

Conclusions: Surgical cricothyrotomy had the lowest complication rate and tended to be quicker and more successful than the other techniques.

Reference:

1. Henderson *et al.* *Anaesthesia* 2004;59:675–694.

Keywords: cadavers; cricothyrotomy; efficiency; oxygenation; techniques
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(162) Considerations About a Symposium on Nursing Services in Disasters

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It is of great importance to minimize the number of disaster casualties while at the same time maximizing the quality of saved lives. That is why potential disaster threats should be eliminated if possible. To achieve this goal, personal, organizational, national, and global awareness and preparedness levels should be developed. In this study, 529 participants of “Nursing Services in Disasters Symposium” were asked what they thought of the symposium and what they thought about the disaster studies made in Turkey. The answers from 231 participants are discussed based on scientific criteria.

Keywords: awareness; casualties; disaster; preparedness; survey; Turkey
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(163) Improving the Performance of Triage Nurses

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The chief concept of an emergency ward is triage. The initial objective of an effective triage system is to identify severe emergencies and perform the necessary actions to allow the victims to survive the situation. Due to these special characteristics, triage nurses must have three main qualities: (1) speed; (2) accuracy; and (4) skill.

The performance of triage usually is stressful. Therefore, it is critical to choose and process the appropriate data. Therefore, the nurse must have concentration skills, thoughtfulness, and a good memory, because the consequences of errors during the process could be irretrievable. To prevent such occurrences, the nurses' cognitive skills such as: (1) attention; (2) concentration; (3) data processing; (4) decision-making; and (5) ability to use information technology should be improved.

The concept of data processing in triage contains six stages: (1) collecting data; (2) collecting signs; (3) collecting symptoms; (4) ranking the information; (5) defining the probable diagnosis; and (6) formulating the nursing diagnosis.

The data can be organized according to: (1) conditions; and (2) occurrences. Some diagnostic errors concerning daily occurrences can include: predicting errors. Constant training of triage nurses is important, five different qualities compared to a new triage nurse including: (1) smoothness; (2) automaticity; (3) mental effort; (4) being stress free and (5) points of view.

Selecting effective and efficient triage nurses is of ultimate importance. Experience shows that high self-monitoring people have priority over low self-monitoring people.

Keywords: education; improvement; nursing; training; triage
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(164) Disaster Education and Training of Emergency Nurses in South Australia

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South Australia has a population of 1.1 million people, the majority of whom reside in metropolitan Adelaide. South Australia has been fortunate to avoid a major incident that has involved mass casualties or a large-scale response from the healthcare system.

Currently, there is no structured disaster education for emergency nurses in South Australia. The only formal training is the Major Incident Medical Management and Support (MIMMS) three-day course, which six emergency nurses have now completed. This implies a significant gap in disaster education and awareness among the emergency nurses of South Australia.

As the largest group in the multidisciplinary team, nurses in the emergency department play an important role in carrying out the department's disaster plan and potentially can be deployed to disaster sites. Combined with the potential threat of mass-casualty incidents, it is imperative that all emergency nurses, particularly on a senior clinical level, have disaster education. For this to occur, it is essential to increase awareness and to introduce disaster education.

The plan is to implement a standardized approach to disaster education within the state. Initially, this could be approached by circulating a questionnaire and creating a database of emergency nurses, including any disaster education/experience they have. Introducing and increasing nurse participation in the one-day MIMMS course also would be beneficial. In the future, the introduction of more formalized education statewide or through the university system would be appropriate.

Keywords: Australia; disaster training; nurses; preparedness; response
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Oral Presentations—Theme 11: Pediatrics

Session 1

Chairs: Leonid Roshal; Arthur Cooper; J. Peper

Problems of Rendering Medical Aid to Children in Disasters, Wars, and Terrorist Events

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Children's hospitals where various pediatric specialists work are common. However, while providing medical help to children in disasters, wars, and terrorist events, this fact is not taken into account. That is why children often do not

receive satisfactory treatment in disaster situations. Experience has shown that mortality and disabilities in children are much less if they are treated by pediatric specialists. In the world, there currently is only one specialized team (in Russia) that provides the medical aid to children in disasters, wars, and terrorist events. Similar teams must be created for regional and national needs under the World Health Organization aegis in various countries. In regions, that often are exposed to various disasters, training courses should be organized to teach rescuers, adult general surgeons, and traumatologists how to provide medical aid to children.

Keywords: children; pediatric specialists; preparedness; terrorism; training

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Hospital-Based Pediatric Disaster Triage Algorithm: A Collaborative Effort from New York City's Pediatric Disaster Advisory Group

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Objective: Recognizing that children become high-risk patients during disasters, a committee was formed to develop a hospital-based, pediatric triage algorithm.

Methods: Local healthcare providers with expertise in pediatric emergency medicine, emergency medicine, public health and planning, infectious diseases, and social work corroborated in a Delphi-like process to develop recommendations.

Results: Two salient elements of care emerged from this process: (1) clinical criteria to determine triage priorities; and (2) patient flow process. This model was presented in a regional disaster-planning meeting for public comments and recommendations.

This is multi-tiered triage process that separates patients initially, using a visual assessment. An iterative second assessment is made from a more detailed history and a physical examination. Patient care and management is provided at each tier. If decontamination is needed, it will be performed prior to definitive identification and the separation of patients. In addition, the algorithm provides a triage process for hospitals that routinely care for children, as well as those that do not. Concise supplemental information is provided to bridge the pediatric knowledge of the providers. **Conclusion:** This is one of the first known hospital-based triage algorithms for pediatric disasters and serves as a framework for identifying patients based on their level of acuity. It includes basic pediatric, physiological, and developmental guidelines for staff who are unfamiliar with caring for pediatric patients.

Keywords: algorithm; disaster; hospital; pediatric; triage

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Surgical Treatment of Soft Tissues and Bones Complicated with Surgical Infection in Children in Case of Mass Casualties

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Objective: The purpose of this study was to increase the effectiveness of treatment of soft tissue and bone wounds that are complicated by infection in children in case of mass casualties by applying primary and early reconstructive or plastic surgery.

Methods: A total of 477 child victims of earthquakes were treated at various sites. The children were admitted to the nearest medical institution and were treated by a mobile, pediatric, multifunctional team made up of highly qualified specialists. All children had large, soft tissue wounds at various locations on their bodies.

Results: In 175 children (36.7%), crush syndrome was diagnosed. In 43 children (9.0%), there were open fractures of long bones. Mistakes typical for the first stage of surgical treatment have been outlined. Steps for complex wound treatment include: (1) radical surgical wound treatment; (2) intensive therapy; (3) extracorporeal detoxication; (4) topical wound treatment with multicomponent ointments; (5) osteosynthesis with outer fixation; and (6) early reconstructive and plastic surgeries. Healing with primary intension was seen in 96.6% cases. In 40 patients (8.4%) there was consolidation of long bone fractures. In three cases, Ilizarov technique was applied successfully.

Conclusion: Complex treatment of wounds of soft tissues and bones in child victims of earthquakes must be conducted by pediatric, multifunctional teams at hospitals. Primary and early reconstructive and plastic surgeries minimize the rate of disability and restore anatomical and functional integrity of the damaged areas.

Keywords: children; earthquake; pediatrics; reconstructive surgery; soft tissues

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Three Years of Experience in the Children Referral System in Georgia

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Introduction: The Georgian Center of Disaster Medicine provides transportation for critically ill patients of all ages. Since 2001, thousands of patients have been transported from hospitals in nearly every region in Georgia. Medical teams are specially trained in current standards of basic life support, advanced life support, trauma management, and pediatric advanced life support. Six ambulances are supplied with all the required equipment and medications.

This presentation reports on three years (2003–2005) of experience of the system's experience with the pediatric population and emphasizes the importance and significance of such a referral system. The pediatric population in Georgia includes children from ages one month to 14 years.