# Improving quality of life for communities living with HIV/AIDS, TB and Malaria

Equitable, impactful and cost-effective integration of NCDs in the Global Fund strategy 2023-2028

As the world seeks to build back better from the COVID-19 pandemic, the 2023-2028 strategy of the Global Fund to fight AIDS, TB and Malaria could be instrumental in supporting governments to deliver resilient and sustainable health systems and to improve global health security. The bi-directional relationship between noncommunicable diseases (NCDs: inter alia cancer, respiratory disease, cardiovascular disease and diabetes), HIV and TB reduces quality of life, undermines treatment outcomes and leads to premature mortality. The Global Fund has a valuable opportunity to accelerate achievement of targets, while simultaneously addressing evolving community needs through cost-effective, evidence-based health interventions for NCDs.

NCD Alliance calls on national leaders and the Global Fund Board to recognize the growing impact of NCDs on the physical and mental health and wellbeing of people living with and at risk of HIV, TB and malaria, and on the sustainability and resilience of health systems. We ask that the new strategy provides countries with clearer opportunities and more flexibility in funding to integrate NCD screening, diagnosis and care into programmes and services to address the linkages with HIV, TB and malaria.

The current Global Fund strategy emphasises that "Investments will be made to benefit patients, not combat specific diseases, integrating service delivery, strengthening communities and promoting quality services and equitable access; and where possible, will be based on strong national health strategies and disease control plans in close collaboration with partners to ensure integrated and harmonized approaches."



To build on this, we call on the Board to support countries to integrate NCDs, guided by the needs of communities and according to national priorities, which offers enormous potential to:

- Support communities by integrating measures which will improve quality of life, financial protection, equity, mental health and wellbeing.
- Sustain health gains, protect and maximise the benefits of investments made to date towards eradication.
- → Increase the resilience, sustainability and person-centred responsiveness of health systems, including epidemic recovery and future preparedness.
- → Reduce costs, on the basis of strong investment cases, where integration and joint production in health services, especially in primary care, can yield better health outcomes.<sup>2</sup>
- → Work more effectively with WHO, the UN Inter-Agency Taskforce on NCDs and civil society to identify cost-effective NCD integration opportunities to sustain health improvements and drive further progress to national health objectives.
- → Amplify and mainstream the experience and achievements of the Global Fund in promoting and protecting human rights and gender equality across the whole of society.
- → Contribute to the achievement of all aspects of SDG3 to ensure healthy lives and promote well-being for all, including Universal Health Coverage (UHC, goal 3.8) and reduction of premature mortality due to NCDs and promote mental health (3.4)

Global health outcomes have steadily improved since 1990 and the Global Fund has delivered enormous progress on its mission. At the same time, NCDs have increased and now constitute the primary cause of disability and premature death worldwide.3 Low- and middle-income countries (LMICs) have experienced rapid transitions from disease burden dominated by communicable, maternal and child health conditions to a burden dominated by NCDs and injuries (NCDI), to which health systems are struggling to adapt.4 For the poorest billion people in the lowest income countries, NCDIs now account for more than onethird of the burden of disease, including 800,000 deaths every year in people under 40 years old, more than HIV, TB and maternal deaths combined. NCDIs impose an additional financial burden on

people already living in extreme poverty, with NCDIs imposing catastrophic out-of-pocket costs on 19-50 million of the poorest people every year.<sup>5</sup>

People living with HIV (PLHIV) and TB are more susceptible to many NCDs, including diabetes, cardiovascular disease, chronic lung disease, 14 types of cancer including cervical and lung cancers, and depression, and these interlinkages may be bi-directional.<sup>6,7,8,9,10</sup> In some countries, half of people seeking HIV treatment are also living with NCDs. People living with common co-morbid chronic conditions - e.g. HIV and hypertension, TB and diabetes - face increased physical and financial barriers to access essential treatment, exacerbating impacts on health and wellbeing. As disability and reduced quality of life due to NCDs becomes the major health challenge in all countries, there is an important opportunity in identifying and investing in equitable, costeffective, integrated strategies that reinforce progress made across HIV, TB and malaria.

"We have the highest burden of HIV disease in the world.
Amongst 18-35 year olds, 20% have hypertension and 12% have diabetes. This increases to 30% and 26% respectively among 36-45 year olds. So, coupled with the burden of HIV and TB, we have this rising incidence of noncommunicable diseases...
Currently over 60% of the patients are HIV positive, of which 50% have co-morbidities related to noncommunicable diseases."

Director of Affordable Medicines Directorate, National Department of Health, South Africa, Khadija Jamaloodien, WHO NCD Hard Talks Webinar, 21 October 2020

#### COVID-19 and NCDs undermine health systems resilience and sustainability

COVID-19 has highlighted the fragility of health systems worldwide and risks undermining progress achieved to date on the Global Fund's mission. The pandemic has made clear that hard-won gains in global health are vulnerable, particularly while NCDs remain the weakest link in health systems:

PLHIV who are on effective treatment are not at increased risk of COVID-19 – unless they also have one or more common NCD co-morbidities, such as diabetes, cardiovascular disease, kidney disease, hypertension, which significantly increases the risk of severe outcomes and death.<sup>11</sup>

People living with TB may have poorer outcomes for COVID-19 treatment, particularly if TB treatment is interrupted. Common TB comorbidities, including diabetes and COPD, are linked with more severe COVID-19. <sup>12</sup>

NCDs and COVID-19 are a 'syndemic'\* 13 as people living with NCDs (PLWNCDs) are at significantly higher risk of worse outcomes from COVID-19. In addition, NCD care has been severely disrupted in health systems worldwide, and the impact is likely to eclipse' the direct toll of the virus, and palliative care identified in almost all countries responding to WHO surveys. As a result, many people in Global Fund's target communities who are also living with NCDs may not be able to access essential care, putting their physical and mental health at risk.

For example, while HIV and TB programmes have sought to ensure access to longer (quarterly) supplies of essential medicines, this has not routinely been the case for people living with diabetes who depend on insulin.

Future health security and health system strengthening necessitates effectively tackling NCDs in primary care. An integrated person-centred approach to care and health systems strengthening, as recommended in the Global Action Plan to reach SDG3, would offer major quality of life advances to the Global Fund's target communities.

<sup>\* &</sup>quot;Syndemics are characterised by biological and social interactions between conditions and states, interactions that increase a person's susceptibility to harm or worsen their health outcomes. In the case of COVID-19, attacking NCDs will be a prerequisite for successful containment." – Richard Horton, Offline: COVID-19 is not a pandemic, The Lancet Comment, Vol 396, Issue 10255, p874, Sept 26 2020.

## The opportunity to learn from experience and build back better

The development of the Global Fund's new strategy is an opportunity to examine how to accelerate progress against HIV, TB and malaria, whilst safeguarding hard-won gains against the impacts of the pandemic. The Board has an opportunity to tailor the strategy to more effectively respond to country-led priorities and community needs.

In 2015, the Global Fund recognised common co-infections and co-morbidities (COIM) of HIV/ AIDS, TB and malaria, and invited countries to request financial support in order to maximise the impacts of investments in the three diseases, including for women and children's health and for health systems strengthening (Board decision GF/B33/1114). Since then, some countries have developed programs to integrate other diseases into primary care investment, for example Hepatitis C screening and treatment in Georgia and cervical cancer prevention and screening in Eswatini. However, integration was not widely promoted and there has been limited awareness of the opportunity, which was further weakened as COIM were not specifically mentioned in the 2017-2020 strategy.

As the devastation caused by COVID-19 has been exacerbated by the epidemiological transition towards NCDs in lower income countries, and the evidence-base on HIV, TB and malaria co-morbidities and shared risk factors has developed, the investment case for integration is stronger than ever before:

#### Links between HIV and NCDs

Thanks to advances in HIV research and treatment, HIV infection has become a chronic condition. Across all age groups, PLHIV have an increased risk of NCD co-morbidities:

### Cardiovascular disease (CVD)

countries with hiah HIV-burden, multimorbidity occurs at an early age with an elevated risk of contracting heart-related conditions.<sup>15</sup> For adolescents with a high viral load of HIV, there is a risk of increased levels of triglycerides and cholesterol.<sup>16</sup> PLHIV on combination antiretroviral therapy (ART) are at increased risk of hypertension. It is estimated that 1/3 of PLHIV have hypertension.<sup>17</sup> The risk of developing related conditions - such as myocardial infarction, heart failure, stroke, pulmonary hypertension - is approximately 1.5 - 2 times higher for PLHIV.18

#### **Diabetes**



PLHIV are more likely to have diabetes. Some HIV medicines may increase the risk of developing diabetes.<sup>19</sup>

#### **Chronic respiratory disease**



HIV-infected adults in the US were found to be 50% more likely to develop chronic obstructive pulmonary disease (COPD).<sup>20</sup>

#### Cancer



A woman living with HIV is up to five times more likely to develop cervical cancer.<sup>21</sup> The risk of acquiring HIV among women is doubled by human papillomavirus (HPV) infection.<sup>22</sup>

#### Mental health



PLHIV are twice as likely to experience depression.<sup>23</sup> A 2019 study showed that approximately 39% of PLHIV reported depression.<sup>24</sup>

#### Links between TB and NCDs

People with active TB often experience systematic inflammation and pulmonary impairment, which are risk factors for NCDs.<sup>25</sup>

## (a)

#### **Diabetes**

TB can cause temporary impaired glucose tolerance, which is a risk factor for diabetes. Living with diabetes results in a threefold increase in the risk of developing TB. <sup>26</sup> The rapidly growing number of PLW diabetes worldwide is therefore of major concern in relation to TB targets: The number of people with diabetes rose from 108 million in 1980 to 422 million in 2014, with global prevalence among adults rising from 4-7% to 8.5%. Prevalence is rising fastest in LMICs. As well as premature mortality (1.6 million deaths of people under age 70 in 2016), diabetes is a major cause of preventable blindness, kidney failure, heart attacks, stroke, and the most common cause of amputations.

#### **Chronic respiratory disease**



Following an initial TB episode, approximately 50-70% of people develop chronic lung disease. Up to 6 million people develop post-TB pulmonary impairment every year.<sup>27</sup>

#### Cancer

There is growing evidence of a bi-directional relationship between TB and cancers, particularly lung cancers. Reduced immune system function means that people living with cancer are at higher risk of contracting TB, including a six-fold increase for people with lung cancers.<sup>28</sup>



#### Mental health

The risk of depression is three times higher for people living with TB. Prevalence of depression is up to 50% among people living with TB. <sup>29,30</sup>

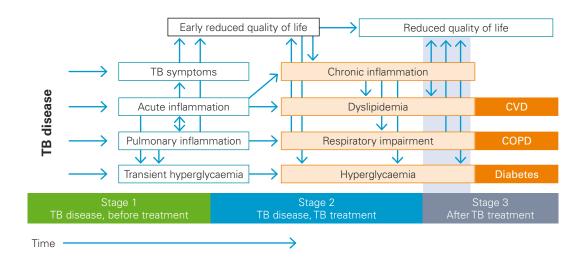


Figure 1: Conceptual framework for increased risk of non-communicable disease after active TB. TB disease results in symptoms, acute inflammation, and may result in transient hyperglycaemia. During later phases of TB disease and during anti-tuberculosis treatment (Stage 2), symptoms experienced during early stages may result in dyslipidemia, respiratory impairment, and hyperglycaemia. In some patients, the Stage 2 symptoms may result in increased risk of chronic non-communicable disease after antituberculosis treatment (Stage 3). All arrows represent non-deterministic pathways; the likelihood of variables at the heads of arrows are hypothesized to be probabilistically increased by variables at the arrows' tails. TB ¼ tuberculosis; CVD ¼ cardiovascular disease; CLD ¼ chronic lung disease.31

#### Links between malaria and NCDs

**Malnutrition** is a risk factor for malaria as well as HIV and TB, and good nutrition is important for adherence and effectiveness of treatment. WHO recommends nutrition screening, assessment and management and nutritional support. Programmes should consider the increasing prevalence of all forms of malnutrition, including those associated with overweight, obesity and nutrient deficiencies, due to increased consumption of ultra-processed and high fat, sugar, and salt foods in LMICs.

## Integration, led by community needs, for resilient, sustainable health systems and Universal Health Coverage

More actively encouraging countries to integrate common NCD comorbidities into Global Fund proposals, according to community needs and where there are clear synergies, would help countries better deliver care and significantly improve quality of life for communities, increasing efficiency in health systems and improving health outcomes for PLHIV, TB and malaria. Country ownership remains key and any integration should be guided by the local prevalence of comorbidities and common risk factors. Countries should be invited to consider synergies between diseases in investment cases, particularly at PHC level, where the wellbeing of communities can be enhanced, morbidity and mortality can be reduced and prevention interventions have greater impact.

In 2015, the Global Fund Board recognized and approved a framework for consideration of country requests for financial support for common co-infections and co-morbidities (COIM: Board decision GF/B33/11), if several conditions could be met:

- → Based on a strong investment case considering impact and cost within the context of existing programs within that country;
- → Extends the life expectancy, prevents and/ or reduces mortality and morbidity, of people living with HIV, TB and malaria by acting directly on HIV, TB or malaria;
- → Effective health intervention that prevents or treats a COIM that has a disproportionate impact on people living with HIV, TB or malaria;
- → Where financing would not detract from or displace financing for cost-effective HIV, TB or malaria interventions;
- Global Fund financing would not displace resources from other funding sources;
- → Alignment with national policy guidelines; and
- → Interventions are synergistic and can be integrated with other HIV, TB or malaria delivery platforms.

These conditions remain appropriate. It is not in the interest of the NCD community to displace funds or in any way undermine progress towards SDG3.3 to end the epidemics of HIV/AIDS, tuberculosis, malaria by 2030. Instead, we see a series of opportunities for integration to improve health promotion, disease prevention and treatment outcomes for HIV, TB and malaria, to enhance towards Global Fund objectives. This approach also offers significant benefits towards SDG3.8 to achieve UHC and SDG3.4 to reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being.

#### **RECOMMENDATIONS:**

## Steps to equitable, impactful and cost-effective integration of NCDs into Global Fund programmes and services

- 1. Meaningfully engage communities and civil society to build on the framework for countries to request financial support for common co-infections and co-morbidities (COIM) of HIV/AIDS, TB and malaria. Provide more flexibility for countries to request financial support to integrate NCDs according to community needs and national priorities to maximise the impacts of investments in HIV, TB and malaria, including for women and children's health and for health systems strengthening.
- 2. Support countries to set up pilot programmes to advance the evidence base on equitable, impactful and cost-effective integration of NCDs into programmes, demonstrating benefits for Global Fund goals and communities. Facilitate a strategic sharing of Global Fund expertise and experience regarding disease prevention, testing and early diagnosis, treatment initiation, retention in care, the scale-up of treatment, elimination of barriers to service, and supply chain management all of which remain major challenges in the NCD response.
- 3. Work together with people with lived experience, civil society, WHO and the UN Inter-Agency Taskforce on NCDs to further develop investment case guidance and pilots for the equitable, impactful and cost-effective integration of NCDs into programmes.
- 4. Showcase examples of integration of NCDs, including mental health, in programmes and services, promote learnings, scale-up and transferability.
- 5. Monitor impact: Improve data collection on co-morbidity and multi-morbidity to develop future targets and respond to communities' evolving needs.

#### OPPORTUNITIES FOR INTEGRATION

Building on the Global Fund's current strategic goal to **Build Resilient and Sustainable Systems for Health**, we propose the following examples of potential synergies and joint interventions based on community needs, risk factors and COIM prevalence to further deliver on operational objectives:

## Strengthen community responses and systems

- → Ensure PLHIV and TB who also live with NCDs are meaningfully included in community engagement and Country Coordination Mechanisms and processes. Actively seek the views and experiences of the community about their other health needs, including NCDs and mental health.
- → Address depression and other mental health conditions in PLHIV and TB. Depression can impact treatment adherence, therefore jeopardising outcomes. Depression can accelerate disease progression and lead to reduced quality of life.

## Support reproductive, women's, children's, and adolescent health, and platforms for integrated service delivery

- → Open and promote opportunities for countries to integrate screening and treatment within health programmes for women, children and adolescents, including HPV and cervical cancer screening, screening and care for gestational diabetes, and screening for Type 1 diabetes in children and adolescents.
- → Consider all forms of malnutrition, including overweight and obesity, in nutritional support and food assistance, to improve treatment outcomes and reduce NCD comorbidity risks (hypertension, type 2 diabetes) as a co-benefit.

## Strengthen global and in-country procurement and supply chain systems

→ Explore synergies with the Global Fund's unique experience in procurement and supply chain management to improve access to diagnostics, medicines, and technologies, including tele/mobile health, for NCDs affecting target communities (e.g. antihypertensives, insulin, glucometers, test strips, imaging capacity, etc.).

### Leverage critical investments in human resources for health

→ Examine opportunities to reduce demand on healthcare workers' time via joint supervision and training. Consider potential for involvement of community health workers to support integration of NCD prevention, screening and care.

## Strengthen data systems for health and countries' capacities for analysis and use

→ Close the data gap on PLHIV, TB, malaria and NCDs. Explore potential to collect (sex- and age- disaggregated) data via Global Fund programmes to increase the evidence base for decision-making and inform national policymakers about multimorbidity, burden of disease and health investment needs.

## Strengthen and align to robust national health strategies and national disease-specific strategic plans

- → Screening, early diagnosis and monitoring of people living with and at risk of HIV, TB, malaria for common comorbid NCDs, to prevent onset of complications and further comorbidities (e.g. HPV, cancers; diabetes, CVD and chronic kidney disease) and to increase opportunities for self-management, optimised treatment outcomes and quality of life, and preventing escalating costs for patients and health systems for later-stage treatment (e.g. chemotherapy, dialysis).
- → Ensure people living with NCDs who are at higher risk of contracting TB (including diabetes, (lung) cancer) are routinely screened and implement efficient TB infection control policies in health-care settings.
- As with HIV, good control and (self-) management of NCDs such as hypertension and diabetes are essential to ensure people are not placed at increased risk of other diseases, notably COVID-19.

## Strengthen financial management and oversight

Together, the 12 signatory agencies of the Global Action Plan for Healthy Lives and Wellbeing for All contribute nearly one-third of all development assistance allocated to health. The agencies are asked to harmonize operational and financial strategies and policies in support of countries to increase efficiency and reduce the burden on countries, engage with countries better to identify priorities, plan, and implement together. The evaluation of the first year of the Global Action Plan has highlighted the need to accelerate progress on the accelerator themes of primary health care, sustainable financing for health, community and civil society engagement, and addressing determinants of health.

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