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# Global Perspectives

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# APRONES: NEUROLOGY RESEARCH AND EDUCATION IN THE DEMOCRATIC REPUBLIC OF THE CONGO

The Democratic Republic of the Congo (DRC) is a large country (2,345,000 km<sup>2</sup>) located in Central Africa. Although no reliable census has been carried out for decades, the population is estimated to be 70 million, of whom about 12% live in Kinshasa, the capital and largest city of the country.

There are currently about 8,000 physicians in the DRC, including approximately 40 neuropsychiatrists and 80 neurology and psychiatry paramedical staff, whose majority is based in Kinshasa. In terms of public health, in addition to the low number of physicians and paramedical staff, the DRC is seriously hit by numerous preventable or curable diseases such as cerebral malaria, stroke, HIV infection/AIDS, epilepsy, and tropical spastic paraparesis such as konzo. Also important to note is the upsurge and rapid spreading of reemerging diseases that were once eradicated or under control, such as human African trypanosomiasis and poliomyelitis, as a consequence of population movements due to wars or natural disasters such as drought or low immunization coverage.

In 2000, a group of neurologists from the Centre Neuropsychopathologique (CNPP) of the University of Kinshasa (UNIKIN) decided to create Association Pour la Promotion des Neurosciences (APRONES), dedicated to the promotion of neurosciences, modeling similar organizations of well-equipped countries. The CNPP is a teaching, research, and care center affiliated with the school of medicine at UNIKIN. It is the only neurology and psychiatry training center for the DRC, while serving the needs for French-speaking countries of central Africa.

After its creation, the APRONES devoted the first 2 years to organize itself internally. During that time, regular organizational and scientific meetings attended only by a few members were held and effort was made to recruit as many new members as possible. After establishing its own internal structure, the APRONES

progressively established collaborative ties with international organizations such as the World Federation of Neurology, the International Brain Research Organization (IBRO), and the International League Against Epilepsy. These collaborative ties have allowed the APRONES to have a clear understanding of international neuroscience networks and start carrying out collaborative research of mutual interest. For example, a United States-Europe-Africa multidisciplinary team including neurologists, biochemists, and epidemiologists is currently investigating the pathogenesis of konzo, a motor neuron disease associated with the consumption of cassava, a staple for more than 600 million dwellings under the tropics. The ties, particularly with the IBRO, have helped organize national and international meetings on a yearly basis, with the participation of neuroscientists from many African countries, Europe, and the United States. Kinshasa hosted almost all of these meetings, but the APRONES has expanded activities to Lubumbashi, the DRC's second largest city. To date, the APRONES has grown from a dozen to 65 members including neurologists, psychiatrists, psychologists, pharmacists, and biochemists. Despite significant scientific progress, much remains unknown about diseases of the nervous system in the developing world. The APRONES is well-positioned to help carry out studies that will advance our understanding of some of these diseases and pave the way for international collaborations to enhance collaborative research work of global health relevance.

### **AUTHOR CONTRIBUTIONS**

M.K. Luabeya: design and implementation of the project, drafting of the manuscript. J.C. Mwanza: design and implementation of the project, drafting of the manuscript. K.M. Mukendi: design and implementation of the project, drafting of the manuscript. D. Tshala-Katumbay: design and implementation of the project, drafting of the manuscript.

#### 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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