

A reality check for aspirational targets to end HIV

UNAIDS recently proposed the ambitious 2020 target of 90% of people living with HIV knowing their status, 90% of people diagnosed with HIV on treatment, and 90% of people on treatment with suppressed viral loads.¹ The 90-90-90 call was linked to a 90% reduction in HIV incidence by 2030 compared with 2010 levels.¹ McMahon and Medland² recently highlighted that the 90-90-90 target is substantially higher than the levels currently achieved in any setting. Even in high-income countries with low overall HIV endemicity, such as Australia and the UK, which are closest to achieving the UNAIDS targets, substantial gains are still required to reach 90-90-90.

Attaining this target will not necessarily lead to the control of HIV transmission despite strong evidence of reduced infectiousness of people on suppressive treatment.³ HIV-related mortality is now rare in most high-income countries because of good antiretroviral therapy (ART) access and coverage. Increases in the number of HIV-positive individuals living well in the community, alongside incident infection adding to the prevalence pool, raise the probability of HIV-negative individuals having sexual

contact with HIV-positive individuals. Depending on how this situation balances against other factors, such as negotiated condom or non-condom-based risk reduction strategies, an increase in the total number of new HIV infections per year might occur as has been observed over the past 15 years in various high-income settings despite improvements in test-and-treat indicators.⁴

Case reporting of diagnoses is a surrogate marker for incidence in many high-income countries. If the diagnosis rate per prevalent case remains almost constant, as it recently has in many settings,⁴ then both HIV prevalence and incidence could increase in the context of moving towards 90-90-90. We argue that increasing numbers of case reports and overall increases in numbers of new infections do not mean the test-and-treat strategy is failing, but simply that the strategy and targets are not consistent with large reductions in absolute numbers of new infections.

Even with favourable assumptions about the effectiveness of treatment as prevention and high uptake of ART soon after diagnosis, on the basis of current projections, with a growing pool of HIV-infected people, the admirable goal of a 90% decline in incidence by 2030 is highly ambitious in settings with already high treatment uptake and low

levels of undiagnosed infections. If aspirational, then such goals may be reasonable; however, it is problematic if health bureaucrats, politicians, and community members believe that achieving 90-90-90 targets by 2020 will necessarily achieve a 90% decline in HIV transmissions by 2030 in the current context in which no HIV cure or effective vaccine exist. As successive years fail to align with ambitious HIV transmission targets, campaigns and programmes that may be successfully reducing transmission could be jeopardised if their measure of success is a substantial decline in new cases of HIV.

We declare no competing interests.

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- 1 Joint United Nations Programme on HIV/AIDS (UNAIDS). Fast track: ending the AIDS epidemic by 2030. http://www.unaids.org/sites/default/files/media_asset/JC2686_WAD2014report_en.pdf (accessed Dec 8, 2014).
- 2 McMahon JH, Medland N. 90-90-90: how do we get there? *Lancet HIV* 2014; **1**: e10.
- 3 Cohen MS, Chen YQ, McCauley M, et al. Prevention of HIV-1 infection with early antiretroviral therapy. *N Engl J Med* 2011; **365**: 493-505.
- 4 Sullivan PS, Jones JS, Baral SD. The global north: HIV epidemiology in high-income countries. *Curr Opin HIV AIDS* 2014; **9**: 199-205.