Number of Hospital Admissions Prior to Reaching a Burn Center: Effects on Applied Treatments

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Introduction: A comparison of the number of applied treatments given to burn patients was conducted among patients with different numbers of hospital admissions prior to arrival at a specialized burn center.
Methods: Retrospective analysis was performed using data from 126 burn patients who had been hospitalized within 24 hours of injury at the Baskent University Burn Unit in Adana, Turkey, between April 2000 and June 2004. Subjects were divided into two groups: (1) those with no or one previous hospital admission (group 1, n = 64); and (2) those with two or more previous hospital admissions (group 2, n = 62)
Results: Mean percentages of total body surface area burned in patients in groups 1 and 2 were 29.0% ±2.86% and 32.6% ±2.89%, respectively (p = 0.37). Corresponding mortality rates were 17.2% and 16.1% (p = 0.87).
Conclusions: Patients transported to multiple centers on the first day following a burn require more operations for debridement and grafting, usually owing to the limited facilities for burn treatment in emergency units and the long distances traveled to specialized facilities. Burn patients transported directly to a dedicated burn unit may undergo specialized treatment earlier and, therefore, require fewer operations for debridement and grafting.
Keywords: admissions; burns; hospital; treatment; victims
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Keynote 2: Post-Conflict Recovery

Chair: Jim Ryan

Thursday 19th May 2005 Nurses, Paramedics, and AHPs in Disaster Care

Chair: Joanne McGlown

Plenary 2: The Peter Safar Lecture

Peter J.F. Baskett

ILCOR 2005 Guidelines on Resuscitation

Position Statement

Increasing International Collaboration through the WADEM

Frank Archer

"The World Association for Disaster and Emergency Medicine (WADEM) was originally founded as the Club of Mainz on 02 October 1976, with a goal of improving the worldwide delivery of prehospital and emergency care during everyday and mass disaster emergencies. Following the constant development of its scope and extension worldwide, and to better reflect its nature, the organization's name was changed to the World Association for Disaster and Emergency Medicine, to focus its members' expertise on the scientific investigation and improvement of disaster and emergency health response. Ultimately, the organization exists to foster international collaboration in the application of knowledge gained from data collected through qualitative and quantitative research to the development of strategies aimed at promoting all aspects of human health, decreasing susceptibility, and increasing resilience to future health disasters and emergencies".[1]

Recently, there has been an increasing, but largely uncoordinated, literature base and academic activity in this field of global significance, but doubt remains regarding the effectiveness of health interventions in disaster and emergency situations. This presentation asks, "Is the current structure of the WADEM capable of supporting this global increase in knowledge and scientific activity, including education and dissemination, or are the needs such that a new model should be examined?" To help explore this question, the organizational and functional structure of the Cochrane Collaboration, an international organization of health professionals and consumers which prepares and maintains systematic reviews of the effectiveness of health care and disseminates them widely to influence decisions about healthcare provision and practice, will be explored to illuminate a potentially exciting structure for a component of the WADEM's mission. Similarities and opportunities are identified for the WADEM to move to the next stage of its historical development to maintain its global leadership as the "WADEM Collaboration".

References:
1. World Association for Disaster and Emergency Medicine: The History of WADEM. Available at www.wadem.medicine.wisc.edu. Accessed 08 February 2005.

Keywords: adaptation; Cochrane Collaboration; goals; history; organization; World Association for Disaster and Emergency Medicine (WADEM)
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Theme 6: Public Health and Disasters

Chairs: Steve Rottman; Jane Knight

Great Questions in Public Health

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The 11 September 2001 attacks cast an enormous amount of concern, attention, and opportunities for debate and improvement towards the United States (US) public health system. Great attention was paid towards the "public health response" to emergencies that introduced terminology that now is commonplace both to scholars of this discipline as well as the mainstream public. Moreover, the disaster system needs to be questioned in terms of identifying and characterizing our key frontline fighters who are "first responders", as well as truly assessing the role of hospitals as a main piece of infrastructure in emergency response.

Key questions to be addressed include: (1) What is preparedness? How do we measure it?; (2) What is quarantine? How is it defined in a population?; (3) When do we transition from "standard of care" to "sufficient care"; and (4) What does this mean?

These are some controversial issues in disaster medicine outlined in some of the key questions about medical and public health preparedness, which are aimed at pinpointing and arriving at common definitions and understandings standard in the US disaster response. The purpose of this paper is not only to introduce these questions, but also to encourage debate and provide final answers to these terms and issues. The goal is to get beyond vague and poorly defined concepts, such as "preparedness" and "quarantine", and open a dialogue to effectively begin to define, analyze and measure key parameters that define our ability to respond to and mitigate disaster.

Keywords: disaster; emergencies; health; hospitals; preparedness; quarantine; response; United States (US)
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Using Design Effects from Previous Cluster Surveys to Guide Sample Size Calculation in Emergency Settings

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Introduction: The standard survey design used in humanitarian emergencies (30 clusters with 30 individuals each) is being used increasingly to measure outcomes other than acute malnutrition; however, research design effects for these outcomes have not been evaluated thoroughly. Being able to accurately estimate design effects is critical when calculating the most efficient sample size for such surveys.
Methods: Design effects and rates of homogeneity for seven nutrition and health outcomes were reviewed from nine population-based, cluster surveys conducted in emergency settings.
Results: In children, the median design effects for mortality, acute malnutrition, and anemia were 1.25, 1.4, and 1.5, respectively. Median design effects for the cumulative prevalence of acute respiratory disease and diarrhea, and for measles vaccination coverage were much higher: 3.6, 3.4, and 5.1, respectively. Four of the eight surveys that assessed crude mortality showed design effects below two; the median was 1.7. Re-analysis of mortality data from Kosovo and Badghis, Afghanistan, showed that given the same number of clusters, changing sample size had a relatively small effect on the precision obtained for the estimate of mortality.
Conclusions: In the majority of surveys, assuming a design effect of 1.5 for acute malnutrition in children and 2 or less for crude mortality would produce a more efficient sample size. In addition, increasing the sample size in cluster surveys without increasing the number of clusters may not result in substantial improvements in precision.

Keywords: cluster; design; effects; emergency; refugees; sample size
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Complex Emergencies: Epidemiological Models and Models of Response

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Complex emergencies (CEs) are the most common, human-induced disasters and represent a major challenge to the humanitarian community. This presentation first will define the three major epidemiological country models of CEs: (1) developing; (2) chronic; and (3) developed, and how they differ for planning purposes. Secondly, the existing international response models: (1) multi-national; (2) unilateral; and (3) the Responsibility to Protect (R2P) models, in terms of their characteristics, objectives, and controversies will be discussed.

Keywords: complex emergencies; disasters; model; response
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Health Needs Among Sudanese Internally Displaced Persons (Special Session on Humanitarian Crises of 2003–2004)

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Introduction: Sudan has the largest displaced population in the world with approximately 3–4 million internally displaced persons (IDPs), and an additional 400,000 Sudanese refugees abroad. During the last 18 months, human rights violations have been on going and widespread in the Darfur region of Sudan.
Objective: Using a combination of quantitative and qualitative methods, the International Medical Corps (IMC) will perform an in-depth and credible real-time assessment of health and basic needs among the >2 million IDPs in the South and West Darfur regions of Sudan. These assessments will help to identify better the basic needs and the gaps in humanitarian aid services, paying close attention to the specific needs of women.
Methods: All study participants for this population-based assessment will be selected using systematic random sampling or a combination of systematic random sampling and cluster sampling as some IDP camps will not be accessible due to safety issues or Government policy. Approximately 1,200 households will be selected randomly and sampled in proportion to their distribution in IDP camps. The survey addresses demographics, the prevalence and extent of certain abuses including sexual violence both by combatants and non-combatants, the prevalence of suicidal ideation, suicide and depression rates, and women's roles in society and primary health needs and gaps.
Conclusion: A discussion of the findings of this survey to be completed in January 2005 will include the wide-ranging implications of establishing patterns of abuse and the health needs of survivors/victims, identifying specific policy recommendations regarding the needs and/or vulnerabilities of the Sudanese IDPs, and identifying specific policy recommendations for gender-based and mental health needs.

Keywords: humanitarian aid; internally displaced persons; public health; Sudan
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