

making, consultation, and clinical practice. It is the first step in enabling paramedics to play a more integrated role in health service delivery and to contribute significantly to building capacity in Queensland's isolated communities.

Keywords: isolated communities; paramedics; Queensland Ambulance Service; rural health services

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(78) Improving the Safety and Capability of Aeromedical Services in Queensland, Australia

J.P. Higgins

Queensland Ambulance Service, Brisbane, Australia

Aeromedical services are an integral part of emergency medical services in Queensland, Australia. Following a series of accidents resulting in the deaths of eight people, much has been done to improve the safety and capacity of rotary wing operations. A series of aero-medical reviews have been conducted, that resulted in the implementation of a number of operational improvements to safety and capability for rotary wing aircraft. These reviews highlighted the importance of participating in a state-wide, multi-functional partnership, delivering best-practice prehospital and inter-hospital services to the Queensland community through the combined efforts of staff and resources of Queensland Ambulance Service (QAS), Queensland Health, and the Community Helicopter Providers (CHPs). Consequently, Queensland employs best-practice frameworks for training, audit, safety, and operations of aeromedical services. Improvements have been made through: (1) the revision of service agreements with CHPs; (2) the revision of clinical crewing on helicopters (e.g., dedicated appointment of paramedics to rotary wing services resulting in opportunities for reduced risk through increased access to training, experience, personal protective equipment, and an understanding of CRM, safety, operations, and clinical practice); (3) establishment of minimum guidelines for CHPs (e.g., minimum twin engine turbine instrument flight rule (IFR) helicopter); (4) implementation of a fatigue management system for all aircrew; and (5) an audit of existing helipads with establishment of a minimum standard.

Keywords: aero-medical; Australia; capability; Community Helicopter Providers; safety; standards

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(79) "Prehospital Urgent Medicine in Space": Reality or Science Fiction?

G. Putic;¹ B. Momirski;² S. Stojanovic;² M. Sudarov;³ D. Panic;⁴ S. Pejovic;² M. Piperski²

1. National Association Emergency Medical St, Zrenjanin, Yugoslavia

2. Emergency Medical Services Zrenjanin, Zrenjanin, Yugoslavia

3. Emergency Medical Services Kikinda, Kikinda, Yugoslavia

4. Emergency Medical Services Vrsac, Vrsac, Yugoslavia

In consideration that some developed countries already have started to commercialize space flight, it is necessary to develop prehospital Emergency Medical Services (EMS) in space. Future space ships should have 10–15 seats. If a need for medical care arises, a space shuttle should be deployed to the space ship so that a qualification person can help the afflict-

ed person. Of course, a person's health is under greater risk during space flight, but maximum precautions still should be taken. All possible ways of making diagnostic and medication judgements should be identified. The presence of EMS in space should not be precluded simply because EMS on Earth has not been firmly established.

We still hope that this vision may go with the words of Neil Armstrong: "this is one small step for a man, one giant leap for mankind", and we will say it is a big step for prehospital EMS and of course for all emergency personnel!

Keywords: commercialized space flight; Emergency Medical Services; space

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(80) Analysis of Emergency Aeromedical Transport in a University-Affiliated Hospital of Taiwan

L.M. Wang;¹ J.M. Yang;² Y.C. Chen²

1. National Yang-Ming University, Taipei, Taiwan

2. Taiwan

The purpose of this study was to analyze and evaluate the early definitive outcomes of the comprehensive emergency medical services and helicopter aeromedical transport systems for those patients in isolated or rural areas.

A total of 351 cases from July 1998 to June 2006 were collected from emergency service records. Each patient was evaluated according to the data from the registration sheet and computerized database. Information such as age, sex, diagnosis, transport place, and helicopter provider were analyzed.

The age range was 0–93 years with a median age of 50 years. The ratio between genders was 1.79:1 (225 men vs. 126 women). Children (<14 years of age) comprised 16.2% of the total study group. The number of trauma and non-trauma surgical patients were nearly equal, at ratio of 1.1:1. The frequency of helicopter transport decreased by 50% after 2002. All transport cases received satisfactory management and evaluation before being transferring to the ward or intensive care unit, except for the four victims that were dead on arrival (no vital signs or had CPR performed on them before being transported). The majority of trauma patients suffered from compound bone fractures and intracranial hemorrhaging. However, non-trauma patients experienced cardiopulmonary compromise and other diseases associated with respiratory failure. No complications occurred during transport.

Aeromedical helicopter transport plays an important role for critically ill patients, whether they suffer from traumatic or non-traumatic injuries, especially if the victims live in a rural area.

Keywords: aeromedical; emergency care; rural; Taiwan; transport

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(81) Reform of the Emergency Medical Services System in Serbia

V.A. Alavanja

Norwegian Red Cross Belgrade, Belgrade, Serbia

The project of Emergency Medical Services system reform in the Republic of Serbia has been financed by the

Norwegian government and implemented by Norwegian Red Cross through a state-to-state agreement.

The first part of the project was directed at 12 cities in Serbia. An assessment revealed a low level of EMS staff skills and a lack of equipment and equipment maintenance. Therefore, the project focused on EMS training, purchasing equipment, and developing the medical software needed for the dispatch centers. The latter included the development of a call center in the capital of Serbia; this project is presented as a case study at Microsoft.com.

The positive changes as a result of these activities were immediate, but short-lived, because they were not supported with new regulations. This points to the importance of systemic changes and new policies to address both the management and content of EMS. These findings resulted in a 2006 project with the main focus of determining a new set of rules and standards for the EMS system to be introduced throughout Serbia.

The presentation will cover following topics: (1) EMS system development (topic no. 3); (2) education and training (topic no 2); and (3) miscellaneous (topic no. 9). It will discuss the means used in order to achieve the project's objectives, the results of the reform, and challenges the team faced with during the process.

Keywords: assessment; Emergency Medical Services; policy; Serbia; training

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(82) Which System Should Be Used in Prehospital Health Services: "Scoop and Run" or "Stay and Play"?

M. Eryilmaz;¹ K. Oner;¹ M. Topuzlar;¹ O. Ozturk;² M. Kalemoglu;¹ B. Baykal³

1. Gulhane Military Medical Academy, Ankara, Turkey
2. Government Hospital, Adiyaman, Turkey
3. Suleyman Demirel University, Isparta, Turkey

The most important factor for survival is the efficiency and the speed of the prehospital health services. The discussions on whether to use the "scoop and run" approach or the "stay and play" approach have progressed, and now the topic of discussion is the SAVER method.

Over the last 15 years, dramatic progress has been made in Turkey in the field of prehospital health services.

	September 2005	September 2006	October 2005	October 2006
NDT1	7.9	5.3	6.3	4.9
NDT2	14.8	14.0	14.4	14.0
NDT3	12.5	13.0	12.7	13.1
NDT4	26.3	26.9	26.2	26.8
NDT5	15.8	16.9	16.2	16.7

Table 1—Mean per month

Contrary to many other countries, doctors are on duty in Turkish ambulances. Regarding the approach to the patient/injured in the field, life-saving interventions are applied first (SAVE), and then, very swiftly (RUN), the patient/injured is transported to a center where the most effective treatment can be applied. In penetrating injuries, every possible medical intervention is realized within the ambulance during transport. In blunt traumas, a stabilization procedure also is applied, and vital interventions and transportation is ensured.

Turkey provided a successful example in terms of emergency health services in the prehospital field.

Keywords: prehospital health services; "scoop and run" approach; "stay and play" approach; Turkey

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(83) More Personnel is Not Enough

S. Papanikolaou;¹ S. Papanikolaou;² P. Polakis;³ V. Kekeris;⁴ N. Papageorgiou;⁴ D. Pyrros;⁴ N. Papaefstathiou;⁴ S. Stergiopoulos¹

1. Athens, Greece
2. National Health's Operation Center, Athens, Greece
3. Iasis Hospital Intensive Care Unit, Athens, Greece
4. EKAB NCEM, Athens, Greece

Objective: The objective of this study was to prove that even if personnel are hired, the performance of a nationwide emergency medical services (EMS) system is multifactorial, and all the factors must be improved in order to be effective.

Methods: All the calls that the EKAB handle and were analyzed: ndt1: call - transmit, ndt2: transmit - arrival, ndt3: time on the scene, ndt4: scene - delivery, ndt5. These factors during months: September 2005 to October 2006 were compared. A multi-way ANOVA was conducted to see if there was an improvement in times.

Results: In September 2006, the EKAB hired 400 personnel (20% of the existing personnel). Data prove that the new personnel was responsible for 7-9% of the workload of the EKAB. No improvement in the times was found.

Conclusions: New personnel improves the pre-scene performance of an EMS system. The time after-scene must be improved in order for the entire system to improve. Emergency medical services facilities must be used correctly.

Keywords: emergency medical services; Greece; improvement; institution; personnel;

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(84) Where There Is No Emergency Medical Services: Prehospital Care in India

N. Roy
World Association for Disaster and Emergency Medicine, Mumbai, India

Objective: The objective is to determine the prehospital care currently available to the accident victims in the city of Mumbai, in the absence of a formal Emergency Medical Services (EMS) system.

Methods: One hundred and seventy narratives were collected from randomly selected victims (AIS>2) in their native languages. These narratives focused on costs, transport times, the role of facilitators/informal care takers, and the route taken to reach the Level-One Trauma Care center.