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Ebola: A latent threat to Latin America. Are we ready?

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1 LETTER TO THE EDITOR

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Ebola: a latent threat to Latin America. Are we ready?

Recently, European governments have been summoned to mobilize resources to attend the Ebola outbreak in West Africa [1]. Along these lines, we think we should also urge Latin American (LA) governments to contribute to halt this humanitarian crisis and to be prepared for the potential arrival of this deadly virus in the Caribbean, Central and South American mainland.

Regarding the collaboration to intervene the crises, it is important to highlight that the Cuban government has already sent a team of 165 highly trained health-care professionals to assist and mitigate the epidemic –this is, so far, the largest medical team that any single foreign country has sent out to the field [2]. Following this effort we encourage other LA governments to create a package of incentives – i.e. paid temporary leave– to facilitate the mobilization of qualified health care professionals to the West Africa region.

In the preparedness to attend the probable arrival of Ebola to the LA region, we acknowledge a huge need for field-based laboratories, epidemiological and microbiological surveillance resources, diagnostic equipment, and mobile communications software as well as other technological assets. As revealed by the ongoing Chikungunya epidemic, Latin America is particularly vulnerable given that there is a lack of appropriate health care infrastructure to tackle a challenge of such dimensions. In addition, highly densely populated poverty areas with deficient basic services constitute a melting pot for the development of potential outbreaks.

Biosafety level-4 (BSL-4) laboratories in Latin America are scarce and some health systems have been incapable to control tropical and endemic diseases, as recently reported for malaria in Venezuela [3].

As opposed to Europe, where a European BSL-4 laboratories network already exists [4], LA still requires a significant increase in technical partnership as well as other resource capabilities, which in the past has limited the work with other important BSL-4 required viral pathogens endemic to the region, such as hantaviruses [5]. Even more, health care institutions should start joining efforts to design preparedness and response programs in order to revamp or build up *de novo* infrastructure to properly address suspicious cases and prepare healthcare professionals for caring of confirmed Ebola infected patients.

If Ebola hits the jackpot in LA this would pose an immense diagnostic dilemma in a region where indigenous viral hemorrhagic fevers exhibiting remarkable similar clinical findings are endemic. Distinguishing cases of Guanarito (Venezuela), Machupo (Bolivia), Junín (Argentina) and Sabiá (Brasil) viruses from Ebola, as well as from other highly prevalent infections such as yellow fever, hemorrhagic dengue, leptospirosis and typhoid amongst others will constitute an ever-increasing challenge. Point of care testing using a biothreat panel like the BioFire diagnostics BioSurveillance system would be very useful for screening highly suspicious cases, while at the same time, providing an automated sample-to-answer diagnostic platform in areas with lack of healthcare trained personnel. However we yet don't

know how such tests would perform in a non-prevalent Ebola region, and at the same time it could be cost-prohibitive for many governments in the hemisphere.

Finally, it is also important to coordinate this LA response to Ebola with the guidance of the regional multilateral health organisms: the *Pan-American Health Organization* should lead this process; and the recently created *South-American Institute of Government in Health* (www.isags-unasur.org) and the *South-American National Institutes of Health Network* [6] could demonstrate their capacity to recruit and materialize resources for global health.

As stated for Europe, we also fully expect all our LA governments to make up for lost time with celerity, determination, and commitment. The Ebola epidemic represents a public health imperative; unchecked, it might very well become a geopolitical crisis; demanding instead of just words, actions.

Conflict of interest

None declared.

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