Availability of stroke units in Colombia

In *The Lancet Neurology*, Sheila Ouriques Martins and colleagues presented the recommendations of the first Latin American Stroke Ministerial meeting that took place in Gramado, Brazil, in 2018.[1] In their Policy View, they provide a map of the stroke centres in Latin America and outline strategies to decrease the burden of stroke.

However, we want to highlight that the data for stroke services in Colombia might be better (ie, more centres might be available for stroke care) than reported in this Policy View. For example, our institution is a primary stroke centre with the capability of treating patients with thrombectomy; our primary stroke programme is certified by the Joint Commission International.[2] With this programme, we provide acute stroke care, measured by quality standards regarding time from the event to access to acute care, neuroimaging diagnosis, and treatment. Also, this programme has an educational component for patients, families, and communities. Our hospital has a stroke unit with a dedicated area for stroke treatment and we follow up our patients for more than 90 days (outpatient setting) after the stroke, with a team (including rehabilitation) providing full-time hospital care during the acute phase. Three more hospitals in Colombia (Bogotá, Bucaramanga, and Cali) are expected to receive a similar certification and open new stroke units in the next few years.

Additionally, the Policy View mentioned that only three private hospitals deliver thrombectomy for the whole country and we also consider this number to be inaccurate. We surveyed the Neurointerventional Colombian Committee, which is a branch of the Colombian Society of Radiology, and received email and telephone answers from 21 neurointerventionalists working in 34 centres across Colombia that do thrombectomy, and at least 14 of them offer 24 h service. Endovascular treatment is available in the largest cities of Colombia (presented according to population size: Bogotá, Medellín, Cali, Barranquilla, Cúcuta, Bucaramanga, and Tunja).

These data mean that in Latin America, following Brazil and Chile, Colombia has the third best provision for acute stroke care according to the information provided by the authors of the Policy View. In Colombia, there are various centres providing stroke care according to the data that we have gathered, which reflects the efforts by many physicians and hospitals to improve the quality of acute stroke management.

We declare no competing interests.

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1 Ouriques Martins SC, Sacks C, Hacke W, et al. Priorities to reduce the burden of stroke in Latin American countries. *Lancet Neurol* 2019; **18:** 674–83.

2 Joint Commission International. JCI-accredited organizations. https://www.jointcommissioninternational.org/about-jci/jci-accredited-organizations/?c=Colombia&a=Primary Stroke Program (accessed May 6, 2019).

Sleeping sickness in the Democratic Republic of the Congo

Adrian Burton[1] discusses the potential of fexinidazole as the first oral treatment for eradication of human African trypanosomiasis (HAT), and how this drug is particularly welcome in light of recent publications about latent carriers—humans, as well as animals. Fexinidazole is indeed a tremendous breakthrough, and—alongside acoziborole—a potential gamechanger for elimination and possible eradication of HAT. There is an important distinction between elimination and eradication: WHO defines elimination as "reduction to zero of the incidence of disease or infection in a defined geographical area", and eradication as "permanent reduction to zero of the worldwide incidence of infection".[2] WHO has targeted elimination of HAT "as a public health problem" by 2020, defined as an annual incidence of less than 1 per 10 000 individuals in 90% of endemic areas, and a global number of cases of HAT below 2000. WHO aims to achieve elimination of infection, reaching and sustaining zero cases of HAT, by 2030. This target is not equivalent to permanent eradication of the pathogen, and we are still working to achieve elimination of HAT as a public health problem—here is our perspective from the field.

For many years DR Congo yielded more than 60–80% of the world's HAT caseload. Recently, great progress has been made towards WHO's goals for HAT elimination, despite a difficult political period. The strategy of the National Sleeping Sickness Control Programme in DR Congo (PNLTHA-DRC) is based on case detection and treatment, through active screening by mobile teams and passive screening in fixed health structures, in line with WHO guidelines. Since 2001, PNLTHA managed to screen between 2–2·5 million people per year for HAT, with a dip in 2010–12 because of declining donor funding. The number of confirmed HAT cases has steadily declined since 1998, in large part explained by this massive screening effort (figure).

We agree that HAT can rebound to epidemic levels after periods of control, with the last alarming peak occurring in the late 1990s when international support for HAT screening was completely withdrawn. To prevent history from repeating itself, we need new and multiple strategies to tackle both the infection and the vector (tsetse flies).[3] In 2015, PNLTHA formed a consortium with research institutes

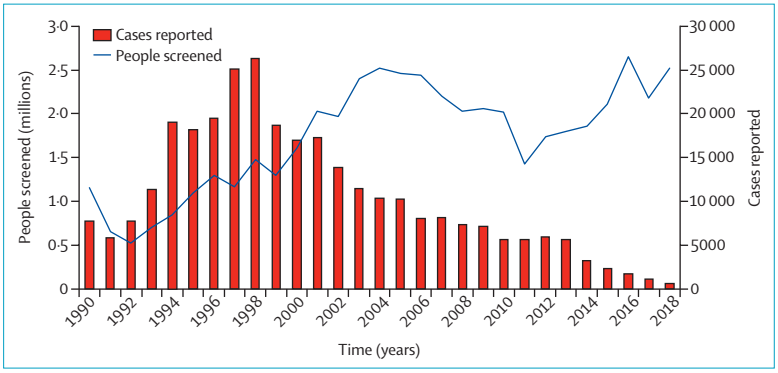

Figure: **Number of people screened for trypanosomiasis and number of confirmed human African trypanosomiasis cases reported in the Democratic Republic of the Congo**
Belgian aid was withdrawn between 1990 and 1998. Data source: National Sleeping Sickness Control Programme in DR Congo (PNLTHA-DRC).

and implementation agencies in support of the HAT elimination agenda, and received funding from the Bill & Melinda Gates Foundation and the Belgian government. We intensified screening efforts and integrated tsetse control based on riverine deployment of so-called tiny targets (small, insecticide-treated screens that attract and kill tsetse flies).[4] We added digital data-driven microplanning of screening operations and quality control of test results.[5] Overt clinical HAT cases were for long thought to be the main if not only source of infection but, if pathogenic trypanosomes are present in animal hosts and undetectable in some human carriers, then the serological screening will indeed leave a proportion of infected hosts untreated. The size and epidemiological significance of this hidden reservoir is uncertain and the research highlighted by Burton[1] is of immediate relevance to our work. Vector control is part of the HAT control strategy in DR Congo, providing an intervention that can interrupt transmission, no matter the host of the parasite. Availability of oral drugs to treat HAT in the DR Congo health system will play an important role for elimination of both HAT as a public health problem and the infection, because it will greatly improve access to care.

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2 Dowdle WR. The principles of disease elimination and eradication. *Bull World Health Organ* 1998; **76** (suppl 2)**:** 22–25.
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4 Mahamat MH, Peka M, Rayaisse JB, et al. Adding tsetse control to medical activities contributes to decreasing transmission of sleeping sickness in the Mandoul focus (Chad). *PLoS Negl Trop Dis* 2017; **11:** e0005792.
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COST Actions: fostering collaborative research for rare diseases

The European Cooperation in Science and Technology (COST) Association is the longest-running framework supporting transnational cooperation. COST Actions are networks that, once approved, are not restricted to the original applicants: in fact, they are open to anyone with a legitimate interest to join the network. The funding is used for workshops, training schools, short scientific missions, and dissemination activities.

The COST webpage shows 22 Actions based on rare diseases (12 currently active) and many more that are methodological and could also be applicable to rare disease research.

Between 2013 and 2017, we participated in the COST Action BM1207, which aimed to accelerate the clinical development of antisense-mediated splicing modulation for rare diseases, with a first focus on Duchenne muscular dystrophy. The Action started out in five countries and ended up including more than 100 participants from 18 countries.

Before the BM1207 Action, only two antisense oligonucleotide therapies had been approved: fomiversen for cytomegalovirus retinitis, and pegaptanib for macular degeneration. During the course of this Action, three new therapeutic antisense oligonucleotides were approved: mipomersen to treat homozygous familial hypercholesterolaemia, eteplirsen for Duchenne muscular dystrophy, and nusinersen for spinal muscular atrophy. These approved antisense drugs represent a landmark for the field,[1,2] boosting preclinical studies in different rare diseases in which this approach might be applicable.

COST Action BM1207 played a seminal part in the development of splice-switching oligonucleotide therapy in Duchenne muscular dystrophy. Before the Action, the antisense splice-modulating field of research was fragmented, and knowhow on the perspective of industry, regulators, and patients was very limited. Through its four working groups (biochemical outcome measures, regulatory models, networking meetings, and stakeholder communication), the Action was instrumental in generating standard protocols for dystrophin quantification

For the **COST webpage** see https://www.cost.eu/cost-actions/browse-actions/

For more on **COST Action BM1207** see http://www.cost.eu/COST_Actions/bmbs/BM1207