

# How Do You Believe HIV Is The Causes AIDS? Systematic Literature Review

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## Abstract

**Introduction:** The human immunodeficiency virus (HIV) has been decisively established as the cause of AIDS. AIDS scientist presents these results as strong evidence that HIV is the cause of AIDS. Such arguments are very persuasive to public and most scientists, even though there is debate among different scientists. **Objectives:** To review HIV the cause of AIDS or not. **Methods:** systematic literature review in methodology was used. The review was conducted using reliable healthcare internet database namely; Google scholar, hinari and PubMed central. Ten scientific articles were scrutinized to obtain results for the review. **Result:** The result of this review showed that a total of six articles were reviewed which talks about the belief and evidence are that HIV is causes of AIDS. **Conclusion:** Even if there is a debate among scientists about whether HIV causes AIDS was related to refusing HIV treatments and poorer health outcomes. And following or accepting the positive one that is HIV causes AIDS do not have side effect without improving of quality of life.

**Keywords:** Causes, HIV, AIDS.

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## INTRODUCTION

### BACKGROUND

The human immunodeficiency virus (HIV) has been decisively established as the cause of AIDS. Notwithstanding the evidence, a small but vocal group has continued to question the link between HIV and AIDS. Periodically, this results in media attention and generates some renewed public interest in their views. Most recently, there has been controversy in the South African and international media over the South African government's announcement that it would convene an international panel to reexamine the scientific evidence surrounding AIDS, including evidence regarding the cause and diagnosis of the disease. The debate has also recently resurfaced in other countries. The argument that HIV does not cause AIDS first attracted broad public attention in an article, published in Cancer Research in 1987, written by Professor Peter Duesberg of the University of California in Berkeley. Duesberg's contentions were rejected by scientists, but attracted attention in the mainstream press and found resonance with specific groups outside the scientific community. For example, his attacks on the 'AIDS establishment', whom he accused of perpetuating the myth of AIDS for their own ends, were appealing to a public who already had a growing sense of disenchantment with the medical community more broadly. Similarly, his

attribution of AIDS to specific lifestyle choices found favors with parts of society, especially those critical of the gay movement. At the time that the controversy started, there were still some questions unanswered on the precise mechanisms of HIV disease. Ten years later there is a more complete understanding of how HIV causes AIDS [1].

"The reason that the whole shabby story of HIV is being held in place is there's so much money riding on it. The federal government is spending about \$4 billion on just this single subject, and all that \$4 billion is predicated on the idea that HIV causes these diseases. If HIV does not cause these diseases, then that money is being wasted. And I believe it is being wasted. But the people who are the recipients of that money don't want it to stop. "I often wonder what would happen if all federal money for AIDS education, research, treatment, and so forth was suddenly dropped to zero. It's my belief that AIDS would go away. In other words, the AIDS diseases that we see today would be reassigned to their former categories Pneumocystis carnie pneumonia, Kaposi's sarcoma, and the other 25 or so different diseases, now including cervical dysplasia and so forth. AIDS has been a disease of definition. If we said that it didn't exist and didn't pay for it with taxpayers' money, it would disappear into the background of normal mortality." Penthouse

Magazine, April 1995 "There are too many shortcomings in the theory that HIV causes all signs of AIDS. We are seeing people HIV-infected for 9, 10, 12 years or more, and they are still in good shape, their immune system is still good. It is unlikely that these people will come down with AIDS later." "HIV is neither necessary nor sufficient to cause AIDS." *VI Int'l AIDS Conference, Jun 24 1990* "It's not even probable, let alone scientifically proven, that HIV causes AIDS. If there is evidence that HIV causes AIDS, there should be scientific documents which either singly or collectively demonstrate that fact, at least with a high probability. There are no such documents." *"Spin Magazine, 1994* "Years from now, people will find our acceptance of the HIV theory of AIDS as silly as we find those who excommunicated Galileo." *"Dancing Naked in the Mind Field," 1998* "Where is the research that says HIV is the cause of AIDS? There are 10,000 people in the world now who specialize in HIV. None has any interest in the possibility HIV doesn't cause AIDS because if it doesn't, their expertise is useless [2]."

"People keep asking me, 'You mean you don't believe that HIV causes AIDS?' And I say, 'Whether I believe it or not is irrelevant! I have no scientific evidence for it.' I might believe in God, and He could have told me in a dream that HIV causes AIDS. But I wouldn't stand up in front of scientists and say, 'I believe HIV causes AIDS because God told me.' I'd say, 'I have papers here in hand and experiments that have been done that can be demonstrated to others.' It's not what somebody believes, it's experimental proof that counts. And those guys don't have that." "If you think a virus is the cause of AIDS, do a control without it. To do a control is the first thing you teach undergraduates. But it hasn't been done. The epidemiology of AIDS is a pile of anecdotal stories selected to the virus-AIDS hypothesis. People don't bother to check the details of popular dogma or consensus views [2].

Recent research suggests that AIDS denialism is undermining HIV prevention and treatment in the US. One study of gay and bisexual men in five US cities showed that 45% of men agreed with the statement "HIV does not cause AIDS" and 51% of men agreed with the statement "HIV/AIDS drugs can harm you more than help you" [7]. A study of people living with HIV/AIDS also found surprisingly high rates of AIDS denialist beliefs, with 17% of infectious disease clinic patients in Baltimore agreeing with the statement "HIV does not cause AIDS" [8]. Wald *et al.*, showed that AIDS denialist beliefs were most frequently endorsed by patients who were not being treated with antiretroviral medications, suggesting a vulnerability to AIDS denialist rhetoric [3].

The current study examined AIDS denialism beliefs in a community sample of men and women

living with HIV/AIDS. We hypothesized that people living with HIV/AIDS who use the Internet will be more inclined to endorse AIDS denialism beliefs and that interest in misinformation taken from the internet will be associated with greater endorsement of AIDS denialist beliefs. In addition, we hypothesized that people living with HIV/AIDS who believe that there is a debate among scientists about whether HIV causes AIDS would demonstrate less use of antiretroviral medications, poorer treatment adherence, and poorer HIV-related health status [3].

Among scientists debate about whether HIV causes AIDS some shows their myths and some shows their evidences as follow.

### Some myths or Arguments That HIV Does Not Cause AIDS

- MYTH: HIV antibody testing is unreliable.
- MYTH: There is no AIDS in Africa. AIDS is nothing more than a new name for old diseases.
- MYTH: HIV cannot be the cause of AIDS because researchers are unable to explain precisely how HIV destroys the immune system.
- MYTH: AZT and other antiretroviral drugs, not HIV, cause AIDS.
- MYTH: Behavioral factors such as recreational drug use and multiple sexual partners account for AIDS.
- MYTH: AIDS among transfusion recipients is due to underlying diseases that necessitated the transfusion, rather than to HIV.
- MYTH: High usage of clotting factor concentrate, not HIV, leads to CD4+ T-cell depletion and AIDS in hemophiliacs.
- MYTH: The distribution of AIDS cases casts doubt on HIV as the cause. Viruses are not gender-specific, yet only a small proportion of AIDS cases are among women.
- MYTH: HIV cannot be the cause of AIDS because the body develops a vigorous antibody response to the virus.
- MYTH: Only a small number of CD4+ T cells are infected by HIV, not enough to damage the immune system.
- MYTH: HIV is not the cause of AIDS because many individuals with HIV have not developed AIDS.
- MYTH: Some people have many symptoms associated with AIDS but do not have HIV infection.
- MYTH: The spectrum of AIDS-related infections seen in different populations proves that AIDS is actually many diseases not caused by HIV [4].

### Some Evidence or arguments that show HIV Causes AIDS

- HIV fulfills Koch's postulates as the cause of AIDS.

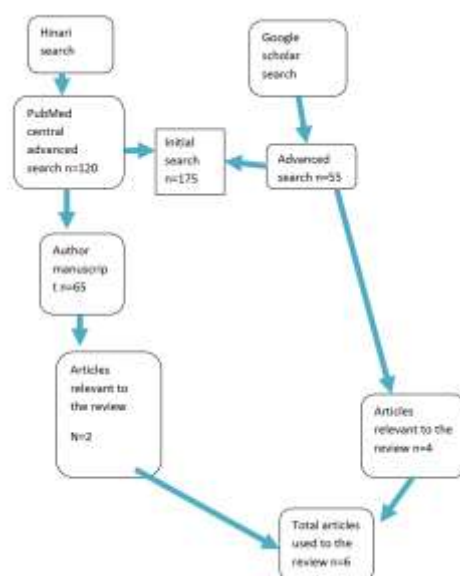
- AIDS and HIV infection are invariably linked in time, place and population group.
- Many studies agree that only a single factor, HIV, predicts whether a person will develop AIDS.
- In cohort studies, severe immunosuppression and AIDS-defining illnesses occur almost exclusively in individuals who are HIV-infected.
- Before the appearance of HIV, AIDS-related diseases such as PCP, KS and MAC were rare in developed countries; today, they are common in HIV-infected individuals.
- In developing countries, patterns of both rare and endemic diseases have changed dramatically as HIV has spread, with a far greater toll now being exacted among the young and middle-aged, including well-educated members of the middle class.
- In studies conducted in both developing and developed countries, death rates are markedly higher among HIV-seropositive individuals than among HIV-seronegative individuals.
- HIV can be detected in virtually everyone with AIDS. Recently developed sensitive testing methods, including the polymerase chain reaction (PCR) and improved culture techniques, have enabled researchers to find HIV in patients with AIDS with few exceptions.
- Numerous studies of HIV-infected people have shown that high levels of infectious HIV, viral antigens, and HIV nucleic acids (DNA and RNA) in the body predict immune system deterioration and an increased risk for developing AIDS.
- The availability of potent combinations of drugs that specifically block HIV replication has dramatically improved the prognosis for HIV-infected individuals. Such an effect would not be seen if HIV did not have a central role in causing AIDS.

- Among HIV-infected patients who receive anti-HIV therapy, those whose viral loads are driven to low levels are much less likely to develop AIDS or die than patients who do not respond to therapy. Such an effect would not be seen if HIV did not have a central role in causing AIDS.
- Nearly everyone with AIDS has antibodies to HIV.
- Numerous serosurveys show that AIDS is common in populations where many individuals have HIV antibodies. Conversely, in populations with low seroprevalence of HIV antibodies, AIDS is extremely rare.
- The specific immunologic profile that typifies AIDS -- a persistently low CD4+ T-cell count -- is extraordinarily rare in the absence of HIV infection or other known cause of immunosuppression.
- Newborn infants have no behavioral risk factors for AIDS, yet many children born to HIV-infected mothers have developed AIDS and died.
- The HIV-infected twin develops AIDS while the uninfected twin does not.
- Studies of transfusion-acquired AIDS cases have repeatedly led to the discovery of HIV in the patient as well as in the blood donor.
- HIV is similar in genetic structure and morphology to other lentiviruses that often cause immunodeficiency in their animal hosts in addition to slow, progressive wasting disorders, neurodegeneration and death [4].

## METHODOLOGY

### Study Design

This review was conducted by reviewing the different available materials i.e. electronically like hinari, PubMed, Google scholar, which were conducted in various parts of the world.



**Fig-1: Review selection process**

**Inclusion Criteria**

- Publications relevant to the review topic
- Literature available in The English Language
- Articles published from 1998-2018
- Articles have free access and contain full text

**Exclusion Criteria**

- Publications that are not in the English Language
- Publications before the year 1998
- Repeated articles in different database

- Publications not available online as free full text
- Literatures not relevant to the review

**RESULT AND DISCUSSION**

The results of this review showed that a total of 6 articles were reviewed which talks about the causal relation between HIV and AIDS which are showed in (Table-1).

**Table-1: Results of the articles/reviews for Results of the articles/reviews the causes of AIDS is really HIV**

S.no	Titles/study	Author	Publication date	Country	Conclusion on causes of AIDS
1	HIV Causes AIDS - How to Respond to Denialist Arguments	The Canadian AIDS Society Board [1].	May 2001	Canada	unambiguous evidence that AIDS is caused by HIV
2	IS "HIV" REALLY THE CAUSE OF AIDS? ARE THERE REALLY ONLY "A FEW" SCIENTISTS WHO DOUBT THIS?	Dr. Peter Duesberg [2]	August 28, 2011.	canada	Controversial
3	"There is no Proof that HIV Causes AIDS": AIDS Denialism Beliefs among People Living with HIV/AIDS	Kalichman <i>et al.</i> , [3].	December 2010	England	debate among scientists about whether HIV causes AIDS
4	The Evidence That HIV Causes AIDS	National Institute of Allergy and Infectious Diseases (NIAID)[4]	November 29, 2000	U.S.A	abundant evidence that HIV causes AIDS
5	How does HIV causes AIDS	Robin.A Weiss [5]	Aug 2003	English	Controversial ideas
6	HIV AND MORTALITY IN AFRICA Does it prove that HIV causes AIDS?	Vladimir Koliadin [6].	August 1998	Britain	A strong evidence of the HIV-causes-AIDS theory and the rest of scientific community and public gullibly accept them as such.

The results of this review showed in (Table-1) different scientists throughout the world said different things or ideas about the causes of AIDS. It is a frequent situation in natural sciences when the same facts may be explained by several competing hypotheses. Moreover, some facts may seem irrefutable evidence for a hypothesis at first sight, but, after closer examination, occur an evidence of the reverse. As far as scientific community and public normally have some controversial ideas, some said we have a numbers of evidence that HIV causes AIDS, others said there is no proof [4]. Still now or there is no significant evidence that HIV causes AIDS. Both easily accept such pseudo-evidences, and fail to notice the obvious logical flaws. The stronger the collective belief in some idea, the smaller the chance that the flaws in the "evidence" will be noticed. Even though there is a controversial idea AIDS is the leading cause of death for men and the second leading cause of death for women [2].

Some current studies show that from different perspectives of adverse health outcomes associated with AIDS denialism beliefs. Controlling for potential confounds, we found that individuals who endorsed the core belief that there is a debate among scientists as to whether HIV causes AIDS were less likely to receive HIV treatments and more likely to refuse medications, because of that those who did not believe that HIV is not the causes of AIDS they refuse their medication. Furthermore, participants who believed there is a debate and were being treated with antiretroviral medications were less adherent to their medications. Agreeing that there is debate about whether HIV causes AIDS was also related to experiencing more HIV-related symptoms and having a detectable viral load. The false hope that comes with believing that scientists do not agree that HIV causes AIDS therefore has the potential to undermine HIV prevention and treatment and leads to different negative health outcomes like increasing of

death do to AIDS and high economic burden throughout the world [4].

## CONCLUSION AND RECOMMENDATIONS

### CONCLUSION

According to this review I want to conclude that even if there is a debate among scientists about whether HIV causes AIDS was related to refusing HIV treatments and poorer health outcomes. And following or accepting the positive one that is HIV causes AIDS do not have side effect without improving of quality of life but AIDS denialism beliefs may be common among people living with HIV/AIDS and such beliefs are associated with poor health outcomes.

### RECOMMENDATION

Based on the review I want to give the following recommendations are forwarded.

#### To Researchers

There is no research on this area especially in our country so it needs further research about. How Ethiopians researchers belief about really HIV causes AIDS.

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