



Evidence for action on HIV/AIDS and injecting drug use

POLICY BRIEF: POLICY GUIDELINES FOR COLLABORATIVE TB AND HIV SERVICES FOR INJECTING AND OTHER DRUG USERS



This policy brief summarizes the evidence and recommendations in the *Policy guidelines for collaborative TB and HIV services for injecting and other drug users*, which were developed by WHO in collaboration with UNODC and UNAIDS and in consultation with a group of technical experts.

The *Policy guidelines* outline the detailed evidence and explanation of the recommendations and describe the methods, the people involved and the summary of conflicts of interest.

This is part of the Evidence for Action Series jointly produced by WHO, UNAIDS and UNODC (1). Others in the series include Effectiveness of interventions to address HIV in prisons, Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among injecting drug users and Effectiveness of drug dependence treatment in preventing HIV among HIV injecting drug users.

PURPOSE

The aim of this guidance is to provide a strategic approach to reducing TB- and HIV-related morbidity and mortality among drug users and their communities in a way that promotes holistic and person-centred services.

Target population

These guidelines are intended for people who are dealing with the population of drug users who have the most problematic patterns of use and the greatest risk of HIV and TB, especially those who inject drugs.

These guidelines focus particularly on people who are:

- using opioid or stimulant drugs, such as cocaine or amphetamines, which are illegal to buy or supply (unless prescribed) in almost all countries;
- using them in a way that is harmful to their physical or mental health; and
- Dusing them in a dependent way, including a strong desire to take the drug, difficulty in controlling its use, persisting in using it despite harmful effects, giving a higher priority to drug use than to other activities and obligations,

increased tolerance and sometimes a physical withdrawal state.

The term "drug user" includes injecting and non-injecting users, unless specified.

▶ Use of alcohol, cannabinoids and tobacco is excluded to enable a focus on the most vulnerable populations.

BACKGROUND

Injecting behaviour

The main focus is on injecting drug users who are the population group with the highest incidence of HIV (2). The risk is not linked to any particular drug but with unsafe practices using shared injecting equipment.

HIV epidemic in drug users

Injecting drug use is a major mode of HIV transmission in several regions and is emerging as a concern in Africa. It is estimated that maybe as much as 10% of all new HIV infections are attributable to injecting drug use, and about 2.5 million past and current injecting drug users are living with HIV (3).



Among all the estimated 33.2 million [30.6 million – 36.1 million] (2) people living with HIV, TB is one of the commonest AIDS-defining conditions and the leading cause of death. Both all-cause and TB-associated mortality rates are several-fold higher among drug users living with HIV than among other people living with HIV (4,5).

TB among drug users

Drug use is associated with increased rates of TB disease and TB infection. People who have TB infection without HIV coinfection have a 5–10% lifetime risk of developing TB disease, whereas people living with HIV have a 5–10% annual risk of developing TB disease (6).

TB disease rates among drug users in New York City in the early 1970s were more than 10 times higher than those in the general population (7). Injecting drug users have higher TB infection rates than the general population (8).

Multidrug-resistant TB poses a threat to TB control, with evidence of increases in some countries. Some emerging signs indicate that people living with HIV may have a higher risk of multidrug-resistant TB. For instance, data available from Donetsk Oblast, Ukraine and from Latvia indicate that HIV and multidrug-resistant TB are significantly associated (9). There may also be a link with prison settings, where multidrug-resistant TB rates are often higher (9).

Gender and drug use

Although women comprise a minority of drug users, they tend to experience greater negative health and social effects than men who use drugs. The links with sex work can place women at greater risk of HIV infection and hence HIV-related TB. They are at great risk of marginalization and violence. Women also have specific needs related to pregnancy and child-rearing, whether for contraception or maternal and child health care. The risk of mother-to-child transmission of HIV can be reduced by early diagnosis and providing antiretroviral therapy (10).

RECOMMENDATIONS

Joint planning

Service delivery is likely to be successful where people can access the right intervention at the right time from the right service. Services therefore need to be planned to meet complex needs, including by actively reaching out to drug users and designing services that will reduce stigma and encourage take-up.

Recommendation 1

There should be multisectoral coordination at the local and national levels to plan, implement and monitor TB/HIV activities for drug users. This should be done through existing mechanisms if possible.

Recommendation 2

The national strategic plans for TB, HIV and substance misuse should clearly define the roles and responsibilities of all service providers delivering services for drug users and should ensure the monitoring and evaluation of TB and HIV activities for drug users, including treatment outcomes.

Recommendation 3

Human resource planning should ensure that there are adequate numbers of personnel and that education and training programmes aim to build sustainable effective teams so that all personnel who have contact with drug users have the appropriate level of skill in dealing with TB and HIV and drug users.

Recommendation 4

All stakeholders for collaborative TB/HIV services for drug users should support and encourage TB/HIV operational research to develop the evidence base for efficient and effective implementation of collaborative TB/HIV activities.

Key interventions

Preventing TB transmission by controlling infection

TB is a contagious disease that is transmitted through airborne infectious particles transferred from person to person through coughing, sneezing, talking or singing.

Recommendation 5

All congregate settings in the health, drug service and criminal justice sectors should have a TB infection control plan supported by all stakeholders that includes administrative, environmental and personal protection measures to reduce the transmission of TB.

Intensified case-finding for TB

The most important symptoms raising suspicion of pulmonary TB are a cough for more than two or three weeks, sputum production and loss of weight. Greater weight loss, diarrhoea and skin disease are more common among people living with HIV than among people who are HIV-negative (11).

Intensified case-finding and treatment of TB among people living with HIV reduces mortality and interrupts disease transmission by infectious cases (in the household and hospital or clinic settings). At a minimum, trained counsellors or other lay health workers can administer a brief questionnaire on TB symptoms to screen for active TB.

HIV testing and counselling

The right to know one's status is fundamental to accessing life-saving prevention, treatment and care services.

Recommendation 6

All services dealing with drug users should have a case-finding protocol for TB and HIV so that staff are aware of the symptoms of TB and HIV and can ensure that drug users have access to appropriate TB and HIV testing and counselling, preferably at the service where they initially present.

Treatment

Treatment for TB

TB is a curable disease when appropriate antimicrobial drugs are available and properly administered. Standard TB therapy consists of an initial phase of two months of treatment with four different antimicrobial drugs given daily under observation and a continuation phase of four to six months of at least two antimicrobial drugs under as close supervision as possible (DOTS) (11).

Treatment for HIV

With the introduction of antiretroviral therapy, HIV infection is in the process of transforming from a progressive and usually fatal disease to a chronic manageable infection.

WHO recommends a standardized public health approach to antiretroviral therapy regimens for HIV infection (12,13). HIV services should select a single first-line regimen and a limited number of second-line regimens.

Multiple treatment regimes

In some cases simultaneous medication may be needed for multiple conditions including TB, HIV, hepatitis B virus and hepatitis C virus, other infections and conditions related to drug dependence as well as drug dependence itself (14). Despite these challenges, none of these are absolute contraindications to standard TB/HIV treatment regimens and treatment for associated illness in drug users.

Recommendation 7

TB and HIV services and services for drug users should ensure access to appropriate treatment for drug users by using global, regional and national clinical guidelines and should work in collaboration to ensure treatment supervision and to simplify the delivery of treatment.

Preventing TB using isoniazid preventive therapy

Isoniazid preventive therapy means that people who have been infected with TB, especially people living with HIV, use this single anti-TB drug for six to nine months to prevent TB infection from progressing to TB disease.

Isoniazid preventive therapy is effective for preventing active TB disease in TB-infected individuals who are also living with HIV. Antiretroviral therapy reduces the incidence of TB by as much as 80%, so that providing antiretroviral therapy to drug users with HIV is also effective for preventing active TB, and this effect is also additive when used with isoniazid (15).

Recommendation 8

All health services should ensure access to isoniazid preventive therapy to drug users living with HIV once active TB is reasonably excluded.

Preventing HIV transmission

Sharing injecting equipment in an unsafe way is the greatest risk factor for HIV transmission. Sex is also a route of transmission for HIV, such as for drug users who may exchange sex for drugs or money (16,17).

Recommendation 9

All personnel working with TB suspects and patients, people living with HIV and drug users should be able to assess risk factors for HIV infec-

tion and transmission and should provide comprehensive HIV prevention information and services to their clients to minimize these risks. Personnel should also be aware of how to protect themselves from occupational exposure to HIV and TB.

Overcoming barriers

Models of service delivery

Health outcomes for drug users can be much worse than those among the general population. Stigma against drug users among health workers, law enforcement personnel and social service workers contributes to poor outcomes (18) as does the need to attend multiple services. Women who inject drugs are more likely than men to delay approaching health facilities (19). TB and HIV services and services for drug users are organized very separately in many countries and are not as integrated as they could be. Both better case detection and adherence in drug users are feasible and imperative for TB and HIV programmes. Treatment programmes can help address the gap in health outcomes when organized properly.

Recommendation 10

All services dealing with drug users should collaborate locally with key partners to ensure universal access to comprehensive TB and HIV prevention, treatment and care as well as drug treatment services for drug users in a holistic personcentred way that maximizes access and adherence: in one setting, if possible.

Prisons and other places of detention

Prisoners are often housed in overcrowded facilities with inadequate ventilation, hygiene and health care services. In many countries drug users are at high risk of being imprisoned. Prisoners have a high risk of transmitting TB and HIV infection and a significant probability of dual TB/HIV infection (20–22). Treatment risks being discontinued on transfer in and out of and between places of detention.

Recommendation 11

Medical examination upon entry and any time thereafter, conforming to internationally accepted standards of medical confidentiality and care, should be available for all prisoners. Prisoners should obtain care equivalent to that provided for the civilian population, and care should be continuous on transfer in and out of places of detention.

Adherence

Adherence interventions among drug users can result in treatment completion rates as high as those for other people. Poor adherence leads to the development of drug resistance, and this may soon be seen as a failure not primarily of the drug user but of the health system to provide appropriate adherence interventions.

Barriers to adherence vary between settings, so services should consult with users and their representatives first to find the most effective ways to overcome them and the best local solutions. Evidence indicates effectiveness for adherence reminders, adherence counselling, contingency management, supervised therapy, opioid substitution therapy and ancillary services.

Recommendation 12

There should be specific adherence support measures for drug users to ensure the best possible treatment outcomes for TB and HIV infection and to reduce the risk of development of drug resistance and the risk of transmission to other people.

Common types of comorbidity

Neither medication for TB nor antiretroviral therapy are contraindicated in drug users with hepatitis B or C (11,23–25). Many types of comorbidity such as mental health problems, hepatitis and ongoing illicit drug use may require increased health care supervision, and global, regional or national clinical guidelines should be followed in managing them.

Recommendation 13

Comorbidity, including viral hepatitis infection (such as hepatitis B and C), should not contraindicate HIV or TB treatment for drug users. Alcohol dependence, active drug use and mental health problems should not be used as reasons to withhold treatment.

REFERENCES

- 1. Evidence for Action Series (E4A) [web site]. Geneva, World Health Organization, 2008 (http://www.who.int/hiv/pub/advocacy/idupolicybrief/en, accessed 27 June 2008).
- 2. 2007 AIDS epidemic update. Geneva, UNAIDS/WHO, 2007 (http://www.unaids.org/en/KnowledgeCentre/HIVData/EpiUpdate/EpiUpdArchive/2007, accessed 27 June 2008).
- 3. Towards universal access by 2010: how WHO is working with countries to scale-up HIV prevention, treatment, care and support. Geneva, World Health Organization, 2006 (http://www.who.int/hiv/pub/advocacy/universalaccess/en/index.html, accessed 27 June 2008).
- 4. Sylla L et al. Integration and co-location of HIV/AIDS, tuberculosis and drug treatment services. *International Journal of Drug Policy*, 2007, 18:306–312.
- 5. Kourbatova EV et al. Risk factors for mortality among adult patients with newly diagnosed tuberculosis in Samara, Russia. *International Journal of Tuberculosis and Lung Diseases*, 2006, 10:1224–1230.
- 6. Selwyn PA et al. A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection.

 New England Journal of Medicine, 1989, 320:545–550.
- 7. Reichman LB, Felton CP, Edsall JR. Drug dependence, a possible new risk factor for tuberculosis disease. *Archives of Internal Medicine*, 1979, 139:337–339.
- 8. Portu JJ et al. Tuberculin skin testing in intravenous drug users: differences between HIV-seropositive and HIV-seronegative subjects. *Addiction Biology*, 2002, 7:235–241.
- 9. WHO/IUATLD Global Project on Antituberculosis Drug Resistance Surveillance. Anti-tuberculosis drug resistance in the world. Fourth global report. Geneva, World Health Organization, 2008 (http://www.who.int/tb/features_archive/drsreport_launch_26feb08/en/index.html, accessed 27 June 2008).

- 10. Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants: guidelines on care, treatment and support for women living with HIV/AIDS and their children in resource-constrained settings. Geneva, World Health Organization, 2006 (http://www.who.int/hiv/pub/mtct/guidelines/en, accessed 27 June 2008).
- 11. *TB/HIV: a clinical manual.* 2nd ed. Geneva, World Health Organization, 2004 (http://www.who.int/tb/publications/who_htm_tb_2004_329/en/index.html, accessed 27 June 2008).
- 12. Antiretroviral therapy for HIV infection in adults and adolescents: recommendations for a public health approach. 2006 revision. Geneva, World Health Organization, 2006 (http://www.who.int/hiv/pub/guidelines/adult/en/index.html, accessed 27 June 2008).
- 13. Antiretroviral therapy of HIV infection in infants and children: towards universal access. Recommendations for a public health approach. Geneva, World Health Organization, 2007 (http://www.who.int/hiv/pub/guidelines/art/en, accessed 27 June 2008).
- 14. WHO, UNAIDS and UNODC. *Policy brief:* antiretroviral therapy and injecting drug users. Geneva, World Health Organization, 2005 (http://www.who.int/hiv/pub/prev_care/arvidu.pdf, accessed 27 June 2008).
- 15. Golub JE et al. The impact of antiretroviral therapy and isoniazid preventive therapy on tuberculosis incidence in HIV-infected patients in Rio de Janeiro, Brazil. *AIDS*, 2007, 21:1441–1448.
- 16. Injecting drug use [web site]. Vienna, United Nations Office for Drugs and Crime, 2008 (http://www.unodc.org/unodc/en/hiv-aids/injecting-drug-use.html, accessed 27 June 2008).
- 17. Policy and programming guide for HIV/AIDS prevention and care among injecting drug users. Geneva, World Health Organization, 2005 (http://www.who.int/hiv/pub/idu/iduguide/en, accessed 27 June 2008).
- 18. Nyamathi A et al. Tuberculosis knowledge, perceived risk and risk behaviors among homeless adults: effect of ethnicity and injection drug use. *Journal of Community Health*, 2004, 29:483–497.

- 19. Kohli R et al. Mortality in an urban cohort of HIV-infected and at-risk drug users in the era of highly active antiretroviral therapy. *Clinical and Infectious Diseases*, 2005, 41:864–872.
- 20. Status paper on prisons and tuberculosis. Copenhagen, Regional Office for Europe, 2007 (http://www.euro.who.int/prisons/publications/20050610_1, accessed 27 June 2008).
- 21. Drobniewski FA et al. Tuberculosis, HIV seroprevalence and intravenous drug abuse in prisoners. *European Respiratory Journal*, 2005, 26:298–304.
- 22. Martin V et al. *Mycobacterium* tuberculosis and human immunodeficiency virus co-infection in intravenous drug users on admission to prison. *International Journal of Tuberculosis and Lung Diseases*, 2000, 4:41–46.
- 23. Treatment of tuberculosis: guidelines for national programmes. 3rd ed. Geneva, World Health Organization, 2003 (http://www.who.int/tb/publications/cds_tb_2003_313/en, accessed 27 June 2008).
- 24. Eramova I, Matic S, Munz M, eds. HIV/AIDS treatment and care: clinical protocols for the WHO European Region. Copenhagen, Regional Office for Europe, 2007 (http://www.euro.who.int/InformationSources/Publications/Catalogue/20071121_1, accessed 27 June 2008).
- 25. Scaling up antiretroviral therapy in resource-limited settings: treatment guidelines for a public health approach. Geneva, World Health Organization, 2003 (http://www.who.int/3by5/publications/documents/arvguidelines/en, accessed 27 June 2008).

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