

Need for resuscitation registry in India based on Indian Society of Anaesthesiologists cardiopulmonary resuscitation guidelines

In India, only 10.54% of the patients are transported by ambulance personnel, whereas 45.40% patients were transported by their relatives, 36.59% by police personnel and 7.47% by bystanders.^[1] Hence, a large number of laypersons need to be trained to provide efficient and timely resuscitation to those in cardiac arrest outside the hospital. Compression-only life support^[2] should focus on family members, police personnel, taxi drivers, autorickshaw drivers and bystanders. The survival rates with compression-only cardiopulmonary resuscitation (CPR) are similar to CPR with both compressions and rescue breaths.^[3] Compression-only CPR is simple, easy for an untrained layperson to perform and can be easily taught over the telephone by the dispatcher.^[3]

Basic CPR life support (BCLS) is a universal practice guideline for India providing a stepwise algorithmic approach for resuscitation of adult victims outside the hospital by trained medics and paramedics.^[4] Cardiac arrest patients sometimes may have agonal gasps or a seizure, confusing the trained medics and paramedics. Medics and paramedics along with dispatchers should recognise that agonal gasps are a sign of cardiac arrest and brief generalised seizures may be the first manifestation of cardiac arrest.^[3] Early defibrillation along with high-quality CPR and early transfer to the nearest medical facility improves chances of survival.^[3] It is critical that the proposed BCLS algorithm remains the minimum standard to be followed by trained medics and paramedics for victims with cardiac arrest outside the hospital.

Comprehensive CPR life support is a minimum standard, stepwise algorithmic approach to manage a patient with cardiopulmonary arrest inside the hospital for trained personnel (doctors, nurses and paramedics).^[5] Prevention of cardiac arrest is a priority in patients admitted in the hospital by implementing appropriate surveillance system, medical emergency

teams or rapid response teams, identifying those patients at risk and treating early clinical deterioration. Cooling comatose adult patients in cardiac arrest with return of spontaneous circulation (ROSC) to temperatures between 32°C and 36°C for at least 24 h improved patient's neurologic outcomes.^[3] However, routine pre-hospital cooling of patients provides no benefit, instead, has potential complications with a rapid infusion of cold intravenous fluids for pre-hospital cooling.^[3] If EtCO₂ is <10 mmHg, it indicates inadequate CPR. Moreover, after 20 min of CPR, if EtCO₂ is still <10 mmHg, then it means the patient has minimal chances of ROSC and survival.^[3]

The next step is to create a standardised reporting template based on the Utstein-style resuscitation registry template^[6] for collecting, reporting and publishing of CPR data and for forming a national resuscitation registry in India. The data from the national resuscitation registry will help in creating a simple, evidence-based, efficient resuscitation guideline for India in the future. Successful implementation and acceptance of the Indian Society of Anaesthesiologists' resuscitation guidelines would be achieved when layperson and trained medical personnel all over India are aware of the guidelines, accept them, add the guidelines in their training curriculum and practice the guidelines in resuscitating cardiac arrest victims.

Ramakrishnan V Trichur

Department of Emergency Medicine, Sri Ramachandra Medical College and Research Institute, Chennai, Tamil Nadu, India

Address for correspondence:

Prof. Ramakrishnan V Trichur,
Department of Emergency Medicine, Sri Ramachandra Medical College and Research Institute, Porur, Chennai - 600 116, Tamil Nadu, India.
E-mail: tramakrishnan2003@yahoo.co.in

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