If HIV is the Cause of Aids Why is there a Continuing Controvercy?

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ABSTRACT

It is almost universally accepted that AIDS is caused by the HIV virus. However, ever since the inception of the AIDS crisis there have been so-called AIDS dissidents or dissenters, who do not accept this link. Some of these dissenters are major bona fide scientists yet their views are generally marginalized and are not published in the major scientific-medical journals. The aim of this review is to present the AIDS dissenters viewpoint in a neutral, uncritical manner. My aim is to provide an easily acceptable account of the AIDS dissenter's viewpoint which the reader can compare with the generally accepted AIDS model. In this way, they can come to their own conclusion as to whether or not the AIDS dissenters have a case.

Key words: Acquired Immunodeficiency Syndrome, AIDS, HIV, virus, sexually ransmitted infections, Disease Control and immune system.

INTRODUCTION

In 1981 the first case of a new disease, now known as Acquired Immunodeficiency Syndrome (AIDS) was recorded. In 1984 it was announced that the cause of this new disease had been found and it became known as Human Immunodeficiency Virus. Since then, the consensus view amongst nearly all scientists is that HIV causes AIDS and it is nearly universally accepted that by destroying the cells of the immune system, HIV causes the host to become highly susceptible to many opportunistic pathogens allowing the infected individual to succumb to these diseases, which ultimately leads to death. However, a small minority of scientists claim that HIV does not harm the immune system, but is merely a passenger virus and a marker for the true causes of AIDS, such as drug abuse, abnormal health conditions and the prophylactic treatment use of anti-HIV drugs. The AIDS dissidents (or dissenters, as they are also known) claim that each of these risk-factors are known to lower the immune system and are in fact the real cause of AIDS (Root Bernstein, 1990, 1993, Chin, 2007). It is believed by these dissidents that unequivocal evidence proving the HIV-causes-AIDS hypothesis is absent from the scientific literature and that HIV spreads throughout the population is not indicative of a pathogenic virus. One would have imagined that by now, all dissent against the AIDS hypothesis would have disappeared and that only a lunatic fringe would still maintain that we have been mistaken for nearly three decades, this is not the case however, and some thirty years after the appearance of HIV there remain a small number of scientists, some of whom hold influential positions, who are active AIDS dissidents.

The ideas of the AIDS dissenters are often marginalized and few major scientific journals publish their views. This could be seen as a an attempt keep "fringe" views out of the scientific mainstream or, as the dissenters believe, an attempt at censorship. In either case the views of the dissenters are rarely given in peer reviewed journals. My aim here is to present what the dissenters

believe in a neutral way and let the reader judge for themselves. The counter-argument is readily obtained, so here I have used the space available to give the dissenters viewpoint without attempting to any attempt at validation or otherwise.

Almost immediately after the link was made between HIV and Aids a controversy erupted which continues to this very day. Put simply, while the vast majority of the scientific-medical community strongly agrees with the so called "consensus view" there has always been a minority of scientists who believe that HIV does not cause AIDS. What then is behind the claims of these heretics? Should they even be given a hearing in the face of the vast amount of evidence which apparently exists to prove they are wrong? I think that they should be given such a hearing and my aim here is to give their views- a viewpoint which has been excluded from the major medical and scientific journals. Here, I will present the AIDS dissenters views uncritically and will make no attempt to answer them on behalf of those who accept the established view. Instead I will attempt to explain how this controversy could have continued for so long. If the AIDS dissenters are not mad then their case needs to be given, what follows is an attempt to fairly present that case.

The Standard Dissent Model

In April 1984 the American Health and Human Services Secretary announced to the media that the probable cause of the newly identified Acquired Immunodeficiency Syndrome complex (AIDS) had been discovered. Robert Gallo, a research scientist from the US National Institute of Health research scientist, then went on to assert without any reservations that AIDS is an infectious disease caused by a newly discovered virus, now known as Human Immunodeficiency Virus (HIV). Since then the consensus view amongst the scientific and medical community has followed this claim hypothesis simply put, HIV equals AIDS.

It is almost universally claimed that HIV, a retrovirus to infect and destroy cells of the immune system, especially the T-cells that form an important defense against viral and other intracellular pathogens (O'Brian, 1997). The destruction of these cells, and others involved in immunity, leads to a lowered immune response, increasing the

susceptibility of the individual to opportunistic infections such as *Pneumocystis carinii* pneumonia, systemic infections caused by the pathogenic yeast, *Candida* and Kaposi's sarcoma. This syndrome of individual diseases is referred to AIDS (Acquired Immunodeficiency Syndrome) and to date there are a least 30 diseases, which in the presence of HIV antibodies, are used to define AIDS (Centre for Disease Control, 2001).

According to the standard view of AIDS, the HIV virus is spread via the transfer of infected bodily fluids, for example, during sexual intercourse or the sharing of infected needles. Once infected with the retrovirus, AIDS will develop within 10 years and will eventually lead to death caused by one, or more, of the AIDS defining opportunistic pathogens. The AIDS complex first came to medical attention in 1981 when the Centre for Disease Control (CDC) released a report describing five cases of male homosexuals all suffering P. carinii pneumonia, a condition only found in people with severe immune system suppression. Within a few weeks, twenty one more homosexual men had been diagnosed with severe immunosuppression. Initially, this was presumed to be a lifestyle related disease because the first cases were restricted only reported in male homosexuals. Since the announcement in 1984, the scientific and medical establishments have spent the last 30 or so years and billions of dollars researching the HIV-equals-AIDS hypothesis (Mullis et al, 1994). However, from the very beginning, a few prominent scientists began to dissent against the standard HIV model. The most prominent of these included Professor Peter Duesberg, an eminent retrovirologist, working at the University of California, Berkeley, Dr. Kary Mullis the discovery of the widely used PCR technique; and Dr. Gordon Stewart, Emeritus Professor of Public Health at Edinburgh University. Even as the HIV equals AIDS hypothesis was emerging a controversy began relating to who should be given the credit for the discovery of the virus. In 1984 Dr. Robert was initially credited with discovery of 'HIV. However, Dr. Luc Montagnier, of the Pasteur Institute in Paris, claims that Gallo's virus originated from cultures grown from samples supplied by Montagnier himself. A highly visible dispute followed which was initially resolved in 1987, when both parties published a joint public statement. However, motivated by the

incredibly high financial rewards that would inevitably result from HIV antibody test kits, the dispute arose again in 1992. In a court case that eventually discredited Gallo due to falsification of a key document, the Pasteur Institute in Paris was finally accredited as having discovered HIV (Culliton, 1992).

Professor Peter Duesberg is the leading voice of "non-believers" and HIV dissident, who since the beginning of the epidemic have repeatedly claims that there is no unequivocal scientific evidence to prove that HIV is the cause of AIDS. Duesberg argued for many that HIV is only weakly infectious and that the central tenets of the theory has failed every one of the fifteen testable predictions for a new virus and fails to meet Koch's postulates (Duesberg, 1992, 1996, 2000). Papers published by other leading dissenters include Root-Bernstein (1990), Stewart (1999), Mullis *et al.* (1994) and Papadopulos - Eleopulos *et al.* (1993).

Duesberg's "Heresy"

Duesberg and other dissenters such a Root Bernstein have now retired from the fray. Duesberg's opponents would doubtless maintain that he has last seen the light but in his last statements he appeared to remain convinced of his views; his retreat has presumably resulted from extreme peer and political pressure, and the almost impossible task of gaining headway against the established, consensus view.

Duesberg's claim that HIV is not the cause of AIDS is based on the following:

HIV destroys T -lymphocytes slower than the body can regenerate them and is therefore not capable of significantly damaging the immune system (Duesberg, 1992, 1995, 1996, 2000). Most (91%) of all American AIDS patients are male and thus the disease is unlikely to be spread by heterosexual intercourse. Many AIDS patients are from abnormal health (or "at risk") groups including heterosexual intravenous drug users; male homosexuals using oral aphrodisiacs and psychoactive drugs; haemophiliacs who may have received contaminated blood transfusions; the new born of drug-addicted mothers and finally, non-haemophiliac recipients of blood transfusions.

Duesberg claims that every year, the incubation period for HIV to develop into AIDS is extended as the expected epidemic fails to materialize. He claims that there are numerous factors which are capable of suppressing the immune system which are present in AIDS patients, including multiple transfer of semen to the rectum in homosexuals and the use of recreational drugs such as amyl nitrites (also known as poppers) and opiates, multiple infections with diverse sexually transmitted diseases. AIDS in Africa he claims is associated with malnutrition and exposure to a wide range of diseases notably syphilis. Immunosuppression in haemophiliacs and blood donation recipients he claims is due to exposure to bloodrelated immunosuppressants, notably factor eight.

Duesberg also claims that there exists a ten-fold variation between the ratio of HIV infection and AIDS incidence for the different risk groups, and a dramatic variation of diseases in AIDS patients exists between the different risk groups. For example, amyl nitrate inhalant abusers predominantly suffer from Kaposi's sarcoma, drug users suffer from TB and infants primarily develop dementia and bacterial infections. There is also, he claims, a difference in American AIDS compared to European AIDS, and American and European AIDS symptoms are different from African AIDS. Duesberg poses the guestion that if the symptoms of AIDS are different in each risk group, how can a universal virus cause the disease, unless the disease was not caused by a pathogen? (Duesberg, 1992, 1995, 1996, 2000). Duesberg repeatedly claims that HIV fails to meet each of Koch's postulates, which are as follows:

Duesberg noted that researchers have failed to detect free virus and provirus in 20 to 50% of AIDS cases. Isolation outside the host environment - Duesberg states that experiments initiated to prove this postulate are flawed since the cells harbouring the provirus are removed away from the protective abilities of the patient's immune system. He claims that HIV, when inoculated into chimpanzees or accidentally into humans fails to produce the AIDS complex.

Duesberg also stated that HIV breaks "the six cardinal rules" of virology. He queried the

biochemical inactivity of the virus during the disease syndrome and also the variations between country and risk group specific symptoms (Duesberg, 1988).

An apparently critical flaw in the AIDSdissenters argument came with the claim that Koch's postulates for the AIDS-HIV association can in fact be demonstrated (O'Brian and Goedert, 1996). Another apparent piece of evidence in favour of the virus-AIDS hypothesis is the high correlation between my positive individuals and AIDS cases. Duesberg claims that this primary argument is based on circular logic. The almost perfect correlation between HIV and AIDS that is often cited by the establishment as support for its hypothesis is purely, he maintains, an artifact of the definition of AIDS itself. He pointed out that the thirty diseases that define AIDS are only diagnosed as AIDS if the patient is also HIV-seropositive. If no HIV antibodies are present, then the diseases are referred to by their individual names (such as tuberculosis). The claims perfect correlation is therefore merely due to the definition of AIDS by its hypothetical cause -HIV (Duesberg, 1996).

Reference to the high presence of HIV in AIDS patients rather than in the general healthy population is again often cited as evidence that HIV causes AIDS but, according to Duesberg, this is a trivial connection taken out of microbiological context. He argues that AIDS risk behaviour is synonymous with accumulation of pathogens from such activities as the sharing of non-sterile needles or drug-mediated sexual contacts. It is this, he claims, that many pathogens such as syphilis, tuberculosis and hepatitis are uncommon in the general population but are common in the AIDS risk groups (Duesberg, 1996).

In his many published reports Duesberg (1992,1996,2000) claims that HIV displays all the classical signs of a harmless passenger virus and is only a marker of "real" AIDS risks such as prolonged drug use and the administration of the cytotoxic DNA chain terminator drug, zidovudine (AZT), which is used for the treatment of HIV infection. The continued recreational use of aphrodisiac drugs and psychoactive chemicals such as nitrite and ethyl chloride inhalants, cocaine and amphetamines to enhance receptive anal

intercourse, are Duesberg claims, the major cause of the lowering of the immune defense system (hence the majority of American AIDS patients are male). Even before the AIDS epidemic began to emerge, it was known that amyl nitrites have an immunosuppressive effect, and that homosexuals using this drug have an altered T -lymphocyte level (Goedert *et al.*, 1982).

Duesberg also stated that the prophylactic administration of AZT and other anti-viral drugs also causes the same symptomatic effects of AIDS such as anaemia, muscle atrophy, lymphomas and dementia. AZT is capable of causing fatal diseases yet it is thought to have a "serendipitous therapeutic" effect on HIV infected individuals. Duesberg cites evidence that suggests that the drug appears to be up to 1000 times more toxic to human T -cells than was previously thought and it has been reported that HIV- positive patients taken off AZT treatment recovered cellular immunity within weeks. From the largest study of AZT -drug usage, known as the "Concord", Duesberg notes that the mortality of the AZT -treated group was 25% higher than that of the placebo group; however, the methods used by Duesberg to arrive at his figures have been hotly disputed (Cohen, 1994).

To sum up, Duesberg proposed that American and European AIDS is caused by long term abuse of recreational drugs (especially nitrite inhalants) and the consumption of anti- HIV drugs such as AZT. His "drugs-AIDS" hypothesis has apparently correctly predicted the American-European AIDS spread. The main points that support his hypothesis are that:

AIDS is restricted to recreational IV and oral drug users. The majority of drug users are male which is why the majority of AIDS patients are male. AIDS has a wide variety of disease symptoms, with each risk-group having its own particular set of AIDS defining illnesses reflecting the different drug habits within each group. The volume of drugs taken, blood transfusions or sexual contacts mediated by aphrodisiacs, correlates to which infections develop and the severity of the disease symptoms.

The western heterosexual "explosion" that was predicted during the early years of HIV-AIDS

research never occurred; a fact which Duesberg claims further supports his case against the virus hypothesis. He believes the Centre for Disease Control (CDC) has tried to cover up the less-thanexpected numbers of AIDS cases by adding new definitions of AIDS to cover more people, thus "adding life to the sagging curves" of AIDS cases (Duesberg, 1996). According to Duesberg, infants of drug using mothers have contracted AIDS.Twothirds of infected children had mothers who injected drugs during pregnancy, and many of the remaining mothers had taken non-IV drugs and/or were prostitutes. Infants suffering from AIDS have their own disease symptoms primarily bacterial infections and retardation (another reason why, it is claims, AIDS cannot be caused by a universal pathogen such as HIV). There is also a claims correlation between the amount of drugs taken by mothers and the degree of retardation and illness in their offspring that Duesberg claims further supports his evidence for the drugs-AIDS theory. On the other hand, the AIDS establishment has used these infants as proof of their virus-AIDS hypothesis, i.e. - that the virus is passed from mother to infant during pregnancy or labour (Cohen, 1994).

Duesberg claims that haemophiliacs suffer from the AIDS complex due to the presence of contaminating foreign proteins found in transfusions which are known to possess immune-lowering properties (De Biasi et al, 1991) and Duesberg cites numerous papers reporting the correlation between the number of transfusions received, the level of immunosuppression and the presence of HIV antibodies in the blood. Out of the 20,000 haemophiliacs in the US, 15,000 have contracted HIV, but only 300 have so far developed AIDS. If the virus hypothesis was correct, it would be expected that approximately 50% of the carriers would have developed or died from the complex by now. Again, the presence of HIV in haemophiliacs, it is claims merely act as a marker of lifestyle (this time the number of transfusions received) and is not the cause of AIDS. The virus-AIDS hypothesis has encompassed the normal mortality of haemophiliacs by ignoring the HIV-free controls and it is used to further back up the "proof" of the establishment's claims. Duesberg again notes the differences in disease symptoms that are found between the various HIV positive groups: homosexuals frequently suffer from Kaposi's sarcoma, whereas haemophiliacs suffering from AIDS very rarely develop this disease (Duesberg, 1992). After examining the evidence for the association between AIDS and haemophiliacs, Papadopulos-Eleopus et al (1995a), concluded that there is no evidence that transmission occurs and hence HIV cannot, Dissenters claim, account for AIDS in haemophiliacs (Papadopulos-Eleopus et al, 1995a, 1995b). Other researchers have supported Duesberg's view regarding the involvement of drugs in the AIDS complex. Al-Bayati (2001) believes, more specifically, that AIDS is the result of corticosteroids and glucocorticoids. He claims that each of these compounds has been linked to the AIDS risk groups:

AIDS in drug users and homosexuals are given glucocorticoids to treat their many infections AIDS in haemophiliacs and lood-transfusion recipients is linked to corticosteroid use to prevent immune reactions and tissue rejection. AIDS in Africa is linked to malnutrition - leading to the release of endogenous cortisol. Regular heroin, and alcohol abuse is also noted as causes of immune deficiency. Al-Bayati calls for better education of the pubic to the real risks of drug abuse and the limitation on the use of corticosteroids and glucocorticoids (Al-Bayati, 2001).

Supposed problems with the HIV antibody test

Considerable controversy has centered on the almost universal use of HIV antibody test kits. It has been claims by the dissenters that the HIV test kits and the western blot test used to detect the presence of HIV antibodies (and thus signifying an infection with HIV) produce a high number of false positive results. The antibody test kit is said to react with many other different proteins/antigens found in blood, especially in promiscuous homosexuals and drug users who have been exposed to many different proteins. The factors that are known to cause false positives include the influenza virus, herpes simplex virus I and II, high levels of circulating immune complexes, Epstein-Barr virus, malnutrition and even receptive anal sex (Johnson, 1996). When using an antibody test there is always the need for a "gold standard" against which the results are compared against. There is no such gold standard for the HIV antibody test and therefore a

positive result and its implications may mean very little (Papadopulos- Eleopulos *et al.* 1995a). These workers claim that the HIV test is scientifically invalid and incapable of determining whether people are really infected with HIV. Their paper concluded that the HIV antibody test used for predictive, diagnostic and epidemiological tools for HIV infection needs to be "carefully reappraised" (Papadopulos-Eleopulos *et al.* 1993) suggesting that the data obtained from the test's use could well be seriously flawed. Duesberg welcomed these results saying that the evidence helped to explain how "a false correlation" had been found between HIV antibodies and AIDS (Hodgkinson, 1993).

HIV antibodies also appear another argument in Duesberg's case against the virus-AIDS view. He claims that it is paradoxical for a virus to cause disease only after the onset of host immunity, as detected by the presence of HIV antibodies. He believes that the immune system is very effective which is why HIV is hard to transmit and HIV remains biochemically inactive during the AIDS complex. Thus the HIV antibody test identifies only natural vaccination "the ultimate protection against viral disease". Duesberg and Blattner (1998) responded to this argument by naming several viral pathogens which are still able to cause diseases after the appearance of protective antibodies - such as reactivated herpes simplex virus and hepatitis B, and therefore the appearance of antibodies does not necessarily lead to immunity.

African AIDS

If, as is suggested by the Dissenters, homosexual drug abusers and haemophiliacs constitute the majority of AIDS cases, why is it that in Africa there is a growing proportion of HIV infected individuals and AIDS patients? Duesberg and others have claims the AIDS risk of HIV-infected Africans is around ten times lower than the average American and European risk, and it is the same for both sexes, unlike the situation found in the USA and Europe. Duesberg also pointed out that the definition of AIDS includes the most common African diseases. Dissenters therefore conclude that the African AIDS "epidemic" is just a new name for native African diseases, some of which include weight loss, diarrhoea, oral candidiasis and Kaposi's sarcoma. These are some of the most common

diseases in Africa and impossible to clinically distinguish between previously known and concurrently diagnosed conventional diseases. To complicate matters even further, no HIV my tests are required for an AIDS diagnosis according to the South African Department of Health, which casts more doubt on the diagnosis of each case (Duesberg, 2000, 1992). Even if tests were conducted, the large number of antibodies induced by the numerous infections prevalent in Africa is likely to cause cross reactions with the antibody test kits, again leading to many false positive results. (Johnson, 1996; Papadopulos-Eleopulos *et al.*,1995b).

Dissenters claim that instead of a new virus, malnutrition, parasitic infections and poor sanitary conditions have all been proposed as causes of African AIDS-defining diseases (AI-Bayati, 2001; Duesberg, 1992). Before the discovery of HIV, protein malnutrition was identified as the world's leading cause of immunodeficiency, particularly in underdeveloped countries (Seligmann *et al.* 1984). Leading from this, Duesberg predicts that the numbers of tuberculosis, diarrhoea, fever and other African AIDS-defining disease cases may be the same in Africans, with and without HIV being present, although no research has been done to investigate this possibility (Duesberg, 1996).

The controversy surrounding the HIV/AIDS hypothesis was highlighted to heads of governments around the globe when the president of South Africa, Thabo Mbeki, wrote a letter to the heads of states highlighting the fact that African AIDS is clearly different from Western AIDS. He pointed out that his government would be researching both sides of the AIDS argument, giving the impression of sympathy towards the dissidents (Cherry, 2000). His letter caused concern within the scientific community in South Africa and a response was quickly published claiming, that by listening to the dissidents, who have no credibility in the field of AIDS research, President Mbeki was threatening future research and putting lives at risk (Rybicki et al, 2000). Complex arguments concerning claims of racism and Western-centrism have clouded the waters even further in relation to AIDS in Africa. (Harrison-Chirimuuta and Chirimuuta, 1997).

Some sociological aspects of the controversy

Mainstream scientists argue that Duesberg's arguments arise from selective reading of the literature, ignoring the evidence that contradicts his ideas and exploiting the unknowns in our current knowledge of disease mechanisms. Some critics claim that the only reason that Duesberg's unorthodox views are given any credence is due to the style in which he presents them in the public arena and meets the "emotional needs" of many people (Cohen, 1994). In the beginning when Duesberg attended a conference on AIDS in a large gay community, he received a "hero's welcome" - that was, until, a few years later, he began to mention that AIDS was more of a "lifestyle" disease. His views then appealed more to the conservative population with little sympathy for the gay movement. Duesberg's attack on AIDS researchers as "greedy self-interested mythmakers" also attracted the attention of the public with a growing disenchantment of the medical profession as a whole (Cohen, 1994, Fumento, 1993). In response to the dissident's attacks, the establishment ridicules these scientists, saying that they only hold these views to get noticed, to be different, and that the majority have no credibility in the field of retroviruses (Booth, 1988). However, the list of dissidents contains the names of many distinguished scientists. Unfortunately, Duesberg's theories have attracted irresponsible support and enabled the establishment to discredit reasonable doubts quickly and easily (Stewart, 1999). Those scientists who speak out against the mainstream view claim that they are frequently ostracized from scientific conferences and other forums. Duesberg believes that he is no longer able to obtain funding to carry out research due to holding unorthodox views. In 1993 the NCI (National Cancer Institute) decided not to renew Duesberg's Outstanding Investigator Grant - an act that Duesberg claims were politically motivated (Cohen, 1994).

In light of the lack of unequivocal evidence for the HIV equals AIDS hypothesis, why does it still hold the majority viewpoint? The dissidents respond by stating that the only way to advance a research career is to hold the consensus view.

Students are told that HIV is the causative agent of AIDS and PhD students can only receive

funding to study this orthodox view. Research laboratories, it is claims by the Dissenters, are also incapable of holding alternative views since two of the leading AIDS research centres are financed by a company that produces HIV antibody diagnostic kits (Booth, 1988).

The emeritus professor of public health, Gordon Stewart, who has worked for the World Health Organization, (WHO), believes that a secretive censorship exists within the respected, peer-reviewed journals such as Science and Nature preventing reasonable discussion on the subject and thus maintains the popularity on the virus- AIDS hypothesis. He claims that on numerous occasions where he has submitted papers questioning the established AIDS hypothesis, they have been censored. He offers several reasons for this censorship including high rewards for work within the orthodox AIDS science and pharmaceutical company's vested interest in following the viral hypothesis. It is in this way that the HIV-AIDS theory gets embedded deeply into society and its people. Opponents to this view are seen as dangerous, unknowledgeable and are often censored or ignored (Stewart, 1999).

Fumento (1993) believes that AIDS researchers are attempting to "pump up their funding" since they are obviously unable not able to obtain grants if there is no epidemic. Duesberg stated that the virus-AIDS hypothesis is "costly, unproductive and harmful". Since 1984 scientists have fought AIDS by basing their work on the HIV = AIDS hypothesis. However, despite the huge amount of money that has been spent on research and treatment (\$35 billion of public spending money in the US alone since 1984), not a single vaccine has been developed, a result Duesberg claims which is the result of a "flawed hypothesis" (Duesberg, 1996).

A Recent Expression of the AIDS-HIV Controversy

A recent expression of the AIDS dissent argument has been given in a book by Henry H. Bauer, called *The Origin, Persistence and Failings of HIV/AIDS Theory*. (Bauer, 2007). Bauer's argument can be summarized as:

1. There should be an obvious correlation

between HIV and the incidence of AIDS if this virus is the cause of the diseases and according to Bauer no such correlation exists. The virus and AIDS are not correlated chronologically and the relative impact on men and women is quite different—the maleto-female ratio for HIV having hardly changed since the epidemic began, while the ratio for AIDS has changed dramatically. Similarly, the black-to white ratio for HIV has hardly changed over the years, while the ratio for AIDS has changed dramatically. Why if HIV causes AIDS do HIV-negative AIDS cases exist? How many such cases are not known because after a substantial number were reported, they were explained away by being referred to as cases of an entirely new disease, i.e. "idiopathic CD4 T-cell lymphopenia"—deficiency of CD4 cells for unknown reasons. There are also people who test positive for HIV who have remained AIDS-free for more than twenty years; these patients have been called "long-term nonprogressors" or "elite controllers" In the standard model of AIDS this fact is accepted. but is regarded as an unsolved mystery. Why it is asked do some people amazingly avoid either infection or, if infected, avoid the harmful effects of HIV? This phenomenon is regarded as being a rarity, but since not every healthy person has been tested for HIV, we cannot know for certain how many long-term non-progressors there actually are, in the US, it may yet be as many as half of all people who would test HIV-positive.

2. The matter would seem to been settled simply by the lack of correlation between HIV and AIDS numbers which points to the fact that whatever HIV is it is not an infectious disease. The estimated number of HIVpositive people in the US remained around one million from the earliest days of the epidemic to the present time, whereas the incidence of infections goes up and down. In any given group, of patients the tendency to test positive for HIV varies with age, sex, and race in the same way. Such regular trends are not displayed by infectious diseases. Perhaps most amazingly, Bauer (2007) claims that there are no authenticated cases of AIDS which have been transmitted by needle sticks to health-care-workers and increased breastfeeding correlates with a lower not higher incidence of "HIV-positives" among the babies. Again counter to the standard AIDS view?? Claims that the sexual transmission of HIV has never been demonstrated and the largest prospective study, in which discordant couples (one partner HIV-positive, the other negative) were followed over a long period found no instances where the negative partner became positive and the incidence of HIV failed to parallel that of known sexually transmitted infections (STIs); rates of HIV often went up and those of STIs like gonorrhea or syphilis fell, and vice versa. Use of condoms apparently does not lead to a decrease in the incidence of HIV positives. and a literally impossible degree sexual promiscuity is needed to explain the prevalence of "HIV" in Africa, i.e. 20-40% of adults would need to have multiple sexual partners and would need to change them frequently. Pregnant women become HIVpositive more frequently than do nonpregnant women. According to the HIV/AIDS theory, the "viral load" determined by polymerase chain reaction (PCR) and there is no correlation between viral load and CD4 counts. In more than twenty years of attempts no one has ever been vaccinate against becoming HIV-positive have all failed a fact which is waiting explanation. Although the standard model HIV/AIDS claims that there is an average latent period of about a decade between infection by HIV and the appearance of symptoms, the data do not demonstrate such a latent period. The median age at which people first test positive for HIV and the median age of patients "living with AIDS" or "living with HIV," and the median age of people who go on to die from "HIV disease" are all approximately the same: namely, the prime years of adulthood.

A particularly damaging blow against the HIV/AIDS theory is that since the early 1990s Kaposi Sarcoma which was originally used as an indicator of AIDS in gay men has been attributed to

a herpes virus (HHV-8 or KSHV), not to HIV. Possibly the most amazing part of the Whole HIV-Aids story is that it can be shown that HIV tests do not detect HIV. There is no "gold standard" for HIV tests and cannot be, since no pure virus has ever been prepared.

So, it is claims, HIV is a postulated, but never isolated retrovirus. In practice, HIV means whatever is detected by an HIV test, tests which are known to generate a high rate of false positives, especially in populations not evidently at risk. HIV positive tests can appear after a flu vaccination, for example, and for dozens of other reasons.

DISCUSSION

The overriding fact about AIDS dissent is that it has persisted for some thirty years, as long in fact as the AIDS-HIV link has been proposed. It has simply not gone away. The dissenters have not slunk away into the shadows embarrassed by their apparent stupidity. Instead new dissenters have joined the argument. Why should this be why should these dissenters continue snapping at the heels of the medical establishment, often at personal risk to their own careers? Perhaps they are indeed mad or stupid! Some dissenters have in fact changed their position over the years, although whether this the crushing reflects peer pressure put upon them or a genuine change of mind in the face of overwhelming evidence is not clear. Robert Root Bernstein for example, before he eventually left the debate, moved towards the idea that co-factors are involved and that HIV alone does not cause AIDS (Root-Bernstein and Merril, 1997). However, other notable scientists, such as Lynn Margulis continue to express their doubts about the AIDS-HIV link (Margulis, et al, 2009)

Most readers of this review would simply take the view that the HIV-AIDS link cannot be wrong because so many fist-rate scientist b believe in it, simply put- it is the consensus view. It should be pointed out however, that consensus views in science and medicine have often turned out to be wrong. The best example is provided by the story behind the cause of stomach ulcers. Up until the mid 198os every expert on gastroenterology would unequivocally state that gastric ulcers are caused by stress, and would ridicule anyone who opposed this view. It turned out however, that this consensus view was wrong and that the bacterium, Helicobacter pylori, in fact causes ulcers-gastric ulcers are an infectious disease, a fact which was resisted by the majority gastroenterologists. Could the same thing happen with the HIV-AIDs consensus view? Only time will tell, but in the interim it seems certain that the AIDS dissenters will continue with their rearguard action.

A note on the references

Many major scientific-medical journals refuse outright to accept any papers which argue against the standard HIV-AIDS viewpoint. As a result, AIDS dissenters have to publish their view wherever they can, in newspapers, magazines and non-peer reviewed journals. This of course give ammunition to those who support the consensus view who can argue that the dissenters case is so weak that it can only be accepted by non-peer reviewed or "low quality" journals. This fact explains the relatively large number of web sources quoted below.

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