TUBERCULOSIS AND HIV/AIDS: A STRATEGY FOR THE CONTROL OF A DUAL EPIDEMIC IN THE WHO AFRICAN REGION

Executive Summary

1. The tuberculosis epidemic in the WHO African Region has reached emergency proportions. Based on recent surveillance data, the Region accounts for 25% of the global notified tuberculosis cases but only 10% of the world population. During the past ten years, tuberculosis notification rates have more than doubled in most countries. While the increase is widespread, it is most noticeable where HIV prevalence is high. On average, 35% of tuberculosis patients in the Region are co-infected with HIV, and tuberculosis accounts for approximately 40% of deaths in people living with HIV/AIDS.

2. Several randomized trials have demonstrated the effectiveness of joint tuberculosis and HIV/AIDS interventions in reducing morbidity and mortality among the dually infected. Notwithstanding the recognized importance of co-infection in driving the TB epidemic as well as evidence of effective delivery of joint interventions, TB and HIV/AIDS control programmes continue to implement control activities independent of each other. The result has been low coverage, limited access and inefficient use of scarce resources.

3. This strategy proposes interventions for strengthening mechanisms for collaboration; improving prevention, case-finding and treatment of TB among people living with HIV/AIDS; improving access to HIV testing and counselling among TB patients; infection control to reduce transmission; advocacy, communication and social mobilization; partnerships; resource mobilization; and research.

4. The Regional Committee is requested to review and adopt the proposed strategy.
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INTRODUCTION

1. Tuberculosis cases have more than trebled in many countries over the past 10 years,\(^1\) especially where HIV prevalence is high. With approximately 35% of TB patients also infected with HIV, TB and HIV co-infection has become the most important factor driving the TB epidemic in the African Region.

2. Recognizing the public health importance of the two epidemics, the WHO Regional Committee for Africa passed two resolutions at its fifty-fifth session in 2005. Resolution AFR/RC55/R5 declared TB an emergency in the Region; it further called upon Member States to implement urgent and extraordinary actions to bring the TB epidemic under control, including scaling up TB and HIV/AIDS interventions. Resolution AFR/RC55/R6 called for accelerating HIV prevention interventions in countries. Earlier, African ministers of health had committed to the goals of The 3 by 5 Initiative and universal access to antiretroviral therapy for people living with HIV/AIDS (PLWHA).

3. This strategy proposes priority interventions to promote and accelerate the implementation of joint activities against the two diseases, to reduce morbidity and mortality associated with TB and HIV co-infection, and to improve the quality of life of people living with TB and HIV/AIDS. However, effective implementation of this strategy requires multisectoral involvement, coordination, and additional and sustainable resources.

SITUATION ANALYSIS AND JUSTIFICATION

Situation analysis

4. Over one million new TB cases were reported in 2005. With only 10% of the world population, the African Region accounts for at least 25% of notified TB cases every year.\(^2\) Since the beginning of 2006, evidence of increasing incidence of TB cases resistant to first-line and second-line antituberculosis drugs have emerged in some countries in the Region. By the end of 2006, all Member States were implementing the recommended directly-observed treatment short-course for controlling TB.\(^3\)

5. Sub-Saharan Africa carries the highest burden of HIV infections and HIV/AIDS-related mortality in the world, accounting for more than 60% of PLWHA. Approximately three quarters of women and nearly 90% of children living with HIV/AIDS are in this region.

6. In HIV-infected persons, the virus promotes progression of active TB if there is latent or recently-acquired \textit{Mycobacterium tuberculosis} infections. At a pathological level, TB accelerates the development of AIDS among people living with HIV and is a defining condition for AIDS. In some countries, especially in southern Africa, HIV prevalence among TB patients is as much as 70%, and TB is responsible for at least 40% of deaths of PLWHA in the Region.\(^4\)

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\(^1\) WHO, Tuberculosis surveillance report, Brazzaville, World Health Organization, Regional Office for Africa, 2005.


7. Coverage with key TB and HIV/AIDS interventions is still unacceptably low in the Region. In
2005, between 2% and 50% of TB cases were being tested for HIV, and less than 10% of eligible
dually-infected TB patients were accessing antiretroviral treatment. Just over 50% of dually-infected
HIV patients were accessing cotrimoxazole prophylactic therapy while less than 10% of PLWHA
were screened for active TB. Overall, antiretroviral therapy coverage in sub-Saharan Africa is
approximately 28% (24%–33%). By the end 2005, among the general population, the median
percentages of men and women who had been tested for HIV and had received the results were 12%
and 10%, respectively.5

8. Despite the known negative synergistic interaction between the two infections and evidence of
reduced morbidity and mortality through the provision of joint TB and HIV/AIDS interventions,
programmes for the control of the two conditions have largely been implemented independent of
each other. TB control programmes focus on implementing DOTS; HIV/AIDS control programmes
tend to view TB only as one of the opportunistic infections, giving little attention to the special care
needs of PLWHA co-infected with TB.

9. There is increased political commitment at both regional and international levels for universal
access to TB and HIV/AIDS control services, including joint TB and HIV/AIDS interventions. There
is also increased funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)
and other partners to scale up such interventions.

Justification

10. To date, several randomized trials have shown the effectiveness of joint interventions to reduce
TB incidence and death among PLWHA. The use of cotrimoxazole and isoniazid preventive therapy
and management of other opportunistic infections have reduced morbidity and mortality among
PLWHA. In addition, antiretroviral therapy has reduced the incidence of tuberculosis by more than
80% in PLWHA.6

11. While the negative effect of dual TB-HIV infection is known, and the positive impact of joint
interventions has been shown, TB and HIV/AIDS control programmes have largely been
implemented independently. This has limited access to available effective interventions for the
dually-infected and resulted in inefficient utilization of scarce resources.

12. Effective TB and HIV/AIDS control must necessarily include delivery of interventions to
address the dual epidemic. TB patients must have ready access to HIV/AIDS prevention, care and
support interventions; likewise, PLWHA must have access to TB prevention, care and support
interventions.

13. This strategy emphasizes the importance of the dual TB and HIV/AIDS epidemic and will
facilitate the scaling up of available effective interventions to improve the quality of life of the
dually-infected.

5 WHO, UNAIDS, UNICEF, Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector,

REGIONAL STRATEGY

General objective

14. The aim of this strategy is to contribute to the reduction of morbidity and mortality associated with TB and HIV co-infection in the Region by ensuring universal access to TB and HIV/AIDS interventions as guided by the Stop TB strategy.

Specific objectives

15. The specific objectives are:

   (a) to provide a framework for planning, organizing, implementing, monitoring and evaluating delivery of joint TB and HIV/AIDS interventions;
   (b) to promote the provision of TB and HIV/AIDS prevention, care and support services as an integral part of a comprehensive package of care for dually-infected persons;
   (c) to provide a platform for advocacy to control the TB and HIV dual epidemic;
   (d) to enhance intersectoral collaboration and partnerships for dual TB and HIV/AIDS control;
   (e) to promote universal access to TB and HIV services.

Guiding principles

16. Implementation of the strategy will be guided by the following principles:

   (a) **Equitable access to TB and HIV/AIDS interventions** includes deliberate targeting and inclusion of all vulnerable groups.
   (b) **National ownership and leadership** of the strategy and implementation process should be country-owned and managed to ensure harmonization and sustainability.
   (c) **Partnership and collaboration** involve all sectors, including the civil society and communities at all stages of programme development and implementation to increase acceptability of interventions, expand access to services, and broker additional human and financial resources for programme implementation.

Priority interventions

17. The key interventions are aimed at strengthening collaboration between the two control programmes; improving prevention, case-finding and treatment of TB among PLWHA and vulnerable populations such as prisoners; and improving access to HIV testing and counselling among TB patients. The proposed actions are recommended for all areas where HIV prevalence among TB patients exceeds 5%, and are to be carried out within the context of existing TB and HIV/AIDS control programmes.
Strengthening mechanisms for collaboration

18. It is necessary to develop improved mechanisms for collaboration between TB and AIDS control programmes. This could be facilitated by setting up joint coordinating bodies at operational level as well as developing joint TB and HIV plans of action. In order to establish the basis for collaboration, it is necessary to develop a comprehensive package of interventions as well as technical guidelines and tools to deal with co-infection. All stakeholders and care providers in the public and private sectors need to be sensitized and trained to support delivery of all collaborative interventions.

Improving prevention, case-finding and treatment of TB among PLWHA

19. Reducing the burden of tuberculosis among PLWHA is one of the critical pillars of this strategy. This could be achieved through intensified tuberculosis case-finding among PLWHA to identify and treat those with active TB while providing isoniazid preventive therapy and other methods for PLWHA without active TB.

Improving access to HIV testing and counselling among TB patients

20. This strategy is for improving HIV testing and counseling among TB patients. This can be achieved by offering routine HIV testing and counselling as an entry point, with an opt-out option, for all TB patients and for continuum of HIV/AIDS care and support for dually-infected TB patients. Other services include interventions to prevent new HIV infections, reduce HIV transmission, offer prophylactic therapy for other opportunistic bacterial infections and provide antiretroviral drugs for eligible dually-infected TB patients to reduce viral load.

Infection control to reduce transmission

21. Infection control measures must be implemented as an integral part of joint TB/HIV interventions. Special attention should be given to preventing cross transmission of multidrug resistant and extensively drug resistant TB to vulnerable PLWHA and other high-risk groups such as prisoners and refugees. This could be facilitated where possible by patient triage, physical separation (isolation and barrier nursing), environmental engineering of facilities, and improving patient compliance to TB treatment to prevent acquired drug resistance.

Contributing to health systems strengthening

22. Health systems strengthening is a component of the Stop TB strategy. Strengthening of human resources for health, laboratory infrastructure and medicines supply and management are major contributions of TB control programmes to health systems strengthening. The innovations in TB service delivery within general health services need to be documented and shared. The ongoing work by WHO on development of documents and tools to support active engagement of national tuberculosis programmes in health systems strengthening should be accelerated and guidance should be provided to Member States.
Advocacy, communication and social mobilization

23. In order to promote popular support for implementation of the activities, there is need to create community and health care worker awareness and sensitization to the importance of TB and HIV coinfection. This could be facilitated through implementation of targeted advocacy, communication and social mobilization strategies for TB and HIV control.

Partnerships and resource mobilization

24. Mobilization of additional financial and other resources is critical for meaningful scaling up of the proposed interventions. While donor funding is an option to increase the resource envelope, allocation of sufficient national resources and inclusion of TB/HIV interventions within national development plans are crucial to ensure sustainable resources. Support can be elicited by submitting grant applications to funding agencies such as the Global Fund to Fight AIDS, Tuberculosis and Malaria; the Bill and Melinda Gates Foundation; and other bilateral and multilateral donor partners.

25. It is equally important to enhance the capacity of collaborating partners to deliver joint interventions through decentralization of decision-making processes and delivery of services. This could be achieved through increased community and civil society participation as well as public-private partnerships in the delivery of identified services.

Research

26. Ongoing clinical and other research for better understanding and evaluation of the impact of interventions is an important element of programme implementation. This could be done through promoting close collaboration with national research institutions and researchers to carry out operational research useful for TB and HIV/AIDS prevention and control.

Roles and responsibilities

Countries

27. Countries should allocate funding for priority interventions to promote universal access to TB and HIV/AIDS services. Specific roles and responsibilities for countries are: development and implementation of advocacy and social mobilization activities, and short- and medium-term action plans for controlling the dual TB and HIV epidemic; development and adaptation of tools and technical guidelines; mobilizing both internal and external resources for implementation of activities; monitoring and evaluation of programme implementation and impacts; coordination of collaborating partners; and development of national partnerships for the delivery of TB, HIV/AIDS and joint TB-HIV/AIDS activities.

WHO and other partners

28. The strategy envisages the following roles and responsibilities for WHO and other partners: support of national programmes to promote effective control of TB, HIV/AIDS and dual TB-HIV infections; provision of technical support to countries to develop or adapt tools and national guidelines, programme implementation, monitoring and evaluation; and support to countries in
resource mobilization and strengthening health delivery systems. WHO should identify and support centres of excellence, particularly for MDR and XDR TB, and develop a strategy for resistant TB strains.

**Resource implications**

29. According to WHO and the International Union against Tuberculosis and Lung Disease, it costs about US$ 5–10 to screen one case for TB, US$ 17 to treat one uncomplicated TB case, and about US$ 2000 to treat one case of multidrug resistant TB. UNAIDS estimates that one HIV test costs approximately US$ 2, and antiretroviral therapy for one year costs US$ 130–300 per patient. Thus a meaningful scaling up of interventions to control the TB-HIV/AIDS dual epidemic will require an increased level of financial resources on a sustainable basis.

30. Additional resources are required to cater for the increased numbers of people who will require testing and counselling for HIV, screening for TB and correct management of dual infections.

**Monitoring and evaluation**

31. In order to monitor and evaluate implementation of the proposed joint TB and HIV/AIDS interventions, the following indicators will be monitored according to locality, age group and sex:

- (a) proportion of target population with defined geographical access to joint TB and HIV/AIDS services;
- (b) proportion of eligible HIV-positive TB patients accessing core HIV/AIDS services, including antiretroviral therapy;
- (c) HIV/AIDS-related mortality among TB patients, and TB-related mortality among AIDS patients;
- (d) proportion of PLWHA screened for active TB and proportion of PLWHA with active TB accessing effective TB treatment;
- (e) tracking of MDR and XDR TB.

**CONCLUSION**

32. HIV co-infection is the most important risk factor for increased TB incidence in the African Region. At the same time, TB is the commonest cause of death among PLWHA. Interventions to reduce the impact of the dual epidemic exist but are currently delivered independently by separate control programmes. The result is limited access to services; missed opportunities for diagnosis, treatment and care; reduced effectiveness; and inefficient use of resources.

33. The strategy calls for joint delivery of services in order to accelerate the scaling up of interventions for TB and HIV/AIDS towards universal access and to maximize on scarce resources and health impacts.

34. The Regional Committee is requested to review and adopt the proposed strategy.