

## Anesthesia in Africa : quo vadis ?

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To evaluate the future of anesthesia in Africa, a broad scope must be considered. The problem of anesthesia and medicine in general in Africa, is the fact that local governments do not always recognize health as one of the cornerstones for future development. In the present issue of *Acta Anaesthesiologica Belgica*, LOKOSSOU *et al.* (1) mention the health expenditures of 16 US\$ per capita in 2001 in Benin. In comparison, the Belgian government spent 1.607 € (aproxim. 2.100 US\$) per inhabitant in 2004.

KAMM (2) noted that anesthesia in Africa can not be separated from the framework of the health system, which in turn can not be separated from social, cultural and political structures in the African countries. Any healthcare system must be indigenous to the area and must develop out of a given structure, its systems and its possibilities. An amount of 30% to 40% of general anesthetic procedures in Africa is performed with ketamine, seldom used in Europe for this purpose. We must realise that in African countries, anesthetic agents and equipment are used appropriate to their situation. Africa must do it with the means they have and in their context. The "sophistication syndrome" must be minimised and help to developing countries must be focused on the local situations.

A lot of problems are described in the overview of anesthesia practice in French speaking Africa, which is representative for the rest of Africa :

- the decreasing number of physicians specialised in anesthesia
- the alarming outcome of surgery and anesthesia especially, with a high degree of peri-operative mortality
- the shortage and bad age distribution of anesthesia care providers, with a gap of knowledge
- the deficiency of teaching and anesthesia training
- the selfish political visions in Europe and Africa, which provoke a brain drain away from Africa
- unreliable drug concentration and inadequate supply
- shortage of essential anesthesia material and disposables

Formation of adequate anesthesia care providers and the provision of the essential anesthesia systems and drugs, now seem the most important problems to solve.

- The foundation of new schools to teach and train nurse-anesthetists is promising. But the need for more doctors is essential as nurse-anesthetists are limited in managing patients with complications and co-morbidity. The increase of doctors can be achieved by motivating the doctors formed in Western countries to return to their native countries. Governments, political and professional instances, from developing and better-developed countries together, must realise that better work conditions are essential and that only correct and fair payment of medical providers can ameliorate the situation. OKAFOR (3) describes the situation in the department of anesthesia of the University of Nigeria Teaching Hospital of Enugu, where since payment was improved in 2000, the number of physician anesthetists increased by 100%.
- The provision of adequate equipment and drugs, remains another huge problem. In her touching account on the inventory of anesthesia provision in Tanzania, TOWEY and KIMARO (4) mentions that one of the major obstacles was the lack of funds to buy vaporisers and oxygen concentrators. Logistics of transporting supplies on roads washed away by latest rain, was reported as another problem.
- In 1880 William McEWEN first described endotracheal anesthesia in the *British Medical Journal* (5). Large populations of sub Saharan Africa still remain without this basic foundation of modern anesthesia. This is an appalling and unacceptable position, TOWEY and KIMARO (4) continued in their report. They conclude : If you give a person a fish, you feed her for a day. If you

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teach her to fish, she can feed herself for a lifetime. But only if she has a fishing rod ! Every initiative to improve the local situation must be encouraged.

Training programs should be supported and cooperation with institutions of developed countries must be stimulated. The use of regional anesthesia must be further developed. Improvement in safety should be pursued by more use of spinal anesthesia in stead of general anesthesia (6). A proof of the improvement of the peri-operative care has been provided in Ghana, by a regional anesthesia educational program (7), which was supported by the department of anesthesiology and critical care medicine of the John Hopkins Hospital. The aim of the cooperation is the creation of an increased level of regional anesthesia expertise. This can result in less reliance on airway acquisition and mechanical ventilation, improved intra-operative hemodynamics, safer and better post operative pain control. The Ghanaian anesthesiologists will be empowered to serve as a resource for spreading the relevant knowledge and skills of regional anesthesia to anesthesiologists in other African countries.

Similarly, hospitals in developed countries can "adopt" medical centres in the third world to support them with logistic and educational means, as the recent cooperation between our institution and the dispensary of Kara in Togo shows.

Another hopeful initiative is ECHO, International Health Services, a British charity which supplies appropriate, affordable, quality assured drugs and medical supplies to governments, charities and mission hospitals in more than 130 countries (4).

The poignant overview of anesthesia in French speaking countries of Sub Saharan Africa is obligatory reading for every philanthropic anesthesiologist in the developed countries. We must be worried

about this harrowing situation and evolution. The elimination of poverty is essential, but is not the only solution for the proposed problems. Committed and dedicated teachers of the developed world must be found to help, but unstable political regimes are often the reason that engaged health care workers are reluctant to travel to Africa. Professional organisations such as our own Belgian Society have the task to work out assistance programs for the developing countries. This paper can help to weigh upon political authorities to influence their decision-making in their foreign African policy. It is the duty of everyone to help to deliver the adaptive skills and to find adequate remedies for a very sick situation where quick and profound reanimation is mandatory.

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