



August 4th Beirut Port Explosion: Challenges of Mass Casualty Hospital Management during the Covid-19 Pandemic

Nagi Souaiby

The 4th of August marks an unforgettable date in the mind of the Lebanese people. On that day at exactly 18:08, one of the largest non-nuclear explosions hit the capital of Lebanon, Beirut. Several tons of poorly stocked Ammonium Nitrate detonated due to a conflagration of fireworks stored nearby. The explosion was estimated to be around one-fortieth (1/40) of the power of the Hiroshima bomb. Although the city was moderately shielded by a massive grain silo adjacent to the blast, some residential buildings collapsed and the pressure wave hit hard, destroyed properties, and caused the death of hundreds, and injured more than 7,000 people.

In the immediate aftermath of the explosion and for several days, a disaster emergency response was put in place for several days after the blast. The healthcare system in Lebanon, the emergency medical services, the international aid, and the people of Lebanon, played a crucial role in mending the broken city. The presentation describes the emergency response on multiple levels: governmental, institutional, and individual, but mostly at the hospital level, revealing the challenges of medical management, especially the absence of prehospital medical regulations, triage difficulties, and human resources mobilization, as well as logistical difficulties such as documentation, identification and the use of PPE in the midst of a pandemic. In addition, international aid support to the Lebanese people is discussed.

The impact on the healthcare system in Lebanon was highlighted, as this explosion resulted in a surge of COVID-19 outbreaks nationally. Even the most prepared healthcare system and the most well-thought emergency plan response would have failed to address a disaster of this magnitude. It is thus important to learn from the mistakes and work on improving the response in order to deal with similar scenarios. The Lebanese experience should be a lesson for other countries in order to improve their emergency response plans in similar situations.