

Responding to the Challenge of Non-communicable Diseases

Joint United Nations Programme on HIV/AIDS

1. NCDs among people living with HIV is an increasing global public health issue

Many countries with HIV epidemics are now experiencing growing rates of NCDs.

Death rates from NCDs are nearly twice as high in low- and middle-income countries (LMICs) compared to high-income countries.

Antiretroviral therapy (ART) for HIV enables people living with HIV to lead long and productive lives. However, they are now becoming susceptible to NCDs in later life.

The four NCDs that account for the greatest number of comorbidities among people living with HIV in LMICs are cardiovascular diseases (CVD), cervical cancer, depression and diabetes.² The risk of cervical cancer among women living with HIV compared to women without HIV is increased up to fivefold.³ HIV-hepatitis C virus coinfection is associated with CVD, diabetes and/or death in people living with HIV.^{4, 5}

United Nations high-level meetings have highlighted the need for the UN, including UNAIDS, to scale up their work on NCDs as part of the 2030 Agenda for Sustainable Development.¹

NCDs contribute to ill-health, poverty and inequities and slow the development of countries. Every year 15 million people die before age 70 from NCDs, with 86% of these premature deaths occurring in developing countries.

Major progress on NCDs is possible. Premature deaths from NCDs are largely caused by modifiable behavioural risk factors, such as tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol. Environmental risks (e.g. air pollution) and constrained access to basic services also contribute significantly to NCDs.

Addressing NCDs requires coordinated action from all UN agencies within a broader whole-of-society response.

HIV, cervical cancer and NCDs are all diseases associated with gender and socioeconomic inequalities, and health disparities across and within countries.

HIV infection may increase the risk of NCDs due to stimulation of inflammatory markers and adverse events associated with some antiretroviral medicines for HIV treatment. This risk is compounded by NCD risk factors, e.g. tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity.

1 General Assembly Resolution 66/2, Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, A/RES/66/2 (19 December 2011), available from <https://undocs.org/A/RES/66/2>

2 Patel P, Rose C, Collins P, Nuche-Berenguer B, Sahasrabudde V, Peparth et al. (2018). Non-communicable diseases among HIV-infected persons in low-income and middle-income countries. *AIDS*, 32:S5-S20. doi: 10.1097/QAD.0000000000001888.

3 HPV, HIV and cervical cancer: leveraging synergies to save women's lives. Geneva: UNAIDS; 2016 (UNAIDS/JC2851E; <https://www.unaids.org/en/resources/documents/2016/HPV-HIV-cervical-cancer>).

4 Jenny-Avita ER. (2003). HCV-Coinfection Is Associated with Diabetes and CD4 Decline. *AIDS Clinical Care* 3:1(12).

5 Kakinami L, Block R, Adams M, Cohn S, Maliakkal B and Fisher S. (2012). Risk of cardiovascular disease in HIV, hepatitis C, or HIV/hepatitis C patients compared to the general population. *International Journal of Clinical Practice*, 67(1):6-13 doi: 10.1111/j.1742-1241.2012.02953.x

Smoking is associated with a twofold increase in mortality among people living with HIV mainly due to lung cancer. In LMICs, tobacco use among people living with HIV is higher than among those without HIV.⁶ Smoking is predicted to produce an excess of 18 million cases and 40 million deaths related to tuberculosis (TB) between 2010 and 2050, increasing TB cases and deaths by 7 percent and 66 percent respectively over this period.⁷ Given the HIV-TB syndemic, smoking, thus, constitutes a major exacerbating factor for HIV, TB and HIV-TB co-infections.

Harmful use of alcohol is associated with: risky sexual behaviour with an increased risk of acquiring HIV, resulting in an estimated 33,000 new cases of HIV each year;⁸ reduced adherence to ART; alcohol-drug interactions and toxicities; and an increased risk of antiretroviral resistance. Harmful use of alcohol also increases the risk of TB infection⁹ and is associated with delays in seeking TB care.¹⁰

Alcohol increases the risk for HIV-related comorbidities, including liver disease, CVD, cerebrovascular disease, pulmonary disease, bone disease and cancer. Alcohol dependence further impacts the progression of HIV infection, as well as associated TB and viral hepatitis.

People with mental health and substance use conditions are often at greater risk of HIV infection and are less likely to access education, prevention, testing and treatment services. People living with HIV are at an increased risk of developing mental health conditions, such as depression and anxiety.

Key populations, people living with HIV and people with mental health conditions experience multifaceted stigma and the effects of interlocking systems of discrimination.^{11, 12} Stigma associated with HIV and marginalized identities have been linked to anxiety, depression, poor self-esteem and poor adherence to HIV care.¹³ Stigma also remains a barrier to accessing drug dependence treatment, mental health care and HIV services.^{14,15}

- 6 Mdege N, Shah S, Ayo-Yusuf O, Hakim J and Siddiqi K. (2017). Tobacco use among people living with HIV: analysis of data from Demographic and Health Surveys from 28 low-income and middle-income countries. *The Lancet Global Health*, 5(6):e578-e592.
- 7 Basu S, Stuckler D, Bitton A, and Glantz SA. (2011). Projected effects of tobacco smoking on worldwide tuberculosis control: mathematical modelling analysis. *BMJ*, (343): doi: <https://doi.org/10.1136/bmj.d5506>
- 8 Global status report on alcohol and health 2018. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.
- 9 Imtiaz S, Shield KD, Roerecke M, et al. (2017). Alcohol consumption as a risk factor for tuberculosis: meta-analyses and burden of disease. *European Respiratory Journal*, (50) : doi: 10.1183/13993003.00216-2017
- 10 Van Ness SE, Chandra A, Sarkar S et al. (2017). Predictors of delayed care seeking for tuberculosis in southern India: an observational study. *BMC Infect Dis*, (17):567: doi: 10.1186/s12879-017-2629-9
- 11 Collins PY, Unger Hv, Armbrister A. Church ladies, good girls, and locas: Stigma and the intersection of gender, ethnicity, mental illness, and sexuality in relation to HIV risk. *Social Science & Medicine*. 2008;67(3):389-97.
- 12 Earnshaw VA, Bogart LM, Dovidio JF, Williams DR. Stigma and racial/ethnic HIV disparities: moving toward resilience. *The American psychologist*. 2013;68(4):225-36.
- 13 Patton GC, Sawyer SM, Santelli JS, Ross DA, Affri R, Allen NB, et al. Our future: a Lancet commission on adolescent health and wellbeing. *Lancet*. 2016;387(10036):2423-78
- 14 Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation. Geneva: World Health Organization; 2017.
- 15 Bundy DAP, de Silva N, Horton S, Patton GC, Schultz L, Jamison DT. Investment in child and adolescent health and development: key messages from Disease Control Priorities, 3rd Edition. *Lancet*. 2018;391(10121):687-99.

2. UNAIDS has a role to play in supporting countries in NCD prevention and control

In partnership with the United Nations Interagency Task Force on NCDs, UNAIDS focuses on developing policies for integration of HIV and NCDs, and HIV and mental health strategies. This approach is aligned with the 2016 UN Political Declaration on Ending AIDS by 2030 and the 2016–2021 UNAIDS Strategy: On the Fast-Track to End AIDS.¹⁶

The UNAIDS Global Strategy for 2016–2021 supports multisectoral, integrated, people-centred, human rights and evidence-based services for HIV and HPV/cervical cancer, HIV and NCDs, HIV and mental health as well as for tuberculosis, sexual and reproductive health, maternal, newborn and child health with the active engagement of communities and civil society.



The Thematic Segment of the 43rd UNAIDS Programme Coordinating Board (PCB) meeting was dedicated to mental health and HIV: promoting human rights, an integrated and person-centred approach to improving ART adherence, well-being and quality of life.¹⁷

In follow up to the Thematic Segment, at its 44th meeting,¹⁸ UNAIDS PCB called on:

- Member States to implement evidence-based, people-centred, human rights and community-based policies and programmes to promote mental health and quality of life with a focus on addressing stigma and discrimination related to both HIV and mental health conditions as part of HIV prevention, treatment and care services.
- Member States to address social determinants of mental health and HIV by adopting and implementing social protection policies and programmes to reduce stigma and discrimination.
- the UNAIDS Joint Programme to review and revise existing practices and guidelines in order to ensure integration of mental health and substance use services into HIV service delivery platforms, and HIV services into mental health and substance use prevention and treatment programmes, and to provide respective implementation guidance.
- the UNAIDS Joint Programme to take into account the intersection between mental health and HIV, and the importance of improving psychosocial wellbeing and upholding the quality of life of people affected and living with HIV, as part of a person-centred and human rights approach when developing the next UNAIDS strategy for 2021–2030.

¹⁶ UNAIDS 2016–2021 Strategy. Geneva: UNAIDS; 2015 (https://www.unaids.org/sites/default/files/media_asset/20151027_UNAIDS_PCB37_15_18_EN_rev1.pdf)

¹⁷ The 43rd UNAIDS Programme Coordinating Board (11–13 December 2018), available from https://www.unaids.org/sites/default/files/media_asset/20181214_UNAIDS_PCB43_Decisions_EN.pdf

¹⁸ The 44th UNAIDS Programme Coordinating Board (27 June 2019), available from https://www.unaids.org/en/resources/documents/2019/PCB44_Decisions

UNAIDS has reviewed the recommended cost-effective interventions endorsed by the WHA—“best buys”—to identify those that are linked to its work at global, regional and country levels. These interventions address the synergies between HIV and HPV/cervical cancer, HIV and NCDs, and HIV and mental health. UNAIDS plays an advocacy and facilitating role for global, regional and country level multisectoral partnerships as well as resource mobilization efforts to support countrywide responses to cervical cancer, NCDs and mental health issues.

BEST BUYS

In 2017, the World Health Assembly endorsed a set of “best buys” and other recommended interventions to address NCDs.¹⁹ Best buy interventions address four NCD risk factors (tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity) and four disease areas (cardiovascular disease, diabetes, cancer and chronic respiratory disease). There are 88 recommended interventions, including overarching/enabling policy actions.



Evidence-based interventions	UNAIDS actions
<p>Vaccination against human papillomavirus (2 doses) of 9–13-year-old girls.</p> <p>Prevention of cervical cancer by screening women aged 30–49 years.</p>	<p>UNAIDS advocates for an HIV-cervical cancer policy, services and partnerships, along with community engagement; it also supports a focus on HPV vaccination for HIV-positive girls, and cervical pre-cancer and cancer screening, treatment and care for women living with and at risk of HIV.</p> <p>UNAIDS collects, analyses and tracks country reports on the Global AIDS Monitoring and National Composite Policy Index indicators for cervical cancer screening among women living with HIV, and integrated cervical cancer-HIV policies and services.</p>
<p>Raise public and political awareness, understanding and practice about prevention and control of NCDs.</p>	<p>UNAIDS raises political and public awareness at global and country levels for integrating NCDs and mental health into HIV strategies, policies and programmes with a focus on people living with and at risk of HIV, HIV-NCDs and HIV-mental health comorbidities; emphasis is also put on addressing human rights issues, stigma and discrimination, and health, social and gender inequalities which are common across HIV, NCDs and mental health issues.</p>
<p>Integrate NCDs into the social and development agenda and poverty alleviation strategies.</p>	<p>UNAIDS advocates for tackling the social determinants of mental health and HIV by means of social protection policies and other programmes to reduce stigma and discrimination.</p>

¹⁹ “Best buys” and other recommended interventions for the prevention and control of non-communicable diseases, Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO. Available at: <http://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf>

3. Partnerships are critical for UNAIDS in mobilizing an effective response to NCDs

UNAIDS actively seeks to strengthen partnerships to address NCDs: some of them are listed below.

- UNAIDS is a co-founding partner of the PEPFAR-G.W. Bush Institute-UNAIDS-Merck public-private partnership to end AIDS and cervical cancer among HIV-positive women in Africa. This initiative enables UNAIDS to support policy advocacy and reforms, resource mobilization and community engagement.
- In partnership with WHO, United Nations Population Fund (UNFPA) and other partners, UNAIDS is supporting national governments in fast-track countries to develop cervical cancer indicators and targets in their respective national health plans, and advocates for the realization of the WHO Global Call to Action towards the elimination of cervical cancer at the country level and development of the WHO Global Strategy towards the Elimination of Cervical Cancer.
- UNAIDS is supporting the H6 partnership for the health of women, children and adolescents (currently under WHO chairmanship) at the global and country level by enhancing the centrality of sexual, reproductive, maternal, newborn, child and adolescent (RMNCAH) health: this programme prioritizes HPV-cervical cancer prevention, screening and treatment for girls and young women and engages communities and mobilizes resources to enable these services to be scaled up.
- UNAIDS and WHO are in the process of developing an implementation guidance for integrating mental health and substance use services into HIV service delivery programmes.

Due diligence is required to ensure all partnerships advance health and development outcomes. Some private sector activities are beneficial for public health, while others contribute to NCD burdens by working to increase or preserve the availability, accessibility and/or desirability of health-harming products. An example is the fundamental conflict of interest between the tobacco industry and public health. Partnerships with some pharmaceutical companies may pose apparent or real conflicts of interest.



4. Mobilizing resources to deliver

UNAIDS advocates and supports countries to mobilize domestic and donor resources for integrating HIV and cervical cancer prevention and care in countries with a high burden of HIV and cervical cancer. UNAIDS has also mobilized resources for the integration of mental health and HIV services and for addressing human rights and quality of life issues.



The United Nations Inter-Agency Task Force on the Prevention and Control of Non-communicable Diseases was established in 2013 by the Secretary General and placed under the leadership of WHO to coordinate the activities of the UN System to support the realization of the commitments made by Heads of State and Government in the 2011 Political Declaration on NCDs. Joint activities included in the work plan of the Task Force are additive to various, more comprehensive efforts conducted by the UN agencies to prevent and control NCDs. These joint activities offer important opportunities to address cross-cutting issues and to advance capacity and learning in countries.



Photo credits: © World Bank via Flickr