Knowledge and skills regarding adult cardio-pulmonary resuscitation among doctors and nurses

Jagoda AI¹, Samarakoon MASC¹

¹Postgraduate Institute of Medicine, University of Colombo

Objectives: to assess the knowledge and skills regarding adult cardio-pulmonary resuscitation (CPR) among doctors and nurses working in Kegalle district, Sri Lanka.

Methods: To assess core knowledge regarding CPR, a self-administered questionnaire was used. For skills assessment, each candidate was asked to perform CPR on a Laderal 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 ventilation. 100 doctors and 284 nurses were included in the study.

Results: Only 45.08% of doctors and 36.75% of nurses had adequate core knowledge on CPR and the knowledge deteriorated with time. A good core knowledge on CPR was associated with a good perceived level of competency regarding CPR. One third of doctors and 70.08% of nurses had never received an update on CPR. The use of Ambu bag was the most preferred way to deliver ventilations but 83.5% of the time rescue breaths were inadequate, the average volume of ventilation being 392 ml. Only 36.84% of doctors were confident regarding their endotracheal 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 a duty cycle was 52.13%. Almost all the respondents did not adhere to the correct CPR steps. The positive aspect was that emergency treatment units (ETUs) were adequately equipped to resuscitate patients.

Conclusions: Core knowledge and skills regarding adult CPR is inadequate among doctors and nurses working at government hospitals in Kegalle district. Therefore, it is recommended to arrange training programs on CPR based on the latest guidelines and conducted by an expert panel.