

# Turning the Tide toward an AIDS Free Generation: Is It Within Our Reach?

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The 19<sup>th</sup> International AIDS conference was attended by 25 000 persons in Washington DC, United States of America (USA), in July 2012 under the theme “Turning the Tide Together”. The mood was generally upbeat with several notables including Hillary Clinton, US Secretary of State, endorsing the move toward an AIDS free generation. This was the first international AIDS conference held in the USA since 1990, made possible because President Obama lifted the restriction on persons living with HIV (PLHIV) from entering the USA. However, several sex-workers and drug users who wished to attend were barred since it remains illegal in the USA to allow them entry into the country.

In his plenary address, Dr Anthony Fauci, Director, National Institute of Allergy and Infectious Diseases, spoke of the scientific basis for ending the HIV epidemic. He reviewed the progress made to date, highlighting combination prevention and the prevention of HIV by early antiretroviral treatment (ART). While finding a cure and an HIV vaccine remain challenges, he asserted that we have the scientific basis to implement effective programmes to control HIV. However, this will not happen spontaneously and country ownership and capacity need to be strengthened and structural barriers overcome.

There is no question that significant progress has been made in responding to the global HIV epidemic in recent years. HIV incidence has declined by more than 25% between 2001 and 2009 in 33 countries (1). The number of PLHIV on ART has increased from 400 000 in 2003 to 6.6 million in 2010 (1) and 8 million in 2011 (2). Coverage of HIV-positive pregnant women with an effective antiretroviral (ARV) regimen for reducing mother-to-child HIV transmission (excluding single-dose nevirapine) increased to 48% in 2010 (1). Early treatment of PLHIV reduces HIV transmission in HIV discordant couples (3) and pre-exposure use of ARV drugs appears promising in reducing sexual transmission of HIV provided adherence is high (4, 5). Given the impressive impact of antiretroviral drugs in reducing HIV transmission, there is a growing movement to promote “ARV treatment as prevention” though many questions remain to be answered (6, 7). Randomized controlled trials have demonstrated the effectiveness of male circumcision in reducing female-to-male HIV transmission (8–10) and there is consensus on the need for multiple approaches to HIV prevention that take account of the specific circumstances and

context, namely combination prevention (7). The real challenge is to find the leadership, the will and the resources to implement these measures and to tackle the considerable structural barriers, stigma and discrimination that feed the HIV epidemic.

This conference provided important food for thought for Caribbean policy-makers, programme managers and health providers. The evidence is accumulating with regard to the value of early ART for PLHIV. Current World Health Organization (WHO) guidelines recommend starting treatment when the CD4 count falls below 350 cells/mm<sup>3</sup> (11). However, there appears to be benefits to beginning treatment when the CD4 count is 500 cells/mm<sup>3</sup> or higher: immune function is better preserved, the risk of tuberculosis is less (12), progression to HIV is slower and risk of HIV transmission is reduced (2, 3, 13). These benefits must be weighed against potential harms: the possibility of HIV resistance, toxicities arising from long term use of ART and cost. Whatever the decision concerning when to start ART, we must take measures to improve adherence to medication which is less than satisfactory. One study from Mozambique reported 97% adherence to ART following the formation of support groups within the community (14). Unfortunately, most of our patients are not prepared to disclose their status to their family and friends so it is more difficult to provide them with the support that they need.

In determining when PLHIV should start ART, we need to take account of the continued failure in the Caribbean and globally to identify many persons living with HIV and to get them into treatment. Even in developed countries, there is significant fallout along the “treatment cascade” with declining proportions of persons aware of their HIV status, entering care, retained on treatment and with viral load undetectable, which is the goal of ART. However, while 20% of PLHIV are unaware of their status in the USA, as many as 50% of PLHIV in the Caribbean do not know that they are HIV positive. There is a need to ensure routine provider-initiated HIV testing of all adults being admitted to hospital and attending accident and emergency rooms and to expand outreach testing to all sites where persons go to meet sex-partners especially where commercial sex is available. The Food and Drug Administration (FDA) has now approved an HIV test kit for self-testing. This is an important advance to be welcomed because it puts the ability to test in the hands of the individual (just like a self-test pregnancy kit).

The coverage of pregnant women with ART is high in most Caribbean countries (79%) so it is quite feasible for the Caribbean to be the first region to achieve the goal of eliminating mother-to-child HIV transmission, currently defined as 2% of infants of HIV positive mothers being HIV infected.

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Once a pregnant woman is placed on ART, the question arises whether she should remain on ART following childbirth regardless of her CD4 count. This may well be in her interest as well as contribute to reducing HIV transmission because many persons do not disclose their HIV status to their partner and do not practice safe sex consistently.

While the HIV incidence in the Caribbean has declined in recent years, there are still far too many persons becoming newly HIV infected, annually estimated at 12 000 in 2010 (1). In many Caribbean countries there is both a generalized HIV epidemic in the population as well as a concentrated HIV epidemic among men who have sex with men (MSM), sex-workers and other key populations. There is no magic bullet to further reduce new HIV infections and an effective HIV vaccine is not likely in the foreseeable future. Each country must “know its epidemic” and work out the appropriate mix of approaches to control their HIV epidemic. In this respect, progress is mixed and the capacity and resources to do this effectively quite uneven. The Pan Caribbean Partnership against HIV/AIDS (PANCAP) has brought the countries and partners together and mobilized considerable resources within the context of the Caribbean Regional Strategic Framework on HIV and AIDS. However, there is no effective mechanism in place to harmonize the regional response while building national capacity so multiple agencies and donors pursue their mandates in a fragmented manner.

The Pan Caribbean Partnership against HIV/AIDS needs to learn the lessons of the expanded programme of immunization that have enabled the Caribbean to lead the world with respect to vaccine preventable diseases and apply them in a creative way in order to achieve a more effective HIV response. These lessons include: strong unified technical leadership, systematic building of country capacity to run the programme using national resources, annual week-long meetings of country programme managers which include technical updates, progress reports, sharing and discussing best practices, challenges and lessons and refining operational plans, horizontal cooperation in which country managers from several countries take turns to do in depth evaluations with their colleagues in another country, laying the basis for the policy-makers to set strategic goals and provide the leadership and support to achieve these goals.

Of course HIV is complicated by the fact that it is sexually transmitted and requires societies to address sensitive issues such as sexual activity of young persons, sexual orientation, sex-work and drugs as well as the continued stigma and discrimination associated especially with homosexuality but also with sex-work and HIV infection. On these critical issues, with rare exceptions, our leaders fail to lead, fail to challenge narrow, bigoted thinking, fail to promote meaningful dialogue and are fearful of taking any initiative, privately claiming that it is political suicide. The failure to address structural barriers, to affirm the human rights of the marginalized and promote a supportive legal and

social framework contributes to the high HIV prevalence among some key groups especially MSM. However, it is noteworthy that HIV prevalence among MSM tends to be high in many developed countries and HIV prevalence among black men in the USA is similar to the prevalence among MSM in Jamaica. Measures to control HIV among MSM have had limited success in most settings and this needs to be analysed dispassionately and renewed efforts made (15).

In parts of sub-Saharan Africa, adult male circumcision is being rolled out and contributing to reduced HIV transmission. While adult male circumcision may not be warranted in the Caribbean, serious consideration should be given to promoting male infant circumcision as a long term strategy to reduce HIV transmission in the Caribbean. Pre-exposure prophylaxis (PrEP) has been shown to be effective provided persons adhere diligently (4, 5). In practice, this appears to be a challenge for most persons so it is advisable to await more research before embarking on this approach. In the Caribbean, programmes to control sexually transmitted infections (STIs) need to be strengthened. Both public and private practitioners have an important role in treating STIs effectively, treating the sex-partners, and promoting safe sex and HIV testing in all persons with an STI.

While we can say that the tide of the HIV epidemic is turning in the Caribbean and globally, it remains visionary to talk of achieving an AIDS free generation. International gatherings appear to thrive on high sounding declarations and elegant visionary speeches. However, preventing new HIV infections and controlling the HIV epidemic requires committed leadership at all levels to translate the vision into effective programmes on the ground using creative approaches, inspiring and mobilizing health providers and communities to transform health and social services as well as the cultural and social norms by which we live.

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