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Title: [Effect of the prehospital trauma life support program \(PHTLS\) on prehospital trauma care.](#)

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Abstract:

Background: Improvement in trauma patient outcome has been demonstrated after the implementation of the Prehospital Trauma Life Support (PHTLS) program in Trinidad and Tobago. This study was aimed at identifying prehospital care factors that may explain this improvement.

Methods: All patients transferred by ambulance to the major trauma referral hospital had assessment of airway control, oxygen use, cervical (C)-spine control, and hemorrhage control, as well as splinting of extremities during pre-PHTLS (July of 1990 to December of 1991; n = 332) and post-PHTLS periods (January of 1994 to June of 1995; n = 350). Pre-PHTLS data were compared with post- PHTLS data by chi2 analysis with a p value 0.05 being considered statistically significant.

Results: The frequency (%) increased in the post- PHTLS period for airway control (10 vs. 99.7%), C-spine control (2.1 vs. 89.4%), splinting of extremities (22 vs. 60.6%), hemorrhage control (16 vs. 96.9%), and oxygen use (6.6 vs. 89.5%) when no specific problem was identified. When a specific problem was identified in these areas, the post-PHTLS percentage also increased for airway control (16.2 vs. 100%), C-spine control (25 vs. 100%), splinting of extremities (33.9 vs. 100%), hemorrhage control (18 vs. 100%), and oxygen use (43.2 vs. 98.9%).

Conclusions: Prehospital trauma care has changed after the introduction of the PHTLS program as indicated by more frequent airway control, use of oxygen, control of cervical (C)-spine and hemorrhage, as well as splinting of fractures. This finding was evident not only as a routine but particularly when a specific related problem was identified. This change in prehospital care could be responsible for the improved trauma patient outcome after PHTLS. [References: 22]