

Recognising the potential of neglected tropical disease programmes as a platform for pandemic preparedness: the Ascend experience

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Living in an increasingly interconnected world, epidemics and pandemics are increasingly likely to be a vista for the future. This, coupled with the likely devastating effects of climate change, means that humanitarian crises are likely to increase. Now, more than ever before, is the time to scale up investment in prevention and preparedness strategies, and to review our current approaches to delivering health services, including those that address neglected tropical diseases. The Ascend West and Central Africa programme has illustrated the importance of innovation, multisector partnerships, resilience and the opportunity for change.

Keywords: social behaviour change communication, COVID-19, neglected tropical diseases, pandemic, West Africa.

Introduction

Living in an increasingly interconnected world, epidemics and pandemics are likely to be a regular future spectre driven by globalisation, loss of biodiversity and the impacts of climate change,^{1,2} with a consequential increase in the frequency of humanitarian crises.

Urgent investment in prevention and preparedness strategies is required. This includes a review of our current approaches to delivering health services, including those that address neglected tropical diseases (NTDs). The Ascend West and Central Africa programme (hereafter called ‘Ascend’, or ‘the programme’)³ has illustrated the importance of innovation, multisector partnerships, resilience and the opportunity for change.

Significant progress has been achieved towards eliminating a number of major NTDs; this could be derailed by the diversion of attention to coronavirus disease (COVID-19) and other health crises.^{4–8} Furthermore, with the current fragility of NTD funding due to the pandemic and the changing landscape of donors’ focus, the 1 billion people affected by NTDs globally are facing an increasingly bleak outlook if efforts are not made to refocus approaches and ensure that resources reach those in need.

NTD platforms are uniquely placed to address large-scale health crises. NTD programmes are intrinsically designed to reach broad audiences and to access hard-to-reach rural communities. In the African setting this is primarily performed through community-based structures, which include networks of community volunteers, frontline health workers, traditional

institutions, community-based organisations and faith-based organisations working collaboratively to deliver effective and efficient NTD programmes in endemic communities. Pivotal to all NTD programmes is the extensive network of community volunteers who act as the main delivery channel, and who are trusted locally and internationally.

These community-based health workers could also prove critical in curbing the pandemic by leveraging NTD platforms in the distribution of vaccinations, particularly in those hard-to-reach areas. Over the decades, NTD programmes have been bolstering health systems through building the capacity of those health systems. With scarce resources, we advocate for greater integration of health service delivery to improve health outcomes, while at the same time advocating for the potential of NTD programme platforms to be used in humanitarian crises. Integration of NTDs and other disease programmes is not a new concept and has proven to be effective and cost efficient. Examples of this integration to date include immunisation, HIV, malaria and TB programmes.^{9,10} What NTD platforms have not been used for is in response to large health crises such as pandemics. The concept of ‘integration’ has been critical since 2005 and stimulated U.S. Agency for International Development (USAID) to start NTD funding.

The detrimental effects of the COVID-19 pandemic on the NTD agenda are well documented^{10,11}; less so is how NTD platforms can be repurposed to effectively contribute to an emergency response, at the magnitude of a pandemic. Building on research from Molyneux et al.⁸ and Clark et al.,⁹ which

Table 1. Key outputs of the Ascend West and Central Africa COVID-19 responses (Apr–Dec 2020)

	Number of people reached with mass-media radio, SMS and TV adverts about COVID-19 transmission	Number of people reached through community sensitisation activities about COVID-19	Number of frontline health workers who received masks, gloves or hydro-alcoholic gel or other handwashing material	Number of frontline health workers/CDDs and volunteers trained to respond to COVID-19
Benin	5 082 892	4 298 421	92	2815
Burkina Faso	17 003 032	101 621	750	750
Chad	8 780 617	235 254	-	-
Cote d'Ivoire	5 623 380	-	-	-
DRC	56 021 337	16 682 612	3527	-
Ghana	17 454 478	-	-	997
Guinea	10 286 539	850 000	-	-
Guinea Bissau	-	-	-	77
Liberia	1 752 468	390 425	198	678
Nigeria	13 573 140	1 268 600	983	5898
Sierra Leone	2 040 000	-	-	2400
Total actual	137 617 883	23 826 933	5504	13 615
Target	104 649 231	15 838 156	1813	10 222
Achievement	132%	150%	304%	133%

Abbreviations: CDDs, Community-Directed Distributors; DRC, Democratic Republic of Congo.

These outputs demonstrate the country and overall reach of the Ascend COVID-19 response mass-media campaigns, the reach of the sensitisation activities, the number of frontline health workers, community drug distributors (CDDs) and volunteers trained, as well as the numbers of those receiving logistical support.

describes key lessons learnt from the rapid adaptation of the Ascend programme in response to COVID-19, we now present the results of the programme when its funder—the UK Foreign Commonwealth Development Office (FCDO)—requested that the programme shift focus and maximise its approach to respond to the pandemic where appropriate and feasible. By working rapidly with Ministries of Health and national COVID-19 taskforces, gaps in national COVID-19 responses were identified, and comprehensive packages of support were established for 11 countries, based on the resources, experience and skills of the programme. We outline key operational considerations that focused our attention at the outset of the pandemic. We also reflect upon the potential unique capacities of NTD programmes to adapt their efforts, expanding beyond normal NTD programming and capitalising on the resources readily available from NTD programmes, as well as providing considerations for programming in any future pandemic.

Adapting our NTD approach

NTDs are diseases of poverty that impose a devastating human, social and economic burden on >1 billion people worldwide. Given the wide scope and burden of these diseases, the platforms to address them are also large in scale and reach. This programme focused on the five diseases focused on mass drug administration that are reliant on a large network of community health workers and volunteers to deliver these treatments to populations affected by these NTDs.

Coinciding with the WHO recommendation that NTD programmes temporarily suspend mass drug treatment, community-based surveys and active case finding, in April 2020, the Ascend programme embraced the challenge to support the COVID-19 response effort, with the main areas of focus including mass-media campaigns, training and logistics support. Following an intensive period of coordination with governments, implementation activities had commenced by mid-June 2020. With the support of mass-media and communications partners, 10 countries received expert creative support in the development and roll-out of engaging behaviour change communication campaigns, focused on COVID-19 response and mitigation. The process and key challenges from these campaigns are well documented⁸ during this period, when NTD activities were put on pause.

Expansive reach

The results of these efforts across the 11 countries led to >137 million people being reached with behaviour change communication campaigns in 49 languages, >13 000 health workers and people being trained and >23.8 million reached with community sensitisation activities (Table 1). Rated as effective by a recent evaluation, it was reported that the mass-media campaigns had positive indicators of campaign effectiveness across all countries.⁹

The evaluation included the campaign reach across the various media platforms, alongside an analysis of the quantitative

data gathered through a telephone survey that was administered in each country. The survey findings assessed key areas of the campaigns in nine of the countries, including the level of campaign attribution and campaign impact; beneficiary resonance with the campaign; adherence to the campaign message; behaviour change indicators and the extent to which campaign objectives were met. The vast majority of respondents felt the COVID-19 messages applied to people like themselves and to communities like theirs.

Many said they would share the messages for the benefit of others, which indicates broader impact beyond just those directly exposed to the campaign. The social media campaigns proved to be particularly effective in their reach, with, for example, >10 million individuals engaged on social media in Nigeria.¹²

These efforts demonstrate the capacity and capabilities of NTD programmes to mobilise resources and shift programmatic focus efforts at scale. The untapped potential of NTD platforms to be repositioned in response to health crises quickly became clear.

Maximising the untapped potential of NTD platforms

Given our experiences to date in our COVID-19 responses, we feel there is huge potential to not only leverage these platforms in humanitarian response efforts, but also to better integrate health services, thereby increasing efficiencies, reducing burdens on health systems and ultimately improving the health outcomes of those in need. NTD platforms, by their nature, have huge capacities, with far-reaching strong networks and influence at all levels, from local communities right through to national ministries, global supply chains, donors and the WHO. With robust surveillance systems, and having mapped NTDs, data can be used to provide a proxy indicator of those who are most marginalised, serving as a good indication of where we should be responding first in crises.

These platforms have huge scope to address hitherto what has been described as ‘siloe programming’, with a strong call to address this through shifting approaches to focus on multi-sectoral and holistic programming to address cross-cutting issues within health systems. As Bland⁴ argues, there is a need for cross-cutting approaches to tackle NTDs. The author suggests the need for integrating approaches that address multiple diseases as opposed to a focus on single diseases. Integration of multiple NTDs was largely achieved in 2005,⁸ and there remains great potential for further integration of other systems. This is further supported by the WHO’s recent release of a companion document to the NTD Road Map outlining a One Health approach.¹³

Adapting to and addressing the pandemic has led to unearthing the potential of NTD programmes. Calls for greater integration to address multiple diseases, as opposed to single disease or verticalised disease types, is not a new concept.^{8,9} Diverting all our attentions, COVID-19 has impacted the global health community on all levels. In the light of the Ascend experience of using NTD platforms in response to the pandemic, we have better understood the potential of using NTD platforms in humanitarian crises.

While caution should be applied to ensure that systems and networks are not overburdened with additional activities that result in poorer quality delivery of healthcare services, NTD platforms proved they are well placed to respond to future pandemics. As such, they have the potential to address broader health issues by capitalising on the wealth and breadth of expertise and capacities available within them, while at the same time providing us with the opportunity to explore how these platforms can serve as a springboard to supporting future health crises. As countries began to reduce COVID-19 restrictions, NTD programmes were able to reinstate programmatic activities with adapted protocols. In the 11 countries where the programme shifted focus to COVID-19 response activities, NTD programming was also able to resume in parallel. Not only were NTD programmes strengthened by reacting to a global crisis, it also forced the issue of reviewing how NTD programmes approach broader health programming.

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References

- 1 Dyer J. Ready for the next pandemic (spoiler alert: it’s coming). *Infection Control Today*. 2021;25:3.
- 2 Preparing for the next pandemic. *Nat Med* 2021;27:357. <https://doi.org/10.1038/s41591-021-01291-z>.
- 3 Downs P, Bush S, Bannerman R, et al. Neglected tropical disease elimination is a relay race – let’s not drop the baton. *Int Health*. 2022;14(Suppl 2):ii1–ii6.
- 4 Bland S. Ending the neglect—integrating approaches to disease elimination. *SciDevNet*. 2021. <https://www.scidev.net/global/opinions/ending-the-neglect-integrating-approaches-to-disease-elimination/>.
- 5 Nleya MJ, Bigirimana N. How to keep fighting neglected tropical diseases during a pandemic. *World Economic Forum*. 2020. <https://www.weforum.org/agenda/2020/11/ighting-neglected-tropical-diseases-during-a-pandemic/>.

- 6 Elphick-Pooley T. We must learn lessons from Covid-19 - and work together to tackle all epidemics. Politics Home. 2021. <https://www.politicshome.com/members/article/uniting-to-combat-ntds><https://www.politicshome.com/members/article/uniting-to-combat-ntds>.
- 7 Hotez PJ, Fenwick A, Molyneux D. The new COVID-19 poor and the neglected tropical diseases resurgence. *Infect Dis Poverty*. 2021;10:10.
- 8 Molyneux DH, Hotez PJ, Fenwick A. Rapid-impact interventions: How a policy of integrated control for Africa's neglected tropical diseases could benefit the poor. *PLOS Med*. 2005;2(11):e336.
- 9 Hotez PJ, Molyneux DH, Fenwick A, et al. Incorporating a rapid-impact package for neglected tropical diseases with programs for HIV/AIDS, tuberculosis, and malaria. *PLOS Med*, 2006;3:e102.
- 10 Molyneux DH, Aboe A, Isiyaku S, et al. COVID-19 and neglected tropical diseases in Africa: impacts, interactions, consequences. *Int Health*. 2020;12(5):367–72.
- 11 Clark A, Hill B, Bannerman R, et al. Adapting an integrated neglected tropical disease programme in response to COVID-19. *Trans R Soc Trop Med Hyg*. 2021;115(5):441–6.
- 12 M&C Saatchi M&C Saatchi World Services. (Prepared for the ASCEND West and Central Africa Programme funded by The Foreign Commonwealth and Development Office of the UK government) 2021. Covid Campaign Monitoring and Evaluation Report. London, UK: M&C Saatchi World Services.
- 13 Jesudason T. New WHO Road map for NTD recovery post COVID-19. *Lancet Infect Dis*. 2021;20(8):902.