

## Editorial



# The HIV/AIDS pandemic will not end by the year 2030 in low and middle income countries

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### Abstract

The recent Lancet Commission-International AIDS Society report: Advancing Global health and strengthening the HIV response in the Era of the Sustainable Development Goals; clearly highlights the fact that the world is NOT on track in ending the AIDS pandemic by 2030. Emphasis on massive and early diagnosis and placement on Combined Anti- Retroviral Therapy (cART) remain key cornerstones in reaching these goals. Effective viral load informed care remains very promising in reducing drug resistance, and improving outcomes in infected persons. The authors argue that the current funding trends, management paradigms, research agendas, data collection and information system models, as well as the overall appreciation of the evolution of the pandemic in low and middle- income countries, lead to a logical conclusion that this pandemic will not end, especially in these countries by 2030. Major action areas are proposed for policy makers and researchers for appreciation and action.

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## Editorial

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The recent Lancet Commission-International AIDS Society report: Advancing Global health and Strengthening the HIV response in the Era of the Sustainable Development Goals; clearly highlights the fact that the world is NOT on track in ending the AIDS pandemic by 2030 [1]. Many persons in developing countries still do not know their HIV status [1, 2]. Emphasis on massive and early diagnosis and placement on Combined Anti- Retroviral Therapy (cART) remain key cornerstones in reaching these goals. The test and treat approach has heightened hopes in encouraging self- testing, as a possible tool, which is almost stigma free, and allows hard to reach groups (e.g Men Who Have Sex with men; MSM, Intra venous Drug Users; IDUs) to know their HIV serological status [3]. It has been argued elsewhere that this approach must only complement clinic based testing, as linkage to care, sustainability concerns, clear self-testing national policies, and quality assurance challenges still constitute understudied and underexplored barriers, especially in the most infected and affected countries of the world [4-6]. In low and middle- income countries (LMICs), stigma, discrimination and access to key populations (MSM, transgender persons, sex workers, IDUs, and prisoners) might constitute a key impediment in preventing new infections. For instance, key populations accounted for over 47% of new infections in 2017 [7]. The risk of acquiring HIV is 27 times higher among men who have sex with men; 23 times higher among people who inject drugs; 13 times higher for female sex workers; 12 times higher for transgender women [8]. Key populations stand to constitute a breeding ground for a new cycle of new infections in the shadows. However, the world has been too ambitious in forgetting so early that HIV related stigma is real, serious and remains a major issue of concern [7-10]. This parameter must be provided the real attention it deserves.

Many countries are still unable to maintain a reasonable and effective supply chains for cART [11]. There is indisputable evidence that placement of People Living with HIV (PLHIV) on cART is key in breaking the transmission chain [12, 13]. This gap makes attaining 90-90-90 UNAIDS goals unrealistic, when it comes to breaking the transmission chain, as well as overcoming the barrier of drug resistance. The challenge regarding resistance to first line anti-retroviral therapy is particularly worrisome. It is an illusion regarding ending the pandemic, without making 2<sup>nd</sup> and 3<sup>rd</sup> line drugs available, and properly training clinicians in identifying on clinical and paraclinical grounds, treatment failure, and properly switching

to appropriate 2<sup>nd</sup> and 3<sup>rd</sup> line drugs when indicated, and on time. We welcome efforts made lately regarding vulgarization of the viral load informed care in current HIV medicine on a global scale [1]. However, without properly ensuring adherence to available medications, proper timely switching from 1st to 2<sup>nd</sup>/3<sup>rd</sup> line drugs, and a constant supply chain, these efforts might be diluted, and might not yield expected results.

HIV in this era is a chronic disease. The success obtained with cART in making people live longer has unfortunately increased the Non Communicable Disease burden, already challenging health systems in LMICs: HIV induced cardiometabolic disease (Heart disease, stroke, dyslipidemias, glucose intolerance to overt HIV-cART induced diabetes). Special efforts have to be made in creating appropriate chronic disease management paradigms in PLHIV [14-16]. As at now, are we ready to welcome management of HIV as a chronic disease? Primary health care models have to adapt to accommodate HIV as chronic disease in its care continuum. A lot is still not known on health outcomes in PLHIV on cART, especially from the most infected and affected regions of the world like Africa [17, 18]. Most studies are from high income countries. High income countries have more stable supply chains, and the drugs used in these countries are very different. Applying findings from the latter, to the former, in disease management is almost irrational. Cohort studies including children and women are almost inexistent in Africa [18]. It is important to note that over 1.8 million new infections were recorded worldwide for the year 2017 alone [8]. As efforts continue in identifying effective drugs with fewer side effects, the HIV vaccine research agenda must remain a priority within the HIV scientific community. Holistic and context specific approaches are highly needed to fight the emerging pandemic of drug resistance. There is lack of quality data, especially in LMICs, which makes monitoring of the pandemic very problematic [17, 18]. Funders and governments must specifically include quality data collection and information schemes in their health system strengthening agendas of countries as a whole, and for HIV in particular. Dependence on foreign aid and imported management models will not be helpful in accelerating the ending of this pandemic at diagnostic, treatment and monitoring levels. The current funding trends are insufficient to end the HIV pandemic by 2030 in LIMCs [1, 19].

The World Health Organization (WHO) is mobilizing material and financial resources for its 2017-2021 plans to support a coordinated international effort to prevent, monitor and respond to the emergence of HIV drug resistance, and to strengthen country

efforts to achieve the global HIV targets [19]. If the momentum in funding the fight against the HIV-AIDS pandemic maintains the current gear, it might be too idle to dream of ever ending the HIV-AIDS pandemic, at least, not by 2030 in LMICs.

## Competing interests

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The authors declare no competing interests.

## References

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1. Bekker L-G, Alleyne G, Baral S, Cepeda J, Daskalakis D, Dowdy D *et al.* Advancing global health and strengthening the HIV response in the era of the Sustainable Development Goals: the International AIDS Society-Lancet Commission. *The Lancet*. 2018 Jul 28;392(10144):312-58. **PubMed | Google Scholar**
2. Alzate Angel JC, Pericàs JM, Taylor HA, Benach J. Systemic factors and barriers that hamper adequate data collection on the HIV epidemic and its associated Inequalities in Countries With Long-Term Armed Conflicts: Lessons From Colombia. *Am J Public Health*. 2018 Oct;108(10):1341-1344. **PubMed | Google Scholar**
3. WHO. A short technical update on self-testing for HIV. WHO. Cited 6 Oct 2018.
4. Tang W, Wu D. Opportunities and challenges for HIV self-testing in China. *The Lancet HIV*. 2018 Sep 10. Cited 2018 Oct 6.
5. Bain LE, Ditah CM, Awah PK, Ekuwe NC. Ethical implications of HIV self-testing: the game is far from being over. *Pan Afr Med J*. 2016 Oct 26;25:114. **PubMed | Google Scholar**
6. Gagnon M, French M, Hébert Y. The HIV self-testing debate: where do we stand? *BMC Int Health Hum Rights*. 2018 Jan 18;18(1):5. **PubMed | Google Scholar**
7. UNAIDS. UNAIDS warns that HIV-related stigma and discrimination is preventing people from accessing HIV services . Cited 2018 Oct 6.
8. UNAIDS. Global HIV & AIDS statistics-2018 fact sheet. Cited 2018 Oct 9.
9. Seb-Akahomen OJ, Lawani AO, James BO. Stigma and suicidality among people living with HIV attending a secondary healthcare facility in Nigeria. *Perspect Psychiatr Care*. 1 September 2018. **PubMed | Google Scholar**
10. Stockton MA, Giger K, Nyblade L. A scoping review of the role of HIV-related stigma and discrimination in noncommunicable disease care. *PLoS One*. 2018 Jun 21;13(6):e0199602. **PubMed | Google Scholar**
11. Minior T, Douglas M, Edgil D, Srivastava M, Crowley J, Firth J *et al.* The critical role of supply chains in preventing human Immunodeficiency Virus drug resistance in low- and middle-income settings. *J Infect Dis*. 2017 Dec 1;216(Suppl 9):S812-5. **PubMed | Google Scholar**
12. Albert J, Berglund T, Gisslén M, Gröön P, Sönnnerborg A, Tegnell A *et al.* Risk of HIV transmission from patients on antiretroviral therapy:a position statement from the Public Health Agency of Sweden and the Swedish Reference Group for Antiviral Therapy. *Scand J Infect Dis*. 2014 Oct;46(10):673-7. **PubMed | Google Scholar**
13. Lundgren J, Phillips A. Prevention of HIV transmission by antiretroviral therapy. *Lancet HIV*. 2018 Mar;5(3):e108-e109. **PubMed | Google Scholar**
14. Nou E, Lo J, Hadigan C, Grinspoon SK. Pathophysiology and management of cardiovascular disease in HIV-infected patients. *Lancet Diabetes Endocrinol*. 2016 Jul;4(7):598-610. **PubMed | Google Scholar**
15. Noubiap JJ, Bigna JJ, Nansseu JR, Nyaga UF, Balti EV, Echouffo-Tcheugui JB *et al.* Prevalence of dyslipidaemia among adults in Africa: a systematic review and meta-analysis. *Lancet Glob Health*. 2018 Sep;6(9):e998-e1007. **PubMed | Google Scholar**

16. Triant VA, Perez J, Regan S, Massaro JM, Meigs JB, Grinspoon SK *et al.* Cardiovascular risk prediction functions underestimate risk in HIV infection. *Circulation*. 2018 May 22;137(21):2203-2214. **PubMed | Google Scholar**
17. Kengne AP, Ntsekhe M. Challenges of cardiovascular disease risk evaluation in people living with HIV infection. *Circulation*. 2018 May 22;137(21):2215-2217. **PubMed | Google Scholar**
18. Manga P. HIV and Heart Disease in Africa. *Journal of the American College of Cardiology*. 2015 Aug 4;66(5):586-8. **PubMed | Google Scholar**
19. WHO. **HIV drug resistance**. WHO. Cited 2018 Oct 7.