Background Paper for the Stop TB Coordinating Board Special Session

Focus on Africa: Intensifying action to reach the MDGs

Wednesday, May 4, 2005, Addis Ababa, Ethiopia.

This paper is prepared for the members of the STOP TB Coordinating Board, and, more generally for health policy makers in Africa[1].

Summary

While virtually every African country now has a TB control programme, Africa is the only continent where the incidence of TB is estimated to be rising (sufficiently to cause a global increase). 2.3 million cases of TB are estimated to occur each year in Africa with some 540,000 deaths. The fight to control TB globally, and to achieve the TB focused Millennium Development Goals (MDGs), will therefore be won or lost in Africa. The main barriers to better control of this disease are the HIV epidemic and the performance to date of health systems, including TB control programmes.

This paper* calls for a rapid scaling up of TB control efforts across Africa. If we fail to act, the HIV epidemic will ensure that the burden of suffering and death from TB will rise. A draft "road map" for African TB control for 2005-2007 has been developed to provide additional detail on activity areas and financing needs for the key areas outlined in this paper. This road map builds on provisional inputs from our partners into the Global Plan to Stop TB, 2006-2015.

1. Status of the TB &TB-HIV Epidemic in Africa

a. Status of the TB Epidemic

In five out of 6 continents tuberculosis incidence is either falling or stable. Africa is the only continent where TB incidence is rising; though the rate of increase has fallen from 15% per year in 1991 to less than 5% in 2003. This rate, however, is sufficient to cause a global increase in TB incidence of about 1.0% per year[1]. Globally, both prevalence and mortality are falling, and but for the strongly adverse trends in Africa, would be falling even faster. Africa is fast becoming the battleground to reach the TB control targets linked to the MDGs. Of the 8.8 million new cases of TB estimated to have occurred in 2003, 2.4 million (27%) were in Africa, while Africa represents only 11% of the world's population. Nine (9) of the 22 "high burden" countries which constitute 80% of the global total TB burden, are in Africa[1].

** Prepared by staff of TB/HIV and Drug Resistance Team, Department of Stop TB, WHO and Secretariat, TB/HIV Working Group along with the Stop TB Partnership Secretariat*

b. Status of the TB-HIV Epidemic

Africa is home to 29 of the 41 countries with the highest burden of HIV infected TB patients. In 2003, globally, 229,000 people co-infected with TB and HIV died , over 80% of these deaths were in Africa[1]. The direction of the HIV epidemic in Africa is crucial for TB control. Future projections are not optimistic: in its 2005 report on scenarios for the HIV epidemic in Africa, UNAIDS concluded that a fall in the global total of HIV infected people before 2010 is unlikely[2].

With high levels of HIV, increases in TB incidence are almost inevitable in part as a result of the immune suppression caused by HIV and the reactivation of pre-existing infections with the tubercle bacillus. The higher the HIV prevalence, the higher the TB incidence and the higher the proportion of young (15-24 years) women among TB patients. Some 35% of African TB cases are HIV infected, compared to about 8% for the world as a whole. However, there is also evidence that even while TB increases enormously among the HIV infected, it is still possible to see decreases among those without HIV[3].

> *In Karonga district, Malawi, where a good TB programme has existed for nearly 20 years, the proportion of new smear positive TB cases attributable to HIV rose from 17% in 1988-90 to 57% in 2000-01, but the estimated rate of smear-positive TB among HIV uninfected people fell from 78/100,000 to 45/100,000.*

2. Status of TB Control Programmes in Africa

Case detection in Africa is the same as the global average (50%)[1]. The continent is not, though, achieving the global average of 82% (Africa = 73%) for treatment success rate. Of the nine, high burden African countries, the majority moved away from the World Health Assembly TB control targets between 2002 and 2003.

There is evidence that some control programmes may be missing cases particularly among the HIV infected. The consequences of the close relationship between TB and HIV could be substantially mitigated through even closer collaboration between TB and HIV control programmes.

The GDF has provided a much more regular supply of low cost, high quality drugs for TB treatments to 1.5 million patients in 30 African countries, since 2001. In order to ensure longer term sustainability of a regular supply of anti-TB drugs for African TB control programmes, local capacity in manufacturing, drug management and procurement capacity needs to be strengthened.

3. TB in the Context of Wider Health Challenges

In addition to the impact of HIV, TB incidence is also linked to poverty and the weak infrastructures and health systems that are its consequences. Levels of poverty in some African countries combine with relatively poor levels of nutrition, overcrowding and weak health service delivery to fuel transmission of TB.

Relief from the burden of TB can only come through improved access to and quality of health services for the whole population. The challenges confronting health systems are not unique to TB or HIV control. Control of these diseases is unlikely to be fully achieved unless there are efficient health systems capable of delivering broad services, including laboratory networks for diagnosis and follow up.

a. Infrastructure & Management of Public Health Services

In sub-Saharan Africa, it is estimated that only 53% of the population has access to health services and the health infrastructure. TB control will not succeed until the health system, those working in TB control and other disease specific programmes, work together to address the basic priorities (including provision of adequate diagnostic capacity). In other places even if the health infrastructure is functional poor management of systems remains a problem. For example, decentralization following health sector reform, priority setting at district level sometimes excludes TB as observed in Zambia in the 1990s. Likewise, financial administration, with the arrival of greater external funds for TB control, has becoming a considerable bottleneck.

b. Human Resources for Health

The lack of sufficient trained staff is consistently cited as the main constraint facing TB control. Health workers constitute the heart of all health services. In Sub Saharan Africa there is only about 1 health worker per 1000 population. The global average is 4, while it is 11 for North America.

The causes for this crisis are complex but include insufficient places in medical, nursing and clinical schools along with inadequate preparation of those who are admitted. Once trained, further educational opportunities for medical staff are few; management of the "stock" of human resources is not optimal, such that most countries cannot say how many posts are actively filled at any given time; postings into the rural areas are unpopular. Outflows of staff are accelerated by labour migration into the private sector, NGOs, and especially to industrialized countries, which actively recruit for workers from poorer countries. Health workers are also afflicted by HIV/AIDS and TB themselves.

> *Malawi has only one sixth of the recommended complement of doctors practising in the country and 65% of the posts for health workers in the public health system are vacant.*

There are specific consequences of this workforce crisis for TB control: there is a lack of adequate staffing to carry out tests; to manage follow-up in the community; to provide the psycho-social support essential for good adherence to treatment; to carry out programme evaluation and monitoring and to coordinate with the HIV care delivery services; most central units for TB control are also understaffed while most TB programme managers have to carry out other functions; supervision and management structures, with functional oversight of the NTPs, needs strengthening; in some countries, district TB officers are of such a low cadre that productive interaction with higher grades in the general health services is difficult; clinical staff often fail to detect suspects in health facilities.

The Joint Learning Initiative-a consortium of more than 100 health leaders- pointed out, the relatively well-resourced "priority programmes" have a responsibility, and a capacity, to "*mobilize, retain and train health workers… while steadily building primary health care systems*."[4]

Specific measures to address the health workforce crisis could include:

- A better understanding of the numbers and competencies of the desired workforce;
- More attractive remuneration including training schemes and housing packages, linked with clear career pathways;
- Policies to enable clinical and laboratory work to be carried out by "lower" cadres of workers,
- Agreement with industrialized countries to limit the "poaching" of staff.

c. Financing TB Control

The advent of the Global Fund To Fight Against AIDS, TB and Malaria (GFATM) has led to unprecedented quantities of funding for TB control, but funding gaps remain. As a proportion of the totals needed for TB control, or just for NTPs, these gaps are largest in the African high burden countries. There are differences in philosophy between the GFATM and the sector wide approaches and health sector strategic plans slowly built up in a number of African countries during the 1990s. Increasing decentralisation of responsibility and accountability for health service provision to districts have been slowed down by the centralized decision-making of GFATM funded projects, and GFATM funds have not so far addressed the underlying constraints within the health system, although this is intended in Round 5.

> *STOP TB has begun an initiative to catalyse the GFATM and other support - Intensified Action and Support to Countries (ISAC). In Uganda, ISAC supports a national Stop TB Partnership that helps fill human resource gaps in the public sector through collaboration with NGOs. While in Kenya, partners are supporting key provincial and district staff in order to help accelerate expansion of TB control activities in the periphery.*

The reporting demands of diverse and often uncoordinated funding and technical agencies adds a further burden to already stretched programme staff. For NTPs, delegation of large amounts of funding and responsibility by international aid agencies to international and national NGOs, poses particular difficulties of co-ordination, especially when these agencies insist on technical guidelines at variance with national policies. Technical agencies vary in the extent to which they support country coordination mechanisms and work together to support the NTP. This should be addressed by mechanisms such as the Poverty Reduction Strategy Papers (PRSP) and Sector Wide Approaches (SWAps).

Donor harmonization, especially as it relates to large global initiatives, is now a high level priority and is being addressed in the Millennium Project, The Commission on Macroeconomics and Health, the World Bank's Rising to the Challenges of the Health MDGs, and the High Level Forum on the MDGs. Practical solutions for coordination and for the provision of technical assistance to support national systems are urgently needed.

d. Political Commitment

TB featured in the Abuja Declaration of HIV/AIDS, TB and other Infectious Diseases. The NEPAD Initial Programme of Action includes better access to, and improved quality of, TB services, including community based DOTS, collaborative TB/HIV activities and public private partnership, and also commits to develop regional strategies to mobilise human and financial resources for TB control activities. However, in its January 2005 Resolution, for example, the African Union failed to include any mention of TB, in the section on health.

Strong African leadership giving much more emphasis to health and particularly TB is crucially needed if the MDGs are to be achieved. Nelson Mandela has shown the way. As he said at the 2004 AIDS conference: '*We cannot win the battle against AIDS if we do not also fight TB. TB is too often a death sentence for people with AIDS*'.

4. Strategies for a Way Forward

a. Full Implementation of an Enhanced TB DOTS Strategy

The DOTS strategy has already been used to diagnose and treat millions of TB patients in Africa. It is cost-effective in both saving lives and in reducing TB transmission and notifications. Case detection and DOTS population coverage in Africa are actually remarkable given the poverty in the region.

> *Ethiopia, with a GDP per capita of $100 per year, has treatment success rates comparable with countries 30 times richer.*

However, the performance of DOTS programmes in Africa is limited by the impact of HIV and the health system constraints outlined. So, the DOTS strategy needs to be strengthened and evolve to address the African specific context. Reinforcing DOTS so that there is improved case-finding, diagnosis and cure through an effective patient-centered approach to reach all patients, and especially the poor will be vital. As will support to the provision of a reliable supply of TB drugs through GDF and technical support to strengthen local manufacturing, drug management and procurement capacity.

The costs of DOTS strengthening (including TB-HIV additional activities) amounts to approximately $1.2 billion for 2006 and 2007.

b. A Joint Approach to TB and HIV: two diseases, one patient.

HIV/AIDS is not only a huge problem for TB epidemiology, it is also the largest health problem confronting the developing world. A comprehensive strategy which builds on high quality DOTS programmes and comprehensive HIV/AIDS care to address the impact of HIV related TB has been developed and defined in the 'Interim policy on collaborative TB/HIV activities'[5]. Financial resources are increasingly available, although slow to move.

The STOP TB Partnership Working Group on TB-HIV, working closely with WHO, calls on countries to significantly strengthen their DOTS programmes to address the dual epidemic, for example by improving treatment success and in their capacity to diagnose smear negative and extrapulmonary cases, which are more common among the HIV infected. Countries need to establish the mechanisms for collaboration between TB and HIV control communities (both public and private sector); implement activities to reduce the burden of HIV among TB patients ; and implement activities to reduce the burden of TB among PLWHA.

Further joint TB-HIV advocacy aimed at civil society, community groups and patients on the one hand, and at political leaders, on the other, could have significant impact in speeding up the response and overcoming bottlenecks in the provision of TB services. The impact could be magnified further by alliances with the tremendous pressure now being applied by the US President's Emergency Plan for AIDS Relief, the World Bank, and the GFATM to provide antiretroviral treatment to patients with AIDS.

c. Setting TB in the Development Framework.

African governments must increasingly be in the "driving seat" in announcing, setting, and implementing the development agenda. The Commission for Africa recognised the need for a "bold, and comprehensive approach" to aid. This comprehensive approach emphasises the establishment of partnerships, support to existing pan-African initiatives such as NEPAD, urges the rich countries to provide unprecedented amounts of aid, and calls on Africa to take the lead in the whole process.

A joint report by the African Union and the Economic Commission for Africa in 2004 estimated an economic loss of 4-7% of GDP annually in countries with a high burden of TB. The most crucial question for the next decade may well be how low-income countries with high burdens of HIV/AIDS and TB can escape the downward spiral of ill-health and poverty. Three quarters of all TB cases are 15-49 years of age and are thus the economically productive members of their communities. The global cost of TB is estimated to be US$13 billion a year. Clarity on the real socio-economic costs of TB for the African continent would be timely and welcome.

Better connections between TB, anti-poverty initiatives and health system strengthening must be forged to ensure TB treatment is accessible to all socio-economic groups (but most importantly to the poor). Debt relief of highly indebted poor countries could contribute to this end by freeing up domestic resources. However, initiatives such as the PRSP (Poverty Reduction Strategy Papers) and MTEF (Medium Term Expenditure Frameworks) and other broad planning mechanisms such as SWAps (Sector Wide Approaches) hold the potential for addressing constraints and place financing for TB in a sustainable and flexible long term strategic plan.

d. Exploiting the Untapped Power of Communities

Enhancing the role of individuals, families and communities to assume responsibility for their own health and welfare is crucial. The experiences of various successful patient

centred or community initiatives, including in TB, suggest the importance of building a partnership between patients, communities and the formal health system. Moreover, the cultural, traditional and social make-up of African communities offers a very good base to build on to enhance the involvement of patients and communities in addressing the scourge of TB and other killer diseases.

The community contribution in TB control has mainly focused on devolving TB care beyond health institutions to provide treatment support to patients. WHO needs to make its community TB control policies more explicit and African governments and policy makers need to strengthen community health activities and welcome collaboration with the formal health system. The extension health package programme of Ethiopia could be a good example for others to follow.

e. Making New Tools Work for Africa

The impact of cost effective viable new vaccines, drugs, and diagnostics for patients with TB and TB-HIV living in resource constrained settings, such as in Africa, could be considerable.

5. Conclusion : Intensifying Action to Reach the MDGs

The conclusion of this paper is that an immediate and urgent acceleration of TB control is required in Africa if the global TB targets and MDG goals are to be reached and lives saved. TB is still an emergency in Africa; the response should be bold and comprehensive. Africa must be in the driving seat.

In essence, there is a need for vocal and visible political engagement from the highest levels. TB needs to sit with HIV at the top of the African health and development agenda. Wider initiatives such as PRSPs, SWAps, MFET and internal budget planning processes need to embrace TB as a priority. African leaders need to explicitly press for improved TB control, as a means of directly saving lives, improving socio-economic conditions for families and communities, and contributing to both national economic development and achievement of the MDGs. African leaders and health professionals must take the lead in defining their priorities and allocating available internal resources; both financial and non-financial.

Health care systems and infrastructure need urgent support to address the constraints mentioned in this paper; professional and robust management and tackling the health workforce crisis are key. In the African context, setting an enhanced DOTS-based TB control programmes along with joint TB/HIV activities under a holistic "One Patient with Two Diseases" approach, within the context of overall health system reform, is essential.

A separate draft "Road Map" for African TB control for 2005-2007 provides specific recommendations for action with financing needs.

References

[1] Corbett EL, Watt CJ, Walker N, et al. The growing burden of tuberculosis: global trends and interactions with the HIV epidemic. Arch Intern Med 2003; 163: 1009-1021
[2] UNAIDS. AIDS in Africa: three scenarios to 2015. UNAIDS, Geneva, Switzerland, 2005. UNAIDS /04.52E
[3] Glynn JR, Crampin AC, Ngwira BM et al Trends in tuberculosis and the influence of HIV infection in northern Malawi, 1988-2001. AIDS. 2004 Jul 2;18:1459-63
[4] Chen L, Evans T, Anand S et al. Human resources for health: overcoming the crisis. Lancet 2004;364:1984-90
[5] World Health Organisation. Interim Policy on Collaborative TB/HIV activities. WHO/HTM/TB/2004.330 and WHO/HTM/HIV/2004.1