Unite in the fight against HIV/AIDS, tuberculosis and malaria

The G7 members must renew their commitments to tackling HIV/AIDS, tuberculosis and malaria, as millions are still missing out on vital treatment

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The United Nations' Millennium Development Goals (MDGs) were created to harness the collective power of governments and leading international development agencies to address the needs of the world's poorest people. Included in these goals was a commitment to improving global health by combating HIV/AIDS, malaria and tuberculosis. The G7 has the opportunity to secure and accelerate progress on these goals as the world moves towards and beyond the 2015 MDG deadline.

Progress so far

MDG six pledges to "combat HIV/AIDS, malaria and other diseases" by reaching three targets. The first is to "have halted and begun to reverse the spread of HIV/AIDS". This goal has been met. HIV/AIDS infections are declining in most regions and have decreased overall by 33 per cent.

The second target is to "achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it". While this has not been met, 9.7 million people were treated in 2012 – 1.6 million people more than in 2011. Fewer HIV-positive patients die from HIV/AIDS. Earlier treatment with antiretroviral therapy increases the patient's life span and decreases the risk of transmitting HIV to others. In response to new research, in 2013 the World Health Organization released guidelines to simplify and expand antiretroviral treatment so that people newly diagnosed with HIV might receive early treatment. This policy change will prevent an additional three million deaths and 3.5 million infections in low- and middle-income countries by 2025.

The third target is to "have halted by 2015 and begun to reverse the incidence of malaria and other major diseases". At present, 59 out of the 97 countries reporting malaria have met this goal. The global incidence of malaria has declined by 25 per cent since 2000 and deaths from malaria have dropped by 42 per cent. Since 2000, 3.3 million people's lives have been saved, 90 percent of whom were children under five living in sub-Saharan Africa. In countries with malaria control, the percentage of children dying from malaria has fallen by 20 per cent. In sub-Saharan Africa more children sleep under insecticide-treated bed nets. And many countries now provide free, rapid diagnostic testing through the public sector.

Improved access to treatment for tuberculosis has saved 22 million lives between 1995 and 2011. By the end of 2002, all countries with a high incidence of tuberculosis were also addressing multi-drug-resistant tuberculosis (MDR-TB). The MDG of reducing the mortality rate of tuberculosis patients by 50 per cent from 1990 may be met if political commitment continues. In 2012, 8.6 million people were newly diagnosed with tuberculosis and 1.3 million died, which is a decline from 2011. The new diagnostic test known as Xpert MTB/RIF represents a critical diagnostic advance as it allows for earlier treatment of MDR-TB patients with the appropriate drug regimens. Today, 88 low- and middle-income countries receive access to this equipment.

Outstanding challenges

Each year, 2.5 million people are newly infected with HIV. Of these, 1.6 million are in sub-Saharan Africa. While new infections are declining, as of 2011, 34 million people live with HIV, seven million of whom are eligible for but lack access to antiretroviral treatment. While the MDG target of universal access in 2010 was missed, it will still be possible to reach this goal if current trends are sustained. Public health interventions must continue to improve access to antiretroviral treatment while expanding public education programmes to young people.

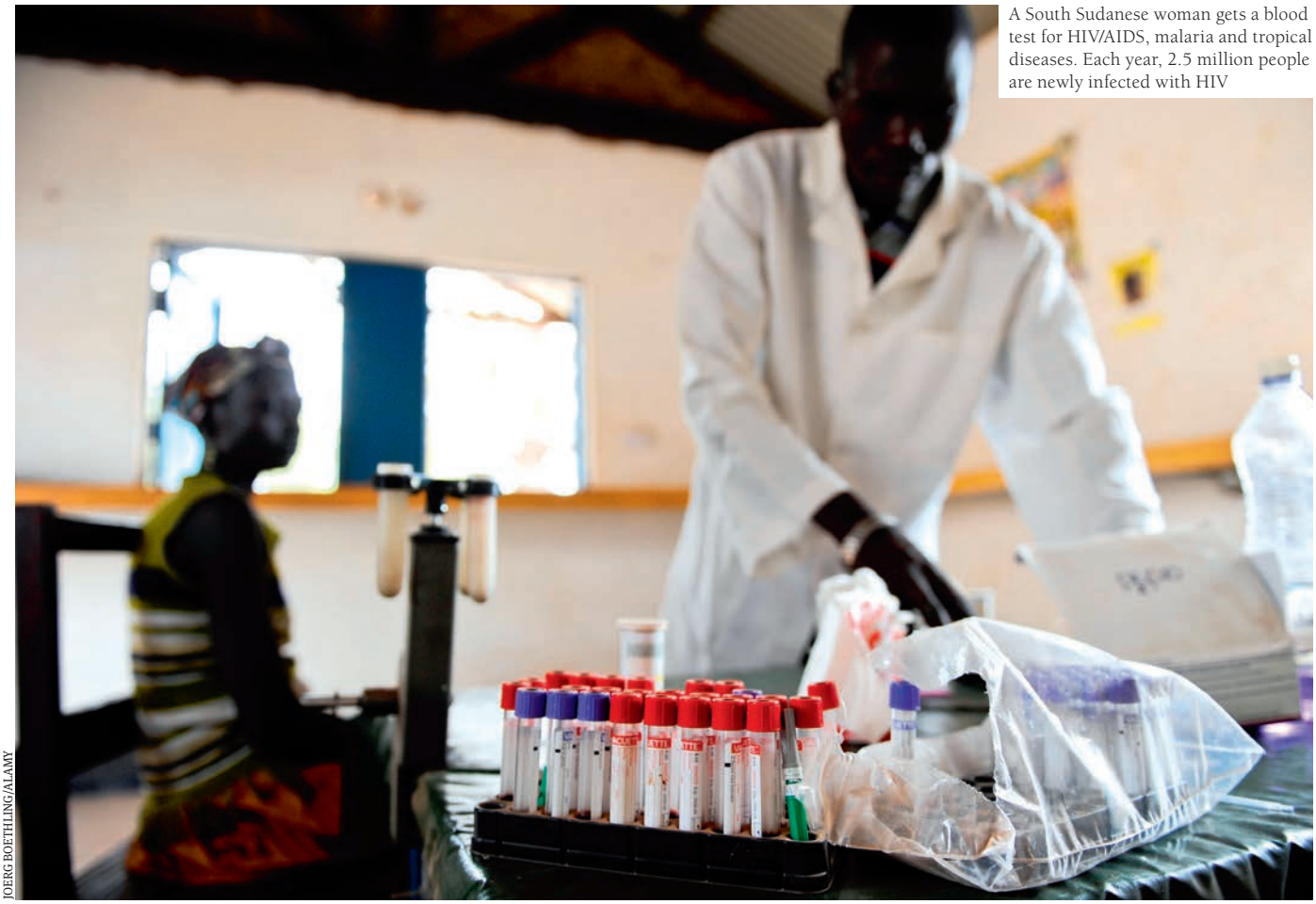
The ongoing success of the Roll Back Malaria partnership requires sustained political commitment to maintain this momentum. There is a need to expand the distribution of insecticide-treated mosquito nets to children under five in sub-Saharan Africa, and to scale up vector control in sub-Saharan Africa. More children under five must receive access to artemisinin-based therapy, which reduces illness and death from the most common form of malaria. Finally, drug and insecticide resistance is growing: five countries in South-East Asia have malaria strains resistant to artemisinin, and 64 countries have mosquitos resistant to insecticides. The funding gap is approximately $2.8 billion.

Leaders should renew their commitments to provide WHO with the resources to strengthen surveillance on global drug resistance

The incidence of tuberculosis is declining by only two per cent per year. Continued and future success requires improved patient detection – WHO's Stop TB Partnership estimates that the healthcare system is missing three million patients who have the disease. It also requires expanding access to MDR-TB treatment. Drug resistance could reverse the progress in managing tuberculosis. In 2012, 450,000 people were diagnosed with MDR-TB, 10 per cent of whom had extremely drug-resistant tuberculosis – a form that is more difficult and expensive to treat. The challenge is to advance new scientific discoveries and rapidly implement them in high-risk communities. The funding gap to accomplish these goals is $2 billion.

The G7 contribution

G7 members need first to bridge the funding gaps and honour all pledges to the Global Fund to Fight AIDS, Tuberculosis and Malaria. Some of these pledges are outstanding.



A South Sudanese woman gets a blood test for HIV/AIDS, malaria and tropical diseases. Each year, 2.5 million people are newly infected with HIV

JOERG BOETHLING/ALAMY

Second, antimicrobial drug resistance is a looming global crisis that threatens to undo progress on tuberculosis and malaria and has other important domestic public health implications for G7 members. The G7 leaders should deepen the commitments they made at Lough Erne by agreeing to promote research and development through strategic partnerships on new drugs and diagnostic tools, and on the public health structures necessary for maintaining gold-standard care for those affected by antimicrobial drug resistance, including tuberculosis and malaria patients. Leaders should also renew their commitments to provide WHO with the resources to strengthen surveillance on global drug resistance. When the group of senior officials issues its report in 2015 on the global research infrastructure for innovation, established in Okinawa and restated in Lough Erne, it should include world health research and innovation.

Third, the G7 should hold a cross-sectoral meeting on economic reform and global healthcare delivery, drawing on expert knowledge from WHO, the World Bank and leading academic researchers, for the purpose of informing science and finance ministers. G7 decisions on economic growth and poverty eradication must support, not erode, global health efforts.

Advances in HIV/AIDS, tuberculosis and malaria campaigns since 2000 are significant, but subject to reversal. The response of the G7 members is critical to maintaining and accelerating this fragile progress. Efforts such as the ones proposed here could provide an effective and lasting contribution far beyond 2015. ■

FIGHTBACK™
TB innovation for tomorrow

Calling for champions: can world leaders rise to the challenge and win the fight against tuberculosis?

Considering today's medical advances, with genetic tests predicting Alzheimer's and infants being functionally cured of HIV, it seems absurd that a fully preventable disease known to us for centuries is today the second deadliest infectious disease on the planet. Yet it is true, and both of us have witnessed first-hand how the devastating effects of tuberculosis (TB) have ravaged our communities from North America to Africa. Having spent decades to mobilise international efforts to curb TB, we can both attest to the progress still urgently required to make our vision of TB elimination a reality.

In 1970, most forms of TB were curable yet new, virulent drug resistant strains were beginning to appear. Today, over a million people a year continue to die from TB. Worse yet, we now have fewer effective tools to treat TB, to the point where some patients are sent home to die because we lack medicines and the proper care to treat them. How is this possible?

The answer lies in a combination of neglect and complacency – neglect from world leaders who have not focused enough attention on the TB threat and complacency from TB advocates who continue to use the same tired approaches that fail to capture the public's attention. Most G8 countries considered TB a disease "of the past". As a result, public and private institutions reduced investments in TB control and medical research, to the point where only two new TB drugs have been approved in the past 40 years. Simple, effective diagnostic tests like those used for HIV or malaria are not available for TB. Neglecting immunisation, neglecting public education and neglecting the search for better tools to safeguard against this airborne disease has led to a massive resurgence of TB cases.

Although TB remains predominant in middle- and low-income countries, no place is isolated. One third of the world's population is infected with TB bacteria and over 8.5 million people become sick every year.[1] With increased worldwide mobility no person is immune. For example, London witnessed a large outbreak of TB in the early 2000s. Last year, Californian high schools experienced a TB scare when 45 students were diagnosed as TB-infected. The list of such examples is increasing. Nevertheless, the voice of the TB community remains weak.

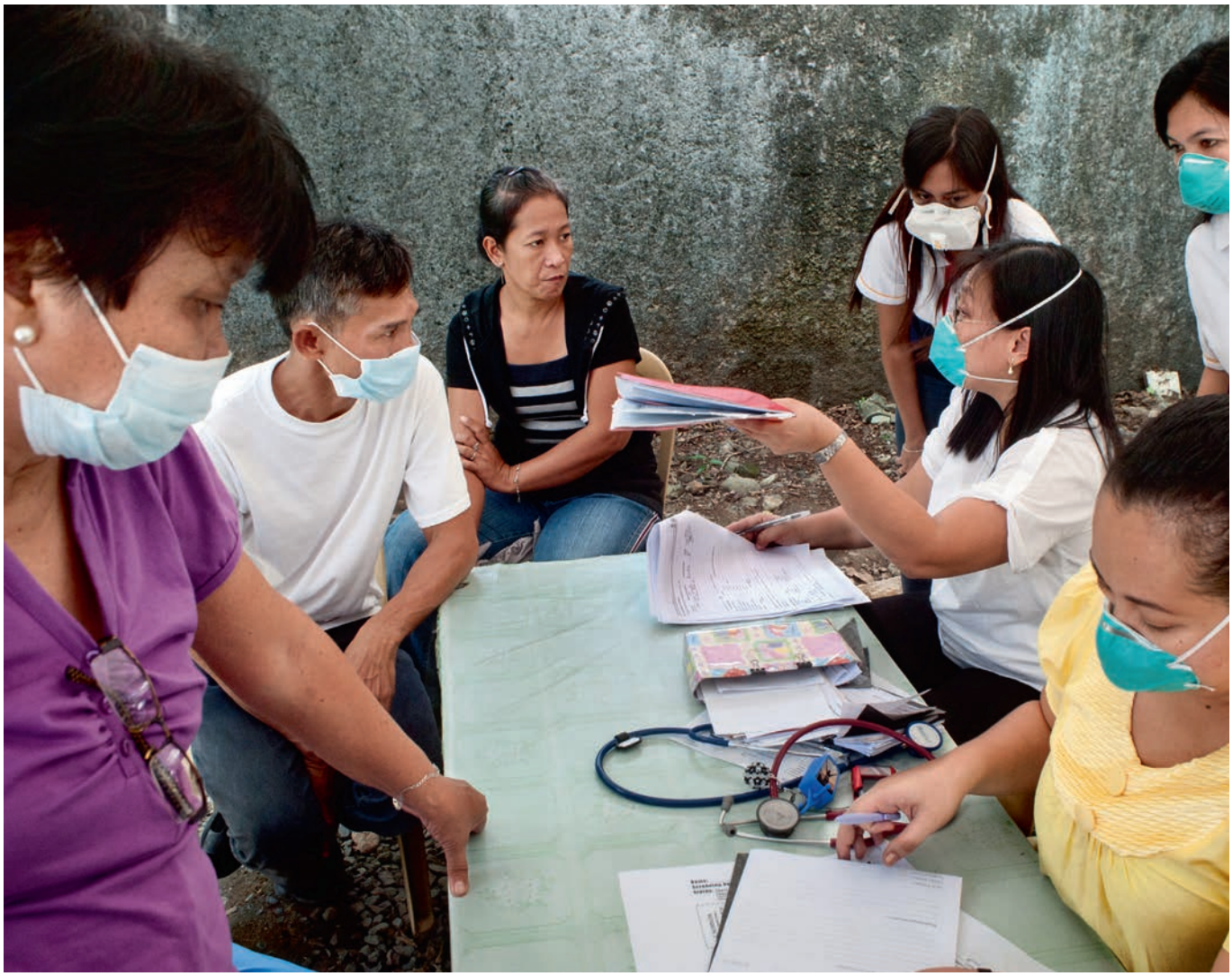
Without increased pressure from people affected by TB worldwide, it is difficult for a champion to emerge who feels inspired to take on the cause and for him or her to demand more investments in new tools and implementation of more effective policies. The lack of national commitments and discipline to control TB has frequently led to poor programme implementation, with incorrect treatments that lead to an emergence of resistance to the few TB drugs we have.

The result is a frightening rise of multi- and extensively drug-resistant tuberculosis (MDR- and XDR-TB), man-made calamities that occur when a person becomes resistant to at least two of the first-line medicines. XDR-TB is resistant to both first- and second-line drugs. XDR-TB was reported by 58 countries in 2010, but by 2012 surged to 84 countries.[2] Shockingly, most of the high-burden MDR- and XDR-TB countries are in the WHO European Region.

Despite the high morbidity and urgency for new solutions, political commitment to TB remains low. In 2006, G8 leaders in St Petersburg pledged new support, stating they were "determined to achieve tangible progress". Some areas they agreed to work on included improved access to prevention and treatment, strengthening capacity of health systems, and supporting innovative clinical research, among others. These leaders must keep up their commitment in 2014 so that progress can continue. Unlike other infectious diseases that gain headlines such as SARS, TB infects and kills slowly, which is why a long-term view and sustained effort is required. We hope that this year's summit will help identify a champion and thereby inspire other world leaders to join the fight.

About Otsuka Pharmaceutical Co Ltd

Otsuka Pharmaceutical Co Ltd is proud to partner in the global efforts to eliminate TB. Its corporate philosophy of addressing the world's unmet medical needs has led Otsuka to invest in improving TB care and control worldwide, focusing on both public- and private-sector treatment. The company remains committed to developing public health and case management models that reduce the spread of drug resistance, improve rational use of new TB medicines and prevent – not just treat – TB. Continuing to lead efforts to find new TB treatments for more than 30 years, Otsuka is the largest funder of TB drug development worldwide.



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This includes bringing more funding to the table. Currently, the majority of funds for TB R&D come from only a few sources led by the US government, the Bill & Melinda Gates Foundation, and a few from the private sector such as the Japanese pharmaceutical company Otsuka, which alone provides a quarter of the total global spending on TB drugs.[3] When funding for such an urgent cause is dominated by only a few, it places the entire system on a precarious footing. The global nature of TB means that no government, organisation or company can defeat it alone – everyone has a role to play.

To be fair, not every country is neglecting TB control. Many have expanded their efforts. For example, Latvia and Estonia, which had the highest MDR- and XDR-TB rates in the world, have successfully increased treatment control, detection rates and public awareness, containing the spread of the disease and reducing mortality. Their investment, anchored in strong political will, paid off.

Political commitment to control TB is the number one recommendation of the WHO and the cornerstone to its eradication. Regardless of whether it is Africa, the Americas, or any other region, we share the same message: no country should be allowed to let its guard down again and permit more than a million preventable deaths each year. Society cannot afford to become complacent and must cultivate champions that can keep government accountable in fulfilling its promises. With proper attention and dedication, the fight against TB can be won.

Benedict Xaba is the former health minister of Swaziland and ministerial TB champion for the STOP TB Partnership Coordinating Board

Dr Lee B Reichman is the founding executive director of the New Jersey Medical School Global Tuberculosis Institute in Newark, New Jersey

1 World Health Organization (WHO) Global Tuberculosis Report 2013
2 World Bank 2013 data
3 Treatment Action Group 2013 Report on Tuberculosis Research Funding Trends, 2005-2012