

# **Integrating e-learning with face to face teaching in Paediatric Life Support training – RESUS4KIDS**

Miss Kathryn McGarvey [1, 2], A/Prof Fenton O’Leary [1, 2, 3]

1. RESUS4KIDS – NSW Child Health Networks, Sydney, NSW. Australia
2. Sydney Medical School, Sydney, NSW, Australia
3. Emergency Department, The Children’s Hospital at Westmead, Sydney, NSW, Australia

## **Background**

Paediatric cardiorespiratory arrests are relatively rare events and it is therefore essential that healthcare workers have the confidence and competence to deal with these emergencies. Although there are several well established paediatric life support courses, most require participants to be away from their place of work for 1-3 days. Human factors training should be an essential part of any life support training program as effective teamwork, leadership and communication are important in the outcome of resuscitations

## **Objectives**

To create a multimodal paediatric life support training program, using e-learning as pre learning in order to shorten the face to face time.

## **Methods**

An expert group created a number of e-Learning modules designed specifically around the Australian Resuscitation Council guidelines. A basic mandatory module incorporated the DRSABCD approach to the collapsed child. Further advanced, optional modules were created on intraosseous access, abnormal cardiac rhythms and reversible causes of cardiac arrest. Participants perform a post course test as a summative assessment. A 90 minute face to face practical course was designed, with 30 minutes of human factors training and 60 minutes of pause and discuss scenario based teaching. The program has been evaluated by usage data, before and after e-learning studies and participant feedback

## **Principal findings**

The program has been well received. Over 150,000 e-Learning lessons have been accessed, 9000 participants have completed the mandatory e-Learning component and 4,800 the short practical course. The program has generated over 12,000 hours of simulation time. The e-learning has shown significant improvements in participants’ ability to deliver life support in a simulated arrest and participants have described an increase in their knowledge, confidence and ability.

## **Conclusion**

RESUS4KIDS is an effective, multimodal paediatric life support training program using an innovative approach to shorten the face to face teaching time and still achieve satisfactory educational outcomes