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Network for strong, national, public health institutes in west Africa

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The first major epidemic of the Ebola virus disease in west Africa is not yet behind us. The Ebola virus disease epidemic showed that most countries

and the international community were not prepared to respond well and in a timely way to this global health emergency.

A new public health framework is urgently needed for west Africa. The international health regulations are not sufficiently enforced and have not been translated into appropriate capacity building.¹ The African Centers for Disease Control and Prevention will soon open in Addis Ababa, Ethiopia. This opening is a much awaited decision, but without an active network of national public health institutes such a centre will be unaware of what is going on at country and local levels. In 2015, the Economic Community of West African States (ECOWAS) approved the creation of the Regional Centre of Surveillance and Disease Control (RCSDC) in Abuja, Nigeria. The West African Health Organization (WAHO) has been invited by ECOWAS to take the necessary measures to ensure the RCSDC is promptly established and functionally operational, and called for all partners to support this process.

We advocate the strengthening of national public health institutes in Africa (15 countries, 340 million people), and believe a functional west African network of public health institutes is necessary.

The missions of national public health institutes are intended to

address the essential functions required to oversee long-term disease control and prevention, and not only to fulfil the pressing needs of outbreak control for the most fatal communicable diseases.² The International Association of National Public Health Institutes (IANPHI) identified 11 core functions for national public health institutes.³ In the short term for west Africa, the national public health capacity could be organised and strengthened along five essential axes that should be functional at all levels of the health system (figure): disease surveillance and monitoring of health trends, field investigation of acute health events irrespective of their origin, laboratory support to public health needs, field research, and field training. Most countries in west Africa do not have a national public health institute per se, but most do have several institutions in place which are more or less functional. Each institute will support some of these core functions. Therefore, in some countries a national public health network could be organised to assemble these essential elements instead of attempting to create a new health institution.⁴ The Ebola virus disease epidemic showed that a crisis unit is necessary to organise an emergency response to health emergencies, but we advocate here for a wider approach.

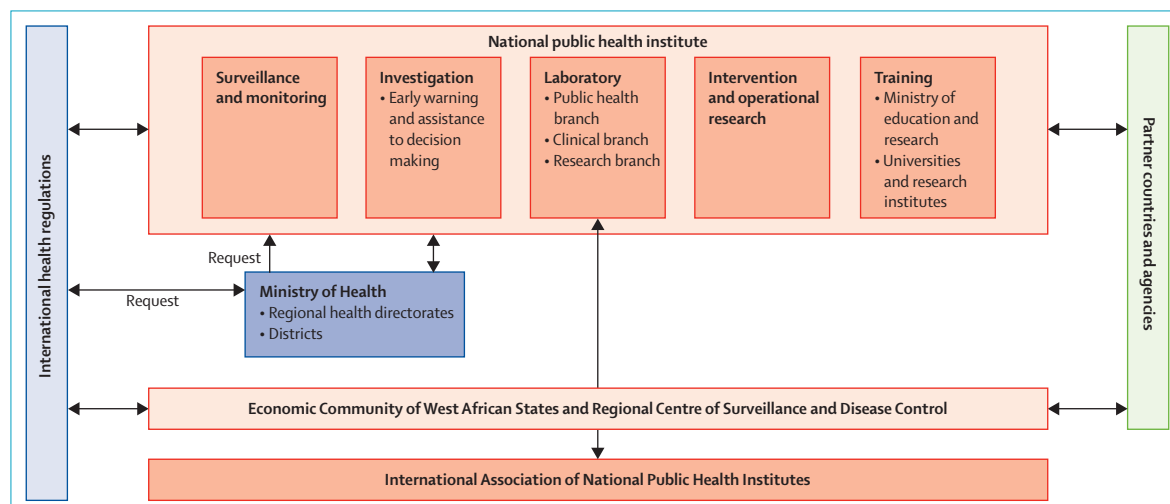


Figure: Proposed institutional and operational framework of national public health institutes in west Africa

National public health institutes or similar network organisations fulfilling the previously stated requirements will comply with international standards (eg, those formulated by IANPHI) and will thus be well positioned to receive international support. These institutes are indispensable constituencies that inform the ECOWAS-RCSDC and work together to identify and resolve health threats likely to spread beyond administrative borders. Specialised regional organisations already exist in west Africa and can be upgraded to consolidate this overall public health architecture, namely in WAHO and WHO's Regional Office for Africa.

Public health is more than global health security.⁵ Public health needs of west Africa should not be restricted to emergency measures dealing with communicable diseases with the highest incidence and mortality. Creation or adaptation of strong national public health institutions or networks willing to cover a broad and comprehensive scope of action (beginning with infectious diseases and environmental issues) should be the common goal. This goal requires a national long-term commitment, some courageous political decisions, and the long-term support of partner countries and institutions. Finally, the Ebola virus disease epidemic showed that it is wise, in this context, to maintain and strengthen support with multilateral organisations rather than to weaken them.⁶

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Coordinating funding in public health emergencies

In an increasingly globalised world, an infectious disease can travel to the other side of the globe before symptoms manifest, yet setting up an effective research response can take months. This delay can cost lives. To save valuable time, we must improve coordination of global research efforts in preparedness of and response to public health emergencies.

We hope to improve coordination with a new network called the Global Research Collaboration for Infectious Disease Preparedness (GloPID-R), the only network of its kind for funders. GloPID-R was founded on the recommendation of the Heads of International Research Organizations (HIROs), and has grown to 23 members from across the globe, with the WHO as observer. The European Commission together with Brazil, Canada, France, South Africa, and South Korea chairs GloPID-R, which was recognised by the G7 as a crucial initiative in 2015.¹

We have set the ambitious goal of initiating a coordinated research response within 48 h of a public health emergency anywhere in the world. And we are already putting this into practice.

GloPID-R started work on the Zika outbreak on Dec 1, 2015, the same day as PAHO's epidemiological alert on the suspected link between the virus and microcephaly.² Our efforts concentrated on identifying immediate research needs, and four Zika working groups were established on aetiology, diagnostics, vaccines, and vector control. Several members initiated projects and launched calls for further research.

We want to go further. At GloPID-R's recent annual meeting on March 14–15, 2016, in Washington, DC, USA, our members set three main priorities for the coming year. The first is to continue coordinating research on the Zika outbreak. The working groups have now mapped ongoing and soon-to-be-launched research, and the report is available on GloPID-R's website. We will discuss how to fill gaps, and encourage and facilitate collaboration between researchers.

Secondly, on the basis of our experiences with the Zika outbreak, we are drawing up a readiness plan for different outbreak scenarios. This will include steps for the rapid identification of research needs during an outbreak, and define the triggers for a GloPID-R research response and the best mechanism for coordination. Development of the readiness plan will take into account discussions in other fora, such as the WHO R&D blueprint.

Finally, GloPID-R members have agreed to develop a framework for rapid and open data sharing during public health emergencies. This framework will be developed in line with the statement by more than 30 global health bodies on data sharing,³ and recommendations by the International Committee of Medical Journal Editors.⁴ We will address the practical aspects of governance and the issues of a repository and data standards, and all data will be considered. These data types include surveillance,



For Global Research Collaboration for Infectious Disease Preparedness see www.glopid-r.org

For the WHO R&D blueprint see <http://www.who.int/csr/research-and-development/en>