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Uchunguzi
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Uchunguzi means investigation in Swahili and provides a summary of some of the most recent international literature as presented in other leading journals, but with an emphasis on what is relevant to our continent.

Integrated acute care strengthens health systems

Content: Acute care can be defined as the health system components, or care delivery platforms, used to treat sudden, often unexpected, urgent or emergent episodes of injury and illness that can lead to death or disability without rapid intervention. As populations continue to grow and age, there is an increasing demand for acute curative services responsive to life-threatening emergencies, acute exacerbation of chronic illnesses and many routine health problems that nevertheless require prompt action. In this paper, leaders, policy-makers and academics are called upon to acknowledge the key contribution of acute care systems towards the care of patients with communicable and non-communicable conditions and injuries. Acute curative services support progress towards strong health systems (horizontal approach) rather than the patchwork efforts that may improve outcomes for specific conditions but not the overall functioning of the health system (vertical programmes). Some of the recommendations include: creating an acute care service delivery model for low- and middle-income countries that will function in parallel with preventive and primary services; improving coordination between deliverers of acute care services, such as emergency physicians, surgeons and obstetricians, to deliver critical acute care services efficiently and effectively and developing research methods to quantify the burden of acute care diseases and injuries, including health economics and cost-effectiveness components.


Shockingly FAST

Content: Following a Cochrane review in 2005, some have criticised the rapid promotion of emergency focussed assessment with sonography in trauma (FAST) scanning, stating there is insufficient evidence to support the adoption of ultrasonography-based clinical pathways in the assessment of blunt trauma. However, this has been contested by others, with some studies showing that FAST decreases time to disposition or operative intervention, reduces the requirement for CT scanning and decreases complication rates and the length of hospital stay. This prospective study conducted in South Africa aimed to evaluate FAST’s efficacy with respect to haemodynamic stability in trauma patients. From the 166 FAST scans conducted during the 9-month
study period, haemodynamic instability and a positive FAST result were significantly related ($p = 0.004$). Sensitivities and specificities of FAST scans for blunt and penetrating trauma were 93.1% and 100%, and 90.0% and 100%, respectively. In support of previous studies, this study emphasises the utility of FAST as a valuable addition to the physician’s repertoire of bedside assessment tools, showing a considerable improvement in diagnostic capabilities in comparison with simple haemodynamic assessments alone.


Emergency and critical care services in Tanzania

Content: While there is a need for good quality care for patients with serious reversible disease in all countries in the world, emergency and critical care tends to be one of the weakest parts of health systems in low-income countries. An assessment of hospitals in four regions of Tanzania identified important deficits in infrastructure, routines and training. Only 30% of the hospitals had an emergency room for adult and paediatric patients and none of the seven districts and regional hospitals had a triage area or intensive care unit for adults. In 80% of the hospitals there were no staff trained in adult triage or critical care. In contrast, a majority of equipment and drugs necessary for emergency and critical care were available in the hospitals (median 90% and 100% respectively). Recent studies in related disciplines have shown findings consistent with our results in the Gambia, Zambia, Mongolia and in Sub-Saharan Africa. This study indicates a need to prioritise the improvement of hospital systems for the care of emergency and critically ill patients in low-income countries.


1 out of 8 medical emergencies in your ED may be a stroke

Content: In Sub-Saharan Africa, although neurologic emergencies are common in the emergency room, there is paucity of data on the subject. There are also very few neurologists, thus patients having neurologic emergencies are attended to by other primary care physicians like Internists, Family physicians and emergency care physicians. A recent review of medical emergencies in a tertiary hospital emergency department in South Nigeria established that more than a quarter of the medical emergencies attending the adult emergency department were neurologic emergencies. The three most common neurologic emergencies were stroke (52.5%), meningoencephalitis (11.3%), and hypertensive encephalopathy (7%). This contrasts with earlier studies carried out in the 1970s in Nigeria and in Kenya in the early 1990s which observed central nervous system infections, mainly meningitis, to be the most frequent neurologic disorder. Similar studies worldwide have also identified stroke as the most frequent neurologic emergency presenting to emergency departments. With this changing trend in Sub-Saharan Africa, there is a need to consider establishing designated hospitals with emergency departments and personnel well versed with the management of stroke and other neurologic emergencies. Recent advancements in stroke care have meant that some stroke patients now have very good prognosis.


Intimate partner violence in the ED – a nursing tale

Content: Intimate partner violence (IPV) survivors commonly contact the emergency unit immediately after the acute violent episode. During this ‘open window period’, the survivor is confronted with the reality of the situation and is more receptive to interventions. Emergency nurses are, therefore, in an ideal position to identify IPV and intervene appropriately to prevent IPV-related mortality and morbidity. Unfortunately, witnessing the suffering of survivors of intimate partner violence has an emotional impact on emergency nurses and leaves them with disruptive and recurrent memories according to this recent research from Pretoria, South Africa. Exposure to the vulnerability and suffering of survivors elicits emotional distress and feelings of sympathy in emergency nurses and they are at risk of developing secondary traumatic stress. Support programmes with the focus on preventing secondary traumatic stress should be available to emergency nurses to enhance their awareness of the appropriate use of empathy and focus on emotional regulation, self-awareness and self-care to diminish emotional distress when caring for survivors of intimate partner violence.


Bagging brains in out-of-hospital-cardiac arrests

Content: Better survival for out-of-hospital cardiac arrest (OHCA) has been associated with the improvement in early access to emergency medical care, early cardiopulmonary resuscitation (CPR), rapid defibrillation, and integrated post-cardiac arrest care. Early advanced life support is often considered of benefit in that it provides intravenous drug therapy and advanced airway management. In this recent study, CPR with conventional bag-valve-mask ventilation for adult OHCA was associated with a favourable neurological outcome compared with any type of out-of-hospital advanced airway management by Emergency Medical Services personnel. Following up a cohort of 649 359 patients, the investigators established the rates of neurologically favourable survival to be 1.0% (95% CI, 0.9–1.1%) in the endotracheal intubation group, 1.1% (95% CI, 1.1–1.2%) in the supraglottic airway group, and 2.9% (95% CI, 2.9–3.0%) in the bag-valve-mask ventilation group. So should clinicians avoid advanced airway management during CPR based on the best available observational evidence? Although one option would be to remove advanced airway
management from the skill set of all out-of-hospital rescuers, that approach would disregard situations in which advanced airway management would be expected to be efficacious, especially for long-distance transfers and respiratory failure not yet with cardiac arrest. Thus the debate continues.