Outcome of prehospital trauma care for road traffic injury in Malaysia

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**Introduction**

This study attempted to increase scientific knowledge on impact of Pre-Hospital Trauma Care on patient outcome for road traffic injuries in Malaysia. We also investigate the association between patient outcome with onset of injuries to hospital arrival time (IAT).

**Methods**

This is a retrospective, cross sectional, observational study of trauma patients coming to Emergency and Trauma Department from January 1, 2016 to December 31, 2017 via ambulance service due to road traffic injuries, based on Pan Asian Trauma Outcome Study (PATOS) database. We then divided patients into two groups based on their onset of injury to hospital arrival time (IAT) exposure. The outcomes of this study were to look at functional recovery as Glasgow Outcome Scale (GOS) and survival of patients at hospital discharge.

**Results**

We identified 3884 adult road traffic injury patients based on stated inclusion criteria. After exclusion criteria, 1874 patient remained. Of these patients, 36.5% were later adolescence in the range of 20-29 years of age and predominantly male (n=1545, 82.4%). 1780 (95%) patients had minor disability but retained independent. The overall survival to discharge were 97.8%. The outcomes were not associated with IAT.

**Conclusion**

In this study, The survival rate from road traffic injury was high (97.8%) may due to improvement in prehospital trauma care. There was no significance different of outcome between patients arrived early to hospital and patients arrived later brought by ambulance.

Keywords; Road Traffic Injuries, Pre-Hospital Time, Trauma Care