

Cardiopulmonary Resuscitation: An Essential Skill not only for Junior Doctors but Medical Undergraduates and Para Medical Staff

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The findings of the cardiopulmonary resuscitation (CPR) survey by Chew et al, despite several limitations, if extrapolated nationally, portends a worryingly dismal current state of resuscitation training amongst junior doctors¹. Only 28% felt their internship training would equip them adequately to handle a resuscitation confidently and over 60% had no prior experience with defibrillation¹.

Basic life support (BLS) and even advanced cardiac life support (ACLS) should be an integral and mandatory component of the undergraduate curriculum in all local medical schools', perhaps for students in their penultimate or final year. Refresher courses and periodic mandatory recertification however is necessary to avoid de-skilling. Simply increasing the period of housemanship training alone is insufficient without the appropriate training and supervision, a problem likely to be exacerbated in the future by a glut of housemen and inadequate training posts.

I am an instructor on the Cardiac Surgery Advanced Life Support (CALs) course. This is an international course (sanctioned by the European Association for Cardiothoracic Surgery – EACTS) which aims to teach advanced CPR resuscitation skills specifically for the management of cardiothoracic patients who suffer a peri-operative cardiac arrest following heart surgery².

Following cardiac surgery, cardiac arrest may manifest with an episode of pulseless electrical activity (PEA) due to cardiac tamponade or a VF/VT arrest precipitated by ischaemia. The CALs course has been immensely successful in methodically teaching not only trainee cardiac surgeons, but anaesthetists, surgical /medical assistants and intensive care unit (ICU) nurses, an array of advanced CPR skills such as emergency chest re-opening, internal cardiac massage, pacing or defibrillation in addition to the generic skills of external chest

compressions and intubation.

The UK CALs course experience demonstrated that with appropriate training, even non-surgeons rapidly became competent and confident of performing active interventions in a safe and an expeditious manner. The time to successful definitive treatment was significantly faster post-course in timed simulated cardiac arrest scenarios². This is evidence that structured training and practice in the management of cardiac arrest patients leads to objective improvement in the speed and quality of care delivered thereby improving outcomes.

One could advocate that BLS skills should be actively taught to all non-medical clinical staff in a hospital and more advanced training (ACLS) made additionally available to para-medical staff such as ICU nurses and medical assistants.

The opportunity to acquire competency and confidence with life-saving CPR skills (basic or advanced) should not be exclusively for junior doctors after all any successful resuscitation outcome requires a team approach often involving para-medical staff. However, a good place to commence structured training is with the "first-line" junior doctors and final year medical students.

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