Conclusion: The results of this research can help local agencies plan for suicide attack response and also provides a strong foundation for future research to further investigate responses to the varying types of suicide attacks around the world.
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(P2-3) Analysis of Chest Compression Rate and Its Affect on the Quality of Chest Compressions

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Background: In the last 50 years of modern-era cardiopulmonary resuscitation (CPR), survival rates remain dismal, worldwide. International CPR guidelines recommended a compression rate of at least 100 per minute. There is little evidence documenting if and to what extent high compression rates affect the quality of chest compressions.
Objectives: An objective of this study was to evaluate the effect mean compression rate (MCR) had on the overall quality of chest compressions. Investigators hypothesized that MCRs > 110 would result in a smaller percentage of adequate: compressions (PAC); depth (PAD); and recoil (PAR).
Methods: In this observational pilot study, basic life support providers were recruited from prehospital and in-hospital settings to provide 10 minutes of continuous chest compressions, based on the 2005 American Heart Association guidelines. An adequate compression was defined as a compression that was > 35 mm, had full recoil, and correct hand position. Data were recorded using the Laerdal PC Skill reporting System.
Results: Ninety four (91.3%) of 103 participants completed 10 minutes of compressions. Rescuers represented a variety of backgrounds, average age of 35.5 ± 11.0 years. Fifty eight (56.2%) rescuers had performed CPR in the last two years, and 54 (52.4%) practiced prehospital EMS. Providers that did not complete the entire 10 minutes tended to have a higher MCR than those completing 10 minutes, 114.2 ± 19.3 vs. 105.8 ± 15.4 respectively. Within the first two minutes, rescuers with a MCR > 110 delivered 45% of their compressions adequately, compared to 60% when a rescuer's MCR was < 110. This initial disparity was primarily due to decreased PAR, not decreased PAD. After 2 minutes, higher MCRs correlated with decreased PAC, due to decreased PAD.
Conclusions: Data indicates a higher MCR results in decreased PAC, PAD, and PAR, likely attributed to increased rescuer fatigue.
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(P2-4) Prehospital System Development in Jaffna, Sri Lanka

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Introduction: This case study presents the development of a prehospital system in Jaffna, Sri Lanka. The case then outlines the development of the system, examines its first year of operations, and investigates possible reasons for the results of the development of the prehospital system in Jaffna. Finally, the case discusses the continued operations of the system.
Methods: This case study qualitatively researches the development of the Jaffna prehospital care system by looking at indicators of success in human resources, technical knowledge and community awareness. The case study also quantitatively examines the utilization and financial performance of the system during its first year of operation.
Results: According to indicators, the implementation of the model and its functioning can arguably be considered successful in terms of utility, and in many regards financial stability. The system has already responded to over 2,000 emergency calls in its first eleven months of operation. The main ambulance and call center has managed to operate at only a $13.50 USD loss during its first twelve months of operation. It has established quality standards by utilizing trained Emergency Medical Technicians (EMT) and ambulances featuring basic life saving equipment. The system has also integrated itself as a part of the overall health system of the community it is serving.
Conclusions: The system's success in development should be examined as a potential model for implementing prehospital care in a developing and middle-income country setting, while keeping in mind factors outside of the system that were integral to its developmental success.
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(P2-5) Pre- and in-Hospital Time Delays in Acute Stroke Management in Estonia

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Background: Short intervals between stroke onset and thrombolysis determine the efficacy of this procedure. Guidelines for stroke management were introduced in 2005 in the West-Tallinn Stroke Centre and in 2008 in the Tallinn Emergency Medical Services. Since 2006, annual joint stroke meetings of pre- and in-hospital staff have been held. These meetings included analysis of time delays of thrombolyzed patients.
Objective: The aim of the study was to analyze changes in time delays in acute stroke management and adherence to treatment guidelines.
Methods: Pre- and in-hospital data of all consecutive ischemic stroke patients who received intravenous thrombolytic therapy were recorded prospectively at the Stroke Centre. Data from the implementation period of thrombolysis (2005–2008 i.e., 1st period) were compared to recent data from 2009 to 01 September 2010 (2nd period). The data from all stroke patients presenting to ambulance services were analyzed separately from 01 September 2009 to 01 September 2010. Recorded procedures were compared to current treatment guidelines.
Results: A total of 115 patients received thrombolysis at the Stroke Centre. The Alarm Centre assigned the correct priority