

# Prehospital trauma care in South India: A glance through the last 15 years

Dear Editor,

We performed a prospective, observational study in the Accident and Emergency Department, Christian Medical College, Vellore, India comparing the prehospital cares over a period of 10 years (2000–2001 and 2010–2011).<sup>[1]</sup> We showed that 85.25% of the overall victims were males and road traffic accident (RTA) was the main cause of trauma contributing to overall 77% cases. Work-related injuries decreased by 6.5% in one decade probably due to awareness and health education. Overall, the most common type of injury was fracture (38.1%) followed by head injury (27.1%).

This study also showed that during 2010–2011, of the on-site rescuers, 11.5% were nonmedicals with first aid training and 12% were paramedics, whereas during 2000–2001, 2.5% were nonmedicals with first aid training and only 0.75% was paramedics. First aid was administered for 16.75% during 2010–2011 compared with only 1.75% 10 years back. During 2000–2001, auto-rickshaws played the most major role (55%) in transporting trauma victims, which improved a great deal after a decade when 44.5% of the victims were transported by ambulances. During 2010–2011, 88.2% of ambulances were government owned, and of them, 62.3% were equipped with oxygen and resuscitation instruments and paramedics were present in 56.1% of them. During 2010–2011, 86.25% trauma victims reached the first medical responder within the “golden hour” compared to 67% in the year of 2000–2001. The most important cause of delay in reaching tertiary trauma centers was a lack of transport facilities in 2000, but in 2010, the same happened due to late referrals.<sup>[1]</sup>

Recently, another study on trauma victims was conducted in 2014 in Kancheepuram district, semi-urban/rural place very near to Vellore.<sup>[2]</sup> The majority of the victims (79%) were from 15 to 45 years age and most of them were driver/pillion riders (88.5%). Most of the victims were males (72.5%), educated (90.5%). About 37.4% were either using mobile phones or had consumed alcohol at the time of their accident. Furthermore, only 66.3% had a valid license while driving. First aid was done to 18.5% of the victims on-site, but only 7.5% of the patients

were brought to the hospital by ambulances. Furthermore, in 80% of the ambulances, no attending doctor was present and resuscitation equipment was present in only 13.3% of those ambulances.<sup>[2]</sup>

We conclude that even of late, a significant number of people in South India lack in road safety and safe driving policies. First aid measures on the spot have improved considerably over time with time and so also the transit time to the hospital. Ambulance services in urban areas have improved to some extent, but not in rural areas. As a result, a significant number of patients cannot reach the hospital within “golden hour.” However, the ambulances are mostly lacked in qualified personnel and functional equipment. Moreover most importantly, uses of mobile phones during driving have increased the number of RTA over the last decade. Stressing on the recommendations of the World Health Organization, more public awareness and training programs are essential to imbibe the effective first aid measures and make emergency ambulance services as functional and effective.<sup>[3]</sup>

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### Conflicts of interest

There are no conflicts of interest.

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### References

1. Florance B, Das Adhikari D, David SS. Comparative study of the practice of first aid and effectiveness of pre-hospital care over a period of 10 years in trauma patients admitted to the emergency department. *Natl J Emerg Med* 2015;3:117-20.
2. Shrivastava SR, Pandian P, Shrivastava PS. Pre-hospital care

among victims of road traffic accident in a rural area of Tamil Nadu: A cross-sectional descriptive study. *J Neurosci Rural Pract* 2014;5(Suppl 1):S33-8.

- World Health Organization. 10 Facts on Global Road Safety; 2013. Available from: <http://www.who.int/features/factfiles/roadsafety/en/index.html#>. [Last accessed on 2014 Aug 22].

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