## The Impact of Previous Disasters on Hospital Disaster Surge Capacity Preparedness in Finland

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**Introduction:** In a disaster, the number of victims and severity of injuries may overwhelm the treatment capacity of the local hospital. Surge capacity is the hospital's ability to receive and treat an increased number of patients. This study aimed to explore if a past disaster or mass casualty incident (MCI) affects local hospital surge capacity preparedness.
**Method:** The current hospital preparedness plans (HPPs) of University and central hospitals receiving surgical emergency patients in Finland were collected (n=28). The HPPs were read and analyzed using the World Health Organization (WHO) hospital emergency checklist tool with eight key components and 67 action items. The scores of key components were compared by percentage of the maximum score. The surge capacity score was compared between the hospitals that had been exposed to a disaster or MCI with those who had not. The effective level was considered as 70% of total points.
**Results:** The overall median score of all key components was 76% (range 24%). The highest score was in command and control (median 93%, range 29%) and the lowest in post-disaster preparedness (median 50%, range 90%). The median surge capacity score was 65% (range 39%). There has been 12 disasters or MCIs during the past 25 years in Finland, all anthropogenic. There was no statistical difference between the surge capacity score of the hospitals with a history of a disaster or MCI compared to those without (65% for both, p=0.735).
**Conclusion:** In Finland, the overall hospital preparedness level is effective with command and control being the best covered area. Surge capacity preparedness was below the effective level and it was not affected by a past disaster or MCI. Present-day challenges with the lack of resources in the health care system, more attention should be drawn to the surge capacity aspect in hospital preparedness plans.

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## Healthcare and Media Interaction in Major Incidents and Disasters: Experiences Based on Swedish KAMEDO Reports in 20 years

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**Introduction:** Major Incidents and Disasters are often associated with early, extensive and prolonged media reporting. It is important to understand the interaction between first responders/rescue services and the media to create better conditions for providing and making available correct and objective information to as many people as possible.
**Method:** A systematic literature review and content analysis was made on all Swedish KAMEDO reports (emergency medicine observations published by the National Board of Health and Welfare) from the last twenty years, in total 39 reports. KAMEDO's primary task is to feedback experience data (lessons learned) from disasters worldwide, through expert observers at the site of an emergency event. The aim of this study was to evaluate and analyze the experiences made regarding the interaction between media and healthcare in connection with major incidents and disasters, both on site and in hospitals.
**Results:** The analysis resulted in the following main themes:

(1) Communication problems and other challenges in Major Incidents and Disasters

- No protection and restrictions
- Information craving and news hunt
- Interviews as intervention

(2) Recommendations for efficient interaction between healthcare and the media:

- Strategies from alert to action
- Satisfying information needs
- Clarity measures on site
- Key actors of importance
- Proactive media alertness

**Conclusion:** Some conclusions regarding lessons learned about interaction between healthcare and the media, as well as about communication with the afflicted and citizens, in brief: The hospital management should take control of the communication through efficient communication strategies. An accommodating approach to the media's presence can facilitate the dissemination of the necessary early, correct and balanced information. Joint authority press conferences are a model tested and positively evaluated. Healthcare communicators are key actors in hospital crisis communication and media management. Healthcare and media both benefit from developing routines and reciprocal respect for proactive and efficient interaction in emergencies.

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## The Dark Side of the (Preparedness) Moon: Why Promoting Public Preparedness Remains Illusive

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**Introduction:** Despite advancements in health behavior theories, understanding the human motivation to engage in disaster preparedness remains elusive. Most attempts at engaging the public in protective behavior rely on risk communication that



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assumes an information deficit among the people; ergo, risk communicators operate under the assumption that by increasing awareness of risks, sufficient motivation can be generated for preparedness behavior. Yet, this is far from being true.

A growing body of literature indicates the prevalence of fear-directed preparedness behavior, which is suboptimal in motivating behavioral change. This should come as no surprise, as using fear appeal tactics in risk communication designed to promote health behaviors have been proven to be primarily a failure.

Arguably, the phenomenon of failed risk communication campaigns could be linked to unconscious concerns about death, as proposed in the context of the Terror-Management Theory (TMT). According to TMT, since the experience of death-related thoughts triggers the potential for anxiety, the human psyche responds with motivated avoidance. In other words, the mind utilizes mechanisms that prevent death from becoming salient and remove death-related thoughts from focal attention when they arise. In turn, these defense mechanisms may yield procrastination in adopting protective behavior generated by denial as an adaptive coping mechanism.

Preliminary data suggest that procrastination in preparedness behavior until the threat becomes actual and imminent might be explained by TMT; however, explicit evidence for this association is yet to be provided. Should this understanding of the phenomenon be substantiated, it could significantly contribute to expanding our knowledge of the theoretical model behind public preparedness behavior.

The presentation will discuss the state-of-the-art research currently being done by the author to support the above claims. It will provide preliminary findings and will call the community to reconsider the current paradigm of disaster risk reduction and risk communication.

**Method:** n/a
**Results:** n/a
**Conclusion:** n/a

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## Improving Hospital Incident Command Organizational Structures

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**Introduction:** The current Incident Command System (ICS) was developed to manage wildland fires, then was adopted by general firefighting. It has since been adapted to multiple other sectors and widely used. The Hospital Emergency Incident Command (HICS) was introduced in 1991. An ICS currently is required to be used for hospital incident management in the US.

The overarching structure of traditional HICS consists of Command Staff (Incident Commander, Public Information Officer, Safety Officer, Liaison Officer and Medical/Technical Specialist) and General Staff. The General Staff has Sections consisting of Operations, Planning, Logistics and Finance/Administration. Multiple and flexible subgroups carry out the processes in these areas.

This HICS structure does not adapt easily to hospital daily functions and alternatives have been proposed. This includes structuring around essential functions and mixed models. Over time hospital systems have become larger, and incidents more complex and sustained. New more expansive and flexible ICS structures are needed for complex responses.

**Method:** We reviewed both the published and grey literature for examples of different incident management structures and evidence of their effectiveness.

**Results:** There is very little scientific literature on this topic. Several different descriptive reports exist. Multiple examples of hospital incident command organization structures from the hospital level progressing to hospital (and healthcare) system level and then multistate regional models will be reviewed. This includes the standard HICS model, emergency support function models and modifications following advanced ICS principles such as area command.

**Conclusion:** Different ICS models exist that may offer individual healthcare systems improved ways to manage disasters.

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## NO FEAR–Better Integrating Healthcare Into Crisis Management Structures

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**Introduction:** Since the beginning of the COVID 19 pandemic, the EU-funded project, NO FEAR collected lessons observed from the response. One of the issues raised in the retrospective "lessons observed" exercise, was the need to better integrate health care into "crisis management structures" (e.g. Civil Protection).

**Method:** Lessons observed from the COVID-19 response were collected and analyzed by the NO FEAR project, through a questionnaire, discussion with consortium partners, and a large conference in Madrid, with a high-level briefing for policymakers.

**Results:** During the Madrid conference, different speakers pointed out the lack of training for healthcare professionals in crisis management (processes and procedures)–except those with military training or EMS officers who are part of Fire and Rescue Services. In a same manner, crisis managers have very little (if any) training in health. This was identified as a gap in future preparedness.

**Conclusion:** Looking into the future, healthcare professionals who will be called to take part in crisis management systems have to be trained in this task, as well as basic awareness of crisis managers to health issues in emergencies.

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