

Zero New HIV Infections, Zero Discrimination, and Zero AIDS-Related Deaths: Feasible Goals or Ambitious Visions on the Occasion of the World AIDS Day?

AliAkbar Haghdoost, Mohammad Karamouzian¹

Regional Knowledge Hub for HIV/AIDS Surveillance in EMRO Region, Institute of Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran, ¹Researcher at the Research Center for Modeling in Health, Institute of Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

Date of Submission: Oct 04, 2012

Date of Acceptance: Nov 16, 2012

The global community has stepped forward in responding to the AIDS pandemic.^[1] After all these efforts to control this terrible HIV pandemic for over 30 years, we are now in a position to overcome the virus. Through this painfully long time, we have learned enough to gain the upper hand. We are able to turn the pandemic around through effective policies and programs. However, we think we should keep our eyes on the reality. Although the human immunodeficiency virus (HIV) is not a mysterious agent anymore, we have never witnessed a virus quite like this one with the multiple factors that make it so persistently unrelenting. We do know a lot about this virus but still, we are yet to find a way to protect our communities from its attack and minimize its burden effectively. HIV/AIDS, as one of the most important current health issues globally, knows no barriers. Almost all countries, regardless of their development level, socio-economic status, and cultures are facing its considerable social, cultural, and economic impacts. But have you ever wondered why this virus is so universal? Why do we have to put its name on the top list of major health struggles, while meeting minimum promising progress, particularly in some parts of the world like the Eastern Mediterranean Region? Why cannot we just take the virus down and celebrate its end?

Correspondence to:

Prof. AliAkbar Haghdoost,
The Head of Regional Knowledge Hub for HIV/AIDS Surveillance in EMRO Region,
Kerman University of Medical Sciences, Kerman, Iran.
E-mail: ahaghdoost@kmu.ac.ir

How to cite this article: Haghdoost A, Karamouzian M. Zero new HIV infections, zero discrimination, and zero AIDS-related deaths: Feasible goals or ambitious visions on the occasion of the world AIDS day? *Int J Prev Med* 2012;3:819-23.

HIV/AIDS IS NOT MERELY AN INFECTION, IT IS A COMPLEX ISSUE

In light of all the challenges of the last decades regarding HIV, let's take a look at the bigger picture here. When it comes to HIV transmission routes, the first thing that comes to the mind is sex and drugs. For example, in most countries (Islamic countries, in particular), both homosexual and heterosexual contacts are highly sensitive topics. Extra-marital sex, multi-partnership, male/female sex-work, injection drug use, and many other surrounding issues related to HIV are of serious concern not only for health-policy makers but also for experts from different disciplines such as sociology, medicine, law, economy, religion, and politics. On the other hand the legal status of sex work varies from country to country, from being considered a form of abuse (e.g. Norway, Iceland, and Sweden), to be a legal occupation (Netherlands, Germany), or classified as a crime deserving punishments (many Muslims countries).^[2] The latter could even make taking serious actions globally, even harder.

On top of sex-related concepts, a major complicated public health issue is yet to be tackled among drug users and particularly injecting drug users (IDUs). They are another core group with completely different characteristics. Similar to the previous sub-groups, IDUs are a hidden and

marginalized population, scattered in every corner of every country. They may not have proper and easy access to most services. In many cases, even with an active approach, the systems cannot reach them and respond to their needs effectively. To be honest, it is the way beyond passing clean syringes. Do you really think that clean syringes are the most important thing they are in need of?! The answer is clear; most of them are homeless and need strong psycho-social supports as well as social security and at least a half-decent job.

By the way, we wish it was only sex workers and drug abusers. Consider other vulnerable populations such as street-children, prisoners, babies, and partners of high-risk groups. Providing a complete protection to these populations is so difficult, if not impossible. In fact, almost next to nothing can be done without a firm and effective collaboration of different role-players, including policy makers, universities, and research organizations accompanied by a strong commitment from governments all around the globe.

Let's think for a minute about HIV positives and their situation at present. Detecting positives, following them up efficiently, and making sure they are minimizing their risky behaviors and receiving proper medical care and treatment is such a tough task to be achieved. There are number of countries out there who are having a really hard time providing sufficient funding resources for these services.

On top of the above-mentioned struggles and making the pandemic even worse is the fact that HIV along with tuberculosis and other horrible infections make a deadly combination. Globally, the most common cause of death among AIDS patients which kills one of every three patients is tuberculosis.^[3] Although HIV-related tuberculosis is both curable and avoidable, incidence rates continue to rise in developing nations where HIV infection and tuberculosis are endemic and resources are limited. In some areas of sub-Saharan Africa, the rates of co-infection exceed 1000 per 100,000 populations.^[4]

Now that we have reviewed some of the barriers we are facing regarding disarming this deadly virus, let's talk about the excuse given to us to write this editorial article. The "World AIDS Day" on December 1st brings people from all over the globe

together, to raise awareness about HIV/AIDS and demonstrate international solidarity in the face of the pandemic. The day is an opportunity for all the related sectors to talk about the pandemic's status and promote HIV/AIDS prevention, treatment and care around the globe. Between 2011 and 2015, World AIDS Days are held under the theme of "Getting to Zero: Zero New HIV Infections, Zero Discrimination, and Zero AIDS-Related Deaths." In this context, a global vision was developed for all countries; working together toward zeros, but a big question is how we can approach these ambitious targets? They are fantastic and attractive phrases that motivate all stakeholders to contribute and work together more effectively, and the world deserves no less than such a future; however, they are not easily reachable, in reality.

ZERO NEW INFECTIONS

Everyone who is concerned about HIV/AIDS is familiar with the transmission routes of HIV in a population. However, generally speaking, unprotected/unsafe sex and injections are the major routes through which HIV spreads among a population. The good news is that these two behaviors can be controlled; however, not ceased. Let's think about the ABC (Abstinence, Being faithful, Using Condoms) of AIDS; how possible and achievable is abstinence in a population? With the average age of marriage rising globally, premarital sex and extra-marital sex are increasing in both rural and urban areas. No need to say that having such relationships means practicing more riskier behaviors.^[5] Additionally, in a world where sex and drugs are a major form of currency in underground economies, efforts to eliminate them in any society are not likely to be triumphant. In other words, it is very naive to hope that such risky behaviors can be rooted out in any population.^[6] Given the lack of evidence supporting the abstinence strategy in the first place, it is crucial that condom use and education be emphasized.^[7]

In talking about safe sex, the first thing that comes to mind is condom use; however, what really helps reduce the transmission is the correct and consistent use of condoms during sex acts. Several lines of evidence strongly support the claim that correct and consistent use of male and female condoms during vaginal or anal sex can

protect against the spread of Sexually Transmitted Infections (STIs), including HIV.^[8,9] Well, how should a teenager or street children know how to correctly and effectively use condoms? The answer is simple; sexual health education.

There comes another question; when should we start this education? In some western countries, sexual health education begins at a very young age; however, this delicate and sensitive issue cannot be easily broadcasted in more conservative societies, including religious countries. We should accept the fact that today's youths, start to be interested in sex and the issues about sex and sexuality in a younger age than before. However, sexuality is often overlooked as a typical part of their development. Open discussions of sexual activity are taboo and highly stigmatized in many cultures, religious ones, in particular. This may be the main cause of neglecting youth sexual development by parents, schools, and government agencies as well as ignoring sexuality as a normal part of human growth. Moreover, there is a very important question here: How much can sex education encourage youth to start sex acts earlier? Although among literature, we may find some experiences in this regard, honestly, the response to this question is not clear and consistent in different communities. In other words, when dealing with sexual health education, we should be very cautious as it may act as a double-edged sword. Providing children with sexual health education can lead to a rise in premature sexual practices among them.^[10,11]

In regard to risky sexual behaviors, Men Having Sex with Men (MSM) have quite a different story. Although in some parts of the world, same-sex marriage among men is legal, evidence shows that MSM faces psychological pressure, physical punishment, and violations of human rights. Because of all the societal pressure, some MSM may not tend to reveal their true sexual identity. Some of them called "Men on the Down Low" should be paid great attention to; they have both hetero and homosexual relationships but keep the homosexual ones a secret.^[12,13]

Now, let's get back to IDUs. The transmission of HIV among IDUs is greatly adding to the burden of HIV/AIDS worldwide. Through harm reduction programs, people who inject drugs can take precautions against becoming infected with HIV by using sterile injecting equipment, including

needles and syringes, for each injection. Although having an efficient harm reduction program is a gift, the monitoring and evaluation of that are equally important. For instance, in Iran more than 80% of IDUs receive free needles for injection, less than 30% of them are going through prevention programs. We should make sure that the harm-reduction programs are functioning well.

Last but not least, the Mode of Transmission (MOT) of HIV in different corners of the world is changing. For example, a recent study in Iran suggested that although unsafe injection among IDUs is still the main MOT, unsafe sex-contacts seem to have a sharp upward trend throughout the country.^[14] These changes in the pattern of transmission should be taken into account while planning prevention strategies to reduce transmission of the virus. To cut this long story short, as long as the formerly discussed issues are not taken into consideration, our decreasing risky behavior's strategies including condom promotion programs are very unlikely to be doing well.

ZERO DISCRIMINATION

Although over three decades have passed from the onset of the pandemic, stigma, and discrimination against people living with HIV and those populations at increased risk of HIV transmission still exists to varying degrees across the world. These barriers to controlling the pandemic are more massive in traditional and religious societies. The reasons underlying discriminations against People Living with HIV (PLHIV) are really complicated, and it is sometimes unclear which ones make the goal of reaching a zero even harder. HIV/AIDS is related to immoral risky behaviors in the back of the society's mind. Many people get terrified when they hear the word HIV or AIDS and in turn most PLHIV face judgmental looks from others. Actually, people living with HIV/AIDS might face stigma and discrimination within their family, at work, and even in health care settings, which are supposed to be the source of treatment, care, and support. The latter seems to be the most important one which we will be focusing on in the next few paragraphs.

A number of studies around the globe claim that most health care providers have neutral or positive attitudes toward HIV/AIDS patients; however,

patients themselves tell a different story and report extensive experiences of discrimination in health care settings.^[15-17] Many countries have witnessed women in labor being rejected from the hospital due to their HIV positive status. HIV positive men, women and children in desperate need of surgery have been ignored and even denied of their right to receive care and treatment.^[18,19] What is worse, the discrimination is not only faced by people who are living with HIV, but also by those belonging to stigmatized groups, such as drug users, MSM, and Female Sex Workers (FSWs). Discrimination in health care settings can result in avoiding or delaying seeking healthcare, refusing disclosure of HIV status when seeking care, and not adhering to HIV treatment among patients. Patients would feel isolated and depressed, which reduces their chance of getting the care they need. This would also limit the effectiveness of prevention programs.^[20]

ZERO AIDS-RELATED DEATHS

Since the beginning of the pandemic, more than 60 million people have been infected with the HIV virus and approximately 30 million people have died of AIDS. In 2010, there were an estimated 34 million people living with HIV, showing that there are more people living with HIV than ever before, as people are living longer due to the beneficial effects of antiretroviral therapy.^[21] Progresses in case detections and treatments mean that HIV should not be a death sentence anymore. It is treatable and millions of HIV-infected people across the globe now have access to treatment and are living long, healthy lives. The number of AIDS-related deaths worldwide is gradually decreasing from a peak of 2.2 million in 2005 to about 1.8 million in 2010. Nevertheless, AIDS-related deaths have increased about 11-fold in Central Asia and Eastern Europe (from around 8000-90,000), and more than doubled in East Asia (from 24,000-56,000) from 2001 to 2010. Similarly, in the Middle East and North Africa, AIDS-related deaths have increased about 60% (from 22,000-35,000).^[1,22,23]

Medically speaking, it is possible to aim for zero AIDS-related deaths. However; logistically, politically, and socially we still have a long way to go. Most of PLHIV/AIDS are not diagnosed due to a number of reasons; from their not seeking health services, to their not being detected in less-developed

settings. Even most of those who are diagnosed and belong to outreach populations are really hard (or sometimes impossible) to follow up with. These populations not only add to the number of AIDS-related deaths, but also fuel the pandemic.

Moreover, HIV care and treatment rely heavily on international financing. In the present economic climate, the idea that these international supplies may soon dry up is much more than a threat. We must immediately find alternative ways to reduce the cost of care and treatment and to make sure that there are adequate national/international funds to sponsor prolonged treatment programs. Effective treatment for PLHIV not only saves their lives, but also saves numerous others too by reducing the risk of the virus being spread through uninfected populations. Proper care and treatment as well as quick and easy access to antiretrovirals for PLHIV, their families, and our communities is necessary.

What should we do?

It seems that holding shared human rights is the most feasible way to provide HIV prevention, treatment and care for all. The rights-based approach should emphasize the principles that people should receive routine and equal health services regardless of their HIV status. We should also design and perform continuing training projects for healthcare providers in order to increase their understanding of HIV/AIDS and improve their attitudinal skills. Moreover, stakeholders and policy makers should provide appropriate procedures and supplies at health care settings to enable health-care workers to carry out their duties with minimum risk of occupational exposure. They should also develop simple and effective systems to protect the confidentiality of patients at all levels while seeking service. We should remember that HIV/AIDS is mostly a behavior-induced pandemic. Unless the current stigma and discrimination associated with HIV/AIDS are seriously addressed, a policy of routine or mandatory testing alone seems to be doomed to continue to fail in changing the behaviors of individuals. It can even have more negative results by pushing people to keep away from health care settings if they know they will be tested.

Momentum is on our side. Together we can work towards the vision of "Getting to Zero" even if it is not entirely reachable. Focusing on ensuring

high quality, reasonable, reachable, and unbiased services for everyone is necessary. Special attention should be paid to the needs of vulnerable and key populations such as FSWs, IDUs, and MSM. We assume that next to these beautiful visions, some actual and achievable goals should also be set forward. 2015 is only less than 1000 days away; however, it is better to keep stepping ahead and not to quit moving toward these goals even after the due comes.

REFERENCES

1. UNAIDS Report on the global AIDS epidemic, 2012. p. 4-11.
2. Jeffreys S. The legalisation of prostitution: A failed social experiment. *Women Health Watch Newsl* 2003;64:8-11 .
3. Coker R, Miller R. HIV associated tuberculosis. *BMJ* 1997;314:1847.
4. Narain JP, Raviglione MC, Kochi A. HIV-associated tuberculosis in developing countries: Epidemiology and strategies for prevention. *Tuber Lung Dis* 1992;73: 311-21.
5. Bearinger LH, Sieving RE, Ferguson J, Sharma V. Global perspectives on the sexual and reproductive health of adolescents: Patterns, prevention, and potential. *Lancet* 2007;369:1220-31.
6. Enserink M. Let's talk about sex – And drugs. *Science* 2005;308:1578.
7. Barnett T, Parkhurst J. HIV/AIDS: Sex, abstinence, and behaviour change. *Lancet Infect Dis* 2005;5:590-3.
8. Majra JP. Correct and consistent use of condoms. *Indian J Sex Transm Dis* 2009;30:53.
9. Noar SM, Cole C, Carlyle K. Condom use measurement in 56 studies of sexual risk behavior: Review and recommendations. *Arch Sex Behav* 2006;35:327-45.
10. Oakley A, Fullerton D, Holland J, Arnold S, France-Dawson M, Kelley P, *et al.* Sexual health education interventions for young people: A methodological review. *BMJ* 1995;310:158-62.
11. Milburn K. A critical review of peer education with young people with special reference to sexual health. *Health Educ Res* 1995;10:407-20.
12. Millett G, Malebranche D, Mason B, Spikes P. Focusing “down low”: Bisexual black men, HIV risk and heterosexual transmission. *J Natl Med Assoc* 2005;97:52S-9.
13. Phillips L. Deconstructing “down low” discourse: The politics of sexuality, gender, race, AIDS, and anxiety. *J Afr Am Stud* 2005;9:3-15.
14. Nasirian M, Doroudi F, Gooya MM, Sedaghat A, Haghdoost AA. Modelling HIV modes of transmission in Iran. *J Res Health Sci* 2012; [In Press].
15. Nyblade L, Stangl A, Weiss E, Ashburn K. Combating HIV stigma in health care settings: What works? *J Int AIDS Soc* 2009;12:15.
16. Rankin WW, Brennan S, Schell E, Laviwa J, Rankin SH. The stigma of being HIV-positive in Africa. *PLoS Med* 2005;2:e247.
17. Valdiserri RO. HIV/AIDS stigma: An impediment to public health. *Am J Public Health* 2002;92:341-2.
18. Gielen AC, O'Campo P, Faden RR, Eke A. Women's disclosure of HIV status: Experiences of mistreatment and violence in an urban setting. *Women Health* 1997;25:19-31.
19. Carr RL, Gramling LF. Stigma: A health barrier for women with HIV/AIDS. *J Assoc Nurses AIDS Care* 2004;15:30-9.
20. Brown L, Macintyre K, Trujillo L. Interventions to reduce HIV/AIDS stigma: What have we learned? *AIDS Educ Prev* 2003;15:49-69.
21. Walker N, Grassly NC, Garnett GP, Stanecki KA, Ghys PD. Estimating the global burden of HIV/AIDS: What do we really know about the HIV pandemic? *Lancet* 2004;363:2180-5.
22. Mathers CD, Lopez AD, Murray CJ, The Burden of Disease and Mortality by Condition: Data, Methods, and Results for 2001 in *Global Burden of Disease and Risk Factors*. In: Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJ, USA: Oxford University Press; 2006. p, 68-90.
23. Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med* 2006;3:e442.

Source of Support: Nil, **Conflict of Interest:** None declare