

Abstract

Saving life demands only two hands and some basic knowledge. A qualified person can open airways, resuscitate, massage a heart and call for help. A person with cardio-pulmonary resuscitation (CPR) training can sustain an ailing person's heart and brain for a short time until definitive treatment initiated.

This cross sectional descriptive study was carried out to assess the knowledge and skills regarding adult CPR among doctors and nurses working in Kegalle district, Sri Lanka. Furthermore facilities available to carry out CPR at emergency treatment units (ETU) were also evaluated.

To assess the core knowledge regarding CPR, a self administered questionnaire was used. For skills assessment each candidate was given a scenario of cardiac arrest and asked to perform CPR on Lateral Resuci Anne skill trainer manikin. Performance was video recorded and evaluated for correct CPR steps while manikin data was analyzed to check the effectiveness of chest compressions and ventilations.

Results showed that only 45.80% of doctors and 36.75% of nurses had adequate core knowledge on CPR and the knowledge deteriorate with time. A good core knowledge on CPR was associated with a good perceived level of competency regarding CPR. Nearly one third of doctors and 70.08% nurses stated that they have never received an update on CPR. Therefore the knowledge regarding latest CPR guidelines were poor.

The use of an Ambu bag which had a preference rate of 95.1% and 92.3% among doctors and nurses respectively was the most preferred way to deliver ventilations. However manikin data showed that 83.5% of the time rescue breaths were inadequate, the average volume of ventilation being 392 ml.

Regarding securing airway, only 36.84% of the doctors were confident regarding their endo tracheal intubation skills while 84.68% had never performed a cricothyrotomy.

Only 20.6% of chest compressions had adequate depth while 14.7% were performed at a correct rate. The mean value of the duty cycle was 52.13%. Almost all the respondents did not adhere to the correct CPR steps.

The positive aspect was that ETUs were adequately equipped to resuscitate patients.

It can be concluded that core knowledge and skills regarding adult CPR is not up to the expected level among doctors and nurses working at government hospitals in Kegalle district. Therefore it is recommended to arrange training programs on CPR should be arranged at regular intervals to address this problem. These programmes should be based on latest guidelines, conducted by an expert personnel and special emphasis should be given to improve knowledge and skills. A certificate in competency on CPR should be awarded to successful trainees.