Dear Readers,

Welcome to this Special Edition of Update in Anaesthesia, which focuses on Intensive Care Medicine. This specialty has developed greatly over the last 30 years, however development of dedicated intensive care units (ICUs) in more poorly resourced countries has only come about in the last few years. We think of an ICU as a location in the hospital where the sickest patients are admitted for more invasive monitoring and more aggressive organ support and therapy. Inherently these monitors and treatments incur far higher costs than standard ward care, making them unachievable in many settings.

However, equipment is not the major factor that sets the ICU or high dependency unit (HDU) apart from the other wards of a hospital; it is the expertise and numbers of the ICU staff that confers the most dramatic advantage in providing effective care for the critically ill. Nursing staff numbers, and therefore the nurse to patient ratio, vary starkly between the general wards (around one to sixty in the description of a Ugandan ICU by Towey and Anyai, on page 16 of this edition of Update) and the ICU (ideally 1:1, but commonly 1:4 or 1:6). In addition it is the quality of training and experience of these nursing staff that has a major impact on patient care, particularly where staff morale allows good retention of staff and longevity of careers in the ICU.

In addition to good nursing care, close attention to the detail of basic good medical care by trained and experienced clinical officers and doctors, probably has a far greater impact on patient outcome than use of expensive, invasive equipment. In fact there are few interventions in ICU for which the evidence remains relatively unequivocal, examples being nursing patients in the semi-recumbent position (30 degrees head up) to decrease the incidence of ventilator associated pneumonia and administration of antibiotics to patients with sepsis within one hour or presentation. Therapies such as steroids and activated protein C for septic shock, despite encouraging early randomised control studies, have now been proven to be ineffective or harmful. Many of the more technical strategies for providing advanced respiratory support to patients with intractable hypoxia, such as extra-corporeal membrane oxygenation and high frequency oscillation ventilation, have a very limited supporting evidence.

So we are left in a situation where timely basic interventions are likely to bring about the greatest improvements in mortality and morbidity of critically ill patients, manoeuvres such as effective airway management and haemodynamic resuscitation in trauma, early antibiotics and surgical source control in sepsis. These strategies are available in most healthcare settings around the world.

This edition of Update in Anaesthesia attempts to provide an overview of the essential aspects of care of the critically ill and critically injured, with particular focus on practices that are most relevant and achievable in poor resource settings. For most topics in our speciality we have tried to achieve a balance between making the text relevant to workers where ‘high-tech’ equipment is not available and achieving appropriate coverage of the topic for areas where some level of more advanced equipment may be available. In many parts of the world, health centres that are geographically close to each other may vary greatly in their resources, due largely to the influence of alternative funding streams from non-government organisations.

I hope that this edition is useful. I would appreciate your feedback at bruce.mccormick@nhs.net. The articles do not cover this subject fully and suggestions for further ICM topics would be welcomed. This edition is available, along with the full back catalogue of Update in Anaesthesia at http://update.anaesthesiologists.org

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