Putting Triage Theory into Practice at the Scene of Multiple Casualty Vehicular Accidents: The Reality of Multiple Casualty Triage

J. Ranse;[1,2] P. Arbon;[2,3] K. Zeitz;[3] H. Wren;[5] K. Driscoll;[6] R. Elliott[6]
1. Flinders University, Adelaide, Australia
2. Research Centre for Nursing Practice, Canberra, Australia
3. St. John Ambulance Australia, Canberra, Australia
5. Australian Capital Territory Ambulance Service, Canberra, Australia
6. South Australia Ambulance Service, Adelaide, Australia

Research Funding: This project was funded by a research grant from the NRMA-ACT Road Safety Trust.

Objectives: The aim of this research project was to investigate the experiences of ambulance paramedics in applying the principles and protocols of prehospital, multiple casualty triage at the scene of a motor vehicle accident. Key objectives included the investigation of situational cues and other contextual factors influencing triage practice and the development of recommendations for the future education of ambulance paramedicsinvolved with the practice of multiple casualty triage.
Methods: A triangulated approach was used incorporating demographic data, focus groups, and in-depth interviews. Two focus groups canvassed the issues and concerns of the participants in applying multiple casualty triage principles to motor vehicle accident situations. Additionally, focus groups assisted in creating an interview schedule for in-depth interviews. The in-depth interviews were conducted with five participants involved in the earlier focus group discussion, and reflected on their experiences in a detailed way. A thematic analysis of the interviews was conducted using well-established research practices of human science research.
Conclusions: Described in this research is an extended and broadened interpretation of the triage process returning to a more authentic definition of triage: the process of the sorting of casualties to determine priority. There is a need to consider triage as an extended and complex process that incorporates evidence-based physiological cues to assist decision-making and the management of the process of triage from call-out to conclusion, including assessment of contextual and situational variables.
Keywords: Australia; motor vehicle accidents; multiple casualties; paramedics; triage
Prehosp Disast Med 2007;22(2):s71

Indicators for Trauma Systems

E.M. Hoogervorst; J.J.L.M. Bierens
VU Medical Center, Amsterdam, The Netherlands

Introduction: There is an ongoing debate what trauma system (TS) is best while there is a lack of valid research instruments to evaluate a TS. Indicators can possibly be used to measure the quality of TS care.
Objective: The objective of this study is to develop a consensus-based set of indicators to monitor the performance of dispatch centers (DC), ambulance services (AS) and emergency departments (ED) providing care to multitrauma patients (MTP).
Methods: In a 4-round Delphi procedure, the opinion of 141 experts (experienced managers, doctors and nurses from DC, AS and EDs) were questioned regarding indicators of trauma system performance. Likert scales were used to rank indicators. Consensus was defined when ≥70% of the panel agreed.
Results: Response rates to questionnaires 1 through 4 was 86%, 75%, 71%, and 60% respectively. Experts reached consensus on 5 competence indicators (professional education, trauma courses for adults and children, working experience >18 months and yearly exposure ≥10 MTP); 10 result indicators (related to diagnoses, stabilization of vital functions in AS and ED, level of care, trauma team and radiology); three chain indicators (cooperation, communication and feedback); and eight time intervals, but not on the definition of the intervals.
Conclusions: Expert consensus was reached on 26 indicators for MTP No consensus could be reached on definitions of time indicators. A nominal group technique meeting will address this issue. A Delphi procedure was successful in reaching consensus on indicators that monitor performance of the TS for MTP. This is the first step in developing a valid research instrument.
Keywords: Delphi procedure; dispatch centers; emergency; indicators; trauma system
Prehosp Disast Med 2007;22(2):s71

Tailoring the Medical Response for the Management of Burn Disasters

C.L. Broeze;[1] S. Falder;[2] S. Colquhoun;[3] F. Wood[4]
1. McComb Foundation/UWA, Perth, Australia
2. Telstra Burns Unit, Royal Perth Hospital, Perth, Australia
3. McComb Foundation, Perth, Australia
4. McComb Foundation/Royal Perth Hospital, Perth, Australia

Introduction: The aim of this review was to analyze past burn disasters and mass-casualty incidents (MCIs) involving burns since the 1942 Cocoanut Grove fire, in order to identify common problems arising during the response to such incidents. The study also intended to assess recommendations relating to these problems and whether or not changes were implemented based on these reccommendations.
Methods: A comprehensive review of the literature from 1996 to September 2006 was performed using the on-line database Medline. Articles were selected based on thei inclusion prehospital or in-hospital responses to burn disasters and MCIs that consisted of fires, accidental and terrorist explosions, and transportation accidents, where a large proportion of the injuries was burn-related. Articles were read, abstracted, and analyzed for death-and-injury toll, burn-and-non-burn injuries sustained, major problems experienced, and recommendations made.
Results: A review of recommendations from past disasters found that current disaster responders continue to experience similar problems in communication, triage, surge capacity, documentation, staff planning and experience, and transport. A comprehensive literature review enables recommendations from many past disasters to be incorporated into future planning. It also allows for the formulation of future strategies, including increased education in the