Availability of facilities and equipment, in ambulances that provide care in pre hospital set up

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Objective

To describe available facilities and equipment, in ambulances that provide care in pre hospital set up.

Methods

A descriptive cross sectional hospital based study was carried out at the National Hospital of Sri Lanka (NHSL) from 15th August to 13th October 2008. All ambulances that arrived at the NHSL during the study period with an emergency patient were selected as study sample (n=409). A check list was used to assess in situ facilities and equipment that are available in the ambulance.

Results

Most of the ambulances were equipped only with very basic facilities such as wheeled stretcher (95.4%; n=390), ABC fire extinguishers (75.3%; n=308) and warning sirens (94.4%; n=386). Among ventilation and air way equipment required for basic life support, oxygen cylinders showed highest percentage (68.7%; n=281) of availability where as oropharyngeal air ways were available only in 4.9% (n=20) of ambulances. Availability of ventilation and air way equipment required for advanced life support ranged from 0.7% each (n=3) of adult endotracheal tubes and portable ventilators to 0.2% each (n=I) of peadiatric endotracheal tubes and Magill forceps. Patient assessment equipment such as pen lights and blood pressure apparatus were available only in 19.6%(n=80) and 2.2%(n=9) respectively. Communication equipment, obstetric supplies, splinting equipment, surgical items, drug delivery devices, and intravenous equipment, were available only among less than 5% of all ambulances. Most of the ambulances were equipped with safety and accessory equipment, except child safety seat 0.5% (n=2), triage tags 1.7% (n=7) and hack saw 0.7% (n=3), which were available only in less than 2% of all ambulances. Body substance isolation equipment were available only in less than 30% of all ambulances.

Conclusion

The facilities that should be available for basic and advanced life support were poor in ambulances. From equipment that should be available for basic life support, most of the ambulances contained more basic elements only, which have no direct impact on patient care. Most of the equipments required for advanced life support were available only in less than 1% of ambulances.