

## NEGLECTED TROPICAL DISEASES PROGRAM IN ETHIOPIA, PROGRESS AND CHALLENGES

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Ethiopia is one of the global success stories of public health, with the country having achieved most of the health Millennium Development Goals (MDG) (1). Led by long term health development plans, the country has created a resilient health system which responds to the health needs of its citizens (2). Despite this remarkable progress, communicable diseases, including neglected tropical diseases (NTDs), remain one of the major public health problems posing challenges to the country's effort to achieve the Sustainable Development Goals (SDG) (3). In order to address these critically important challenges, the Health Sector Transformation Plan (HSTP) identified the NTDs as a priority public health problem (2,3). While progress to date is encouraging, the national program should enhance its focus on NTDs in order to achieve the 2020 goal of eliminating these diseases. The studies presented in this Special Issue provide details on the progress made and challenges encountered so far on the road to 2020 and provide perspectives on the way ahead.

In January 2012, the global efforts to control NTDs reached a turning point, when the World Health Organization (WHO) launched its NTD Roadmap (4), with partners meeting in London and pledging to work together to control and eliminate 10 NTDs by 2020 (5). In line with these global commitments, Ethiopia developed a master plan in 2013 to tackle eight NTDs (6): trachoma, onchocerciasis, schistosomiasis, soil transmitted helminthiasis, lymphatic filariasis, podoconiosis, leishmaniasis and dracunculiasis (Guinea-worm disease).

In this special issue, Deribew, *et al.* have reported that NTDs caused 3,593 deaths and 579,500 disability-adjusted life-years (DALYs) lost in 2015 in Ethiopia, with a significant reduction from the 1990 figures. The study concluded that Ethiopia has made remarkable progress in reducing the DALY rates for most of the NTDs over the past 25 years. Mengitsu *et al.* described the national program to eliminate lymphatic filariasis (LF) from Ethiopia. In 2015 alone 3.7 million people were treated by mass drug administration for LF. The authors emphasized the need to strengthen operational research, increase access to morbidity management services, and improve monitoring and evaluation of the LF program. They concluded that Ethiopia is poised to achieve the 2020 goal of elimination of LF. Bediom *et al.*, reviewed the Ethiopian Dracunculiasis Eradication Program (EDEP). In 2016, three human cases, 14 dog infections and two baboon infections were reported in the only remaining one endemic district in the country. The authors concluded that the speed of interruption of transmission depends on sustained implementation of heightened active surveillance in all areas, including in endemic, non-endemic high risk areas as well as other previously endemic areas.

In this issue, Negussu *et al.* have documented Schistosomiasis and Soil-Transmitted Helminthiasis program. Meribo *et al.* showcase the program to eliminate onchocerciasis. Deribe *et al.* have assessed and reported the extraordinary progress of the past ten years and the current commitments of the government, private and third sectors to podoconiosis control. Gebre *et al.* have qualitatively evaluated the current status of the trachoma elimination as a public health problem by 2020. In recent years, the country has made significant progress in scaling up services targeting trachoma, such as the WHO recommended surgery for trichiasis cases, antibiotics to treat the community pool of infection, face washing and environmental improvement (SAFE) strategy which has been implemented for more than a decade to eliminate blinding trachoma. Geographical coverage of the SAFE intervention has been increased from 3 woredas in 2003 to 510 woredas in 2016. Trachomatous trichiasis (TT) surgery is steadily increasing with 15,000 surgeries per year implemented in 2001 to over 140,000 surgeries per year in 2015. In total, the trachoma program has conducted over 1,109,773 TT surgeries. Similarly, significant scale-up of mass drug administration with Zithromax® has been achieved from 300,000 to over 36 million individuals treated per year from 2003 through to 2016. Leishmaniasis, one of the public health problems included in the national NTD program, is not covered in this Special Issue.

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Over the last four years nationwide scale up of NTD interventions has been implemented in the country, through strong leadership, efficient coordination mechanisms and partnership. Mapping of all the targeted NTDs has virtually been completed, and services expanded to almost all endemic districts. Mass drug administration for onchocerciasis, schistosomiasis, soil transmitted helminthiasis, lymphatic filariasis has reached 100% geographical coverage. Furthermore, case management for podoconiosis and leishmaniasis has expanded to more districts.

Despite efforts to control and eliminate NTDs in Ethiopia there are important areas which need further strengthening. Firstly, sustained success for the control and elimination of most of the NTDs depends on access and utilization of Water, Sanitation and Hygiene (WASH) services. While NTD control efforts have achieved considerable success through mass drug administration campaigns, for many diseases, WASH remains essential to limit or break the transmission cycle (7). There is a need for strong partnership, coordination and synergy between the NTDs and WASH actors. Secondly, NTD interventions should be integrated. This integration should occur within the existing health system and services should be integrated between NTDs. Most of these diseases geographically overlap and affect the same population group ‘the poorest of the poor’; hence integration will not only reduce the cost of implementation but will also ensure country-wide access to an essential NTD care package (8). Thirdly, strong monitoring and evaluation and surveillance are very important.

The articles in this issue provide a glimpse of the current status of the NTD program in Ethiopia. The authors have provided an important insight into the need for continued commitment from the government and development partners to achieve the targets and goals stipulated in the HSTP and the NTD master plan. Sustained high coverage of interventions, stronger collaboration with the WASH actors and enhanced partnership are critical success factors.

## REFERENCES

1. Balabanova D, Mills A, Conteh L, et al. Good Health at Low Cost 25 years on: lessons for the future of health systems strengthening. *Lancet*. 2013;381(9883):2118-33.
2. Federal Democratic Republic of Ethiopia Ministry of Health. Health Sector Transformation Plan (HSTP). Addis Ababa, Ethiopia. 2015.
3. Federal Democratic Republic of Ethiopia Ministry of Health. Second Edition of Ethiopia National Master Plan For Neglected Tropical Diseases. Addis Ababa, Ethiopia. 2016.
4. World Health Organization. Accelerating Work to Overcome the Global Impact of Neglected Tropical Diseases a Roadmap for Implementation, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland. 2012.
5. Uniting to Combat Neglected Tropical Diseases. Ending the Neglect & Reaching 2020 Goals. London Declaration on Neglected Tropical Diseases. Available at [http://unitingtocombatntds.org/sites/default/files/resource\\_file/london\\_declaration\\_on\\_ntds.pdf](http://unitingtocombatntds.org/sites/default/files/resource_file/london_declaration_on_ntds.pdf). Accessed 02 May 2015.2012.
6. Federal Democratic Republic of Ethiopia Ministry of Health. Ethiopia National Master Plan For Neglected Tropical Diseases. Addis Ababa, Ethiopia. Available at [http://ntdenvision.org/resource/ethiopia\\_national\\_master\\_plan\\_for\\_neglected\\_tropical\\_diseases](http://ntdenvision.org/resource/ethiopia_national_master_plan_for_neglected_tropical_diseases) Accessed on 03 April 2014. 2013.
7. Freeman MC, Ogden S, Jacobson J, et al. Integration of Water, Sanitation, and Hygiene for the Prevention and Control of Neglected Tropical Diseases: A Rationale for Inter-Sectoral Collaboration *PLoS Negl Trop Dis* 2013;7(9):e2439.
8. Deribe K, Meribo K, Gebre T, et al. The burden of Neglected Tropical Diseases in Ethiopia, and opportunities for integrated control and elimination. *Parasit Vectors*. 2012;5(1):240:e35671-10.1371/journal.pone.0035671.