

Willingness to Work of Hospital Staff in Disasters: A Pilot Study in Belgian Hospitals

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Study/Objective: Willingness to work, promoting factors, and hospital disaster management, including the role of the hospital disaster coordinator.

Background: Following a disaster, hospitals are at-risk for sudden crowding of victims. However, can they recruit extra staff willing to work? Is disaster management a daily concern?

Methods: This mixed-method study encompasses an explanatory sequential design with a quantitative data collection and analysis, followed by a second phase with a qualitative research track to explore the willingness to work. A quantitative survey with 11 different virtual disaster situations was offered at four different hospital staff groups (nurses, doctors, administrative, and supporting staff). In the qualitative part, we performed focus groups and semi-structured face-to-face interviews with a purposeful sample of staff members. A “within” the cases analysis was performed to retain the uniqueness of each setting, followed by a cross-case analysis.

Results: Twenty-two Belgian hospitals participated from March 2014 to July 2016. The willingness to work differs between doctors (33.8%), supporting staff (28.1%), nurses (23.6%), and administrative staff (23.1%). Both quantitative and qualitative research at three regional hospitals, from February 2016 to July 2016, confirmed a high willingness to work in all groups. Willingness was strongly related to the disaster type. The greatest willingness detected was with a seasonal influenza epidemic, the lowest for Ebola and nuclear incidents. Four facilitators increased the willingness to work: availability of personal protective equipment, insurance that their family is safe, feedback on the incident, and previous training. The hospital disaster coordinator is the key figure concerning “awareness” and “preparedness” within the hospital.

Conclusion: Although differences in willingness to work depending the context, specific measures, and a concerned, dutiful hospital disaster coordinator all play an important role to enhance this willingness. Hospital disaster planning must reflect continuously on quality and safety policies within the organization.

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International Guidelines for Foreign Medical Workers' Response to Natural Disasters in Low and Middle-Income Countries: Do they Exist, and Are they Being Followed?

A Literature Review of Current International Policy and Grounded Theory Study of the Response to the 2015 Nepal Earthquake

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Study/Objective: To identify international guidelines for foreign health care workers and determine if there is knowledge translation in order to highlight gaps and aid progress to better disaster response.

Background: Following natural disasters, the health sector response has been disorganized and at times harmful to affected populations. Ensuring quality care and effective use of scarce resources depends, in part, on the international workers who participate in the response.

Methods: A literature search and semi-structured interviews of participants in the health sector response to the 2015 Nepal earthquake was used to examine the existence, awareness, and utilization of international guidelines for health care workers responding to disasters.

Results: The literature search revealed no guidelines directly addressing the appropriateness of potential responders. International guidelines contained only general humanitarian principles for guiding activities once in the field, or were directed at organizations or teams rather than individuals. Grounded theory analysis of the interviews suggested that those who were experienced in disaster response tended to be part of larger, established, international organizations. They were also more likely than members of ad hoc teams to be familiar with existing guidelines and engage in field activities consistent with these guidelines, including coordination, reporting, and building on local capacities.

Conclusion: Only general principles exist to guide medical personnel planning to respond to a sudden onset disaster. There are no defined qualification requirements, either for professional skills or disaster response training, for individual foreign health workers. Although progress has been made in setting standards for teams responding to disasters, there is a knowledge gap among inexperienced responders. This contributes to unqualified individuals becoming an additional burden to affected communities. Increasing awareness of international disaster relief guidelines among health professionals prior to the occurrence of a disaster, including emphasizing the need for training prior to deployment, should be a priority.

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Apport des Cindyniques dans le pilotage stratégique des crises/catastrophes

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Study/Objective: Expliciter en quoi le prisme des Cindyniques, au delà de son intérêt pour l'analyse post-crise, autorise des progrès significatifs dans le pilotage stratégique des crises/catastrophes.

Background: L'approche stratégique de la médecine de catastrophe n'a pas, à ce jour, bénéficié d'un corpus théorique qui lui permette de connaître les mêmes progrès que l'approche tactique dans un contexte où cette dernière conduit à croire, à terme, à la maîtrise des risques.

Methods: Le prisme des Cindyniques postule l'inéductibilité de la désorganisation de tout système (sociologique, technologique,

biologique) placé en situation de tension critique, a fortiori en situation de crise/catastrophe. Ce postulat autorise une analyse non plus seulement sur l'identification des causes et la description de leur enchaînement probable de l'approche de type « sûreté », mais de réaliser une véritable taxonomie de ces causes.

Results:

Points clés relatifs aux Cindyniques
– intègrent la propension de toute situation à se diriger inéluctablement vers le désordre si elle est livrée à elle-même
– identifient la nature asymptotique de la prévention des risques basée sur la seule analyse des dangers matériellement perceptibles et d'une réponse purement technique ou procédurale
– reconnaissent les niveaux « global », « individuel », « interindividuel » et « organisationnel » comme critiques
– constatent l'influence du contexte, des flux, de la dynamique et des interactions au sein d'une situation, sur la constitution d'un danger
– perçoivent l'existence de conditions additionnelles « imperceptibles » ou « impensables » susceptibles de renforcer le caractère cindynogène d'une situation
– postulent la nature multidimensionnelle du danger descriptible grâce à un espace à 5 dimensions

Table 1. Points clés relatifs aux Cindyniques.

Conclusion: Le prisme des Cindyniques permet, in fine, d'acter l'importance des représentations, en pointant que « le risque se mesure, la menace se subit, le danger s'affronte » ce qui abouti au triptyque stratégique « affronter – réguler – dépasser » la crise/catastrophe.

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The European Advanced Medical Strategic Triage Doctrine, as a Potential Enrichment for the Federal Emergency Management Agency's National Response Framework

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Study/Objective: Clarifying the European advanced medical strategic triage doctrine, and highlighting its key features and strengths when it comes to mass-casualty situation management.

Background: Mass-casualty events, such as accidents, disasters, or public health emergencies, call for organization to take advantage of the “golden hour” and to ease overwhelmed hospitals in order to maximize victims' survival rate.

Methods: This expert review examines available literature and outlines a practical approach to manage mass-casualty situations, on the basis of a doctrine initially developed by the French Society for Disaster Medicine and extensively practiced in France and continental Europe today.

Results: The European advanced medical strategic triage doctrine differs from other doctrines that only focus on Hospital comprehensive emergency management plans, to respond to a unique combination of patient numbers and care requirements, that challenge a given community's ability to provide adequate patient care using day-to-day operations, in that it insists to treat patients as much as possible at the scene by sending trained physicians and nurses to the nearest spot of the tactical zone (even within the tactical zone, the so-called “exclusion zone”), in order to deliver on-site damage control to prolong the “golden hour” window of therapeutic opportunity and allow an advanced medical strategic triage in combination with a medical strategic dispatch that hierarchies and buffers victims' medevaced to the best nearest available trauma center or resuscitation unit with optimal use of assets.

Conclusion: The issue of mass casualty associated with terrorism has revealed limitations of doctrines that focus on hospital response plans only. Those limitations call for solutions that can be nurtured by the advanced medical strategic triage doctrine.

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Establishment of a National Catastrophe Plan for the Delivery of Care for Burn Patients in Lebanon

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Study/Objective: This study aims at gathering data concerning the care of burn patients in Lebanon. Based on the findings, a national burn plan will be drafted to standardize burn treatment.

Background: Due to Lebanon's tumultuous status and poor infrastructure, burn victims are common. Regardless of the cause, whether politically motivated or a household accident, the country lacks the multi-disciplinary approach to deal with these patients in the acute setting and on a long-term basis. The absence of a national catastrophe burn plan, which would potentially reduce the mortality and morbidity by standardizing burn treatment, renders the situation even more despairing. Currently, one burn center exists in Lebanon providing only 10 specialized beds. This facility cannot accommodate for catastrophes that Lebanon so commonly experiences.

Methods: Questionnaires were disseminated to physicians in 4 hospitals, emergency medical team responders in 3 Lebanese Red Cross centers, the Lebanese Army and the Lebanese Civil Defense with the approval of the Lebanese Society of Emergency Medicine and the Syndicate of Hospitals, after obtaining informed consent. The questions covered topics including burn treatments, patient triage, burn wound evaluation, and the perceived role of the different parties involved in dealing with a burn catastrophe.

Results: Given that we are nearing the end of the data collection phase, results will be presented at the conference.