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Education

Adult education for ICU management: a better way, T. Dorman

COmpetency-BAsed Training programme (CoBaTrICE) in intensive care medicine for Europe and other world regions, *F. Rubulotta & P. Gruber*

Making critical care education BASIC, W.T. Wong et al.

Effective education for palliative care, C.J. Hurd

Free Open-Access Medical education (FOAM) and critical care, C.P. Nickson

Physiotherapy in the ICU e-learning programme, M. Major-Helsloot et al.

Benefits of CRM education and simulation in intensive care and emergency medicine, *J. Barré et al.*

PLUS

Molecular diagnostics in severe respiratory virus infection, *B. Tang et al.*

Integration of nurse practitioners into the critical care team, A.C. Dykstra & J.J. Marini

Supply purchasing for intensive care centres, *R. Burgers & E. van Raaij*

Reducing avoidable harm and death from sepsis and acute kidney injury, *C. Hancock & A. Watkins*

Implementation of early and structured rehabilitation in ICU, D. McWilliams

Process indicator-based plan-do-

act-check cycle in a single-centre quality improvement initiative, *J.A.M. Heijneman et al.*

Improving sepsis outcomes in Brazil. F. Machado

Bringing new technologies to anaesthesia, *M. Cannesson*





ICU MANAGEMENT & PRACTICE

Education

"The function of education is to teach one to think intensively and to think critically" Martin Luther King

orldwide there is still much variation in type and duration of intensive care medicine training programmes (Amin et al. 2016). What is clear is that training programmes need to cover the 'basics' as well as adapt to accommodate new skills, such as point-of-care ultrasound. Education and training for the intensive care specialist are a lifelong commitment. Advances in communication methods and technology have enabled easier ways to keep our knowledge up to date, however.

Todd Dorman starts our cover story on Education by explaining four key adult education principles, which enable active teaching and learning so that the educator is facilitator and coach rather than the "sage on the stage". Next, Wai Tat Wong, Lowell Ling and Charles Gomersall outline the rationale for and lessons learned from the BASIC education collaboration for intensive care practitioners. BASIC courses have been held in 50 countries, and emphasise high-value small group instruction rather than low-value lecturing.

Caroline Hurd is interviewed about why palliative education for intensivists is needed and how it can be taught effectively. She emphasises that communication skills need to be treated and taught with the same importance as procedural skills. Next, Christopher Peter Nickson writes about the free open-access medical education movement—more than just social media, it is a useful adjunct to existing medical education with many benefits such as 'just-in-time' knowledge delivery.

As a prerequisite for a clinical rotation in the ICU, undergraduate physiotherapy students at the European School of Physiotherapy participate in an e-learning programme. Mel Major-Helsloot, Marike Van der Schaf, Bas Moed and Raoul Engelbert describe the development of the e-learning programme and its evaluation. It has proved to be a feasible way to provide students with the basic knowledge, skills and clinical reasoning required before they go into the ICU.

Next, Francesca Rubulotta and Pascale Gruber describe the vision behind and latest developments in the European Society of Intensive Care Medicine's Competency-Based Training in Intensive Care Medicine in Europe (CoBaTrICE), which aims to promote modernisation and mobility by providing a unified and harmonised model of training doctors caring for critically ill patients and their families around the world.

Last, Jessy Barré, Arthur Neuschwander and Antoine Tesniere outline the benefits of crew resource management (CRM) education for intensive care and emergency medicine specialists. Such simulation training has great advantages for assessing and improving non-technical or 'soft' skills, such as

communication, situation awareness and decision-making, which are needed for teams working in the high pressure environments of intensive care and emergency medicine.

In the Matrix section, Benjamin Tang and colleagues evaluate recent advances in molecular testing for patients with suspected respiratory tract infection, and look to the future with combined use of virus detection assay and host response biomarkers.

In the management section, Alicia C. Dykstra and John J. Marini describe the successful integration of a nurse practitioner into the critical care team. They emphasise that the role is intended to augment the interdisciplinary team to meet genuine and unmet needs, rather than compete with the intensivist's role. The greatest benefit has been to provide continuity of care.

Next, Roland Burgers and Erik van Raaij explain an innovative purchasing portfolio model for intensive care centres, which allows managers to make the best decisions on use of scarce resources, including time spent with suppliers.

The health service in Wales, UK, set out to improve outcomes from sepsis and acute kidney injury. Chris Hancock and Adam Watkins describe the 1000 Lives Improvement Service Rapid Response to Acute Illness Learning Set (RRAILS) and the success factors that led to behaviour change across the healthcare system. In innovating to achieve behaviour change they note that it is vital that clinicians are given 'permission to act'.

Early mobilisation is important and beneficial for critically ill patients, yet often it is not implemented. David McWilliams explores how to overcome barriers, such as safety and ICU culture and structure—it's not as simple as increasing the dose or duration of therapy.

Next, Joyce A.M. Heijneman, Jasper van Bommel and Mathieu van der Jagt explain how they developed and implemented a process indicator and plan-do-check-act cycle aimed at improving intracranial pressure management of severe traumatic brain injury patients.

In our Interview section, Flavia Machado, talks about her work with the Latin America Sepsis Institute, quality improvement programmes for sepsis in Brazil as well as forthcoming research collaborations. Next, Maxime Cannesson looks to the future of technology in anaesthesia as well as the potential of the 'data mart' in perioperative care as a hub for data sharing in hospital.

As always, if you would like to get in touch, please email JLVincent@icu-management.org.

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Reference

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