


Responding to Africa's burden of disease: accelerating progress

Benido Impouma , Akpaka A. Kalu, Lindiwe Makubalo, Alex Gasasira, Joseph Cabore and Matshidiso Moeti

World Health Organization, Regional Office for Africa, Cité du Djoué, Brazzaville, Congo

Commentary

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Corresponding author:

Benido Impouma;
Email: impoumab@who.int

Although Africa is home to about 14% of the global population (1.14 billion people), it is growing three times faster than the global average [1]. The continent carries a high burden of disease, but there has been real progress in eradication, elimination, and control since 2015. Examples are the eradication of wild polio in 2020 [2] and the eradication or elimination of neglected tropical diseases, such as dracunculiasis in Kenya in 2018; Human African trypanosomiasis in Togo in 2022; and trachoma in Togo, Gambia, Ghana, and Malawi in 2022 [3]. New HIV infections reduced by 44% in 2021 compared to 2010 [4], and in 2021 the African region passed the 2020 milestone of the End TB Strategy, with a 22% reduction in new infections compared with 2015 [5].

However, these major gains in health are under threat from climate change, which adversely affects food and health security and socio-economic development. These pressures, together with the significant after-effects of the COVID-19 pandemic, are creating potential conditions for explosive outbreaks of communicable diseases and, at the same time, an increasing burden of non-communicable diseases resulting from the demographic transition [6].

The impact of the COVID-19 pandemic is central to all discussion on moving forward in disease control in the WHO African region. It has threatened decades of progress in health globally, including such positive trends as decreasing inequality. In 2020, the pandemic disrupted essential health services in 92% of countries worldwide; 22.7 million children missed basic immunisation; there was an increase in malaria and TB; and global deaths from TB rose for the first time since 2015 [7]. The African region was no exception, and the momentum towards achieving the 2030 Sustainable Development Goals disease burden reduction targets (to end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases, and combat hepatitis, water-borne diseases, and other communicable diseases) has stalled.

Nevertheless, these threats, and the long experience of responding to major disease outbreaks and emergencies in the region, have provided us with important lessons as we get back on track to accelerate progress towards achieving universal health coverage and the sustainable development goals. This requires a shift in mindset and a new way of working. The WHO Regional Office for Africa, as the lead UN health agency in the region, has accordingly initiated a change in its organisational structure, in alignment with the General Programme of Work 2019–2030 (GPW 13) [8] and the Transformation Agenda of the WHO Secretariat in the African Region 2015–2020 [9].

The WHO/AFRO Universal Health Coverage | Communicable and Non-communicable diseases cluster (UCN) was established in 2019 to better integrate the WHO African region disease prevention and control programmes within a health-systems strengthening framework using a data-centric, results-focused, and integrated cluster management approach. UCN is responsible for delivering the WHO African region's strategic agenda for the four priority areas of the SDGs.

The core success factors of the COVID-19 pandemic response have informed the four UCN special initiatives – governance and system capacity, institutional capacity, data science capacity, and research and innovation capacity – exemplified in the Capacity Triangle for disease control (Figure 1). These will be operationalised from 2023 to 2030.

The Capacity Triangle outlines three essential enabling capacities aligned with national governance and systems stewardship to drive sustainable, efficient disease control investment, and impact. As well as maintaining the momentum towards the 2030 disease burden reduction targets, this business model sets the stage for building resilient systems and promoting readiness for the next pandemic. These capacities, in addition to the central strategic area of governance and systems stewardship, are recommended as investment pillars for prioritisation by countries, partners, and donors in the deployment of available disease control resources.

SI 1 Strengthening Systems and Governance (SYGO) will enhance national disease prevention and control programmes through evidence-informed leadership, policies, workflows, programme management, resource allocation, and service delivery models.

SI 2 Strengthening Institutional Capacity (SICA) will expand the pool of technical partners and advisory bodies equipped to support national disease prevention and control programmes, with a focus on *localising* technical support from institutions in the region.

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1. Governance & Systems Stewardship

1.1 Strengthening leadership, policy, planning & guidance, and partnerships & resourcing for health & disease control services delivery including adoption and implementation of WHO technical products for healthier populations, disease control, and health security services, across the life course.

1.2 Capacity strengthening for health services delivery and disease surveillance & information systems at health facility and community levels especially through integrated investing by healthier populations, disease control, and health security programmes, across the life course.

4. Research & Innovation Capacity

4.1 Capacity strengthening for health & disease control research including operational research, implementation research, and research networking for health and disease control.

4.2 Capacity strengthening for health and disease control innovations R&D, regulation and deployment including development and/or deployment of novel pharmaceuticals and therapies, diagnostics and vaccines targeting priority diseases and health conditions.



2. Institutional Capacity

2.1 Capacity strengthening for domesticated country health and disease control agenda setting including empowering in-country institutions to publish country health & disease outlook reports.

2.2 Capacity strengthening for domesticated technical support to country health and disease control programmes including enabling selected in-country institutions to support health and disease control programmes with technical assistance, training, and monitoring & evaluation.

3. Data Science Capacity

3.1 Analytics capacity strengthening for enhanced health & disease control investment efficiency & impact including generation of essential knowledge products, and deployment of analytics and GIS technologies.

3.2 Predictive modelling capacity strengthening for purposive health and disease control action including generation of knowledge for agenda-setting and advocacy.

Figure 1. The Capacity Triangle for disease control.

SI 3 Precision Public Health for the African Region (PPH4Africa) will invest in *data science capacity* strengthening through advanced regional and national data analysis, data visualisation and predictive modelling to *inform* decision support and purposive disease control action.

SI 4 Research and Innovation for Public Health Impact (RIPHI) will *promote* in-country capacities for applied research and research translation for public health action. This includes operational research, implementation research, research networking, and the regulation and deployment of new tools, such as novel pharmaceuticals and therapies, diagnostics, and vaccines.

In conclusion, we need to use the lessons learned since 2015, first from the 2014–2016 outbreak of the Ebola infection, and more recently from the region-wide response to the COVID-19 pandemic, to address the burden of disease in its entirety. The UCN Cluster, recognising the challenges in this diverse and rapidly changing region, is committed to respond strategically and operationally, informed by an evidence-based approach to decision-making.

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Data availability statement. The data that support the findings of this study are available on request from the corresponding author [B.I.]. Some of the data are publicly available through situation reports produced by Ministries of Health and WHO AFRO on their respective websites; however, not all data are publicly available due to confidentiality concerns.

Competing interest. The authors declare none.

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