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BUILDING FOUNDATIONS FOR IMPROVING HEALTH OPPORTUNITIES IN SUB-SAHARAN AFRICA



The health care indices and statistics in sub-Saharan Africa as a whole are abysmal. This is more so in relation to provision of neurologic services. Each country has its own set of problems and opportunities, but all face a basic set of challenges, with which we will begin this article.

The 2 major challenges facing African neurosciences are ones of quality and quantity, in both resources and personnel. Within Africa, there is discrepancy between the 2 poles, namely, the north and south of the continent and the sub-Saharan area. Although reasonably advanced in the north and south, neurologic services remain poorly distributed and have multiple deficiencies in the sub-Saharan area.¹

Neurologists and neurosurgeons (neuroscientists in general) are scarce and unequally distributed. In Europe, there is one specialist per 20,000 people; in Africa, one per 3 million people. Neurosurgery in particular remains a very marginal activity in sub-Saharan Africa, where vehicular traumatic brain injury is increasing. In this part of the world, which numbers nearly 40 countries, some countries do not have a single neurosurgeon, some have 1 to 5, with 10 neurosurgeons per country remaining an exception.² Facilities for postgraduate training are nonexistent or poorly developed.

The human deficiency is compounded by a lack of hospital beds for neurologic disorders in sub-Saharan Africa. There is a lack of nurses and subspecialized neurologic services (neurologic rehabilitation, EEG, EMG, neuropathology, and stroke units). Basic drugs used for neurologic disorders may not be available or are too expensive.³

Cultural attitudes and the absence of governmental priority for neurologic diseases combine with the weak health infrastructure and the insufficient supply of medications to complete the factors that prevent adequate treatment of patients in these communities.⁴

A prime example is epilepsy: 90% of people with epilepsy do not receive appropriate treatment. Similarly,

the burden of stroke in the developing world is huge and growing. Finally, despite mortality due to communicable diseases, poverty, and human conflicts, dementia incidence is destined to increase in the developing world in tandem with the aging population. These realities compound the problem of the chronic shortage of trained neurologic practitioners and neuroscientists.

Therefore, there is no doubt that the deficiency of neurologic services in general is an alarming situation, and all hands must be on deck to reverse the situation.⁵ Because of the prevailing economy in sub-Saharan Africa, the equipping of neurologic and neurosurgical services, as well as the training of younger colleagues, remains a recurrent problem. Therefore, all currently available resources ought to be mobilized and put together to obtain very rapid short-term results that will build the foundations for long-term solutions.⁶

Let us go from the theoretical to the actual situation on the scene. Insufficient state funding and research facilities aggravate the clinical deficiencies and discourage the few well-trained African neuroscientists from practicing in their homeland. For those who do return home, cultural, social, economical, and political issues hinder their performance and hence the quality of services delivered in Africa. Strategies for rectification of these handicaps are necessary, including the need for high-standard local training and support from international organizations.¹

What we know and what we can do make a big difference in what we can accomplish. We can improve neurologic services if practitioners are equipped with the knowledge, skills, and support that are necessary. International health partnerships to share knowledge of neurologic management and service development to support the improvement of care in the continent are therefore crucial. These must develop as true partnerships where Western idealizations adapt to the African realities.

Private organizations, including universities, foundations, professional associations, nongovernmental

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Go to Neurology.org for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

organizations, and the pharmaceutical industry, do play an important role in identifying important policy issues through research, designing and developing appropriate technology, and acquiring the knowledge base necessary to form sound international health policy decisions.¹ But these are not coordinated, and there are often duplications among these institutions with the African partners.

Foundations and collaborations between international professional neurologic organizations appear to be of benefit when coordinated to meet the needs of African neuropractitioners and neuroscientists. It may be hoped that discussion of these issues and support from these organizations will lead to the development of neurologic services.² The major players in international health and health policy thus have tremendous potential to contribute to the well-being of humankind, if there can be an Afro-centric coordination on the part of the international community.¹

Let us view the current situation from an accountant's perspective. In the Asset column, multilateral organizations such as the World Health Organization, the Society for Neuroscience, and the International Brain Research Organization have universal areas of concern, and the latter 2 do have small chapters in sub-Saharan countries now. The financial multilateral agencies play a key role in influencing development through the leverage of financial resources. Bilateral agencies of donor countries influence health policy direction by the magnitude of their financial resources.¹

In the Debit column, professional development activities are often sporadic and not tied to the day-to-day activities of the practitioner, and hence have no process for follow-up. It is all too easy to discover that clinically important research findings are either not known by practitioners or not being used in actual practice because basic neuroscience capacities are not available.³ Such educational endeavors lose efficacy without relevance inherent in the day-to-day practice.

The solution to clearing the Debit column can come through long-term, flexible partnerships that will provide the support and opportunities on a continuous basis as a regular feature on the educational and service provision landscape.⁴ Patients should receive care that is based on the best available scientific knowledge, and care should not vary too much from clinician to clinician or from place to place. The ability to conduct research and use the results can have far-reaching benefits for patients. When care is

improved, patients' lives are improved.³ Implementing research-based practices is a complex but valuable endeavor.³

Community benefit from a conceptual perspective can be traced to the philanthropic and humanitarian spirit that dominated the earliest foundations of the hospital as a social institution, and medical, nursing, and rehabilitation personnel as professionals rather than tradespersons.⁵ Medical research foundations can compete more effectively for charitable dollars by being aware of motivations for giving when designing marketing strategy.⁶

Medical research foundations working with local practitioners to develop long-term sustaining strategies based on local needs are the necessary scaffold for creating and improving health opportunities for practitioners and the people in sub-Saharan Africa.

This proposal is not a new one but is worthy of our time and money.

AUTHOR CONTRIBUTIONS

Dr. Ogunbo contributed 60% of the article through initial drafting and research, and multiple redrafts. Dr. Finkel contributed 30% of the article through editing and redrafting. Dr. Ogun contributed 10% of the article through advising the other authors on the content.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

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Neurology®

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Neurology 2013;81;2134-2135

DOI 10.1212/01.wnl.0000437293.13194.12

This information is current as of December 9, 2013

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