Changing the Narrative: Why HIV prevention work in Canada needs to embrace HIV treatment

By Tim Rogers

In 2014, UNAIDS proposed an ambitious set of targets for the global scale-up of HIV treatment. This approach to the HIV response is based on research showing that early, life-long HIV treatment can dramatically improve the health of people living with HIV and can also dramatically reduce HIV transmission. The new UNAIDS strategy emphasizes that the tremendous potential of HIV treatment is not being realized, not even in developed countries like Canada. This must change to bring the HIV epidemic under control.

In this article we will explore the crucial role HIV prevention work can play in the UNAIDS call for a “new narrative on HIV treatment.”

What are the benefits of HIV treatment?

HIV treatment can dramatically improve the health and extend the life of people living with HIV. With the development of better-tolerated HIV treatments, research is showing that starting treatment early, before the virus has a chance to cause damage to the immune system, is important for achieving the best health outcomes.

HIV treatment works by suppressing the amount of virus in the blood to low or undetectable levels and this can also significantly reduce the risk of HIV transmission. In 2011, a landmark study known as HPTN 052 demonstrated for the first time that early treatment can significantly reduce the risk of sexual HIV transmission under certain conditions in heterosexual serodiscordant couples (where one partner is HIV positive and the other is HIV negative). In March 2014, a preliminary analysis of the PARTNER study reported the first direct evidence that effective antiretroviral therapy (ART) can also significantly reduce HIV risk for gay men and other men who have sex with men (MSM). [For more up-to-date information see the CATIE statement on the use of antiretroviral treatment (ART) and an undetectable viral load to prevent the sexual transmission of HIV.]

As HIV treatment and prevention have converged, attention has turned to how well we are engaging people living with HIV in the continuum of services, including testing, care and, ultimately, effective treatment. The concept of an HIV treatment cascade has emerged as a way to identify the gaps in the continuum that are preventing people from realizing the full treatment and prevention benefits of ART.

What is the UNAIDS strategy and how is it new?

In a strategic discussion paper launched at the 2014 World AIDS Conference, UNAIDS proposed that by 2020:

- 90% of all people living with HIV will know their status;
- 90% of all people with diagnosed HIV infection will receive sustained ART;
- 90% of people on ART will maintain viral suppression for long-term benefit.

In this article, we will examine how well we are progressing towards these targets in Canada.
90% of all people receiving ART will have viral suppression (undetectable viral load).

If these targets are achieved, 81% of all people living with HIV will be on treatment and 73% will have an undetectable viral load – the key indicator of ongoing successful treatment – and, therefore, be significantly less likely to transmit the virus to others. Dubbed “90-90-90,” modelling studies show that achieving these targets would result in the end of the epidemic spread of HIV by 2030.1

Previous global HIV treatment targets tended to focus on a single outcome – usually the proportion of people eligible for treatment who access treatment. The new approach by UNAIDS builds on the treatment cascade and looks at the sequence of outcomes that are required to achieve maximum benefits from treatment. This includes HIV diagnosis; engagement in care and treatment; and suppression of the viral load. This new approach means that we need to move beyond a traditional narrow focus on increased access to HIV treatment and consider a broader HIV response that includes outreach; testing and diagnosis; engagement; and retention in care, treatment and support.

Not surprisingly, UNAIDS also calls for urgent efforts to scale-up core prevention efforts for the key populations that are disproportionately impacted by HIV. Key populations identified by UNAIDS include people who inject drugs, MSM, female sex workers, and transgender people. However, in addition to this scale-up, achieving the UNAIDS targets will require a coordinated effort to ensure that people living with and at risk for HIV are informed, engaged and linked between different services within the HIV response, including prevention services. HIV prevention workers have an important role to play in developing such a coordinated response.

**How can we use the UNAIDS targets to improve our efforts?**

Measuring the outcomes that form the basis for the UNAIDS targets is relatively new. Globally, only a few countries or regions have developed estimates. For Canada, there are no national estimates, although British Columbia and Ontario have developed provincial ones. The table below compares different regions where estimates are available.

<table>
<thead>
<tr>
<th>Region</th>
<th>% Diagnosed</th>
<th>% On Treatment</th>
<th>% Undetectable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNAIDS Targets</strong></td>
<td>90</td>
<td>81</td>
<td>73</td>
</tr>
<tr>
<td>Australia (2013)</td>
<td>86</td>
<td>66</td>
<td>62</td>
</tr>
<tr>
<td>United Kingdom (2013)</td>
<td>76</td>
<td>68</td>
<td>61</td>
</tr>
<tr>
<td>France (2010)</td>
<td>81</td>
<td>60</td>
<td>52</td>
</tr>
<tr>
<td>British Columbia (2011)</td>
<td>71</td>
<td>51</td>
<td>35</td>
</tr>
<tr>
<td>Ontario (2014)</td>
<td>65–75</td>
<td>Not available</td>
<td>28–42</td>
</tr>
<tr>
<td>Brazil (2012)</td>
<td>81</td>
<td>44</td>
<td>33</td>
</tr>
<tr>
<td>Sub-Saharan Africa (2013)</td>
<td>45</td>
<td>39</td>
<td>29</td>
</tr>
<tr>
<td>United States (2011)</td>
<td>82</td>
<td>33</td>
<td>25</td>
</tr>
</tbody>
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**UPDATE:** New [2014 estimates of the HIV treatment cascade in Canada](#) were released in 2016. It is estimated that in 2014, 80% of people living with HIV were diagnosed, 76% of people diagnosed were on treatment, and
89% of people on treatment had an undetectable viral load. This means that, overall, an estimated 54% of people living with HIV in Canada had an undetectable viral load in 2014.

According to the table, Australia and the United Kingdom are closest to achieving the UNAIDS targets. France is also doing comparatively well. British Columbia, which has been a global leader in developing new and enhanced programming to improve outcomes for the treatment cascade, was still significantly below the targets in 2011. Although caution is needed in making comparisons because different methods (and data from different years) may have been used to calculate the estimates in each region, these numbers suggest that there is substantial room for improvement in most regions.

For any given region, the targets can be used to identify where programming is strongest and where it could be strengthened. This information can help people who plan and develop programs to make strategic decisions. For example, the estimates suggest that the United States is very strong with diagnosis but not as strong with treatment outcomes. In September 2014, the U.S. Centers for Disease Control and Prevention (CDC) launched a national treatment campaign to encourage people with HIV to access care and stay on treatment. Additionally, information about the treatment cascade in other countries or regions can help people identify good programming that might be adapted to their local context. For example, Sub-Saharan Africa appears to be very strong with treatment outcomes once people are diagnosed. Other regions may be able to learn from successful treatment programs that have been developed in Africa.

The UNAIDS targets can be applied to different communities at the local or organizational level to better understand the gaps in engagement with the treatment cascade and improve access and linkage to relevant services.

**What role can prevention play in meeting the UNAIDS targets?**

While it may appear that the UNAIDS targets are primarily concerned with treatment programs, in fact prevention programs and services have a very important role to play. That’s because treatment programs and services that passively wait for people who suspect they have an HIV infection to present for testing and care are not adequate to reach all those who need these services. Achieving the UNAIDS targets requires pro-active approaches to reach those people who are not engaged in the treatment cascade. Community-based strategies of outreach and engagement – which were pioneered in HIV prevention work – are needed to reach out to people who are undiagnosed and support them to get tested, get into early care and treatment, and remain engaged in care.

Communities need to **know about the health and prevention benefits** of early HIV treatment and be empowered to act on this knowledge. These messages need to be communicated not just to people diagnosed with HIV but also to people **at risk for HIV**. Currently these messages are not well communicated. For example, according to a recent international community consensus statement, many people living with HIV are unaware of the prevention benefits of HIV treatment. The prevention benefits of treatment are even less well known among people who are at risk for HIV. HIV prevention workers have an important role to play in providing individuals and communities with accurate information about the importance of early HIV diagnosis, care and treatment to optimize long-term health (similar to messages about cancer prevention) and about the effect of HIV treatment in reducing the risk of transmission. Moreover, prevention efforts should support individuals to improve their ability to prevent transmission in a way that works for them and to feel empowered to take responsibility for their own and their partners’ sexual health.

Individuals also need to be supported to become **linked and engaged to a range of services** depending on their needs. HIV prevention services are often a first point of contact with health care for people at risk of HIV and those with undiagnosed HIV. Such prevention services may provide an ideal opportunity for engagement and linkage of clients to other services, including testing, counselling, primary care, or clinic-based prevention options such as post-exposure prophylaxis (PEP) and pre-exposure prophylaxis (PrEP). Prevention workers have an important role to play in identifying people who may benefit from the full spectrum of additional health services and supporting them to engage with those services.

The HIV treatment cascade – patching the leaks to improve HIV prevention has examples of Canadian programs that target the different stages of the treatment cascade.

**Engaging in a new narrative about HIV treatment**
The discovery that HIV treatment can dramatically reduce the transmission of HIV is a game changer that has implications for everyone working in HIV. Beyond the changes to specific prevention information and services discussed above, there is a need for people working in prevention to engage in systems-level thinking about how prevention, diagnosis, care, treatment and support services are organized and delivered to different populations and communities. It is crucial to consider how core prevention services fit within and support the continuum of HIV services. New directions in programming should not supplant or weaken existing prevention approaches. There is a need to develop balanced prevention and treatment programming that recognizes HIV prevention is a shared responsibility and that most onward HIV transmissions occur among people who are undiagnosed. Recently the World Health Organization has launched new Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations, which provide a framework for an integrated, systems-level approach to HIV.

Additionally, there may be an opportunity to work together towards societal or “structural” changes that could enhance prevention efforts. A new understanding of HIV transmission risks may help to reduce stigma and fear of people living with HIV, particularly in populations who are disproportionately impacted by HIV. (For example, in a recent national survey of MSM, almost half of those who were HIV-negative said they would not have sex with an HIV-positive man and more than two thirds of HIV-positive men worry about rejection in the gay community because of their HIV status.)

Criminalization of HIV non-disclosure is another structural factor that needs to be addressed if we are to achieve full engagement in testing and treatment. Coordinated strategies could also help to reduce health inequities experienced by some populations, such as newcomers to Canada.

Campaigns for change

Around the world, many new campaigns have been launched that seek to engage communities and individuals to think about HIV differently and to start new discussions about prevention and treatment based on the advances we have made in our knowledge of HIV. The time has come for everyone to join in the discussion.

British Columbia, STOP HIV/AIDS Project

Change HIV History – a campaign to expand HIV testing, treatment, and support services across BC

US Centers for Disease Control and Prevention (CDC)

HIV Treatment Works – this campaign shows how people living with HIV have overcome barriers to get in care and stay on treatment. The website has information on HIV treatment and prevention, as well as how to live well with HIV.

AIDS Council of New South Wales (ACON), Australia

ENDING HIV – a campaign for gay men with information on testing, starting treatment early and prevention strategies.

AIDS Vancouver

Undetectable: The New Face of HIV – a campaign to establish “Undetectable” as a health status distinct from either HIV positive or HIV negative, and in so doing eradicate stigma and promote best practices around research, treatment, and prevention.

Resource

Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States, 2014

References


AIDS Program, Ontario Ministry of Health and Long Term Care, 2014 [private communication]


About the author(s)

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