February 2016

Uchunguzi (Journal Watch/Montre de Journal) March 2016

Benjamin Wachira

Aga Khan University, benjamin.wachira@aku.edu

Follow this and additional works at: http://ecommons.aku.edu/eastafrica_fhs_mc_emerg_med

Recommended Citation

REGULAR FEATURES

Uchunguzi (Journal Watch/Montre de Journal)

Benjamin W. Wachira

Accident and Emergency Department, The Aga Khan University – Nairobi, Nairobi, Kenya

Received 20 January 2016; accepted 22 January 2016; available online 5 February 2016

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.

The African Emergency Nursing Curriculum

Increasing demand on emergency healthcare systems throughout Africa means there is a need to develop and harmonise standards of emergency care for the benefit of African populations. This can potentially be achieved by developing guidelines for appropriate and high quality education to prepare future generations of emergency healthcare providers for their role in all regions of Africa. With this in mind, the African Emergency Nursing Curriculum was developed by emergency nurses, academics and researchers from Africa and the rest of the world to provide a consensus document to guide the development of harmonised standards of emergency nursing theory and practice across Africa (Fig. 1). While being very sensitive to the unique needs of each country, this curriculum provides a suggestion of a way to begin to address a very Afrocentric emergency nursing problem and provides a clear, user friendly framework for consideration by emergency nursing educators throughout Africa.


Emergency care for Kenyans by Kenyans

Access to quality emergency services is an essential component of the human right to health, but barriers to emergency care are found throughout Africa and the wider world. In this recent study from Kenya, researchers conducted focus groups across the country to understand the community’s emergency care needs and barriers they faced when trying to access care. They also sort their thoughts regarding high impact solutions that would expand access to essential emergency services.

From the findings, most Kenyans understood the definition of a medical emergency and had witnessed at least one, which usually was trauma related. They usually helped each other, though lack of knowledge on how to assist, lack of personal protective equipment and the potential to cause inconvenience or harm to the helper were common barriers. Additional barriers included difficulty obtaining transportation, long distances required for travel, a high cost of treatment, lack of prioritisation protocols (causing critically ill patients to queue for a long time before being seen) and providers who were unfriendly or unmotivated to provide timely, appropriate care. Potential solutions from the community included provision of material resources at all levels, from gloves and first aid kits in their communities to resuscitation equipment and stocked medications in hospitals, designation of areas for emergency care in facilities, and availability of a central, accessible, functional emergency number for the entire country. The also suggested training providers in emergency care, having dedicated emergency care providers, improving transportation by increasing the number of ambulances and emergency care capacity building at the community level through community first responder training. Community involvement in the development of emergency care is essential as they themselves have the capacity to identify barriers and generate essential steps to address the most often overlooked component in their right to health—the right to quality emergency services.


Do more ambulances reduce response times?

Response time is viewed as a key performance indicator in most emergency medical services (EMS) systems. This refers...
to the time interval between receipt of a call for emergency assistance at an emergency dispatch centre and arrival of the first EMS vehicle at the corresponding incident location. Though response time targets exist- and are used as a standard against which EMS performance is measured- many services are unable to meet these targets. The reason most often cited for this situation is lack of operational vehicle numbers. This is based on a common perception in EMS that there is a more or less inverse linear relationship between vehicle numbers and response times, and that meeting the response time targets would be greatly aided by acquiring more vehicles. A recent study done in South Africa confirmed this using a simulation model based on input data from a large urban centre EMS system’s operations and computer-aided dispatch system. The results showed that the addition of emergency vehicles to a busy urban EMS improved response times in high-acuity cases though this effect was not linearly related to the number of response vehicles. The number of vehicles required to bring about this transient improvement was also unrealistically large. Changes to the way emergency vehicles are deployed, and how proximity between available vehicles and high-acuity incidents is optimised, are required in order to bring about cost-effective and significant improvements in response time performance.


Figure 1  African Emergency Nursing Curriculum.

Injury in Amhara

According to World Health Organization (WHO), low and middle income countries (LMICs) share more than 90% of the injury burden; to which the Africa region contributes about 21%–mainly the sub Saharan countries. To design effective strategies to reduce this burden, there is a need to describe the magnitude of injury and its associated factors. An Emergency Centre (EC) based cross-sectional study done in Amhara, Ethiopia showed a prevalence of injury in the EC of 55.6% (95% CI, 50.7–60.4%). Being male (AOR = 2.8; 95% CI, 1.79–4.47), monthly income less than 34.2 USD (AOR = 1.89; 95% CI, 1.03–3.46), being age between 20 and 44 years (AOR = 2.25; 95% CI, 1.06–4.81), being a daily labourer (AOR = 6.27; 95% CI, 2.38–16.47), being a farmer (AOR = 2.9; 95% CI, 1.31–6.41) and being a substance user (AOR = 2.16; 95% CI, 1.18–3.96) were significantly associated with injury. With injury becoming one of the leading causes of premature death and disability especially in Africa, we need to develop ECs that are well equipped and staffed by healthcare providers with adequate training in the emergency care of the injured patient.

Needle stick injuries... how bad is it?

Exposure to blood borne pathogens is the most serious occupational health risk encountered within the healthcare profession worldwide. The WHO estimates that 3 million healthcare workers experience percutaneous injuries each year. As a result of these exposures, 66,000 healthcare workers are likely to become infected with hepatitis B, 16,000 with hepatitis C, and 1000 with HIV. A disproportionate number of these blood borne infections (more than 90%) occur in LMICs. Additionally, healthcare workers providing care in ECs have an enhanced risk of exposure due to the nature of their trade and frequent exposure to sharps. A mixed-methods descriptive study conducted in a busy tertiary care EC in the Ashanti Region of Ghana showed that over one-quarter (28.9%) of emergency nurses reported a sharps injury during a one-year period. Of those nurses reporting this type of workplace injury, 45.5% incurred one sharps injury while 18.2% stated they had experienced two sharps injuries. The remainder (36.3%) had experienced four or more sharps injuries within the same period. This highlights the need for institutions to have the appropriate post-exposure guidelines and realistic, low cost interventions, which could further improve the safety of healthcare workers as they provide patient care in the EC.


Emergency care capacity scoring in Sierra Leone

The WHO has urged member states to “assess comprehensively the pre-hospital and emergency care context including, where necessary, identifying unmet needs”. A structured needs assessment is an essential first step in health service development and is necessary to establish existing capacity and identify priorities for development. An assessment of capacity to deliver emergency and critical care was carried out in a sample of secondary care facilities in Freetown, Sierra Leone, using a structured set of standards developed that clearly outline the minimum relevant and realistic requirements for effective emergency and critical care delivery in low-income countries. Capacity in the areas of infrastructure, human resources, training, drugs, equipment, systems, guidelines and diagnostics were evaluated as part of the assessment. The greatest weakness was identified in the domain of infrastructure, with an average score of 43%, while the strongest areas of capacity overall were in drug availability, 82%, and human resources, 79%. A marked disparity was noted between public and private healthcare facilities with consistently lower capacity in the former. The overall Emergency Care Capacity Score was 66%. Though widespread deficiencies were demonstrated especially in public hospitals indicating an inadequate capacity to deliver effective emergency care in the city, the study highlights development priorities and sets a baseline for monitoring service improvements.


Conflict of interest

The author declare no conflict of interest.