



Ascend West and Central Africa COVID-19 and NTDs

Opinion piece, June 2020

Professor David Molyneux, CMG

Ascend
West and Central Africa



Background

This opinion piece follows [this publication](#) by the Ascend West and Central Africa project on the potential impact of COVID-19 on neglected tropical diseases (NTDs) activities. It is authored by Professor David Molyneux, CMG, Emeritus Professor, Liverpool School of Tropical Medicine and Chair of the Ascend West and Central Africa Technical Consultative Committee (TCC) and edited by Simon Bush, Director of NTDs, Sightsavers. It covers the countries included in the Ascend West and Central Africa programme but we hope is relevant to all NTD programmes. The original publication, set to challenge the NTD community and to receive feedback on the initial ideas, promoted great discussion. The content of this opinion piece has taken on that initial feedback and posed new challenges.

The Ascend West and Central Africa project works in thirteen countries¹. The integrated NTD project is funded by the Department for International Development (DFID). The project is implemented in countries by Sightsavers, the Liverpool School of Tropical Medicine, the Schistosomiasis Control Initiative Foundation and Mott MacDonald (“the Ascend West and Central Africa project partners” or “consortium partners”) and a range of other partners.

Following discussions with project staff and after the deliberations of the first meeting of the project’s Technical Consultative Committee² it was decided to provide the programme partners as well as the wider NTD community regular updates on activities and progress. This would include providing information on COVID-19 specific issues from other sources which partners may apply to their country specific situations. We would welcome feedback and suggestions over the coming months as the Ascend West and Central Programme seeks to adapt to the COVID-19 environment. There is a significant volume of material entering the public domain on COVID-19, and the World Health Organization (WHO) as well as other partners are providing relevant advice through guidelines to countries which will be continuously updated.

The key questions addressed in this opinion piece are:

1. Is COVID-19 behaving differently in Africa, or
2. Is Africa behaving differently, or is it
3. a combination of both?

Perhaps when considering responses to these questions it is inappropriate to make comparisons as the demographic of Africa is so different from Western Europe and the USA. However, we know that regardless of those differences there will always be vulnerable segments of the population that will be disproportionately affected.

For example, in Africa, the median age is around 19 years whereas in Europe it is 42. However, while in parts of Africa even the younger age group are likely to have a higher

¹ Benin, Burkina Faso, Central African Republic, Chad, Côte d’Ivoire, Democratic Republic of the Congo, Ghana, Guinea, Guinea-Bissau, Liberia, Niger, Nigeria and Sierra Leone.

² Members of the Technical Consultative Committee are Professor David Molyneux (Chair), Dr Phil Downs (Co-Chair), Dr Sunny Mante, Dr Kamal Kar, Professor Uwen Ekpo, Professor Margaret Gyapong, Professor David Mabey, Dr Susan D’Souza, Dr Louise Kelly Hope, Dr Lynsey Blair, Dr Yael Velleman, and Dr Mwele Malecela (Observer).

frequency of underlying health conditions, in Europe older age groups with chronic conditions are more likely to have access to high quality specialist services. And although still rare, the potential role and risks of sexual activity in COVID-19 and transmission must also be considered. Younger post-puberty populations are more likely to have sexual encounters involving higher risk behaviours of viral transfer. But until the numbers/prevalence of infection carriers without symptoms are known, or if sexual activity is taking place during an incubation period when the individual is contagious, the risks of sexual encounters cannot be factored into transmission models.

Within the framework of the Sustainable Development Goals, the resilience of health systems provides a further dimension to the COVID-19 challenge. As the impact of COVID-19 becomes the dominant feature of discussions achieving Universal Health Coverage (UHC) will become more complicated.

Will health services in Africa be affected positively or negatively in the context of a post COVID-19 (if that situation ever exists)? The NTD Modelling Consortium are working with WHO and the Expanded Special Programme for the Elimination of NTDs (ESPEN) to create predictive models on the impact delays on Mass Drug Administration (MDA) will have on transmission. This work will be useful for WHO in defining the potential impact on the WHO Road Map for NTDs (postponed in approval until the delayed World Health Assembly in November) and also for NTD programmes should their strategies need to be adjusted accordingly.

Suggestions on NTDs and COVID-19

The project's Technical Consultative Committee (TCC) met remotely, focussing on [the initial opinion piece](#), written by David Molyneux and published on the Sightsavers' website.

The committee made several recommendations for TCC members to follow up, recognising that whilst following WHO guidelines the Ascend West and Central Africa MDA programmes would be on hold for some months until the safety of staff and communities at risk from COVID-19 transmission had been minimised. However, it remains important that NTD MDA programmes continue to monitor the situation and plan for rapid restart of activities. To this end, early thinking is required to assemble ideas as to how social distancing and infection control practices will be managed when activities resume. The TCC also recognised that health officials were likely to be re-deployed by their ministries to prioritise COVID-19 related activities. However, the TCC considered that the recommendations from the earlier documents remain pertinent and that the following measures should be implemented as an immediate and practical response to the pandemic:

- The links between the education, water, and sanitation sectors and UNICEF should be explored to facilitate information exchange around the water, hygiene and sanitation opportunities, especially when MDA activities are suspended and the impact of this suspension unknown. The COVID-19 pandemic has created a sense of urgency to implement the well-argued and defined strategies particularly in [the WHO/WASH document](#). The experience from previous Ebola outbreaks showed that villages that practiced Community Led Total Sanitation (CLTS) and were Open Defaecation Free (ODF) had no Ebola cases during the 2014/ 2015 epidemic. This work needs to be highlighted and the experience and associated documentation made available to the

Ascend West and Central Africa partners. This would also address the possible impact of COVID-19 in different settings, like the impact of ODF status on the transmission of STH, schistosomiasis and trachoma. The importance of the biology of transmission should be emphasised where infection results from well-known behaviours can be mitigated by strategies which also reduce COVID-19 transmission (hand and face washing in particular). Whilst behaviour change messages referencing COVID-19 should also embrace the behaviours also driving schistosomiasis transmission; although the importance of often limited and thus unsafe water sources is recognised to be a challenge.

- The importance of smart phone and SMS technology already deployed for LF patient reporting and for trachoma mapping should be implemented as soon as possible for communication with Community Directed Distributors (CDDs) and Community Health Workers (CHWs). An SMS mHealth tool developed by the Liverpool School of Tropical Medicine is being adapted to report other indicators for onchocerciasis, *Loa loa* and associated severe adverse events (SAEs), but also for COVID-19 to assist reporting of cases and determine risk. The tool is unique as texts can be sent from any phone that the CDD/CHW may own, rendering the tool particularly applicable in remote areas. Two relevant papers are referenced:
 - Mwingira et al Lymphatic filariasis patient identification in a large urban area of Tanzania: An application of a community-led mHealth system. PLoS Negl Trop Dis; 2017 11(7): e0005748. <https://doi.org/10.1371/journal.pntd.0005748>.
 - [Stanton et al. Developing a Community-Led SMS Reporting Tool for the Rapid Assessment of Lymphatic Filariasis Morbidity Burden: Case Studies From Malawi and Ghana](#). - Figure 2 in Stanton et al shows where the SMS code could be adapted for any disease. This tool has been used in seven countries with 25,000 lymphatic filariasis cases being reported in diverse endemic settings. It would be valuable to discuss how this methodology can be used in the Ascend West and Central Africa programme within the pandemic context.
- The Liverpool School of Tropical Medicine has completed two interlinked “conflict mapping projects” being finalised for publication. This work could be expanded across all countries, if necessary, where there are security and/ or access issues - one of the potential challenges and risks in some programme countries.
- Decision tree and risk map development stems from collaborative work within the Conflict and Humanitarian Emergencies cross-cutting group of the [NTD NGO Network](#). It was recognised that since implementation of mapping and interventions in complex emergencies is difficult, the mapping task team should develop a decision tree and risk map to help enable NTD programmes to determine the status of complex emergency areas and plan activities accordingly. The decision tree will be shared once published.
- Conflict hotspot mapping - stems from the need to understand spatial distributions of conflict events in relation to lymphatic filariasis endemicity and programme activities during the inception phase, to help with planning and understanding context and potential challenges. The initial work was conducted with the support of a MSc student and initially

included Burkina Faso, Central African Republic (CAR) and the Democratic Republic of the Congo (DRC). Hotspot maps will be shared once published.

- Behaviour Change. M&C Saatchi is working with some programme countries on providing a comprehensive plan to address this topic in the context of COVID-19. These plans have just been approved by the donor and will, for example, strengthen community level communication through the production of messages and materials to be broadcast through community radio stations and adapted in local languages. There is no “one size fits all” in this area of work and bespoke products will be prepared for each of the Ascend West and Central African countries.
- Mott Macdonald have completed a comprehensive Health Systems Assessment in all Ascend countries giving all requisite baseline information to ensure that NTD activities were main-streamed within routine health activities whilst WHO were working on sustainability frameworks to inform the WHO Road Map

Innovation in relation to social distancing

NTD programmes have been innovative over many years developing community directed treatment methods and school-based distribution strategies to ensure the necessary treatment coverage. The introduction of the dose pole, to avoid weighing patients as a means of providing the necessary, correct dosages of drugs and identifying those children not eligible for treatment, were some of the early innovations in this area of work. Using the dose poles, which are approximately two metres in length, to inform behaviours compatible with social distancing could be an effective way to provide health education. The thinking around how dose poles could be adapted for providing drugs, accepting that social distancing might need to be maintained into the foreseeable future, should be investigated. Communities should be engaged in considering the most appropriate ways to deliver drugs in the new scenario. This should also include the need for providing water safely for patients to swallow drugs and ensuring drugs are swallowed. These simple challenges need to be addressed and considered immediately to allow for an early restart of MDA programmes as countries start to lift various restrictions.

Other issues

Informal communities - high risk groups, dissemination-mining, nomadic communities, and pastoralists

In many parts of West Africa informal mining communities are regularly established, particularly gold mining (as well as commercial extractive industries). These camps, with limited social and organisational structures, attract workers from several counties in the region who often exploit the resource and then move to other sites which become more productive (often dependent on the gold price). These populations are highly mobile, are better endowed with cash, have reliable communication systems (cell/smart phones benefitting from quality coverage by networks even in the most remote areas), and circulate throughout the region regardless of frontiers. Such camps have limited access to health care which is provided for by small numbers of females who do not have their family units to

support them. Hygiene and access to safe water supplies are limited. These populations, albeit small, should be recognised as a potential hazard for COVID-19 transmission. Efforts to identify the present location of such activities will present a challenge to the formal health sector to communicate the necessary preventive messages to comply with transmission mitigation behaviours. In the previous document, the particular risks to internally displaced person (IDP) camps and refugee camps were highlighted. However, these settlements have some health and medical support from humanitarian agencies in contrast to mining communities and pastoralists.

Similarly, throughout West Africa nomadic (migratory), usually pastoralist, populations are recognised as being on the periphery of government health and education sectors and the services they provide and form a significant proportion of the populations in the Sahel. These populations will pose a challenge of access and communication of behaviour change messages.

Many traditional patterns of movement (often cross borders) in West Africa also exist as migratory seasonal labour for agricultural activities, both personal and commercial, for production distant from resident communities. Community Directed Distributors (CDDs) have recognised these migratory patterns and have subsequently timed MDA to be undertaken to assure maximum coverage and thus can assist in providing the necessary information to the formal health sector.

Drug expiry

The Ascend West and Central Africa project can play a role in supporting country programmes to have accurate and up-to-date drug inventories as requested by WHO and ESPEN. Wider issues of drug supply are emerging as manufacturing scales back and delivery options are restricted. The engagement of the project with the Supply Chain Forum will be an opportunity to be updated on global impacts. The problem of expiry of MDA drug stocks is an essential issue to address. It has been suggested that the potential extent of this problem be evaluated and that the numbers of drugs which might expire if MDA was delayed for different periods of time (six months, one year etc) be communicated by countries to WHO and the pharmaceutical donors. There will be pressure to start up MDA programmes and the Ascend West and Central project has developed an approach where each request is considered within a risk mitigation framework within WHO guidelines and subject to donor approval.

National coordination activities

The functioning of national level coordination mechanisms, i.e. the National COVID-19 Taskforces and UN Country Coordinating teams, will play an essential role in monitoring and responding to COVID-19 outbreaks. It is important the NTD programme managers are integral to the national response process as they can offer advice and perspectives as well as experience and resource, as outlined in the previous documents and this opinion piece. As NTD programmes flex to support the pandemic response it is essential that its managers play a part in any meetings. Emergency response in respect of providing behaviour change communications (BCC), in particular, WASH messaging, communications with communities and the mobilisation of the CDD resource, should be at the fore front of the national strategy if a COVID-19 response reach is to be achieved at scale. The Ascend West and Central

Africa community communication experiences and systems can lead country responses in social distancing, surveillance, communication and information. These are mitigation activities which can be activated almost immediately.

There is recognition that the pressure COVID-19 places on health staff is significant. There is a voluminous cascade of information from diverse sources which can overwhelm the system. The expectation that such documents and guidance are fully absorbed and acted upon is optimistic. Often the most influential individuals advising the Ministries of Health are WHO Country Representatives (WRs). Given the excellent working relationships between consortium partners and the ministries of health, every effort should be made to engage the WRs at all levels of the consortium to articulate messages around the advantages of engagement with the NTD programmes for reasons articulated in this and previous documents. The desire of DFID to adapt and flex in the new situation and for countries to apply skills, resources and knowledge of the broad NTD environment underlines the advantages of coordination between programmes both within the health sector (specifically evaluating potential links with malaria bednets and Seasonal Malaria Chemotherapy (SMC) with NTD MDA as one example) and the cross-sector (e.g. WASH) demonstrates that the NTD national managers should have a key role in all aspects of the national response.

Summary points

Whilst it is clearly not immediately possible to provide definitive answers to the questions posed in first paragraph of this text, the following suggestions will help define the answers:

- Existing NTD programmes have an **extensive network of ‘geographical and health system reach’** at all levels of the health system (national/district/community) – which have systematic ways of reaching the most remote, hard-to-reach communities (this is important in the context of COVID) and meeting UHC targets.
- NTD programmes are not new and have been in place as **well-rehearsed systems operating for two-three decades which** provide an excellent platform for other programmes to learn from and link to.
- Key additional challenges include: i) **Environmental/climate modifications** that favour vectors or drive populations into at-risk areas or out of MDA areas (thereby missing treatment) ii) **Conflict and humanitarian emergencies** – both issues will be major barriers to NTD elimination strategies and targets, whilst conflict in particular, can result in a large number of internally displaced people and refugees, and iii) **Limited local capacity at all levels.**
- Key opportunities – for COVID include: i) Using **existing knowledge and practices** e.g. social mobilisation, BCC and WASH. ii) Innovative mapping and mHealth **technology** – e.g. SMS reporting tools, geospatial mapping methods using geo-referenced data. iii) **Engaging with communities** to suggest ways to manage social distancing for MDA, and iv) **Develop the dose pole for social distancing** and think now about what MDA would look like in a social distancing environment.

- Place informal mining, nomadic and other traditional migratory communities into the category of high-risk groups and identify location (by mapping with real time satellite imagery as potential hot spots) together with IDP and refugee camps.
- Evaluate potential opportunities via CLTS networks for impact of COVID-19 in ODF versus non ODF communities; define the true impact of ODF on NTDs and on COVID-19.
- Prepare now for the re-start of MDA when safety and WHO current recommendations are revised. Engage communities to develop effective distribution plans to manage social distancing, and the dose pole's potential as a tool for social distancing information which can also be applicable for other diseases, particularly malaria where seasonal chemotherapy is undertaken.
- Maintain the country advocacy for NTD programmes which are ready to adapt COVID-19 mitigation via CDD potential. Exploit SMS / smart phone technology for all aspects of the pandemic to which NTD programmes are well placed to be immediately effective.
- Create an inventory of drug expiry timelines in countries to ensure stocks can be used speedily if guidelines change. NTD programmes should be “ready to go” when given then green light to do so, albeit within constraints which need to be addressed now.
- During the pandemic, ensure that the needs of people with disabilities within communities are not marginalised but mainstreamed into policy thinking.
- NTD programmes are flexible due to long experience in diverse communities, are proven innovators as well as an exemplar of programmes that reach those most in need, the most vulnerable and people with disabilities. They provide the best buys in public health defining UHC and “leaving no one behind”. Health gains over the past decades need to be reinforced during the coming months by strategic reorientation to implement behaviour change, which in the current “no MDA” situation should address transmission reduction through well – defined WASH/ NTD strategies. Now is the time to implement interventions which will have a major impact on both COVID transmission and NTDs, improving the potential impact of the halting of MDA.
- COVID-19 has preoccupied minds over the recent months and will continue to do so; it should not, however, allow the need for other essential health activities to be impaired if at all possible; this applies to NTDs, in particular, when the commonality of interventions, systems and human resources, both formal and informal would have a major impact on the virus and worms through mitigating and reducing transmission.

5 June 2020

Professor David Molyneux, CMG

Emeritus Professor, Liverpool School of Tropical Medicine

Recent relevant Publications and websites

Over the past four weeks a lot of papers and on-line resources have become available relevant to the ongoing situation of COVID-19 in Africa and in the context of NTD programmes:

- An Editorial in the American Journal of Tropical Medicine and Hygiene entitled “COVID-19: Shining the Light on Africa” by Rosenthal and colleagues [Am J Trop Med Hyg](#). 2020 May 5. doi: 10.4269/ajtmh.20-0380. [Epub ahead of print]
- The publication of a Policy Brief by the UN Secretary General on the dimensions of disability and COVID-19 entitled “A Disability inclusive response to Covid-19”. Within are the widely used terms of “leave no one behind” and “equity”, particularly in relation to access to services.
- The latest information on the global situation on COVID-19 is available through the [Johns Hopkins University website](#). However, comparative information on country status is found on [this Coronavirus tracking website](#) which updates every 10 minutes and from [the WHO Regional Office website](#).
- WHO has issued several guidance documents which you can find [here](#).
- [Whilst the Malaria Control Programme issued the following guidelines relating to Seasonal Malaria Chemotherapy administered via MDA:](#)

Note SMC guidance

‘Some campaign activities could expose workers and the public to COVID-19; countries should consider all opportunities to minimize risk of exposure, especially if the activities might not be truly essential (e.g., consider approaches for distribution that minimize person-to-person exposure). However, maintaining and increasing malaria protection remains essential across the targeted populations. Strategies for administering the first dose of SP+AQ via DOT may need to be adapted; for example, the caregiver could be instructed on how to administer the medicine and give the first dose in the presence of the distributor.’

- There is also guidance from the World Food Programme on Standard Operating Procedures for safe distribution of food to communities which might assist NTD community volunteers in MDA and disability related activities.