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Will there be a cure for HIV/AIDS? Making the dream a reality



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ABSTRACT

It has been more than 30 years since AIDS was introduced in people's daily life, and it is a milestone that causes taboos, myths and prejudices. At that time, a patient told me his feelings, and he was very convincing: "I am horrified of living and afraid of dying." Three decades later, AIDS infection is not a death sentence anymore. First, doctors could make that infected patients did not die from the disease; then, that the medication which kept them alive was not so toxic. And finally, that the treatments were more comfortable. And once at this point, the possibility that the virus may disappear from the body is a more realistic goal than ever. The story of AIDS has changed and, for the first time, we can foresee in the short term the beginning of the end of the pandemic. Now it is not about whether the cure is possible or not, but about when we will have it. This current momentum, so hard to get, should be maintained. We have never been so close to achieving this goal. Although the end of the pandemic is close, this is not enough. It is worrying that some world leaders have absolved themselves of responsibility for not stopping or at least having understood the explosion of the pandemic as if it was a natural disaster. "Zero tolerance for HIV" requires a profound understanding of the stigma and discrimination of the infected people to finally get rid of the epidemic of fear and the devastation that the pandemic caused.

Today is the exact date that the characters of "Back to the future" (1985), Doctor Brown and Marty McFly, travel to the future, to October 21st, 2015. Even though it is not possible to travel in time, if someone goes back to the past, with a simple memory exercise, he/she would be able to compare some aspects of AIDS pandemic. It is very valuable to explore some questions, which are intrinsically interesting about AIDS, 30 years after the movie was released: the results could be amazing countries [1].

The first issue in which I would like to focus on is idea that was apparently blunt three decades ago. Particularly, I want to recall a 25-year-old man who was born in London (Austin B), who suffered from AIDS in terminal stages in 1985, and asked me: "Is there any possibility that a cure would be found before I die?" Surely, Austin B remembered that Emmett Brown "removed 30 or 40 years out" in a clinic of the future when he

"changed his blood". Furthermore, in one visit, he stopped worrying about leukemia and other types of cancers such as lymphoma, among others. What would I tell Austin after 33 years of fighting the AIDS pandemic? That the word cure does not sound crazy [2]. In the light of the Nobel award winner Françoise Barré-Sinoussi (codiscoverer of the HIV virus) a global scientific strategy has started, which is called 'Towards an HIV Cure' [3].

The final trigger to cure AIDS, which aroused hope in the scientific community, was the case of the 'Berlin patient' [4]. In the pages of the journal The New England Journal of Medicine Brown's healing was certified thanks to a bone marrow transplant that replaced all his blood cells with other cells from a donor who had a rare genetic mutation which could combat HIV. The bone marrow transplant is not, today, a valid option to 'eradicate' HIV, but it gave a clue of the way that should be followed [5].

All this does not mean that HIV will be healed soon, but at least the taboo of talking about it has been removed. This is just the first step, but it will still take several years to be achieved. Currently, there are many scientific barriers to cure AIDS. It can take decades to find an effective cure, but there is growing evidence which show that the option will arrive [6].

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The goal is that one day the treatment strategy can be replaced by a healing alternative: either completely eliminating the virus from the body, or achieving a functional cure, that is to say, that the virus persists in some way in the patient, but their own immune system keeps it controlled. In short, it was first achieved that the infected patients do not die from the disease; then, that the medication that kept them alive was not so toxic. Finally, we have managed to make treatments more comfortable and less toxic. And at this point, the possibility that the virus may disappear from the body, or stay there without drugs, is a more realistic goal than ever [7].

The second issue that I want to emphasize is to think about that despite the scientific advances in the prevention and treatment of AIDS, we have not succeeded in eliminating the stigma and discrimination associated with HIV infection. Around the world, there have been all sorts of reactions to the AIDS epidemic, from silence and denial to hostility and, in some cases, directly violence [8].

The fear of being labeled or socially relegated makes many people prefer not to be tested for the virus, or avoid treatment in the case of people with HIV infection. Those who have or think they have the virus suffer, in some cases, from rejection or abuse, unemployment, homelessness and exclusion from the health system. Stigma makes the infected people in a society underrated and ashamed. Such reactions represent a serious obstacle to prevention efforts and treatment, as they further exacerbate the effects of the epidemic. This depends on the country, laws, values and the specific subculture [9].

As regards one issue that produces more suffering in some people infected with HIV is the so called social AIDS. Apart from that the main objective of all information campaigns on AIDS is to reduce the spread of the epidemic preventing new infections, an additional goal is to reduce the fear of people infected with HIV and prevent their marginalization. Social AIDS is consistent in the marginalization and discrimination that is suffered by members of the uninfected population, due to the fears that the latter feel by a hypothetical virus transmission through common behaviors in everyday life relationships: shaking hands; giving a hug; kissing; sharing glasses, utensils, cutlery or clothing; using the same bathroom; or sneezing; etc. [10].

Moreover, information is a necessary but not a sufficient condition to achieve behavioral changes. There are believes about AIDS transmission, through situations which are beyond the control of the person, that favor people's discriminatory attitudes towards the affected people. Again, people think that the human suffering (the condition of being HIV-carrier) is an uncontrollable threat. Becoming aware of this is the first step towards interventions that eliminate or reduce social AIDS, in order to eliminate or reduce as soon as possible their false appearance of uncontrollability [11].

To what extent the people around us have accurate information about the ways HIV is transmitted? To what extent are they certain that such information, although accurate, gives them control over the transmission of HIV? How do information and fear interact with discrimination attitudes?

Teenagers of today are the third generation of a world with AIDS. These young people have never known a world without HIV pandemic. Statistics show that there are millions of victims of the disease, frightening. However, some people do not think so [12].

“Love has always been a dangerous feeling. If I have to die for anything, I would rather die of love, not of AIDS,” said on countless occasions the Nobel Prize for Literature, Gabriel Garcia Marquez. The writer never seemed to be surprised or inspired by the pandemic. “I remember the time when in the streets of Bogota there were large posters that warned: ‘If you do not fear God at least fear the syphilis’, this disease was like AIDS, because it was the result of love.” This is an epidemic related to human behavior. Therefore, AIDS lacks the metaphysical aura that characterizes other diseases such as cholera, for example, that may surprise you without moving from the threshold of your house. In short, this explains why the author of *One Hundred Years of Solitude* never wrote anything that is titled “Love in the Time of AIDS” [13].

Over three decades, as a result of the joint efforts of physicians, researchers and the community the utopia of the cure of AIDS has become a scene, not only necessary, but also possible. I do not doubt that the contributions to the scientific community from the pages of *Asian Pacific Journal of Tropical Biomedicine* will continue contributing to the dream of defeating this formidable enemy called AIDS.

Conflict of interest statement

I declare that I have no conflict of interest.

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