



## **Looking forward a decade on**

### *The future of tackling Neglected Tropical Diseases*

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Ten years ago, in 2005, a scientific meeting in Berlin coined the term 'Neglected Tropical Diseases'. This year, the anniversary of that moment peaked with two events further highlighting the prominence NTDs now have on the Global Health agenda. The German National Academy of Sciences, Leopoldina, brought together representatives of the G7 science academies to discuss three topics which Germany, as host of the G7 in 2015, would present to the participating Heads of State in June. The topics selected were the Health of the Oceans, Antimicrobial Resistance and Neglected Tropical Diseases (NTDs).<sup>1</sup>

Chancellor Merkel, in her opening speech to the 68<sup>th</sup> World Health Assembly in May, declared her support for NTDs at the upcoming G7 meeting. This represents further progress for the recognition these diseases of the poor have achieved as a 'brand'. Their inclusion as a group of conditions, alongside malaria, HIV and TB within the proposed 2015-2030 Sustainable Development Goals (SDGs) in health is remarkable progress and the WHO proposed target that there would be "a 90% reduction in the number of people requiring prevention of NTDs by 2030"<sup>2</sup> reflects the need to focus on the chronic pandemic of NTDs. They are the Cinderella's of the diseases as far as financing is concerned despite the value for money investing in NTD programmes brings as independent analyses confirm.

The headline fact that only 0.6% of Official Development Assistance for Health is devoted to NTDs has not changed over a 5 year period despite the higher profile the brand has achieved following the 2012 London Declaration and the Paris 2014 follow up. The G7 initiative is welcome but the financing of delivery by increased country contributions and wider bilateral support beyond the current commitment of the UK and USA must be on the G7 agenda. Euros, Yens and Canadian dollars are required beyond simply signing up to a communiqué.

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<sup>1</sup> The joint statements from the academies on these topics can be viewed on [http://www.leopoldina.org/uploads/tx\\_leopublication/2015\\_G7\\_Statement\\_Neglected\\_Tropical\\_Diseases.pdf](http://www.leopoldina.org/uploads/tx_leopublication/2015_G7_Statement_Neglected_Tropical_Diseases.pdf)

<sup>2</sup> Investing to overcome the global impact of Neglected Tropical Diseases - Third WHO report on neglected tropical diseases, 2015

WHO has shown leadership in defining strategies, developing the Road Map of targets for each disease and through a comprehensive NTD World Assembly Resolution in 2013.

The major pharmaceutical companies have been steadfast in their continued provision of free drugs which are delivered to those countries who apply for them. Some 70% of the donated drugs reach the mouths of those in need in any one year, a far higher proportion than in most drug programmes where World Bank estimates have put the level of loss in the system at some 88%. Anti-malarials for example are subject to counterfeiting and 30% were recently found to be below the standard or counterfeit in a recent survey. Countries would have to purchase NTD drugs as they are all Essential Medicines if they were not donated. Yet the costs of delivery, now estimated at around US\$ 0.20-0.30 per year in Africa and much less in Asia, is a small fraction of the annual health budgets of even the poorest countries.

Given the benefits of the products and their relevance to poverty alleviation the case for developed countries to reassess their financing of anti-poverty health interventions is clear. WHO has made the investment case in its recent 3rd NTD report and the overall additional need is estimated to be US\$750 million /year until 2020 and US\$ 460 million /year to 2030. However, these figures exclude the costs of vector control which are estimated to be circa US\$ 2.7 billion/year with the total required for vector control between 2015 and 2030 being US\$ 32 billion. A frightening sum but one which will be increasing as the projected spread of arboviral diseases reaches more developed warmer climes as *Aedes* vectors adapt. New insecticidal products are required to circumvent resistance and to address urban epidemics of dengue and Chikungunya.

Whilst NTDs are often recognised as chronic diseases there is a significant and understated annual mortality. The Global Burden of Disease (GBD) estimates of annual NTD mortality at 150,000 deaths per year. There is much dispute about these figures as not all WHO NTDs are reported through the NTD channels: Rabies with 60,000; neurocysticercosis with 60,000 and snakebite with 100,000 annual deaths. The deaths from trematode induced cancers of the bladder and bile duct are not included but adding this mortality to the 150,000 GBD study suggests the real NTD mortality is over 300,000 annually whilst the burden of morbidity in Disability Adjusted Life Years (DALY) is some 47.9 million; again a figure which evokes great debate.

The NTD community has attracted increased commitment from several groups who contribute to Global Health. There has been a significant commitment from the Bill & Melinda Gates Foundation; UK's DFID and USAID for implementation and product development research. European Foundations support for research capacity strengthening in Africa and many NGOs are committed to the implementation of programmes in the field and assisting endemic countries whilst there has been an increased interest from the broader academic community. However, there are well-recognised challenges with respect to implementation; the need for new products such as diagnostics and drugs; the difficulties of access to remote or urban populations; the potential for development of drug and insecticide resistance, the challenges of environmental changes on the ecology of vectors.

To address these challenges LSTM has reorganised its approach to Neglected Tropical Diseases utilising its breadth of scientific expertise, from laboratory research all the way to research uptake, benefiting patients worldwide. Between now and 2030 LSTM, and others, must sustain the NTD 'brand' and demonstrate that progress can be made on all these

fronts. Poverty cannot be addressed without recognising the role that NTDs play in generating it.

Of all health programmes few have made such rapid progress towards the targets monitored by the 'Uniting to Combat NTD' stakeholders on an annual basis. The Bill Gates Annual Letter released in January 2015, to coincide with the Davos summit, confirmed his own recognition of the NTD problem and his optimism that at least some of these conditions can be eliminated. The speech by Germany's Chancellor Angela Merkel at the World Health Assembly in May of the same year highlighted NTDs as part of the G7 agenda thus maintaining the momentum.

In addition to much needed academic research, the advocacy case must also continue to be developed. The products are there albeit some not ideal. Focussed research will deliver new and affordable products or approaches within the challenging time frames established. The value for money argument and using what we have now is critical: donated drugs need to be used efficiently and effectively to reach the poorest in greatest need. The achievement of around 800 million annual treatments in 70 countries is a significant public good which few would have foreseen a decade ago. Several billions of treatments have been delivered through many systems and in many settings in the tropics.

However, the relevance of NTDs to the core principle of Universal Health Coverage is evident from the messages from leaders of Global Health. It is time to reduce the inequities in financing NTD programmes and give the poor what they deserve: access to free and effective products.