

MEETING REPORT

HIV DRUG RESISTANCE

WHO HIVRESNET MEETING REPORT

19 OCTOBER 2019

Johannesburg, South Africa



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BACKGROUND

The WHO HIV drug resistance network (WHO HIVResNet) is a large body of international experts, researchers, laboratorians, organizations, partners, stakeholders and civil society members with an advisory and implementation role to prevent, monitor and respond to HIV drug resistance. Established in 2004 by a partnership between WHO and the International AIDS Society, the WHO HIVResNet supports activities to monitor and control the emergence of HIV drug resistance, optimize the use of HIV drug resistance testing, monitor the quality of antiretroviral therapy delivery for the purpose of preventing HIV drug resistance and support policies related to optimal first-, second- and subsequent-line antiretroviral therapy selection.

HIVResNet and its five working groups support the Global Action Plan on HIV drug resistance. The goal of the Global Action Plan is to articulate synergistic actions required to prevent HIV drug resistance from undermining global targets on health and HIV and to provide the most effective treatment to all people living with HIV. The Global Action Plan has five strategic objectives:

- prevention and response;
- monitoring and surveillance;
- research and innovation;
- laboratory capacity; and
- governance and enabling mechanisms.

This meeting took place on 19 October 2019 in Johannesburg, South Africa, immediately after the XXVIII International Workshop on HIV Drug Resistance and Treatment Strategies (<http://www.hivresistance2019.co.za>), thus capitalizing on the presence of HIVResNet members, key opinion leaders and other WHO advisers. Annexes 1–3 provide additional results from participant questionnaires, the meeting agenda and the list of invited participants.

The meeting began with a review of recent changes in WHO's operational model and updates from the chairs of the five HIV drug resistance Global Action Plan working groups. This overview was followed by three thematically divided technical sessions. The meeting concluded with a think tank session in which priorities for WHO to focus on over the next five years were discussed.

SESSION 1: HIVRESNET UPDATE

Presentation 1: New WHO operating model and programme of work: opportunities and risks for HIV drug resistance

Presenter: Meg Doherty, WHO

Summary of key points

- The Thirteenth General Programme of Work is WHO's new five-year strategy. It is designed to focus WHO's work on impact at the country level. Specifically, the Thirteenth General Programme of Work aligns all work with the Sustainable Development Goals to improve the health of all people in all countries and establishes a clear mission to promote health, keep the world safe and serve vulnerable people.
- The Thirteenth General Programme of Work outlines three strategic priorities attached to ambitious goals:
 - ❑ Advancing universal health coverage
 - » Delivery of essential health services
 - » Financial protection
 - » Access to essential health products
 - ❑ Addressing health emergencies
 - » Prepare
 - » Prevent
 - » Detect and respond
 - ❑ Promoting healthier populations
 - » Determinants of health
 - » Risk factors to health
 - » Channels to address health determinants and risks
- The new WHO goal is the Triple Billion targets: 1 billion more people to benefit from universal health coverage, 1 billion more people better protected from health emergencies and 1 billion more people enjoying better health and well-being. These ambitious targets must be met over the next five years to be on track for delivering the Sustainable Development Goal targets by 2030.
- To achieve the goals, WHO's work will span a spectrum from supporting mature health systems with policy dialogue to strengthen systems for the future to support service delivery and filling gaps in emergencies in more fragile health systems. WHO will focus global public goods on impact, and work streams will be tailored to provide what countries need to significantly improve the health of their people.
- There are three key strategic shifts in the way WHO will work. They can be summarized by "working smarter to increase country level impact". All WHO staff members will be empowered to connect their work to the three strategic priorities and articulate how their work feeds into, and is measured by, achieving the Triple Billion targets. The three key strategic priorities are:
 - ❑ Step up leadership
 - ❑ Drive impact in every country
 - ❑ Focus global public goods on impact
- A key function of WHO is developing normative guidelines. In 2019, WHO published **updated HIV care and treatment guidelines**.
 - ❑ Important knowledge gaps exist:
 - » Gaps in knowledge regarding the best third-line and optimal antiretroviral drug sequencing in the age of dolutegravir (DTG) recommended for first- and second-line treatment
 - » Gaps in knowledge regarding the recycling of tenofovir disoproxil fumarate (TDF) in TDF + lamivudine (3TC) + DTG (TLD) after TDF + 3TC + efavirenz (TLE) use and in second-line treatment. This knowledge gap can be informed by research and implementation data focused on HIV drug resistance.
- Future directions of WHO work
 - ❑ Impact at the country level is paramount with priorities and global goods focused on country needs
 - ❑ The Department of global HIV, Hepatitis, and STIs Programmes offers opportunities for:
 - » Integrating communicable and noncommunicable diseases
 - » Sharing resources and laboratory networks
 - » Working across the three levels of WHO (country, region and headquarters)
 - ❑ Overall disease-specific funding is reduced, including for HIV activities
- The 2019 WHO HIVResNet Meeting focuses on helping WHO to give priority to activities that drive impact at the country level and consider opportunities for fundraising.

Objective of the meeting:

Identification of high-priority activities for the HIV drug resistance work stream over the next five years is a key outcome of this meeting. Priorities should support the three strategic priorities of the WHO thirteenth General Programme of Work listed above and have high impact at the country level.

Presentation 2: HIV drug resistance @WHO: what's on the agenda?

Presenter: Silvia Bertagnolio, WHO

Summary of key points

- The five-year Global Action Plan on HIV drug resistance raises awareness of the need to prevent, monitor and respond to HIV drug resistance and provides a framework of action for all stakeholders to ensure that HIV drug resistance does not threaten the achievement of the global targets to end AIDS as a public health threat.
- Successful implementation of the Global Action Plan is a shared responsibility of countries and global and country stakeholders, including non-state partners, people living with HIV, community organizations, researchers and bilateral and multilateral donors. Each stakeholder has a role to play and actionable responsibilities.
- To support implementation of the Global Action Plan, WHO has created five working groups around each of the five strategic objectives of the Global Action Plan:
 1. Prevention and response
 2. Monitoring and surveillance
 3. Research and innovation
 4. Laboratory capacity
 5. Governance and enabling mechanisms, including awareness and advocacy
- WHO provides the following support to countries implementing surveys:
 - ❑ Develop guidance on HIV drug resistance surveillance
 - ❑ Support country capacity in adapting and implementing generic surveillance guidance into operational country protocols
 - ❑ Build the capacity of countries in data management and quality assurance of epidemiological and sequence data (WHO HIV drug resistance database)
 - ❑ Support countries in data interpretation, use of data in the country context and dissemination within stakeholders
 - ❑ Global reporting (the high-level findings of WHO's HIV drug resistance report 2019 were summarized). The data reported included the results of surveys of pretreatment HIV drug resistance among adults initiating antiretroviral therapy, surveys of acquired HIV drug resistance among adults with unsuppressed viral loads, pretreatment HIV drug resistance among infants newly diagnosed with HIV and the monitoring of quality of care indicators, especially important in optimizing population-level viral load suppression and HIV drug resistance prevention, since countries are globally shifting to using DTG in first-line antiretroviral therapy.
- WHO does not fund surveys: most are supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria (funded 24 countries in 2015 and 34 countries in 2018–2020) and some by PEPFAR and by national governments.
- Current WHO HIVResNet laboratory capacity was reviewed. As of October 2019, 30 laboratories were designated for HIV drug resistance testing for surveillance purposes. WHO manages the following laboratory-related activities:
 - ❑ Laboratory normative guidance for drug resistance testing (operational framework)
 - » Describes how WHO strives for high quality, standardized drug resistance test results

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