Inspire, Innovate, & Collaborate: The Stop TB Partnership's 3rd Partners Forum

Report of the Chief Rapporteur, Richard Smith

Introduction

The Stop TB Partnership now has nearly 1000 partners representing non-governmental organizations and community groups, high burden countries, donor governments, multilaterals, foundations and the private sector. The growth in the Partnership was reflected in the diversity and number of partners attending the forum: the Rio Forum had 1200 participants from nearly 70 countries, an almost threefold increase in attendance over the previous Partners Forum held five years ago in New Delhi, India.

Background

The Forum allowed people to renew their commitment to stopping TB, review progress with the Global Plan to Stop TB, reach consensus on the way forward, connect with and support each other, and meet new partners. It was full of new people and new ideas.

Programme

In addition to plenary sessions with world leaders on TB, there were dozens thematic tracks, constituency consultations and other side meetings where partners could interact and discuss a wide range of TB-related subjects, as well as review progress and plan for the future. This report describes the plenary sessions and a wide number of these thematic tracks and side meetings.

Day 1

Opening Ceremony - Plenary Session: Inspire

Professor Michel Kazatchkine, Executive Director of the Global Fund for TB, AIDS, and Malaria, gave the keynote address and emphasized that more than two million people a year are dying of a disease that is curable. TB is a disease of poverty and inequity, and the fight against TB is one of the key global strategies to counter poverty and inequity. While more innovation and ambition are needed, there has been substantial progress in recent years. Over $3 billion dollars has come from the Global Fund, 4.5 million people have been treated with DOTS, and 10,000 people with multidrug resistant TB have been treated. Currently, the Global Fund provides two thirds of international financing to fight TB and is funding programmes in 110 countries.

Kazatchkine pointed to four particular challenges:

- The rise in multidrug resistant TB
- TB causes a quarter of the deaths in people infected with HIV
- The need for new drugs, diagnostics, and vaccines
- The need to involve civil society and develop a rights-based approach to TB

Dr Margaret Chan, Director General of WHO, addressed the conference via video and welcomed the largest gathering ever of partner organizations working on TB at the 3rd Stop TB Partners’ Forum. She commended the gathering, noting that the Stop TB Partnership provides a “model of solidarity with the diverse partners needed to fight this disease working together under a unified plan.” She particularly underscored the importance of the Stop TB strategy developed on the Partnership as an evidence-based strategy that utilizes existing tools while also recognizing the need for new tools.
However, Dr Chan did note particular challenges, such as the rise in multidrug resistant TB, the current global economic downturn, and the need to further strengthen and improve programmes to fight TB, including the need to integrate services, such as HIV/TB, and provide overall support to improving health systems.

Mr Marcus Semer, Vice President for Corporate Affairs and Strategic Planning of Kempinski, a hotel chain and member of the Stop TB Partnership which has distributed TB-related information to more than 4 million guests and trained more than 20,000 of its own staff on TB awareness, spoke as a representative from the private sector. Mr Semer told the story of how 17 years ago he had been diagnosed with TB while working as a kitchen porter and had lost his job. The experience had marked him for life.

Semer told the story of Anthony, a 20 year old man, who was working with Kempinski in a Middle East country when he was diagnosed with TB. He had to leave the country and lost his work permit and job. But with Kempinski’s support, he was treated in Kenya. Despite this success, Kempinski has been unable to find him a job in 10 of its hotels in five different countries due to either TB or his youth. The story highlights the reality of TB today in the workplace. Who will take a test for TB if it means they might lose their job? Why would a company support treatment for employees if they cannot afterwards get their jobs back because of difficulties with work permits? The Partnership as a whole must work to overcome these challenges.

Ms Lucy Chesire, a health worker from Kenya who almost died of TB, spoke on behalf of affected communities. She told the audience how ten years ago there was no partnership with civil society and patients. Sixteen years ago there was almost denial of TB. Now more and more communities are becoming engaged.

Ms Anna Cataldi, Italian author, journalist and Stop TB Partnership Ambassador since 2007, told the story of W E Henley, who was diagnosed with TB of the bone at the age of 12 but made it to Oxford University in 1867. He then had one leg amputated. Doctors recommended amputating his other leg to save his life—but he refused. He survived until TB killed him at age 54. From his hospital bed he wrote the poem Invictus, Latin for unconquerable.

Dr Marcos Espinal, Executive Secretary of the Stop TB Partnership, asked: “Are we outraged enough?” To stop TB we can’t just be incremental: we need a cure. “We are,” he said, “supposed to be halfway there—but we are not. We must do more and better. Human rights is not just an issue for sunny days.”

Dr Jorge Sampaio, UN Secretary-General’s Special Envoy to stop TB and former President of the Republic of Portugal, began by reading a statement from Ban Ki-Moon, the Secretary-General.

“The steps being taken around the world to stop tuberculosis are having an impact. Today, the epidemic is continuing its decline. But the rate of decline is far too slow, and TB still takes a life every 20 seconds. Millions of people are benefiting from treatment through coordinated national efforts, but millions more are still missing out. Unless we accelerate action, the numbers of those falling ill will continue to grow.

Invictus

Out of the night that covers me,
Black as the Pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

In the fell clutch of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.

Beyond this place of wrath and tears
Looms but the honor of the shade,
And yet the menace of the years
Finds, and shall find me, unafraid.

It matters not how strait the gate,
How charged with punishments the scroll
I am the master of my fate;
I am the captain of my soul.

W E Henley
"Together, we need to help prevent infection, find all people who are ill far earlier and provide treatment for all. We have a Stop TB Strategy that can do this and a Global Plan to Stop TB that sets the course, but our efforts are failing short.

"We must redouble our efforts to fight multidrug-resistant (MDR-TB) and extensively drug-resistant (XDR-TB) forms of TB. We must also continue to fight the TB/HIV co-epidemic.

"I welcome the commitment of governments, multilateral organizations, non-governmental organizations, foundations and members of the corporate, academic and research communities working to halt and reverse the spread of the disease and stay on track to achieve the Millennium Development Goals.

"In this time of economic crisis, we must protect investments in global health, particularly to protect the most vulnerable. Global cooperation in fighting tuberculosis, and all the Millennium Development Goals, must be essential to our task ahead. As we look to the future, we need to build and expand our partnerships to deliver the solutions we know work today. We also need to innovate so we can prevent disease, save lives and enable communities to thrive."

Insufficient attention, said President Sampaio, has been paid to TB as a block to development. The benefits of treating TB are far greater than the costs: according to World Bank estimates, countries affected by TB will get a return on investment of 9-15 times from money spent on treatment.

Low and middle income countries will be hit hard by the global financial crisis. What will happen? asked President Sampaio. Will health be kept high on the development agenda? We might, predicted Sampaio, see countries cutting health spending. Some vulnerable countries may risk losing all the progress made against TB.

The session ended on a high note with Dr Jose Gomes Temporão, Minister of Health of the Federative Republic of Brazil, describing how Brazil had done well in controlling TB but can, should, and wants to do more in the battle against TB. No cent, he promised, will be disinvested from public health. In fact there will be an increase.

**Plenary Session: Progress with the Global Plan to Stop TB**

The Global Plan to Stop TB is a substantive, clear, ambitious, feasible plan of the actions needed from all players, said Ms Irene Koek, Chair of the Stop TB Partnership Coordinating Board. It is a model looked to by other groups, and it must be an instrument for making things happen.

First published in 2006, the Global Plan requires a progress report every three years—and the first report in draft was considered at the Forum. The progress report answers three questions: Where are we? What else do we need to do? And finally, does the plan need updating?

The plan, said Dr Mario Raviglione, Director of the Stop TB Department at WHO, requires some $61 billion to control TB in endemic areas and $11 billion for research and the development of new tools. At the moment there is a funding gap of about $1 billion a year for control in endemic areas and $385m for research and development. Globally, substantial funding gaps for control persist in all regions except Eastern Europe.

The table shows cases of deaths from TB at the time of the Forum in March 2009. Asia has the most cases, with South East Asia accounting for 34%, while sub-Saharan Africa has the highest incidence—over 300 cases per 100,000.

<table>
<thead>
<tr>
<th>All forms of TB</th>
<th>Estimated number of cases</th>
<th>Estimated number of deaths</th>
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<tr>
<td></td>
<td>9.27 m</td>
<td>1.77 m</td>
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</table>
Multidrug resistant TB | 511,000 | 150,000
Extensively drug resistant TB | ~50,000 | ~30,000
HIV associated TB | 1.4 m (15%) | 456,000

Both the Millennium Development Goals and the Global Plan to Stop TB set targets for TB. Goal 6 of the MDGs is to “Combat HIV/AIDS, malaria and other diseases.” Target 8 is “to have halted by 2015 and begun to reverse the incidence of TB.” MDG Indicator 23 is the “incidence, prevalence and deaths associated with TB” and Indicator 24 is the “proportion of TB cases detected and cured under DOTS.”

The Global Plan aims for a “50% reduction in TB prevalence and deaths by 2015” and elimination (<1 case per million population) by 2050. The prevalence of TB has fallen from just under 300 cases per 100,000 in 1990 to just over 200. The America, Eastern Mediterranean, South East Asian, and Western Pacific regions are on track to reach the target of 148 cases per 100,000 in 2015. However, the target will not be reached in the African and European regions. TB incidence rates are stable (around 130 case per 100,000 globally) or falling slowly, but the number of cases is increasing due to an increase in the population.

Mortality from TB increased from just under 30 deaths per 100,000 in 1990 to over 30 in 2002 but has since fallen to 26 per 100,000 in 2007. The American, Eastern Mediterranean, and South East Asian regions are on track to achieve the target of 14 deaths per 100,000 by 2015, but the Western Pacific, African, and European regions are not. The global target will probably not be achieved, said Dr Raviglione.

The Global Plan’s target for 2007 was 2.2 million new positive smear cases notified under the DOTS programme; in fact, there were 2.5 million cases notified, a clear success story. After years of detection rates rising it has stagnated since 2006. This, said Dr Raviglione, is one of the main challenges facing the Partnership.

The target of 85% treatment success among smear positive cases has, however, been met. DOTS has now been implemented in 180 countries, and 37.3 million people have been treated between 1995 and 2007.

But there is bad news regarding multi-drug resistant TB (MDR-TB), or TB that is resistant to at least isoniazid and rifampicin, the two most powerful drugs for treating TB. There were estimated to be 500,000 new cases in 2007, 10% of which occurred in the former Soviet Union. Yet most cases were undetected, and only around 1% (3,600) were treated optimally. It is estimated that only 3% will be optimally treated in 2009. This is far behind the Global Plan’s target of treating 69,000 in 2007. There is a major challenge to increase the number of cases of MDR-TB that are diagnosed and treated.

Progress is also not good, said Dr Raviglione, with the “double epidemic” of TB and HIV. In 2007 there were about 1.4 million cases of people infected with TB and HIV and about 450,000 deaths. About half of the people with TB in South Africa are also infected with HIV. Only about 2% of people living with HIV have been tested for TB and only about 30,000 started on treatment (0.1% of people living with TB). It’s slightly better from the TB side with 1 million people with TB being tested for HIV (16% of cases), and of the 250,000 people with TB and HIV around 200,000 are being treated with cotrimaxazole preventive therapy and 90,000 with antiretroviral therapy.

The challenge is to increase rapidly the number of people living with HIV who are tested for TB and offered chemoprophylaxis while consolidating the number of patients with TB tested for HIV and treated as necessary.

Dr Raviglione concluded by looking forward and thought it very likely that the global financial crisis will mean that both domestic spending on health and aid will fall. Reduced funding will mean more poverty and consequently more TB. It is almost a rule that a fall in gross domestic product means a rise in TB. Thus the gains made by the Global Plan will be seriously threatened, increasing the importance of the Stop TB
Partnership advocating more strongly than ever for people with TB. “We need,” he said, “real time monitoring to detect early signs of deterioration in TB financing and TB indicators to address them without delay.”

**Plenary Session Highlight: Progress in Tanzania, a high burden country**

D H Mwakyusa, Minister of Health and Social Welfare in Tanzania, described the experience of his country, one of 22 high burden countries, in controlling TB. Tanzania developed its first strategy for controlling TB in 1977 and introduced DOTS in 1991. In 2006 the country adopted the Stop TB strategy and the Millennium Development Goals for TB control. That same year TB was declared an emergency in the country.

The ministry has worked in partnership with many international organisations and with faith-based hospitals, local NGOs, and patients who have had TB. Services for TB are provided free in both public and private facilities. Although Tanzania has seen a decline in TB notifications in the past two decades, this may simply be a decline in cases detected: only about 40% of cases are detected.

Tanzania is also working to address the threat of TB/HIV co-infection and multi-drug resistant TB. Tanzania has adopted the WHO TB/HIV interim policy: “One patient, two diseases, one response. The country has real achievements with nearly 4000 health providers trained on TB and HIV and nearly 100 TB/HIV officers appointed. About 85% of patients with TB are tested for HIV, and 90% of those who are coinfected are referred for care. About 85% are given cotrimoxazole preventive therapy and a third are started on antiretroviral therapy. Tanzania has also begun to identify and treat patients with MDR-TB.

But challenges remain, including a shortage of trained health workers; low detection rates; the emergence of MDR-TB; lack of diagnostic tools; an absence of infection control in health facilities; weak information systems; and low community awareness of TB. To address these challenges, the Ministry plans to recruit and train staff; incentivise health workers to work in rural areas; integrate and scale up TB/HIV services; introduce case finding strategies and infection control in health facilities; introduce new diagnostic tools; and seek technical and financial support for advocacy, communication, and social mobilisation (ACSM)

**Plenary Session Highlight: Progress in Developing New Technologies for TB Control**

Dr. Giorgio Roscigno, Chair of the Working Group on New TB Diagnostics, provided an overview of the progress and key accomplishments in the fields of research and development of new diagnostics, drugs and vaccines during the timeframe of 2006-2009, as well as challenges to the development of new technologies.

In the area of diagnostics, WHO has endorsed a new smear positive case definition; a reduced number of specimens examined by smear microscopy; liquid culture, rapid speciation and DST; and line probe assays for rifampicin and INH resistance. In addition, information on current diagnostics in the pipeline has been published, there has been roll-out of endorsed technologies at country level, work on a scientific blueprint on TB diagnostic development has been initiated, systematic reviews contributing to evidence-based TB diagnosis are being conducted, and the Working Group has been restructured to create a constituency-based Core Group and nine sub-groups focusing on different areas of new TB diagnostics.

The Working Group on New TB Drugs reported that ten projects are in clinical development, nine projects are in preclinical development and 22 projects are in the discovery phase. The Working Group has also restructured to add the position of a co-chair and to create five sub-groups.

The pipeline of new TB vaccines has grown substantially in the past several years. Six TB vaccines have entered Phase I (safety) trials; three TB vaccine candidates have entered Phase II (immunogenicity) trials;
and one candidate entered a Phase III (efficacy) trial. The Working Group has also been working on harmonizing existing and developing new immunological and functional markers for protection against TB, developing reliable economic estimates for vaccine development and introduction, supporting the development of field sites in endemic countries for large-scale vaccine trials, strengthening developing country regulatory capacity, and advocating for increased resources and support for new TB vaccines.

All three groups identified key challenges in basic research, keeping the pipelines filled and closing the funding gap through increased investment in research and development.

**Ministerial Forum and High Level Dialogue**

A major question recurring throughout the Forum’s meetings and sessions was whether donors and national governments would cut funding to health and TB due to the financial crisis. In the ministerial session, health ministers from Afghanistan, Thailand, the Democratic Republic of the Congo, Peru, Uganda, Pakistan, Tanzania, and Zimbabwe were unanimous in insisting that cuts would be a mistake and might lead to a reversal of the gains already made in stopping TB.

Failure to invest now will lead to a bigger bill in the future, said Dr Hiro Nakatani, Assistant Director General of WHO for HIV/AIDS, TB, Malaria, and neglected tropical diseases. Funding has been favourable for five years, but “the cold water is coming.” He emphasized the importance of doing good work now; addressing early emerging problems like MDR-TB; minimizing overlap among partners, including those working on HIV/AIDS; and monitoring progress.

Investment in health is vital for development, a priority for the people, and a key strategy for fighting poverty, said Professor Michel Kazatchkine, Executive Director of the Global Fund to fight AIDS, Malaria, and TB. Any cut would hit the most vulnerable first and increase inequities.

Health and social development are “two sides of the same coin,” said Dr Mohammad Amin Fatimei, Minister of Health in Afghanistan. Investment in health is also, he said, “a bridge to peace,” and a failure to invest could be a blow to peace, stability, and development.

Ms Lucy Chesire, a TB activist from Kenya, reminded the audience that African countries had in 2001 committed to spending 15% of their budgets on health—but it hasn’t happened. Governments need to be reminded of the connections between health and development.

Dr D H Mwakyusa, Minister of Health and Social Welfare in Tanzania, said that Tanzania could not fight TB alone and that “partnership is key.” Countries must develop good policies and costed plans, revisit priorities, and provide strong leadership and political commitment, but, he said, “we must deliver.” He noted that Tanzania was spending only 11% of its budget on health and informed that only Botswana had reached the 15% commitment.

Dr James Kakooza, state Minister for Primary Health Care in the Republic of Uganda, said that it was important to streamline budgets, set priorities, and minimize the cost of duplicating programmes.

Representatives of donor countries said that efficiency was important not just for recipient countries but also for donors. Donors should align and harmonize their approaches and funds and avoid asking, for instance, for separate reports.

USAID was hoping not just to hold the line but to see small increases for TB and health, but it was “extraordinarily important” to see results from investments. Ms Irene Koek, Chief of the Infectious Diseases Division of USAID and Chair of Stop TB Coordinating Board, advised countries to “think big” but said that the risk to funding was substantial. Donors were looking for innovation and efficiency and how TB programmes fit within primary health care systems.
If we are not careful a financial crisis will become a human crisis, said a representative from the World Bank. Capital and salaries usually are not cut, but rather drugs and supplies, which can be disastrous for TB control programmes. It may be necessary to prioritise and early monitoring systems will be important to detect quickly if problems arise.

Dr Marcos Espinal, Executive Secretary of the Stop TB Partnership, summed up the key points of the meeting:

- Neither donors nor countries should cut funds so that we can “preserve the gains”.
- Successful replenishment of the Global Fund, the main funder of work against TB, is essential.
- African countries should reach their commitment to spend 15% of their budgets on health.
- Focus on results and, in this light, transparency and accountability are essential.
- There should be free treatment for TB.
- Inputs to TB programmes such as drugs must be protected.
- Early warning systems of resurgent TB are needed.

Day 2

Plenary Session: Innovate

Many different forms of innovation were considered at the opening plenary session on the second day of the Forum, including innovative partnerships to control TB in high burden countries, expanding the role of the community in TB control and research, novel approaches to developing new TB vaccines, and innovative mechanisms to finance TB control.

Afghanistan has had decades of war and notified cases of TB have increased from 9,500 in 2001 to 29,000 in 2007, said Dr Sayed Mohammad Amin Fatimie, Minister of Public Health in Afghanistan. There are probably 45,000 cases a year, 70% of them among women—mostly younger women.

But Afghanistan, one of the high burden countries, has been effective at creating partnerships, including innovative forms of partnership. From 4 partners in 2001, Afghanistan now has 18 in 2009. Funding for TB control has grown tenfold from $700,000 in 2004 to $7 million in 2009. This year, Afghanistan had more than a million young people on a "March to Stop TB". “Partnership, partnership and partnership” is what we need to stop TB, concluded Fatimie.

Carol Nawina Nyirenda of the Community Initiative for TB, HIV, and Malaria in Zambia, emphasized the importance of having community activists on international, regional, and national boards. Activists, she explained, can act as a bridge between affected constituencies and the boards, provide a reality check on proposals, offer hands on experience, and help with community mobilization.

Nyirenda listed a number of key issues for activists and communities.

- Investment in promoting the research literacy of community members
- Rapid transfer of innovations from developed countries to high burden countries
- Better point of care diagnostic tools
- Treatments for drug resistant TB and treatments that are compatible with antiretroviral therapy
- Vaccines effective in all children regardless of HIV status
• Innovation in isoniazid preventive therapy, infection control, and intensified case finding in people living with HIV
• Investment in research infrastructure in high burden countries

“We do not want,” she concluded, “to be seen as mere passive beneficiaries of health services but as partners who must be seen as integral to the fight against TB and TB/HIV.”

Dr. Jerald Sadoff, President and Chief Executive Officer of the Aeras Global TB Vaccine Foundation, provided a summary of the pipeline for new TB vaccines, indicating that seven candidates are currently in clinical trials. Dr. Sadoff then provided an overview of novel approaches to TB vaccine development to ensure that new vaccines are safe, affordable and accessible as soon as possible, including in resource-limited settings. These approaches include efforts to develop an improved recombinant BCG that would be more immunogenic and safer for use in infants with HIV than the current BCG vaccine; development of an aerosol delivery platform, which may provide an easy, affordable delivery mechanism that could eliminate the need for needles and cold chain and provide superior protection; and manufacturing capacities and strategies that would ensure uniformity of quality and minimize lag time between licensure and distribution.

UNITAID, explained Dr Jorge Bermudez, Executive Secretary of UNITAID, is an innovative financing mechanism for scaling up access to medicines and diagnostics for HIV/AIDS, TB, and malaria. Founded in 2006, UNITAID funding is supporting the financing of medicines and diagnostic tools in 93 countries.

UNITAID funding is predictable and sustainable, links diagnostic tools and treatments, and works hard on procurement and supply management. UNITAID has been innovative in producing child friendly treatments and developing new diagnostic tools and funding mechanism for combating MDR-TB. But UNITAID has other innovations in the pipeline, including diagnostic tools and treatments for XDR-TB.

The plenary ended with illustrations of how photography could be used to help stop TB. Working with residents of favelas in Rio de Janeiro, Mr Gary Knight was able to create pictures of TB. Mr James Nachtway, a former war photographer, assembled a powerful series of photographs to show the consequences of XDR-TB that can be seen at: http://www.xdrtb.org/

New diagnostic tests, vaccines, and drugs

The main way of diagnosing tuberculosis, microscopy, is 100 years old; the only vaccine is 85 years old; and the last new drug became available 40 years ago. The barriers to developing new tools are scientific and market uncertainty, said Dr Jerald Sadoff, President of the Aeras Global TB Vaccine Foundation. In addition, there is a lack of capacity for manufacturing and running clinical trials.

The response has been to create product development partnerships (PDPs), which are non-profit enterprises that manage resources and partnerships across public, private, and philanthropic sectors. PDPs act as a catalyst to develop new products and range from the virtual to brick and mortar companies.

Diagnostics

The aim with diagnostics is to create a sensitive, specific, accessible test that can be used in primary care, said Dr Giorgio Roscigno, Chief Executive Officer of the Foundation for Innovative New Diagnostics (FIND) and Chair of the New TB Diagnostics Working Group. In addition, there is a need for a rapid, affordable test for detecting drug resistance and for a predictive test that will identify infections that will lead to active disease.

FIND is working to develop new diagnostic tests, said Dr Mark Perkins, FIND Chief Scientific Officer. FIND liaises with pharmaceutical and biotech companies, research institutions, and academics to identify
possible candidates and with funders to finance development, evaluation, and demonstration of new
tests. Once it has demonstrated the value of tests FIND liaises with many organisations to encourage
uptake. FIND has 50 partner sites in 25 countries for TB trials.

Diagnosis is a process not a product, said Perkins, and it happens at several levels: the clinic, the
peripheral laboratory, the regional laboratory, and the reference laboratory. The big challenge is to
develop tests for the clinics, where 60% of patients are seen.

New liquid culture methods are already allowing diagnosis in 10-14 days rather than 28 days and can be
used in referral laboratories. Nucleic acid amplification can also allow detection of drug resistance within
one day.

Fluorescent microscopy increases the sensitivity of direct smear microscopy, and a new fluorescent
microscope, the LED microscope, is robust and cheaper than other fluorescent microscopes and should
soon be available for use in peripheral laboratories.

The big challenge, however, is diagnostic tests for the point of care, and tools for detecting TB antigens in
urine are being developed.

So there is promise but also challenges: funding is around half of what is needed; more products are
needed in the pipeline; and there is no consensus on TB biomarkers.

**Vaccines**

The Stop TB Partnership aims to eliminate TB by 2050; this aim will be unreachable without a new
vaccine, said Dr Sadoff. The existing vaccine, BCG, works in only 15-40% of children and possibly not at all
in adults.

The current goal, said Sadoff, is to have a safe, licensed vaccine available at reasonable cost by 2015.
There are currently seven candidate vaccines in clinical trials with one in a phase III (efficacy) trial. The
most promising candidate works by boosting BCG and has been show to produce cellular immunity at a
level never previously achieved, a scientific as well as a clinical breakthrough.

Dr Sadoff, also emphasized the critical role that research institutions in endemic countries play in research
and development of new TB vaccines. Large-scale community-based epidemiologic cohort studies and
vaccine trials are conducted in areas with high burdens of TB, and it is critical that infrastructure is in place
to ensure that these trials are conducted in compliance with international standards. Aeras partners with
local research institutions in endemic countries to develop the capacity to conduct these trials, including
physical infrastructure such as laboratory, clinical and administrative facilities, and human resource
capacity via professional development and training. Field sites for large-scale clinical trials are currently
being developed in South Africa, India, Kenya, Uganda, Mozambique and Cambodia.

Just over $3 billion is needed to develop a new vaccine, said Dr Sadoff, and currently the gap is over $1
billion.

**Drugs**

The requirements that new drugs must meet are considerable said Dr Mel Spigelman, president of the
Global Alliance for TB Drug Development. They must act more quickly than existing drugs, which must be
used for 6-24 months. Eventually they should work in 10 days—as is the case with most drugs against
bacterial infections. The drugs must work against MDR-TB and XDR-TB, be compatible with antiretrovirals
(which some existing drugs are not), be taken orally once a day, have improved safety and tolerability, and be cheap.

There has, however, been a “phenomenal sea change” in that there are now more than 20 products in the pipeline, all produced in the past five to 10 years. Two drugs, gatifloxacin and moxifloxacin, are in phase III trials, but only about 10% of drugs in the pipeline reach the market.

The challenges in drug development, said Spigelman, are to increase collaboration among drug sponsors, speed clinical trials (after decades of there not being drug trials in TB), minimize delays in getting the new drugs to patients, and raise adequate funding. Some $100m is needed over three years, and currently funding is short.

**Day 3**

**Plenary Session: Collaborate**

One of the main themes of the Forum—and the whole point of the Stop TB Partnership—was the need to continue and accelerate collaborative efforts to stop TB, including among sectors that might not be used to collaborating together.

Uganda, said Dr James Kakooza, state Minister for Primary Health Care in the Republic of Uganda, has inadequate resources for fighting TB, low detection rates, low rates of treatment success, and rising TB rates due to HIV/AIDS.

But in December 2004 the President launched a national Stop TB Partnership, which is independent and autonomous and acts as a point for coordination without overshadowing the national TB control programme. Kakooza emphasized that national TB programmes cannot do it alone and that partnership is essential.

Dr Virginia Baffigo, coordinator of CARE, Peru, told the story of how private non-profit initiatives have been important in countering TB in Peru. A series of developments and the creation of new organisations followed, with the 1970s seeing the organisation of people with TB, the 1980s the creation of the first Peruvian NGOs, and the 1990s the first cases of MDR-TB. The appearance of the Global Fund led to $58 million becoming available for civil society and a multisectoral programme against TB in Peru.

Mr Maxime Lunga, TB activist from the Democratic Republic of the Congo, described the creation of the Club des Amis Damien, a club of TB patients formed in 1999. The club works with patients supporting health workers and offers health education, home visits to those in need, help with giving DOTS, and transport. Overall it has boosted the cure rate from under 40% in 1999 to over 90%.

Indigenous people are at extremely high risk of TB, said Chief Wilton Littlechild, Regional Chief of the Assembly of First Nations, Canada. There are 370 million indigenous people in over 70 countries and yet global data on the incidence of TB among indigenous people points to an incidence rate 29 times higher than other Canadians; for Inuit, this rate is 90 times higher. Likewise, Pacific Islanders and Maoris are 10 times more likely to develop TB than others living in New Zealand.

In November 2007, a collaborative meeting of indigenous leaders from 60 countries and public health experts lead to a strategic framework action plan that aims to engage the international community in promoting TB control amongst indigenous populations.

Dr Arshad Javad, chief executive of the Hayatabad Medical Complex, Peshawar, Pakistan, described how public private mix helps with controlling TB in his country. In 2004, a Public Private Mix was begun, bringing together primary health care, hospitals, and academic institutes from the public sector with
general practitioners, informal health providers, clinics and hospitals, and academics from the private sector. The private sector provides DOTS, support for treating MDR-TB, and advocacy, communication, and social mobilisation. General Practitioners provide DOTS though various models, including social franchising and district led clusters. Plans for the future include scaling up the DOTS programme in the private sector and engaging private providers in other interventions, including TB/HIV co-infection and strengthening the health sector.

Faith based organizations provide about 40% of health care and services in Africa alone, said Reverend Monsignor Robert J Vitillo, head of Geneva delegation, Caritas Internationalis, and chairperson, Catholic HIV and AIDS Network. These organisations often operate outside government planning and so are not recognized, but now with global initiatives they are being incorporated into national plans to counter TB. WHO has reviewed faith based organisations and concluded that they could be important partners in primary health care but that they do not receive an adequate proportion of funding from governments and donors. Faith based organizations make good partners, Msgr. Vitillo explained, because they often work in the most disadvantaged areas and in complex humanitarian emergencies and are strongly motivated by lasting values.

**Closing Session - The next five years**

Bill Clinton, former US president, spoke on video in the closing session and emphasised the need to coordinate programmes against TB and HIV. “Each life,” he said, “has equal value. We should start to live as if that’s true.”

Mr Michele Sidibe, Executive Director of UNAIDS, developed that theme, saying: “If the virus [HIV] and the bacteria [TB] are working so well together, why can’t we?”

Although in most countries TB and HIV programmes have not been well coordinated, there are countries where cooperation is advanced— as in Kenya and Brazil, where 70% of patients with TB are tested for HIV. Mr Sidibe told the story of a patient he had encountered last month in South Africa, who had been very sick but is now healthy. She had been screened for TB and started on treatment and then screened for HIV and started on treatment. She was treated in the first clinic in South Africa to combine TB and HIV services. That kind of cooperation must be extended to the global level, and in a time of financial crisis both HIV and TB programmes must be more efficient and accountable.

Mr Sidibe foresaw three joint actions. Firstly, clinics that provide both TB and HIV services should become the norm. “You need both hands to clap,” and national programmes must address both TB and HIV. Secondly, the TB and AIDS movements must work together. At the moment they don’t go to each other’s meetings or implement each other’s policies. The movements must work together on funding, capacity, and improving health systems. Thirdly, everybody should work for universal access to both AIDS and TB services. “This,” he said, “is my number one priority… We will have to move from our comfort zones,” particularly to reach the poor and the marginalised.

NGOs make up half the partners in the Stop TB Partnership, Dr Nils Billo, Executive Director of the International Union Against TB and Lung Disease, said that during the NGO constituency consultations at the Forum, a number of recommendations were provided by the constituency to the partnership, including sharing of best practices between NGOs, greater involvement of NGOs in national programme reviews, and a call for the establishment of a Nominating Committee to oversee the election of the next representative of the NGO Seat on the Stop TB Partnership Coordinating Board.

Mrs Sandra Roelofs, First Lady of Georgia and Stop TB Ambassador, called on the countries of eastern Europe, a hot spot for MDR-TB and XDR-TB, to admit their problems and not be afraid to ask for help.
Ms Anna Cataldi, Stop TB Ambassador, said: “We can’t let 65 years of progress unravel,” and called for a rights based approach to TB to address the needs of the marginalised. Currently less than 1% of patients with MDR-TB receive the treatment they need.

Dr Jorge Sampaio, UN Secretary-General’s Special Envoy to Stop TB and former President of the Republic of Portugal, said in his closing address that there was still much to do and that it was unacceptable that 5,000 people die every day of TB. TB must be kept on the political agenda, and “MDR-TB is not being addressed with sufficient speed or commitment.”

Inspiration, innovation, and collaboration are all vital, and “affected communities hold the key” to stopping TB. NGOs are vital and can work at the grassroots level. The private sector is important, and there must be national Stop TB Partnerships that include all stakeholders.

“Partnership, partnership, and partnership” has been the main theme of the conference, said Sampaio. These problems are much too complicated and multifaceted for any one group or one sector to solve. But it’s important to minimise overlap. One stakeholder that is particularly important and has been neglected is civil society, and political commitment from the top is essential.

Dr Marcos Espinal, Executive Secretary of the Stop TB Partnership, returned to the themes of the meeting: inspiration, innovation, and collaboration. The meeting had surely inspired. One new innovation was the need for an early warning system to detect any effects from possible cuts in spending on TB programmes. On collaboration, the meeting had emphasized the importance of global funding for civil society and the human rights approach to TB.

These were the final challenges that Dr Espinal presented to the Forum:

- Not enough testing for HIV
- Joint treatment of HIV and TB
- Fighting drug resistance
- Funding will remain one huge challenge