well-prepared contribution to the field of medicine. The Summit brought presidents, kings, ecologists, and politicians from 142 countries to Rio, along with 10,000 official international participants, and 28,000 people from non-governmental organizations.

Description: Medical assistance was available on a 24-hour basis and was provided in three locations: 1) at meeting sites; 2) designated hotels; and 3) hospitals (two public trauma centers and six private hospitals). Medical providers included 400 doctors, nurses, paramedics, and administrative personnel, all contributing to an efficient operation. A total of 2,840 medical reports emerged over a period of 10 days. Three patients with heart attacks were diagnosed early and treated at the scene; the patients were stabilized and returned home after protocols were completed.

Presentation: This paper will present world-wide pathologies, trauma education, and some peculiarities that occurred within the meetings.

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26 Years of Motor Racing Trackside Rescue

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The author first attended a motor racing circuit as a medical officer in 1964. The facilities were rudimentary to the extreme. Medical officers were handed a small sandwich box containing a triangular bandage, an ampoule of morphine, and a lunch ticket. The ambulances were old and for the most part decrepit with no oxygen and often no petrol. The medical ethos of the time was to load-and-go; indeed, many senior medical colleagues believed that delay at the scene of the accident, for resuscitation to take place, was detrimental to the patients' overall survival.

This paper outlines the development of a medical service that has been copied around the world, much of which is now mandatory for Formula-1 racing: the Grand Prix Mobile Medical Operating Unit of 1965, the world's first motor racing rescue unit of 1968, the first small medical intervention car of 1973, and the high-speed Jaguars equipped with pulse oximetry and full resuscitation equipment.

It is difficult to believe in this high-tech era that such simple principles as on-site resuscitation have taken well over a decade before becoming generally accepted.

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Medical Reponse in High-Rise Buildings

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Singapore is a highly urbanized city. More than 80% of its population live in high-rise flats. This poses special problems to ambulance teams, especially when patients have to be evacuated to the hospital. A three-week study on emergency ambulance runs was conducted. A total of 2,930 runs were analyzed. The results are as follows:

Story	No. of Cases	%	Ambulance Location to Patient (mean time minutes)	Patient to Ambulance Location (mean time minutes)
1st	1,656	53.1	2.24	6.79
2nd-5th	604	20.6	2.79	8.60
6th-10th	511	17.4	2.86	10.20
11th-20th	242	8.3	2.96	10.34
21st-30th	17	0.6	3.53	12.30

The amount of time required to locate and evacuate patients increased in relation to the height of the story on which the patient was located. Factors contributing to this included distance, the presence of elevators on only certain floors, elevators stopping at multiple levels, and narrow staircases causing increased difficulty in carrying patients. This delay affects the care given by the ambulance team and has medical repercussions, especially in patients with cardiac arrest and major trauma. Public education and modifications to buildings, e.g., having lifts that will stop on every floor, have been suggested to reduce medical response times in high-rise buildings.

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What is the Proper Role of Physicians and Nurses at the Scene of a Disaster? Lack of Benefit with On-Scene Triage

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Objective: To review the performance and benefit of hospital medical teams who responded to two disasters.

Methods: A retrospective analysis was undertaken to review the roles of all medical personnel involved in the rescue efforts after two airline crashes, Delta 191 and Delta 1141.

Results: The initial response to both airliner crashes was made by fire/rescue, police, and paramedic personnel stationed at the airport. Paramedics from neighboring cities responded quickly. Initial search and rescue was begun. Hospital medical teams arrived 45 to 54 minutes after the crash. In both crashes, all but five survivors had been transported to the hospitals. The remaining survivors had undergone triage and were treated prior to the arrival of the medical teams. Statistics are in Table 1.

Table 1

Statistics of Crashes	Delta 191	Delta 1141
Persons on aircraft	163	108
Dead at scene	134	14
Serious injuries	29	26
Minor injuries	0	68
Crash to hospital notice (min)	14	5
Crash to hospital team arrival	54	45

Of the 10 survivors examined by hospital teams, no changes were made in the treatment of the victims. Hospital medical

teams delayed the transport of the victims by 10–12 minutes. The only changes made by hospital teams were to alter the hospital destination of two victims; both were inappropriate changes. It was beneficial for selected members of the hospital teams to provide medical care and informal debriefing for rescue crews. Hospital staff members provided beneficial care for family members of the deceased and injured from the crash of Delta 191 over the next week, as well as formal critical stress incident debriefing for rescue crews.
Conclusion: Hospital medical teams increased on-scene time and were not of benefit when prehospital teams previously had performed triage and treatment of patients. Physicians and nurses were of benefit with checking and treating the rescue workers and caring for the families of the deceased and injured victims over the next several days. The role of physicians and nurses at disasters needs to be reevaluated.

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The European Aero-Medical Institute (EURAMI): Objectives and Tasks in Emergency and Disaster Medicine

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Introduction: On 11 February 1992, the representatives of 20 European countries established a European Aero-Medical Institute (EURAMI) in Brussels.
Discussion: The authors give a short presentation on the aim, objectives, and tasks of this institution.
1. To ensure the same high quality and good level of air rescue as an integral part of EMS in all European countries through: a) harmonization and standardization of tried-and-tested European and international medical experiences and results in air rescue; b) facilitation and development of practical activities of all members/organizations of air rescue; and c) improvement in and increase of the results of air rescue in all European countries.
2. Effective support to the developing countries in disaster prevention and relief, especially in preparation and formation of preventive medical task forces and in education of medical and paramedical personnel/staff.

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The French Emergency Medical System

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Introduction: The French Emergency Medical System aims to provide an appropriate medical answer to the injured, ill, and pregnant women at the scene of a disaster.
Discussion: Organizational principles of this system include medical treatment by experienced practitioners and medical regulation of requests allowing for the best means of medical intervention (doctor, first-aid worker, ambulance, emergency mobile care unit, etc.).
Conclusion: Although this system is 25 years old, it continues to prove its effectiveness among the population every day.

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Is More Better? Advanced Clinical Skills in Ambulance Services

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Introduction: The decision on which clinical skills are appropriate to prehospital care usually has been based on the published experience of other ambulance services, both nationally and internationally. While some of these clinical skills may be suitable and prudent, others may be of limited benefit due to the infrequency of their use or unproven efficacy.
Objective: A prospective cohort study was undertaken to better understand the epidemiology of cases managed by the ambulance service in Perth, Western Australia, and thus identify the potential for introducing specific advanced clinical skills.
Methods: All patients managed by the ambulance service during July 1992 were enrolled. The nature of the call was identified by the ambulance officer and the patient's medical record was reviewed to determine the diagnosis and outcome.
Results: A total of 4,776 cases were reviewed. Of these cases 1,126 (24%) were admitted directly to a hospital ward or clinic with the remainder presenting to an emergency department. For the major types of calls the study showed that 4.6% of patients were seriously ill, of which 1.2% deteriorated en route to hospital and 0.5% died in the emergency department. There were 10 patients defibrillated; three survived.
Conclusion: The potential for reducing mortality in this community through the introduction of particular advanced clinical skills in the prehospital setting is limited. This mainly is due to the paucity of critical events. This study has highlighted the difficulty of extrapolating experiences from one service to another.