Development assistance for neglected tropical diseases: progress since 2009

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Received 30 May 2014; revised 3 July 2014; accepted 4 July 2014

Neglected tropical diseases (NTDs) is an umbrella term for a diverse group of debilitating infections that represent the most common afflictions for 2.7 billion people living on less than US$2 per day. Major efforts have recently re-focused attention on NTDs, including structured advocacy by the Bill and Melinda Gates Foundation, technical and political support by WHO and large-scale drug donation programs by pharmaceutical companies. An analysis of the Official Development Assistance (ODA) for NTDs in 2009 showed that Development Assistance Committee members and multilateral donors had largely ignored funding NTD control projects. This study reviews the changes since 2009 and finds an increased engagement by pharmaceutical manufacturers through drug donation programs substantially increased by the ‘London Declaration’ in 2012, a focused effort of 77 public and private partners on control or elimination of the 10 most common NTDs, but no increase in ODA for NTDs between 2008 and 2012. The allocation of ODA still does not reflect the respective importance of these diseases.

Keywords: Drug donations, Financing, Neglected tropical diseases, Official development assistance

Introduction

The neglected tropical diseases (NTDs) is an umbrella term for a diverse group of infectious diseases caused by parasites, viruses and bacteria with a common characteristic: they are debilitating, frequently chronic and traditionally ignored as the diseases often affect the poorest and most underserved populations, representing the most common diseases for 2.7 billion people living on less than US$2 per day. Although there is still some ambiguity about the criteria for inclusion, WHO recognizes 17 diseases as NTDs, yet recent advocacy and control efforts have been selectively focused on the 10 most common NTDs. Many NTDs are the result of poverty and markedly contribute to further poverty by impairing agricultural productivity, cognitive development and education. NTDs are present in every region of WHO, where they cause about 534 000 deaths annually, sharing a similar burden of disease to malaria. They account for the annual loss of approximately 62.5 million disability-adjusted life-years, which highlight NTDs as one of the most important groups of communicable diseases worldwide, behind HIV/AIDS, tuberculosis, lower respiratory infections and diarrheal disease. Nevertheless, the true incidence and impact of NTDs is underestimated due to poor disease surveillance, low level of reporting, difficulty in diagnosis and low case fatality rate that undervalue the real burden of NTDs. Many NTDs are chronic, slowly developing diseases that progressively worsen, can cause severe pain, disfigurement or loss of function and have long-term physical, mental and social consequences for the individuals affected, which are not directly attributed to NTDs. Indeed, there is clear evidence of comorbidity between poor mental health conditions as a result of NTDs, including the neurological sequelae of neurocysticercosis and sleeping sickness and stigma and disability. Some have already suggested that the burden of such mental health conditions should be assessed and included as a major contributor to the global burden of disease. Infections by foodborne trematodiases and other trematode-borne diseases (such as schistosomiasis) can lead to serious secondary complications such as cholangiocarcinoma and bladder cancer that are also not included in the burden of NTDs. At the same time, some of these NTDs are re-emerging epidemics, particularly dengue fever, where over the last few years the global incidence has been increasing at an alarming rate with expansion expected due to factors such as the modern dynamics of climate change, international migration, travel, trade, unorganized and uncontrolled settlements, rural–urban migration and population displacements. A 2003 International Workshop in Berlin on intensified control of neglected diseases constituted the first systematic approach to redirect international attention to NTDs. Over the past decade major efforts have been made to focus attention on NTDs, including increased advocacy to establish NTDs visibly on the international map of health priorities, technical support by WHO to countries affected by the diseases, large-scale drug donation programs by the pharmaceutical industry and efforts to substantially...
increase funding for NTDs from traditional development partners. While progress was made since 2003 on drug donations for NTDs and technical support and advocacy, a review of the Official Development Assistance (ODA) for Health 2003–2007 revealed that NTDs as a whole had only attracted 0.6% of available funds, in contrast to almost 37% allocated to HIV/AIDS. In light of the changing landscape for NTDs, this paper will attempt to review progress in funding and advocacy efforts since 2009.

Methods

Paper selection criteria

An electronic literature search was conducted on PubMed and Google Scholar using combinations of the following keywords: neglected tropical diseases; financing; drug donations and official development assistance. No language or study design restrictions were used. In addition, websites of relevant organizations such as Uniting to Combat NTDs, WHO, the Task Force for Global Health and the SABIN Institute were assessed to identify relevant documentation.

Assessment of funding for neglected tropical diseases

ODA commitments were extracted from the Organization for Economic Co-operation and Development (OECD) Creditor Reporting System (CRS) as previously described. The CRS collects ODA data from donors, including all 22 members of OECD’s Development Assistance Committee (DAC) and, on a voluntary basis, from non-DAC countries and multilateral agencies such as The Global Fund to Fight AIDS, Tuberculosis and Malaria. Donors’ commitments, instead of disbursements, were analyzed for the period 2008–2012 because ODA commitments are nearly 100% complete, whereas disbursements are closer to 90% complete. In order to identify ODA for NTD control, we examined annual ODA commitments for infectious disease control individually in detail. For this purpose, the most comprehensive list of NTDs reported by Hotez was used. In some cases, projects were labelled with generic project titles and short descriptions, e.g., infectious disease control. In order to identify the project’s purpose, we conducted internet and literature searches. However, in some cases, especially when the name of the recipient was not specified, we were not able to identify the specific purpose of the commitment. In other cases, when commitments were made for projects that included non-NTD as well as NTD control activities and we could not identify the share of funding that was allocated to NTDs as a conservative measure, we counted the entire ODA commitments as being for NTD control.

Results

Advocacy for neglected tropical diseases

NTDs have been widely ignored by the global public health community and development partners, which have traditionally allocated financial support to research and control of the three big diseases HIV/AIDS, malaria and tuberculosis. Indicative of this neglect has been the persistent deficiency in provision of new drugs for neglected diseases. During 2000–2011, only four new chemical entities, or 1% of all new chemical entities approved, were for neglected diseases. However, since the Berlin meeting a considerable number of national and international actors has become increasingly engaged in advocacy for control of NTDs, most notably WHO and the Bill and Melinda Gates Foundation (BMGF). This has resulted in structured advocacy efforts supported by grants of the BMGF and in 2009, a first ever series on NTDs in the Lancet. An important milestone in the visibility of NTDs was reached in January 2012, when WHO released a plan to control, eliminate or eradicate 17 NTDs by 2020 titled, ‘Accelerating work to overcome the global impact of neglected tropical diseases: a roadmap for implementation’. The May 2013 World Health Assembly (WHA) Resolution 66.12 on all 17 NTDs marked the first time that the international health community officially and formally recognized the need for an integrated and comprehensive approach to combat the NTDs. Also, NTDs were included in the United Nations (UN) Secretary General’s 2013 High Level Panel report, which will guide the new post-2015 Sustainable Development Agenda, marking the first time that NTDs are explicitly mentioned in the context of a future development framework.

The most consequential event, however, was a meeting of major stakeholders, including the pharmaceutical industry, WHO, BMGF and the World Bank that led to the ‘London Declaration’, an unprecedented, coordinated effort of 77 public and private partners jointly with WHO in January 2012. The participants committed to focus efforts on the 10 most common NTDs and to control or eliminate them, globally or regionally, by 2020. Box 1 summarizes the key advocacy events since the London Declaration for these 10 NTDs. One pledge of the London Declaration stakeholders, from an informal group called ‘Uniting to Combat NTDs’, is to report annually on progress and to organize high-level follow-up meetings on the London Declaration. The most recent meeting held in Paris, in April 2014, showcased the substantial achievements made. It particularly highlighted the critical support for NTDs through increasing drug donations by pharmaceutical companies.

Drugs donations

The pharmaceutical industry has been a major anchor for control of NTDs. Merck set the stage in 1987, with a highly successful donation of ivermectin to the West African River Blindness Control Program, followed by GlaxoSmithKline, which started to donate albendazole for lymphatic filariasis control in 1998 and Pfizer donated azithromycin for trachoma in the same year. There are presently eight companies providing major drug donations for NTDs. Table 1 presents an overview of drug donations, before and after the London Declaration. Five NTDs are controlled by preventive chemotherapy (PC) through country or community-based mass drug administration (MDA) programs. All of the NTDs controlled via PC have benefitted from large-scale drug donation programs. This includes lymphatic filariasis, onchocerciasis, soil-transmitted helminthiasis (STH), schistosomiasis and trachoma.

NTDs controlled via preventive chemotherapy and large-scale drug donation

Lymphatic filariasis (LF) or elephantiasis is an ancient, disfiguring and debilitating disease, caused by the filarial worms transmitted by mosquito vectors, which affects an estimated 120 million
Box 1. Key advocacy events since the London Declaration on neglected tropical diseases (NTDs)

Endorsements
In May 2013, and for the first time, the World Health Assembly recognized the need for a comprehensive approach to battle NTDs by adopting a resolution calling for heightened and integrated measures to defeat 17 NTDs.
In April 2013, and for the first time, African ministers of health collectively acknowledged the need to increase support for NTD control and elimination programs, and African Union Commissioner of Social Affairs, Dr. Mustapha Sidiki Kaloko, called for strong action against these diseases.
In June 2013, at the Organization of American States meeting, heads of state endorsed the PAHO’2009 resolution, elimination of NTDs and other poverty-related infections.
In September 2013, the 63rd session of the WHO Regional Health Committee endorsed the Regional strategy on NTDs for WHO AFRO and the Regional NTD Strategic Plan 2014-2020.
In December 2013, India’s Joint Secretary in the Minister of Health, Dr. Anshu Prakash, reiterated India’s commitment to the London Declaration and endorsed the World Health Assembly resolution on 17 NTDs.

The post-2015 Development Agenda
NTDs were included in the United Nations Secretary General’s 2013 High-Level Panel report, which is expected to inform UN decisions about the post-2015 sustainable development goals.
The Lancet Commission on investing in health identified PCT-NTDs as ‘very good value for money.’
More than 70 countries developed national NTD master plans, including high-burden countries such as Ethiopia and Nigeria.

Groups created
The new Coalition on Operational Research was created to track operational research progress and to identify opportunities for the development of new drugs and diagnostic for NTDs.
In October 2012, the NTD Supply Chain Forum was created to identify and address difficulties in NTD drugs and supply delivery.

NDTs: neglected tropical diseases; PCT-NTDs: preventive chemotherapy-neglected tropical diseases.
Source: Uniting to Combat NTDs, 2013.26

people living in 73 endemic countries.41 The Global Program to Eliminate Lymphatic Filariasis (GPELF) was launched in 2000 in response to the WHA Resolution 50.29 with the goal to eliminate LF by 2020.42 A Global Alliance to Eliminate Lymphatic Filariasis (GAELF) since 2000 has assumed advocacy functions and provides a forum for all parties to regularly discuss progress and strategy. The GPELF has seen the most rapid scale-up of any program in public health history.43 In 2012, about 472 million people received PC, covering 33.6% of individuals at risk of LF globally (Figure 1).

Lymphatic filariasis, also known as river blindness, is caused by the filarial nematode Onchocerca volvulus transmitted by infected black flies. The Onchocerciasis Control Programme in West Africa has a long history of almost 40 years and is considered one of the most successful disease-control efforts in Africa. The program has a charter and structured governance arrangements. The board is composed of participating countries, UN agencies and donors, with WHO being the executing agency and the World Bank the fiscal agent. The first Onchocerciasis Control Programme, operating from 1974 to 2002, succeeded in eliminating the disease as a public health problem in 10 endemic countries using aerial larviciding to interrupt transmission.43 The follow-up African Programme for Onchocerciasis Control (APOC) started in 1995 to target countries that were not covered by the first program using MDA with ivermectin, donated by Merck & Co., Inc. The Onchocerciasis Elimination Program of the Americas was launched in 1992 and achieved more than 85% coverage of MDA in all 13 foci in 2006, and transmission was interrupted in 10 foci by the end of 2011.46 In 2012, APOC reported that 99.3 million people, representing 76.4% of the at-risk population, received ivermectin treatment.47 As of June 2013, a total of 11 foci of the 13 endemic areas have interrupted transmission as a result of health education and mectizan distribution. Colombia (in 2007) and Ecuador (in 2009) became the first countries in the world to halt river blindness transmission.48 Despite these advances, WHO and APOC estimate that more than 100 million people are still at risk of infection in the 20 African countries where the disease is endemic.49

Soil-transmitted helminthiases are a group of nematode worms, the large roundworm (Ascaris), whipworm (Trichuris) and the Hookworms (Necator and Ancylostoma) transmitted through soil contaminated with infected human feces. In 2001, the WHA passed Resolution WHA 54.19, which set a global target and led to the establishment of Partners for Parasite Control.48 An estimated of 875 million children live in high-risk areas worldwide, of whom about 30% are pre-school age and 70% school-age children.49 In 2012, about 310 million children in need of treatment received PC for STH, corresponding to 37% of global coverage (Figure 1). WHO and partners have targeted to treat 50% of pre-school and school-aged children by 2015, and reach 75% coverage by 2020. All endemic countries are expected to have a national plan of action to reach these goals.49

Schistosomiasis is a chronic infection with parasitic blood flukes. Based on data from the Preventive Chemotherapy DataBank, in 2012, over 42 million people of the 249 million living in high-risk areas received PC, corresponding to 17% global coverage (Figure 1). Schistosomiasis has been marked for elimination by 2015 in the eastern Mediterranean region, Caribbean, Indonesia
<table>
<thead>
<tr>
<th>Disease</th>
<th>Donated drug</th>
<th>Donor company</th>
<th>Since London Declaration</th>
<th>Before London Declaration</th>
<th>Amount donated</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onchocerciasis</td>
<td>Ivermectin</td>
<td>Merck &amp; Co., Inc.</td>
<td>Unlimited supply, open-ended</td>
<td>1987-open-ended</td>
<td>Over 1.1 billion treatments, 1987–2012</td>
<td>28,29</td>
</tr>
<tr>
<td>Lymphatic filariasis</td>
<td>Diethylcarbamazine</td>
<td>Bayer Healthcare</td>
<td>Up to 2.2 billion tablets, 2012–2017</td>
<td>NA</td>
<td>NA</td>
<td>28</td>
</tr>
<tr>
<td>Lymphatic filariasis</td>
<td>Notezine (Diethylcarbamazine)</td>
<td>Eisai and the Bill and Melinda Gates Foundation Pfizer</td>
<td>120 million tablets for 2012–2013</td>
<td>NA</td>
<td>NA</td>
<td>28</td>
</tr>
<tr>
<td>Trachoma</td>
<td>Azithromycin</td>
<td>Pfizer</td>
<td>Unlimited supply until at least 2020</td>
<td>1998-open-ended</td>
<td>340 million doses, 1998–2013</td>
<td>28,33,34</td>
</tr>
<tr>
<td>Human African trypanosomiasis</td>
<td>Suramin</td>
<td>Bayer Healthcare</td>
<td>Up to 10 000 vials per year until 2012</td>
<td>NA</td>
<td>NA</td>
<td>28,37</td>
</tr>
<tr>
<td>Human African trypanosomiasis</td>
<td>Nifurtimox</td>
<td>Bayer Healthcare</td>
<td>Up to 2.4 billion tablets, 2009–2014</td>
<td>NA</td>
<td>NA</td>
<td>28,37</td>
</tr>
<tr>
<td>Schistosomiasis</td>
<td>Praziquantel</td>
<td>Merck KGaA</td>
<td>Up to 250 million tablets per year, open-ended</td>
<td>2007–2017</td>
<td>200 million tablets until 2017</td>
<td>28,38</td>
</tr>
<tr>
<td>Soil-transmitted helminthias</td>
<td>Mebendazole</td>
<td>Johnson &amp; Johnson</td>
<td>Up to 200 million tablets per year until 2020</td>
<td>2006-open-ended</td>
<td>NA (112 million doses in 2012)</td>
<td>28,40</td>
</tr>
</tbody>
</table>

MDT: multi-drug therapy. NA: not applicable.
and the Mekong River basin. Elimination by 2020 has been proposed for regions of the Americas, Western Pacific and selected countries in Africa.\textsuperscript{24} Control programs are national and largely domestically financed.

Trachoma is an infection with the bacterium \textit{Chlamydia trachomatis} that accounts for about 3\% of all cases of blindness worldwide and affects as much as 90\% of school-aged children in hyperendemic areas.\textsuperscript{50} WHO estimates that more than 20 million people are actively infected, 7.2 million need surgery for trichiasis and 1.2 million have become irreversibly blinded.\textsuperscript{51,52} In 1998, the WHA Resolution 51.11 set a target to eliminate blinding trachoma as a public health problem by 2020 through the implementation of the SAFE strategy (surgery, antibiotic treatment, facial cleanliness and environmental improvement).\textsuperscript{53} SAFE comprises multiple interventions in addition to preventive chemotherapy.\textsuperscript{45} Analysis of Preventive Chemotherapy Databank data for 2012 showed that of the 241.47 million requiring preventive chemotherapy, 48.78 million (20.2\%; 48.78/241.47) have received it (Figure 1).

Other NTD programs
Dracunculiasis (Guinea worm disease) is the only NTD close to eradication, although there is no vaccine or medicine available to prevent or treat the disease. The global eradication campaign for Dracunculiasis has achieved resounding progress by implementing preventive measures focusing on case management and containment, provision of safe drinking-water sources, vector control and health education.\textsuperscript{45,54} Dengue is perhaps the most important NTD. It is a viral disease caused by four different serotypes of the dengue virus, which poses a serious challenge to the public health community since there is no treatment or vaccine and prevention relies entirely on control of the vector \textit{Aedes aegypti}. There has been a steady rise in the number of cases of dengue and severe dengue reported during the period 1955–2013, which has been accompanied by a steady rise in the number of fatalities.\textsuperscript{45} The recent geographic expansion of dengue and its vector now represents a real threat for outbreaks in the United States and Europe.\textsuperscript{5,55,56} Although WHO has formulated a global strategy for dengue prevention and control (2012–2020), which has the goal to reduce 2010 mortality from dengue by at least 50\% and reduce morbidity by at least 25\%, dengue control programs are national and almost entirely domestically financed. Table 2 provides an overview of the other NTD programs on the WHO list, including targets and current status.\textsuperscript{55,57–61} Four additional NTDs including endemic treponematoses/yaws, taeniasis/cysticercosis, human echinococcosis and foodborne trematodiases were not included in the table as they are under-reported and do not benefit from international financial support for prevention and control programs, including mass treatment campaigns.\textsuperscript{45}

Funding for control
The lack of funding for NTD control has been noted by WHO, academics and non-governmental organizations.\textsuperscript{15,62–64} In 2009, a systematic review of ODA commitments for infectious diseases
<table>
<thead>
<tr>
<th>Disease</th>
<th>Program</th>
<th>WHO Roadmap targets</th>
<th>Current status</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dengue</td>
<td>WHO global strategy for dengue prevention and control 2012–2020</td>
<td>Reduced mortality from dengue by at least 50% and reduced number of cases by at least 25% using 2010 as the baseline by 2020</td>
<td>The number of cases of dengue and severe dengue reported during 1955–2013 grew steadily, which was accompanied by a rise in the number of deaths from an average of 2563 during 2006–2009 to 4248 in 2010</td>
<td>45</td>
</tr>
<tr>
<td>Rabies</td>
<td>WHO, the FAO, the World Organization for Animal Health (OIE) and the Global Alliance for Rabies Control</td>
<td>Elimination of human rabies transmitted by dogs and stop dog-to-dog transmission in all Latin American countries by 2015</td>
<td>China and India bear the most of rabies burden The number of clinically diagnosed deaths from rabies reported to the Chinese Center for Disease Control fell to 1917 rabies deaths in 2011. The number of infected counties has remained almost stable since 2008</td>
<td>45</td>
</tr>
<tr>
<td>Buruli ulcer</td>
<td>Global Buruli Ulcer Initiative</td>
<td>Cure 70% of cases in endemic countries by 2020</td>
<td>Unknown due to limited information of burden</td>
<td>45</td>
</tr>
<tr>
<td>Leprosy</td>
<td>Country programs adopting WHO enhanced global strategy for further reducing the disease burden due to leprosy 2011–2015</td>
<td>Reduction of new cases with visible deformity by 35% compared to the rate of 2010, by 2015. Global of elimination by 2020</td>
<td>In 2012, less than 20 countries reported over 1000 new cases of leprosy, indicating that it is becoming limited to a small number of countries</td>
<td>45,57</td>
</tr>
<tr>
<td>Chagas</td>
<td>Regional control initiatives in Latin America</td>
<td>Transmission trough blood transfusion interrupted by 2015. Intra-domiciliary transmission interrupted in the Americas by 2020</td>
<td>In 2008, chagas disease killed more than 10 000 people, and as of 2009, more than 1 million cases were reported in Argentina and Brazil. Chagas is now an emerging public health threat in countries such as the United States, Canada, Western Europe, Japan, and Australia due to widespread emigration. Transmission by the main domestic vectors have been interrupted in Uruguay, Chile, Brazil and much of Central America (Guatemala, Honduras, El Salvador, Nicaragua)</td>
<td>45,58</td>
</tr>
<tr>
<td>Human African trypanosomiasis (HAT)</td>
<td>The Programme Against African Trypanosomiasis, Pan African Tsetse and Trypanosomiasis Eradication Campaign (PATTEC)</td>
<td>Elimination of 80% country foci by 2015. Global elimination by 2020</td>
<td>Number of cases reported to WHO in 2012 were less than 8000. However, the disease is grossly underreported</td>
<td>45,59,60</td>
</tr>
<tr>
<td>Leishmaniasis</td>
<td>Regional Control Initiatives, The World Health Assembly Resolution (WHA60.13) on the ‘Control of Leishmaniasis,’ 2007</td>
<td>Regional elimination of VL from the Indian subcontinent by 2020</td>
<td>Largely underreported. Approximately 0.2 to 0.4 cases and 0.7 to 1.2 million VL and cutaneous leishmaniasis cases, respectively, occur each year</td>
<td>45,61</td>
</tr>
<tr>
<td>Guinea worm (Dracunculiasis)</td>
<td>The Guinea Worm Eradication Program (GWEP)</td>
<td>Eradicated by 2015. Global elimination by 2020</td>
<td>Close to achieving the eradication. In 2013, a 73% decline was recorded in the number of cases of Dracunculiasis, from 542 in 2012, to 148 in 2013</td>
<td>45,54</td>
</tr>
</tbody>
</table>

FAO: The Food and Agriculture Organization of the United Nations; VL: visceral leishmaniasis.
(2003–2007), isolating commitments for all NTDs, was published using the OECD Creditor Reporting System (CRS). The result showed a disappointing allocation of only 0.6% of ODA for NTDs. A follow-up analysis for the following 5 years (2008–2012) has been undertaken, using the same methodology. Tables 3 and 4 summarizes the findings. The overall steady increase in ODA for health during the 2003–2007 period, from a total of US$8.7 billion to US$14.4 billion, has continued through 2008 and 2009, and reached US$20 billion. Subsequently in 2010–2012, total ODA for health slightly declined to US$18 billion. HIV/AIDS, malaria and tuberculosis are continuing to attract most funding (50% and above) and their share has risen by 2.9%, 0.4% and 6.4%, respectively, over the period, yet NTD control has continued to remain constant at 0.6% of all health ODA (Table 4).

### Discussion

The international community has advocated forcefully to put NTDs back on the international agenda, and pharmaceutical companies are donating the critical drugs needed to achieve the 2020 NTD control or elimination goals for the ten most common NTDs. However, a closer look at the full spectrum of NTDs reveals wide variation in NTD control efforts, in terms of mix of interventions, governance and organization and general progress. For NTDs not suitable for elimination, local health system support is critical and several NTDs require multiple interventions such as support to sanitation and water supply or vector control. Disease programs, which have traditionally benefitted from independent organizational arrangements and long-standing designated donor support, such as APOC and the Guinea Worm Eradication Program, have continued to progress well, as has the long-standing trachoma program. Lymphatic filariasis has been the disease with the most rapid scale-up of country programs using MDA. Four factors were critical for the success of LF: a WHO managed global program (GPELF), an unlimited drug donation program by GlaxoSmithKline, the creation and complementary support of GAELF and donor support by bilateral donors (the US and UK, and the BMGF). While STH and schistosomiasis have also benefited from greater advocacy, significant drug donations have only occurred recently, therefore country scale-up is gradually proceeding. However, NTDs for which there are no vaccines or effective drugs, such as dengue, seem to have hardly benefitted from the international advocacy.

#### Table 3. Health and population commitments by purpose, 2008–2012 (in millions of constant US$, 2010 base year)

<table>
<thead>
<tr>
<th>Year</th>
<th>HIV/AIDS control</th>
<th>Malaria control</th>
<th>TB control</th>
<th>Infectious diseases excl. NTDs</th>
<th>NTDs control</th>
<th>Health sector development</th>
<th>Pop. Excl. HIV/AIDS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>7398</td>
<td>1202</td>
<td>444</td>
<td>1036</td>
<td>80</td>
<td>5660</td>
<td>2260</td>
<td>18 080</td>
</tr>
<tr>
<td>2009</td>
<td>8139</td>
<td>2284</td>
<td>893</td>
<td>1316</td>
<td>117</td>
<td>5680</td>
<td>2020</td>
<td>20 449</td>
</tr>
<tr>
<td>2010</td>
<td>7320</td>
<td>1494</td>
<td>976</td>
<td>1009</td>
<td>133</td>
<td>6007</td>
<td>2143</td>
<td>19 082</td>
</tr>
<tr>
<td>2011</td>
<td>7491</td>
<td>1370</td>
<td>592</td>
<td>1069</td>
<td>114</td>
<td>5702</td>
<td>2396</td>
<td>18 734</td>
</tr>
<tr>
<td>2012</td>
<td>8548</td>
<td>1228</td>
<td>607</td>
<td>1038</td>
<td>116</td>
<td>3528</td>
<td>3053</td>
<td>18 118</td>
</tr>
<tr>
<td>Compound annual growth rate</td>
<td>2.93%</td>
<td>0.43%</td>
<td>6.45%</td>
<td>0.04%</td>
<td>7.71%</td>
<td>–9.02%</td>
<td>6.20%</td>
<td>0.04%</td>
</tr>
</tbody>
</table>

NTDs: Neglected tropical diseases; Pop: population.

| Data for NTDs control corresponds to funding amounts reported to the OECD CRS and US Department of State Foreign Operations Bill report, 2012.66
| Source: OECD Creditor Reporting System (CRS), PEPFAR, 2011 and 2012.64,65 |

#### Table 4. Percentage of health and population commitments by purpose, 2008–2012

<table>
<thead>
<tr>
<th>Year</th>
<th>HIV/AIDS control</th>
<th>Malaria control</th>
<th>TB control</th>
<th>Infectious diseases excl. NTDs</th>
<th>NTD control</th>
<th>Health sector development</th>
<th>Pop. Excl. HIV/AIDS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>40.9</td>
<td>6.6</td>
<td>2.5</td>
<td>5.7</td>
<td>0.4</td>
<td>31.3</td>
<td>12.5</td>
<td>100</td>
</tr>
<tr>
<td>2009</td>
<td>39.8</td>
<td>11.2</td>
<td>4.4</td>
<td>6.4</td>
<td>0.6</td>
<td>27.8</td>
<td>9.9</td>
<td>100</td>
</tr>
<tr>
<td>2010</td>
<td>38.4</td>
<td>7.8</td>
<td>5.1</td>
<td>5.3</td>
<td>0.7</td>
<td>31.5</td>
<td>11.2</td>
<td>100</td>
</tr>
<tr>
<td>2011</td>
<td>40.0</td>
<td>7.3</td>
<td>3.2</td>
<td>5.7</td>
<td>0.6</td>
<td>30.4</td>
<td>12.8</td>
<td>100</td>
</tr>
<tr>
<td>2012</td>
<td>47.2</td>
<td>6.8</td>
<td>3.4</td>
<td>5.7</td>
<td>0.6</td>
<td>19.5</td>
<td>16.9</td>
<td>100</td>
</tr>
</tbody>
</table>

NTDs: neglected tropical diseases; Pop: population.

Source: OECD Creditor Reporting System (CRS), PEPFAR, 2011 and 2012.64,65
efforts and progress in control and elimination has been slow and limited.

More importantly, the renewed focus on NTDs from the international health community and the pharmaceutical industry has not been accompanied by the requisite increase in ODA contributions for NTDs. Between 2008 and 2012, NTD funding remained disappointingly low at 0.6% of ODA. Also the number of bilateral donors participating has been decreasing and today funding is largely provided by the US and the UK. While there have been some efforts, none of the Regional Development Banks have made a substantial contribution to NTDs, nor has the World Bank through country lending or the Global Fund to Fight AIDS, Tuberculosis and Malaria, which has been unable to expand its mandate to include NTDs. At the same time, NTD funding that exists remains strongly focused on Africa, despite critical needs in other parts of the world. NTD control plans prepared in 2011 by WHO and approved by the regional committees for the Western Pacific and South East Asia have thus far failed to attract substantial donor funding. Therefore, national governments continue to bear the burden and provide most of the funding for NTDs in these regions. On a positive note, a hopeful sign has been set at the recent high-level meeting in Paris, with a World Bank pledge of funds to NTDs. In addition, the Asian Development Bank has recently launched a ‘Regional Malaria and Other Communicable Disease Threats Trust Fund’, which has received initial financing from the Governments of Australia and the United Kingdom. The funding could provide a mechanism to pool and funnel resources to battle NTDs.

The major advocacy efforts for NTDs, and the generous, large drug donations are a huge step forward, but the international donor community is now called upon to follow-up and substantially increase its share of ODA to provide an integrated and holistic approach to NTDs in which MDA could be combined with other necessary interventions such as vector control, health systems support, morbidity management and community empowerment. The NTD funding needs are modest in comparison with the needs to distribute the drugs, as well as to train human resources, can be fully realized and that countries have the needed resources to distribute the drugs, as well as to train human resources, update disease mapping, monitor progress of control interventions (surveillance of changes in incidence and prevalence), assess drug efficacy and promptly identify possible development of drug resistance. Yet, beyond the London Declaration, greater and predictable ODA will be key to any future progress for the complete NTD spectrum, particularly for those diseases that are not responsive to drug interventions.

Authors’ contributions: BHL and NH drafted the review; LT conducted the ODA commitments systematic review. All authors read and approved the final manuscript. BHL is the guarantor of the paper.

Funding: None.

Competing interest: None declared.

Ethical approval: Not required.

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