

EM in Sudan

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Abdelrahman Salah-Eldin Imbabi, FRCSEd  
Assistant Professor of Surgery, Department of Surgery, Faculty of Medicine,  
Plastic & Reconstructive Surgeon, Soba University Hospital  
University of Khartoum

Academic Secretary, Sudan Association of Surgeons,  
Director, Severe Trauma Instruction Course (STIC)

PO Box 2709, Khartoum, Sudan  
Tel/Fax: +249 11 462931  
Mobile: +249 12 371796  
E-mail: aseimbabi@rcsed.ac.uk

Sudan, one of the largest Afro-Arab countries (area 1M sq. miles) is situated in the heart of Africa and forms an important gateway between the Arab World and the rest of Africa. It has one of THE longest rivers in the World, the River Nile, cutting through its whole length from South to North. The White Nile from the Southern Lake Victoria in Uganda meets the Blue Nile in Khartoum, pouring down from the Ethiopian heights in the East.

Its population from the last census (about 10 years ago) was 30M, a large chunk of whom are either abroad or else concentrated in the capitol cities of Khartoum, Omdurman and Khartoum North. The people are a multiethnic mixture, and tribal conglomeration is still very prominent.

Economy is generally poor. Traditionally the Economy was based on Agriculture and Animal Production, both of which Sudan may be considered to be very rich, and probably fortunate in that modern genetic manipulations have not yet come into play. Industry, on the otherhand, forms a minor performer in the Economy, with the exception of the new player, the Petroleum Industry in which the Sudanese are now building their hopes.

Ethnic conflicts, particularly those between South and North have been rife for many decades, especially at the boundaries between the Nilotic tribes (original African stock) and the Afro-Arab tribes of South-West Sudan. These conflicts are mostly based on land/water and grazing rights and now added to it the petroleum conflicts. Other than these boundary conflicts, Southerners and Northerners have always lived together in harmony and peace. These conflicts have turned, however, into a destructive civil war during the past few years, and has been flared up further by agitators turning the conflict into a religious conflict.

Conflicts in neighbouring countries have also induced a large influx of refugees during the past two decades, many of whom still remain in Sudan. In the absence of full international support, these refugees have further strained the Economy and pushed it backward.

To make things even worse, Sudan has been implicated with the harbouring of terrorist groups, and this has invited severe international sanctions for many years. The generally harmless Sudanese people (Sudanese have traditionally been known to be kind, generous, helpful, truthful and trustworthy) have been punished by the International Community for the actions of individuals. It is surprising that one of possibly the safest places to be in the World is in

Khartoum (as regards crime and terror), but none-the-less it is described as a Terrorist Country and is sanctioned!

As regards education, Sudan is possibly one of the first Afro-Arab countries to have a university (the University of Khartoum) which was well-known for its high-caliber output. And also one of the first to have Postgraduate Degrees. The Sudanese graduate has been able to gain the respect of his counterparts all over the world.

Administrative mismanagement and corruption (including international mismanagement), the extension of conflicts, the sanctions and the exodus of highly qualified Sudanese to the Gulf and the Western World have all had their toll on the originally very humble Economy.

And this has had its effect on the social fabric and framework, including education, health and all public services which are now falling far behind international levels and expectations. Accordingly EM in Sudan, as a specialty and unique service, is still an unborn fetus.

#### Emergency Service System in Sudan

The current system in Sudan is the UNIT system headed by a senior consultant with or without a junior consultant, and medical officers (service hospitals) or registrars and house officers (teaching hospitals). Each unit has the responsibility of covering the emergency room (in their respective hospitals and specialty, i.e. surgical units for example cover surgical emergencies only in a separate surgical casualty area) 1-2 times a week for 24 hours. The coverage is usually done by the junior doctors with the inexperienced house officers or medical officers being at the forefront. Consultants rarely, if ever, come to the emergency room!

This system has the theoretical advantage of providing specialized care for the patient from the start, and emergency patients are followed up by the same team from start to end. However, the theory stops there since the emergency patients are actually being dealt with by junior inexperienced doctors in the emergency room, who have no special training for dealing with emergencies. Furthermore, the system depends upon the patient who is supposed to correctly triage himself/herself to the correct casualty!

Multiply injured patients are seen in the orthopaedic casualty. Again the doctors have no special training in the management of such patients. As may be expected, attention is drawn towards fractures and wounds, whereas the ABC principles do not come into play, with the result that many patients are lost because of airway and breathing problems or because of internal injuries which have been missed.

On top of this all, emergency patients have to buy everything beforehand! They have to buy the canula and the catheter and the I.V. fluid and the dressings! And it is not usually within the casualty itself; someone has to go to the pharmacy to get the stuff! There is no system for 'serve now and pay later'. This occurs in spite of a clear presidential decree that all emergencies are to be treated free-of-charge in public hospitals! But the fact remains that these hospitals do not have budgets for purchasing items and stocking emergency rooms!

Private hospitals have a uni-casualty where all patients are seen in the same area by a registrar-level doctor (usually), but again these doctors do not have special training in emergency management. The expense, however, is prohibitive for most patients (not covered by National Health Insurance) and must be paid

forefront, and furthermore, these doctors are also supposed to cover in-patients and may not be physically available in the casualty on arrival of seriously ill patients! And of course, if the patient needs specialist attention in the middle of the night, s/he would be very lucky to find a consultant, and might as well forget about it, especially more so in the case of public hospitals ....

All these factors have resulted in a higher morbidity and mortality rate amongst seriously ill patients. Exact figures, however, are lacking due to very poor documentation and recording, and a very poor statistical system. Patients will die in the casualty, and all they get is probably a comment from the registrar in the morning to the consultant reporting that "we had a couple of mortalities during the night", and that's it in most cases! And this is talking about main hospitals in the capitol, where they are supposed to be at their best!!

It is unfortunate that I have to present this gloomy picture. But I believe that the only way to go forwards is to recognize our problems and then work at solving them. I am not an EM physician myself, nor do I know of any Sudanese who is an EM physician by specialization and profession. Yes there are some doctors who may have interested themselves in one or more aspects of emergency care; I for one am interested in trauma and wound surgery in particular, and my contributions in Sudan are aimed mainly at improving trauma management.

Postgraduate training and degrees in Sudan have always been catered for by the Postgraduate Medical Studies Board (PGMSB) of the University of Khartoum. Degrees do not include Emergency Medicine as a specialty. Similarly, the newly developed National Medical Specialization Board (Ministry of Health) does not include EM as a specialty. In fact the whole concept of EM as a unique and separate specialty has not yet been conceived in Sudan.

However, in collaboration with the various departments and the Educational Development Centre (EDC) of the University of Khartoum, the PGMSB has sponsored a series of short emergency management courses. At the Department of Surgery and in view of the increasing morbidity and mortality from trauma (conflicts and accidents), we were interested in importing the ATLS, but due to financial difficulties, this proved to be out of reach. So in its place we developed a local trauma course, the Severe Trauma Instruction Course (STIC) which is now in its 4th year. It started as a 5-day course mainly for surgical registrars, but now is divided into two courses BASIC and ADVANCED STIC.

The Basic STIC is a 2-day course once every 2-3 months and which targets all levels of doctors, senior medical students and senior nurses. It concentrates on early life-saving procedures. The Advanced STIC requires the candidate to have completed the Basic STIC and is a 3-day course 1-2 times every year going into details of managing various injuries as well as the setup of trauma units and trauma documentation and audit.

The courses are not copies of other internationally recognized courses, such as the ATLS, although they build on similar principles, but they are modified to suite our local circumstances. As these courses are very local, however, their recognition is also very local. We are looking for an International partner to augment and sponsor these courses so that our doctors do not face problems or difficulties when working abroad.

Preliminary results were presented at the Doha International Emergency Congress last year, and are currently under consideration for publication in the Middle East Journal of Emergency Medicine (MEJEM). I will be happy to provide further details on these courses to any interested party.

It is my hope that Sudan wakes up from its nightmare and develops into a productive, healthy and reliable country, harmonious with its neighbours and the International Community as a whole. It is also my hope that the International Community help the Sudanese to achieve that goal. For this issue of Emergency Medicine, I hope to create links with you that will help us to conceive, deliver and develop EM in Sudan.

Thank you!