

A. E. W I L D E R - S M I T H

AIDS

WORLD FAMOUS SCIENTIST GIVES YOU

FACT
WITHOUT
FICTION

A.E. Wilder-Smith
AIDS—Fact without Fiction

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T.W.F.T. Publishers
Costa Mesa, California

AIDS — Fact without Fiction

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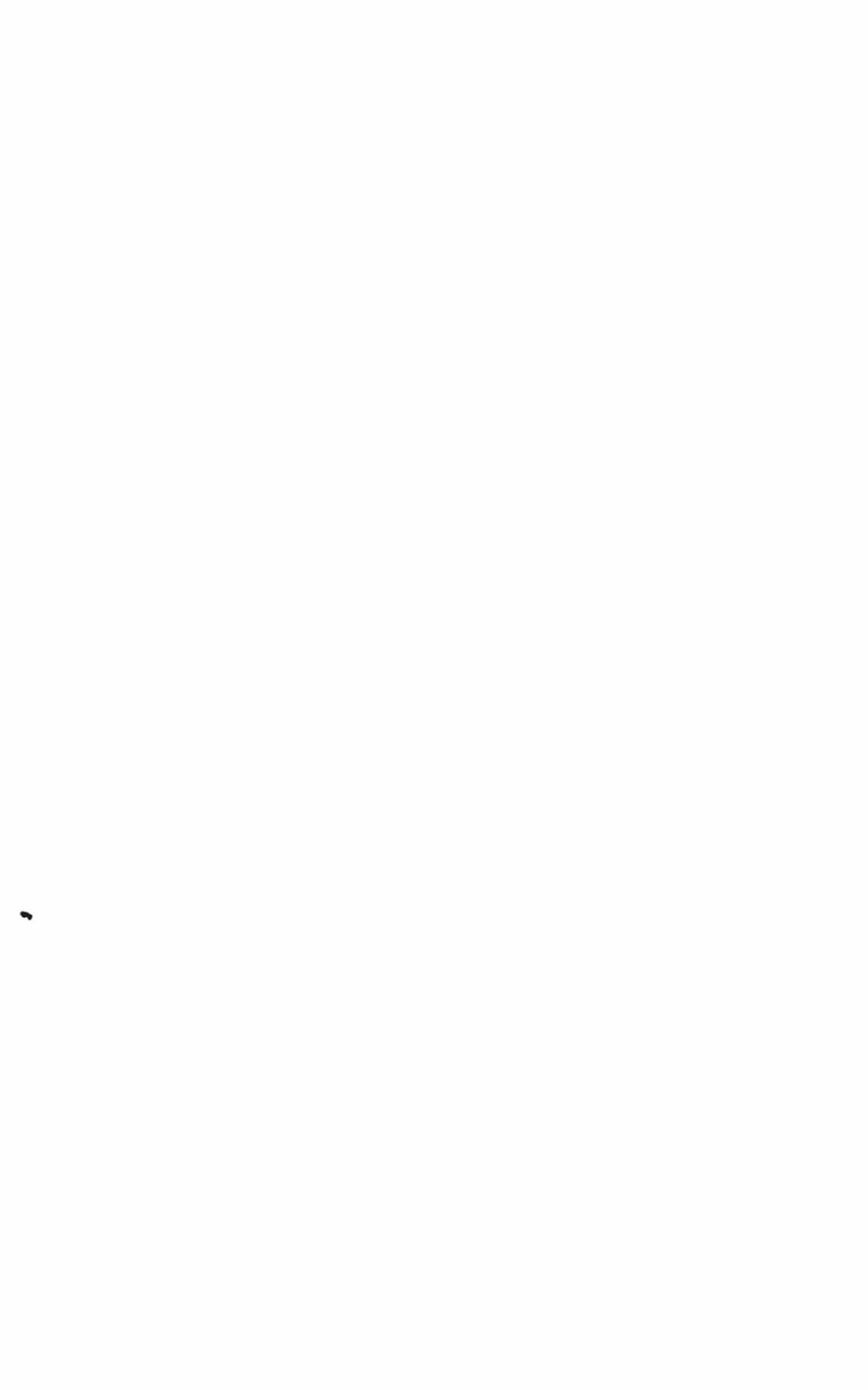
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Introductory Remarks

Chapter III (Incidence and characteristics of the HIV infection) requires medical knowledge. Readers who do not have this knowledge may skip this chapter as well as Chapter V - AIDS Therapy: Current therapeutical AIDS research - without losing the coherence and the important overall message of this book. Please note the short explanatory vocabulary list at the end.



Preface

The Situation: Uncertain

It is highly uncertain how many people have become infected with the lethal AIDS virus. The publicized numbers are purely speculative since they only cover the registered AIDS cases, and maybe not even those, because many patients die from other diseases (such as brain death or tuberculosis, TBC) during the course of the AIDS infection. Some of these cases are not covered by the official AIDS statistics.

There are many other reasons why the total number of AIDS infections is unknown :

(a) Some AIDS patients conceal their disease — often because they are afraid of discrimination — until it is no longer possible in the final stages of the illness.

(b) Many patients do not know that they have been infected with the AIDS virus. The illness may only become evident after many years and may not be recognized as such by the patient. There may even be a possibility that the disease does not become evident at all or that the infected person dies of other causes, such as another illness or in an accident. During this period, it may be possible that the AIDS carrier may infect his surroundings with the lethal AIDS virus.

(c) The customary AIDS tests have a margin of uncertainty about them and are not completely indicative of

whether a person is infected. The reasons for this are that it may take months or years until the infected organism produces the antibodies that are detectable with the usual tests. The tests provide information on the antibodies, not on the actual AIDS virus in the blood stream. On the other hand, there are cases where no antibodies are produced by the AIDS infected patient. The test result is thus "negative" while the tested person in reality is AIDS "positive".

The test has mainly been applied to high risk groups (homosexuals, drug addicts, promiscuous persons and hemophiliacs) and no exact data is available for the rest of the population. In Berlin, a series of tests was performed on 2,200 pregnant women who were not part of the aforementioned high risk groups. The results were alarming: Roughly one pregnant woman in 250 out of this pool of average people was infected with AIDS! None of these nine mothers ever imagined they had become infected.¹

Routes of Infection: Contradictory

There is agreement on one thing: AIDS is mainly communicated via blood (exchange of needles with drug addicts, blood transfusion, organ transplants, etc.) and via sexual intercourse (seminal and vaginal fluids). However, the AIDS virus has been found as well in the sweat, urine, excrements, saliva and tears of AIDS carriers. The statement that casual social contact (drinking from the same glass) with AIDS carriers and even french kisses or intercourse with condoms are safe, rely on the assumptions that:

a) The AIDS virus is quickly killed once it is outside the body because of its high fragility.

b) A large quantity of the virus is needed to cause the infection.

Some scientists contradict these statements because it

has been shown in scientific investigations that the AIDS virus sometimes proves to be very resistant and long lived (e.g. active after seven days in an open petri dish). AIDS researcher Dr. John Seale maintains that even one single virus can cause the infection with AIDS.

If these opinions prove to be true, then french kisses may be as deadly as other bodily contacts in which infected sweat infiltrates skin abrasions (such as in sports or sexual intercourse — even with condoms — when both partners sweat).

Nobody can precisely tell how many ways there are of contracting the AIDS infection. The statement that no such case has been observed outside sexual intercourse and blood exchange does not stand up to close scrutiny. Not only are there countless patients who do not know how they have become infected, but also AIDS carriers often cannot determine with absolute certainty where he or she became infected. One can only rely on assumptions. The partner of an AIDS carrier who has become infected, and thinks it happened during intercourse, might possibly have contracted the disease with a french kiss. It is not possible for anyone to actually witness infiltration of the virus. There have not been long-term conclusive and extensive studies made on AIDS infected couples who have only had contact via french kisses and not had sexual intercourse.

How can it be proved that an infection took place by using a common drinking glass, when it may take years before the disease manifests itself?

Each statistical analysis of AIDS shows a quite considerable fraction of cases under the heading "infection contraction uncertain". This holds for children who have not had sexual intercourse, have not used drugs, are not hemophiliacs and do not have AIDS-infected mothers. These facts point to still unknown routes of contagion. These unknown infection routes must be actively researched over long periods of time.

The Handle on the Epidemic: Uncertain

Because "decent people shouldn't have anything to do with it", serious AIDS research has been obstructed right since the beginning of the epidemic, and in particular in the USA. The topic was initially hushed up. In addition, there were quarrels between French and American scientists investigating AIDS which held up progress too.

An overly zealous, "decent" society is quick in criticizing "outsiders". So the silence of many AIDS infected patients is understandable.

There have been cases where windows have been broken at the home of a family with an AIDS infected son, hemophiliac since birth, and where, the next morning, the words "beat it you pigs" had been sprayed on the door. There have been cases where a 75-year-old grandmother refused to see her grandson because she heard that doctors found an AIDS infection after his hospitalization. There have been cases where a little girl was stoned and beaten at a playground because someone found out her mother was AIDS infected (by an unknown route). — These cases illustrate why many people who carry responsibility in the fight against the AIDS epidemic do not know what to do. Maybe they will hide the real causes of the danger of contagion in order to avoid such panic and discrimination.

The human race, estranged from God and suffering from general lack of security, will not be able to cope with the evil of fear. It is justifiable to assume that many of us who feel the fear of losing our own health and prosperity due to contact with AIDS carriers, will be quick to mark those who pose this threat as "unworthy of living" and will want to eliminate them. On the other hand the appeasing tactics of officials is often used as a cover for the defense of sexual freedom, which is, in the view of many "progressives", one of the main "achievements" of the sex revolution.

As it has been pointed out in *Time* magazine, not only have we been able to split the atom but also many of today's marriages as well! Here we meet both faces of our modern society: On one hand, we have rapid technological and scientific progress. And on the other, there is moral breakdown and the inability to deal with the ethical values of freedom. The wrong impression of freedom sees a free man as someone who may do whatever he wishes. Freedom is often perceived as a non-committed, completely independent style of life expressible in lust if need be. It is this perception that tries to get rid of everything that could possibly restrict in any way personal autonomy. However, there is no such thing as absolute freedom. He who decides against life is really in favor of death. He who decides against ethical norms and God-given commands is actually in favor of chaos and decay. The true alternative would be: free order. Order without freedom is dictatorship. Freedom without order is chaos and leads to decay. History teaches us that this chaos is often used by people hungry for power to satisfy their own personal desires.

When it became clear six or seven years ago that the hot baths and saunas mainly visited by homosexuals in San Francisco had become the centers from which AIDS was being spread, nobody dared at first to do anything much about it publicly. Later Dr. Dan William, a medical doctor and homosexual himself, dared to suggest in a newspaper article that posters should be posted in the baths, warning everyone of the danger of AIDS infection by homosexual acts. This suggestion, which did not include the closing down of the saunas, caused major public indignation because the so called sexual liberation was unwilling to give an inch on what it sees as its achievement — i.e. free sex. The leading gay magazine, *Body Politics*, declared William to be “a monogamist spreading panic and an epidemic of fear”.² “Instead of deciding what to do about their own safety, many homo-

sexuals defended their right to their beloved practices as if their life depended on it."³

Finally, promiscuity (intercourse with frequently changing partners) — an achievement of modern sex ideology — boosted the spread of the AIDS epidemic, supported also by perverted sexual habits of the type one finds mostly among homosexuals.

This fact is still being concealed because if one names promiscuity, drug abuse and homosexuality as the lethal messengers that brought us AIDS, then one would have to include the sexual revolution as well — and this is unthinkable for many today. Rather, conceal the facts and hope that "safer sex" may bring a breakthrough. Just do not admit that the basic failure lies in a society which would not accept God-given commandments concerning sexual fidelity. That is why so many AIDS campaigns, depending on the country where they are carried out, became a rather dishonest attempt to couple the ideology of the sexual revolution together with the fight against AIDS — namely "safe" promiscuous sex. This symbiosis is destined to become another costly failure, one of many in the short history of AIDS. The slogan "safer sex", meaning really safe promiscuous sex, "use condoms", allows the very promiscuity which precipitated AIDS in the first place.

We should not forget, however, that there are many honest and mostly uncelebrated men and women in many countries engaging in an exemplary manner in the fight against AIDS and in AIDS research. They deserve our respect and all our support.

Remarks

In this book, the author exemplifies the afore-mentioned aspects of the AIDS problem. He shows the connections between ideology and AIDS education, presents facts normally concealed and gives insight to the trends of

current AIDS research.

It has been sometimes necessary to repeat certain facts in viewing them under different perspectives so that the reader is reminded of the context. This is necessary given the complex nature of some of the material.

The author has followed up on the fight against AIDS (and the hush ups) in many parts of the world. He does not intend to give a different and detailed review of the assorted AIDS campaigns in those countries on account of the overwhelming amount of material involved.

It should be noted that in this book there are two often recurring words which are used in the following manner:

(a) Sodomy. (the usual meaning, and the meaning used by the author, are given in the appropriate text). The term means copulation with a member of the same species and sex or with an animal.

(b) Quarantine. It should be noted that quarantine should not be seen in a narrow way as the isolation of each individual AIDS carrier, but in a wider sense. This may require physical isolation in some cases (e.g. if an AIDS carrier continues to infect others by his sexual activity in spite of his knowledge of his infection). However, it will often mean stricter measures adapted to the dangers of infection, such as air filters for personnel in contact with AIDS/TBC combination patients or prohibiting all high-risk groups from donating blood.

Prologue

AIDS (acquired immuno deficiency syndrome) was first differentially described in 1981. Since then the syndrome has spread epidemically. In the USA alone there were more than 38,000 active cases reported by autumn 1987. The three year mortality rate is in excess of 90%, that is 90% of all full blown AIDS cases are dead within three years after they have been diagnosed.

It is estimated that between 1 and 2 million US citizens have been infected with HIV (Human Immuno Deficiency Virus) (autumn 1987). Presumably a large fraction of those will manifest the illness in due course.

The US Public Health Service estimates 270,000 full blown AIDS cases by 1991, cases showing opportunistic infections which can be lethal due to immune system deficiency. The AIDS syndrome itself will always be lethal once it has been clinically established.¹ However, the infection does not always end up immediately in the AIDS syndrome. Thousands of Europeans and possibly millions of Africans have been infected with HIV to date.² In the past, infectious epidemics have been brought under control by means of well adapted, medically founded therapies, vaccination and quarantine. In the case of the AIDS epidemic these measures are only partially applicable since there is not yet any effective AIDS therapy — neither vaccination nor chemotherapy. The only fully effective measure available today to stop

the epidemic would be the complete sexual quarantine and veto of body fluid exchange of those who have been infected. However, this drastic measure would immediately collide with the modern emancipated sexual attitude.³ Renunciation of intercourse is seen as inhuman. Renunciation by the infected of unrestricted social contacts in everyday life, in hospitals and at home is viewed just the same. This may be the reason why we do not have the mandatory AIDS test and the obligatory reporting of AIDS infected individuals.⁴ The political AIDS lobby renders almost any kind of limitation useless. Safe sex is not safe enough when one deals with an almost 100% deadly syndrome. Any exchange of bodily liquids with a person who is AIDS infected and tests HIV positive or HIV negative may mean the danger of infection with AIDS. Therefore, it might seem that the sexual quarantine and the strict control of the use of non-sterile injection needles in drug abuse, constitute the currently only effective measures against the AIDS epidemic.

However, even the fight against AIDS has become politicized since AIDS may be a direct consequence of the worldwide collapse of the moralistic-social context and the "emancipation of sex life" which translates into ideologically permissible promiscuity. This is not fair either with respect to the already AIDS infected patient or to the still uninfected individual. In the end it will be medical science itself and not politics or lobbying which will heal and protect against AIDS. Medical science, however, has to yield today because it is the politician and not the scientist who distributes the tax money by which research is funded.

It is just recently that scientists have begun to consider some of the consequences of politically directed sexual emancipation.

For one, the physical and psychic ability of young people is dwindling. According to some statistics, this dwindling is caused, at least in part, by exaggerated sex

life. The continued sexual stimulation produces physical and psychic distress.⁵ Exeptions to this rule only confirm it.

Secondly, casual promiscuity leads to unstable marriages. Divorce statistics prove this.⁶ Adultery leaves the family destabilized with severe consequences for generations to come for children and families.

Thirdly, there are personal psychological consequences to be paid arising from excessive sexual activity.

Last, but not least, one has to keep in mind the fact that AIDS was not primarily related to homosexuality but rather to promiscuous heterosexuality.⁷

According to current medical standards any medical practitioner is allowed to identify carriers of most infectious diseases and to prevent infection of other healthy individuals. Since, however, many AIDS carriers are sexually-emancipatively active the question of AIDS has become a political one rather than a medical one. For this reason the doctor is not allowed to apply the normal medical standards for infectious diseases as far as AIDS is concerned. He is not allowed to identify AIDS patients. In many countries even doctors who are AIDS carriers themselves do not have a mandatory obligation to inform their patients of this fact before invasive operations. This risk is not even allowed for Hepatitis B. In the USA, any medical doctor or dentist who has contracted Hepatitis B has to get written permission from his patients before he is allowed to start treatment. The consequences of Hepatitis B may be grave but they are generally less than those of AIDS which is lethal as soon as the syndrome has surfaced. The current political understanding is that anyone, even AIDS infected individuals, may exercise the freedom of sexual promiscuity. This is said to be their right as members of a permissive society. The only politically opportune restriction against AIDS is therefore that of "safe sex" which generally means the use of condoms. In the light of current knowledge one has to

consider, though, that any direct exchange of body fluids with AIDS carriers is risky. Any medical student knows that condoms do not even protect absolutely against pregnancy, so that condoms obviously can allow the exchange of certain body fluids.

Those who imported AIDS into the western world — not into Africa — were homosexuals. In Africa, on the contrary, heterosexuals with promiscuous life styles were responsible for spreading the virus. Once established in the West and in Africa the infection spread rapidly through drug addicts who shared needles, hemophiliacs who received AIDS infected blood and blood products, and individuals who were practicing promiscuous hetero- and homosexual relationships.

These individuals now do not wish to be identified. Identification would ruin their image; restrictions would be unacceptable. That is why AIDS carriers may not be identified as yet. They have succeeded in lobbying legislatures to recognize their risky, emancipated lifestyle in law. Bills against homosexuality have been struck down. The result was predictable: homosexuality and sodomy (intercourse with animals) have been practically legalized in many countries in spite of the AIDS epidemic.

Some priests in European countries have even rendered homosexuality morally acceptable too by marrying homosexual and lesbian couples (cf. Romans 1:18-32). It is believed by medical experts that male homosexuality weakens the immune system even without an AIDS infection and thus prepares the body of the recipient for the AIDS virus. Homosexuality may thus be seen as pathological, even without the influence of the AIDS virus.

In this way it is ideologically conditioned policy which hampers the fight against the AIDS epidemic in many parts of the world. On September 10, 1987, I heard on the English Radio 4 channel the following message in the news broadcast: The TUC, the leftist English trades

union formerly led by the marxist Arthur Scargill, had demanded that no Aids carrier be discriminated against, i.e. identified. Nobody should be able to fire anyone for the reason that he or she is an AIDS carrier. But if this person is working in the grocery department or has otherwise close contact with other people, what should one do then?

Since when may a politician or a political organization such as the TUC decide on medical measures which can only be determined by a medical scientist? According to Rita Süßmuth (former Health Minister in Western Germany) AIDS tests may under no circumstances be used to discriminate against other people.⁸ But what does discrimination really mean?

If the word is used in the sense of degrading or belittling, then the former Federal Minister of Health was perfectly right. But if the word is used in the sense of restricting, in order to protect one's own or other people's health, then she is certainly wrong. Maybe it is even the AIDS patient who needs protection and isolation because of his weakened condition and because he may be endangered by social contacts. Protection through isolation (in the original meaning of the word discrimination) may be necessary for the AIDS carrier in order to go on with life. At the same time it is necessary for healthy individuals to be protected especially against promiscuous AIDS patients in order to prevent the epidemic from spreading. If in former times someone was the carrier of an infectious disease which threatened the public health, that person was isolated automatically in quarantine in order to protect the environment and himself. Today the rules for isolation are often violated, and with good reason, since most infectious diseases can be treated therapeutically and the consequences are not dramatic. AIDS, however, is deadly, the incubation period is long and an efficient treatment is not in sight. In contrast to former times when medical science was in the hands of medical

doctors, today, influential groups have succeeded in preventing strict measures against AIDS (condoms are no absolute protection against AIDS) based on political and so called human rights.

Robert Koch and other epidemiologists showed many years ago, how to deal with infectious diseases. Why now, for the first time in the recent history of science, should groups uneducated in medical sciences be allowed to get rid of the standards of medicine just to satisfy their ideology? Especially since AIDS has to be seen as a lethal epidemic. Politically motivated people disallow under the banner of progress, of non-discrimination and of sexual emancipation, even the identification of infectious carriers. They disallow effective measures, even though the virus replicates a thousand times faster than any other known organism. This virus not only destroys the immune system it also affects the central nervous system (ARC) destroying it as well.

Chapter I

Introduction

The Organism Known as HIV

The organism that causes AIDS is a retrovirus that has become known under the names of LAV/HTLV-III (Lymph Adenopathy-Associated Virus/Human T-cell Lymphotropic Retrovirus) or HIV (Human Immunodeficiency Virus). It was discovered in January, 1983, by Luc Montagnier and colleagues at the Pasteur Institute in Paris. In 1984, Robert C. Gallo of the National Cancer Institute discovered the virus independently of Montagnier as the cause of AIDS.

The Bundesgesundheitsamt (Federal Ministry of Health of the Federal Republic of Germany) defines AIDS (Acquired Immuno Deficiency Syndrome) as follows (Communication No. 43, December 1984): "An acquired immune deficiency syndrome due to infections with LAV/HTLV-III in which diseases occur, persist or re-occur, owing to defects in the cellular immune system and for which immune deficiencies there are no other known causes ." ¹ This definition is outdated since the AIDS virus also attacks the central nervous system as well as the immune system.

In other words, the AIDS virus attacks the defense system of the body (the immune system) in such a way

that the body is no longer able to react against a whole scenario of diseases and imported cells. In this way, rare forms of cancer may be caused such as the Kaposi syndrome or certain forms of pneumonia (*Pneumocystis carinii*), as well as manifold infections against which a healthy body would develop immunity.

As the acronym AIDS implies, the virus is known for attacking the immune system of the body. It must be emphasized at the outset that the virus does not only attack the cells of this system. This makes up only a fraction of the possible routes of attack. That is, the AIDS syndrome does not necessarily link to the attack of certain cells of the immune system. The AIDS virus also attacks certain cells of the brain (nervous tissue and neurons), irreversibly and lethally. This means that certain neurons and tissue in the brain can be attacked, damaged and eventually killed by the virus. This may lead to a demented state similar to Alzheimer's disease. Along this second track the AIDS syndrome causes a steadily increasing dementia and a paralysis of the central nervous system of the AIDS patient similar to that observed in Alzheimer patients. AIDS may also simulate senile dementia besides the other symptoms of immune deficiency.

The damage caused by the AIDS virus is therefore not only seen in context with the damage to cells of the immune system. The virus may also cause increasing damage to the brain's cellular structure. One should not restrict the extent to which damage is caused to the immune system alone.

In addition to those two primary modes of damaging the body, one has to take into account that the AIDS retrovirus proliferates rapidly. The definition of what exactly a retrovirus is, will be given later. The AIDS organism duplicates at a rate roughly about a thousand times faster than that of other biological cells, including bacteria we now know. By the time the virus has infil-

trated the body and the replication has begun, the fight against it by medication is very difficult. There is still (April 1989) no cure for AIDS known to medicine. Only palliation is possible. No method of selectively stopping HIV-replication without damaging normal cells is known at present.

This still does not cover all that has to be said about AIDS. Even though the human body answers HIV attack with the production of HIV-antibodies, this production rarely sets in immediately after the infection (AIDS testing so far relies on detecting these antibodies — more about this later). The so called incubation period may take months, even years. This means that the AIDS virus may be in the blood stream for quite a while without the production of any antibodies. A patient may thus be AIDS infected and contagious yet no doctor could trace this infection by detecting antibodies in the blood immediately after infection by HIV.

The consequence of the above is grave. A patient infected with HIV may infect others through sexual intercourse, or secretion or other blood transfer or organ transplants, without ever knowing he is AIDS infected and contagious. His blood test will show a negative AIDS antibody result. The AIDS virus itself is difficult to identify in blood and tissue, which is the reason why laboratories work with the antibody test. In consequence, a man who carries the AIDS virus, but who has not developed any antibodies, may be cleared as non-infected. He may donate his blood and infect the blood bank, simply because his antibody test was classified as negative. In reality he is positive, meaning the virus is present and that he is contagious. Using this blood in surgery or transfusions risks infecting the recipients. It is not always known who donated the infected blood being used. There have been attempts to eliminate the AIDS virus in blood without rendering the blood useless. Those procedures have yet to be perfected.

New testing procedures that concentrate on detecting the virus itself and not only its antibodies are needed urgently to prevent blood banks from contamination. AIDS has spread for several years through infected blood, not only through intercourse or exchange of needles between drug abusers. Hemophiliacs and even babies have become infected with the AIDS virus by means of direct transfusions of blood or secretion exchange.

The facts stated above lead to another important conclusion with respect to AIDS and the way it spreads. Whenever a biological organism has been infected with the AIDS retrovirus, it will eventually produce antibodies. Antibodies normally fight an infiltrator and in this way a human being or any other organism becomes immune and protected against certain infections, such as mumps or mycobacterium tuberculosis. In practice, immunization by vaccination against tetanus and poliomyelitis relies on this process. One infects the body to be protected with a weakened form of the virus that is not able to cause the disease but that will nevertheless get the antibody production started. In this way, the body is immunized against the infiltration of virulent, not weakened, organisms, and is thus protected.

As soon as the AIDS virus has entered the blood and tissue, the human body will try to fight the AIDS retrovirus by the production of antibodies. The detection of these antibodies is a keystone in the present diagnosis of AIDS.

However, one has to take into account that 1) AIDS inhibits the immune system. Therefore the antibody production is restricted. 2) The occurrence of AIDS antibodies may not stop the further course of the infection and the full blown attack of the disease may follow. 3) This is why the attack can go on to destroy the rest of the immune system with the consequence that the virus proliferates. 4) This proliferation takes place a thousand times faster than that of all other known organisms and far faster

than all bacteria known to us. Thus it overwhelms the attacked system. The patient then contracts opportunistic infections, becomes increasingly weaker, until death ensues. 5) In addition, one has to consider that the rapid proliferation of the retrovirus conditions a high mutation rate. After each mutation one would need another and different antibody to fight the new mutant subspecies of the AIDS retrovirus. The crippled immune system responsible for the antibody production finally capitulates before the manifold AIDS subspecies until the human body gets swamped by the explosively proliferating viruses, and finally dies.

For this reason our own antibodies do not stop the development of the AIDS syndrome and attempts at immunizing against the AIDS virus have been in vain so far. That is why experts do not put too much hope in the fight against the AIDS syndrome with vaccines. Theoretically, there is little ground for hope. If our own antibodies are not able to cope with AIDS, how can one hope that artificially produced antibodies will be more efficient? This is one reason why research workers are concentrating today on chemotherapy. It needs no mention that work on immunization therapy continues. So far, however, none of the methods have been successful.

Let us return to the question of antibodies: Retroviruses such as HIV or LAV/HTLV-III mutate rapidly, as has been pointed out. The new subspecies of HIV are mutants and require therefore new sub-antibodies to fight them. The impaired immune system will thus have to continually produce a whole new, rapidly changing spectrum of antibodies against the continually changing virus, if the AIDS retrovirus is to be fought efficiently. That is one reason why one must bet on chemotherapy, which aims at killing the whole retrovirus at once or at least inactivating it.

Newer AIDS Symptoms: Tuberculosis

Recently, there has been another important development in the AIDS epidemic. Tuberculosis had been regarded as a defeated disease, at least in the western world. Efficient chemotherapy, better nutrition and improved standards of hygiene (better living conditions) in many parts of the world have contributed to the success in the fight against tuberculosis. The disease is being eradicated in affluent western society. This situation has, however, changed in some homosexual areas. Not only has there been an increase in the number of tuberculosis cases, but also in the reported number of an otherwise rather rare form of cancer (Kaposi sarcoma). The reason is easy to understand: Treating a normal TBC patient with chemotherapy (INH, streptomycin, formerly also PAS) supported his immune system. The chemotherapy alone would not overcome the intruder without the help of the immune system. Once however, the AIDS retrovirus has undermined the immune system of an organism, the normal chemotherapy does not help in the usual manner and the tuberculosis mycobacterium can overwhelm the AIDS patient. The patient with the full blown AIDS syndrome will then die of a tuberculosis infection — or indeed of any other opportunistic infection.²

These AIDS/TBC patients often cough violently. The lung secretion which thus gets expelled, does not only contain *M. tuberculosis* but also the AIDS retrovirus, since AIDS-infected patients have been shown to carry the organism in all bodily secretions (sperm, saliva, sweat, vaginal secretion, plasma and blood). Consequently, the AIDS/TBC patient does not only expel *M. tuberculosis* but also the AIDS retrovirus.³ Whenever the AIDS/TBC nursing personnel inhales the exhaled secretion containing the viruses, the tuberculosis may infect their lungs. One has to remember that TBC causes lacerations and open wounds in the lungs of the infected

person through which an exchange of AIDS viruses is easily effected into the blood stream of the patient. This preconditions a second patient to die of AIDS and tuberculosis.⁴ It is for this reason that homosexual and AIDS groups are afraid of an AIDS-TBC-epidemic⁵. The HIV “gets wings” by means of the TBC and infection by droplet transfer becomes a reality. AIDS alone is not so easily transferred, but combined with *M.tuberculosis*, HIV gains as it were “wings” and may be transferred by droplet infection.

Other Aspects of the Fight Against AIDS— Restriction of Direct Infection

The AIDS virus needs to find its way directly into the blood stream to cause an AIDS infection. Any kind of open wound will do. If blood, plasma, sperm or other secretions of an AIDS carrier find their way into the blood stream of another human, then even a potentially minute amount of living virus (1 virion) will be sufficient to cause the AIDS syndrome.⁶ Intercourse, transfusion or wounds are sufficient to facilitate an infection. As far as we know the AIDS virus cannot infiltrate through intact skin. There is, however, concern, as shown above, that through the combination of TBC and AIDS droplet infection (TBC — by coughing)⁷ will be a possible route. This may be of consequence if the lung membranes and the air passages of patients are no longer intact, which can be the case where bleeding of any kind occurs. If small lacerations and cracks damage the integrity of a membrane then there may be the possibility of contracting AIDS through social contacts (see citations later on).

The rapid spread of the AIDS syndrome progresses via:

a) Patients who have received AIDS infected blood transfusions during surgery. Hemophiliacs are AIDS endangered because they receive transfused blood or blood products directly into the blood stream.

b) Drug addicts who share infected needles.

c) Prenatal and perinatal care. AIDS infected mothers can transfer their retroviruses directly through small membrane breaks to their pre- and neonatal babies. The infection can be transferred anywhere through wounds or weaknesses in the baby's skin. Normally, there is no direct exchange between the blood circulation of the mother and that of the unborn baby since everything has to pass to the baby through the membranes of the placenta. If, however, a membrane loses its integrity, then the baby may be danger. Such a loss of membrane integrity is hardly avoidable during the birth process. Purely chemical exchange between the mother and child does not mediate an infection.

d) Homosexual and heterosexual intercourse. Normally, the circulatory systems of both partners stay separate during both kinds of intercourse. If however breaks or lacerations of membranes are present, such as with hemorrhoids or other bleeding wounds, a transfer of viruses can happen that may cause AIDS infection.

The morphology of the vagina and of the penis is such that membranes are not normally damaged during heterosexual intercourse (with the exception of the destruction of the hymen during the first sexual encounter of a virgin). This is why there is normally no transfer of retroviruses this way. There are, however, exceptions to this rule, if one of the sex partners has been infected with AIDS. The chances of a transfer of the AIDS virus in heterosexual intercourse are larger for frequently changing sex partners. Increased promiscuity causes the increased possibility of an infection since the sperm and the secretions of the AIDS infected partner carry the AIDS retrovirus and may cause AIDS infection if membranes are not intact. The same holds true for the AIDS infected woman. Her vaginal secretions may transfer the AIDS virus to her partner. If she is infected, the more sex partners she has, the greater the chances of an AIDS

transfer. The infection may take place through the infected man or woman whether or not he or she has developed antibodies.

Promiscuity is the main predisposition for today's AIDS epidemic. One has to remember that free promiscuity is a direct "achievement" of the "sex-emancipation" of our generation. A woman is obviously not designed to have intimate contacts with a multitude of men, just as a man is not designed to have intercourse with many women. If it were not for today's promiscuity among the general population, the AIDS epidemic would not have reached its present proportions. Thus the epidemic is a direct consequence of sex emancipation leading to promiscuity. That is, the AIDS epidemic is a political-ideological matter and is not necessarily and primarily connected with medicine.

But the AIDS epidemic is not only a socio-political matter, for it also leads to a moral and psychological catastrophe in society. Psychologically and physiologically, a woman is made for ONE man and vice versa. It is indeed the fidelity of a woman toward her husband and vice versa which may catalyse the development the best characters and physiological traits in both man and woman.

Through the direct politically motivated encouragement of unrestricted promiscuity in young society, the best character traits in our society have been largely discouraged. For example Bertolt Brecht, the well known German Marxist author, suggested that sexual intercourse between students should be encouraged in German high schools in specially equipped class rooms as a recognition of good academic achievements.⁸ The expression of attributes such as fidelity, abstinence, patience, and inner purity within our society is being actively suppressed as being "non-progressive". In other words, instead of encouraging self-control in the human being, society has encouraged the training of young people who

are a nuisance to themselves and others because they are conditioned by instinct. A highly developed society, which has to be based on reliability, fidelity, self denial and diligence cannot have as its leaders men and women who are worn out beings driven to death by their instincts and lack of restraint. Promiscuity without bounds reduces us to the level of dehumanization — to the level of instinct driven animals.

The above remarks concern the purely moral aspect of the great AIDS epidemic at present being unleashed. As has been maintained by Dr. Dani Bolognesi of Duke University Medical School, in a hearing of the U.S. congress on July, 22, 1985, that about 2 million Americans may have contracted the AIDS retrovirus. They are now in danger of developing the full blown AIDS syndrome. This number may double every year if we cannot do anything about it on a moral or on a medical basis. People who make such statements⁹ must be taken as serious medical doctors and researchers and not as panic-makers, (cf. Rita Süßmuth,¹⁰ Former Federal Minister of Health in the German Federal Republic) who designated such warnings as those of panic makers.

e) Homosexual intercourse. Intercourse between men is often carried out anally, (i.e. the anus is used as a vagina). There is also oral and manual intercourse. The following aspects should be considered in this homosexual behavior:

The intercourse is often promiscuous. Some homosexuals have 10-15 intimate contacts per night, sometimes of a casual or anonymous nature. When the number of anonymous, casual and intimate partners increases, the probability of contracting AIDS increases proportionately. We will go into detail on homosexual methods of intercourse, with additional literature citations¹¹ later.

In contrast to the vagina, the anus is not made to withstand the pressure and the friction occurring during sexual intercourse. Fissures in the walls of the anus and

rectum occur easily and may lead to bleeding. AIDS viruses in the sperm that get into the fissures and lacerations transfer directly into the blood stream and infect the partner.

The same thing happens in the case of oral intercourse (fellatio). Many people have small wounds, small ulcers or herpes infections in their mouths. The hard or soft gums may bleed during brushing the teeth, another sign that the membranes are not intact. AIDS infected sperm which gets into the mouth of such can mediate a virus transfer.

It is for these reasons that AIDS infections are seen as closely related to homosexual habits in the western world. Also, in all countries, there is a close relation between infections and AIDS-infected blood transfusions. However, in Africa, where AIDS may have had its origin, AIDS is rather unrelated to homosexuality. Why this difference in the etiology of the disease? It should be noted that AIDS in the west and in Africa is less connected to sexual intercourse (homosexual or heterosexual), as such, but rather to the fact that an enormous amount of promiscuity is present in both regions. In making such statements we exclude the present spread of AIDS through blood transfusions and dirty, reused needles etc., in drug abuse anywhere in the world.

The more active sex partners there are, the greater the probability of contracting AIDS. Again this relates the new epidemic of the 20th century to the decline of the family and the disappearing strict monogamy as a result of changed sexual ideology. The chance of contracting AIDS is linked to the number of sex partners, whether they are homosexual or heterosexual. We will, however, reconsider this statement later on. AIDS is thus a direct physiological and pathological consequence of the changed sex morality in today's society. In reality, we see it as the expression of the new, materialistic man who is closely tied to his animalistic instincts instead of the

mastering of these instincts by a higher morality. Instead of letting our psyche and our spirit master our desire for sex for the good of our common interests, our instincts are allowed to master our psyche. The soul and our spirit drown under the hegemony of the body and its instincts.

Our society is still at the beginning of the possibilities of the AIDS epidemic. Monogamy and abstinence might perhaps somewhat restrict a further spread of the disease, but not once the spread has exceeded a certain critical value. In this case, there will be only a few who are not infected by the virus and those who reproduce normally and monogamously will infect their "normal" uninfected partners. If there were to be no more "normal" sexual intercourse in the future, the extinction of the human race is imminent — or the "Brave New World" approaches reality in which we see human reproduction taking place from swines' uteri!

But a return to sexual abstinence, monogamy and self-control will not be within the power of a normal, emancipated human being. Only a strong inner or religious motivation can enable anyone to say "no" to himself (Jesus in Luke 14:33) in sexual and other matters! Without this inner motivation there seems to be no way now for immunological (vaccination) and chemotherapeutical methods alone to limit the epidemic. So far, the success of both these therapies has not been encouraging. We will report on the latest attempts in both directions at the appropriate place in this book.

Why Does AIDS Occur so often in Homosexuals?

In discussing this question we should bear in mind that we are not talking of people who have contracted the virus via drug abuse, infected blood or through intimate contact with other AIDS patients. It is a historical fact that AIDS was introduced into the west by homosexuals and

that it occurred first in the USA and then in other western countries through the homosexuals. Statistics prove this, even though certain political parties and lobbies attempt to cover up this fact.

There are some AIDS experts¹² who see the problem in the following light: Sperms penetrate into the rectum during anal intercourse and may penetrate the thin walls and small fissures in this channel. If the sperm is infected with the AIDS retrovirus, an infection may be caused by allowing the virus to enter directly into the blood stream of the recipient.

But even if the sperm is not infected with AIDS, the normal immune system becomes stressed by the sperm attack alone.¹³ The continuing stress of foreign protein (sperms represent foreign protein) on the healthy immune system leads to its overloading and therefore weakening. Consequently, the immune system becomes less capable of resisting other forms of infection, including, of course, the AIDS virus.¹⁴ It is no wonder, therefore, that active HIV-negative homosexuals are more likely to contract infections than people who do not practice anal intercourse. The immune system of the homosexual is already weakened before it is attacked by an AIDS infection. The body thus contracts many diseases more easily. The human body is not designed for this kind of foreign protein stress by homosexual habits and cannot stand up to it for long periods.

We wonder, therefore, whether the biblical attitude toward homosexuality (Romans 1:24-28) and bestiality (Leviticus: 20 etc) does not have its justification in the terms of physiology and psychology. The biblical prohibitions may not have been arbitrary at all but rather well considered. The punishment was severe. Why? Because homosexuality is physiologically and psychologically unhealthy and may not be "gay" at all.

One hundred to 200 years ago, it was syphilis and gonorrhoea that were the incurable venereal diseases of

the time — some of the great musicians and artists died from them. These diseases have been more or less overcome now by chemotherapy. But tolerance and resistance to them appear to be on the rise again. Are we seeing the same kind of development with AIDS?

Chapter II

HIV:—Historical and Other aspects

The Discovery of the Organism in France and the USA

The French team of Luc Montagnier at the Pasteur institute had already discovered LAV (the Lymphadenopathy-Associated-Virus) in 1983. It is a retrovirus that causes AIDS and the ARC (AIDS-Related Complex). In order to stimulate further research, a short notice of the discovery was made. However, the reports in the scientific press were so cautious in their formulation that most scientists hardly noticed them and their importance was not recognized.

On April, 23, 1984, Margaret Hechler of the National Institute of Health announced the definitive discovery of the AIDS-ARC virus at a press conference. Dr. Robert Gallo and his team at the National Cancer Institute declared they had isolated a retrovirus which they named the HTLV-III, which stands for "Human T-cell Lymphotropic Retrovirus." AIDS itself stands for "Acquired Immune Deficiency Syndrome", an acronym.

When the discovery of the AIDS virus was announced, the general opinion was that it was only a matter of time before a suitable blood test would be developed — maybe one half year — and the bloodbanks of the world would

no longer contribute to its spread through infected blood. It was further believed that within two to three years a vaccination against the AIDS syndrome would be available. Thus science would have a handle on the epidemic. But reality in research did not collaborate here. Even though an AIDS antibody test has been developed, there is no sign yet of a vaccination or of any other kind of therapy (including chemotherapy) which are curative and not merely palliative.

Many specialists are of the opinion that not only have vaccination and chemotherapy failed in the fight against the epidemic but also the needed collaboration between Luc Montagnier and Robert Gallo! There has been an extended and fierce international fight about AIDS patents and copyrights between the United States and the Pasteur Institute. The French demanded the patents on the anti-body tests for AIDS by declaring its priority in the field, which indeed was the case. Because of this fight, a lot of money and time have been lost that could otherwise have gone into scientific research. It also diminished the zeal and drive of scientists. For weeks, the main participants testified before judges and lawyers — time they could have better utilized by working in their laboratories. Besides, few lawyers have any real insight into the complicated matters of retrovirus research.

Early Clinical Work and Observations (GRID)

On July, 3, 1981, K. Altman published an article in the *New York Times* entitled "Rare form of cancer found in 41 homosexuals". The *San Francisco Chronicle* published the same article the same day under the heading, "Eruption of cancer in homosexuals".

Even though AIDS had become recognized as a medical entity only after 1980, these cancer cases were recorded as a syndrome as early as 1975. The long AIDS incubation period initially caused diagnostic problems since the

virus can be in the blood stream of the patient for a long time before overt AIDS symptoms or antibodies surface. It is therefore assumed that the AIDS epidemic may have been covertly present in the western world as early as 1970. *The Lancet* of October 29, 1960 reported the case of a young man with oral and anal ulcers who died rapidly from a pneumocystis and a CMV (Cytomegalovirus) infection. Reading of this description today one immediately thinks of AIDS.¹

Between 1976 and 1981, The Center for Disease Control, (CDC, USA) defined AIDS as a disease occurring almost exclusively among homosexuals. During this period, only one case had involved a female who became infected with AIDS. Ninety four percent of all cases involved men who were homosexual or bisexual. This presumed correlation between AIDS and homosexuality led to the use of the acronym GRID (Gay Related Immuno Deficiency Disease).

There then arose a strong political movement in the USA to abolish the name GRID because the connotation had become synonymous with the lifestyle of homosexuals. GRID was banned and replaced later by AIDS.

Early on, many experts thought that the origin of the AIDS epidemic in the West lay in Haiti. But the opposite may in fact be true because AIDS was found on the US mainland before it first occurred on Haiti.² Homosexuals from the U.S. apparently spread the disease while vacationing in Haiti, since Haitians are perhaps often more resistant to AIDS than other groups.

In Europe a similar situation arose: Homosexual men in Europe were the avant-garde from which the infection spread through blood banks and drug abuse. In Africa, however, heterosexual but promiscuous men spread the disease.

The infection mechanism by which the retrovirus reached humans — be they from Europe, America or Africa — is still unknown. Some believe the AIDS virus

occurred initially in green monkeys, and was transferred to human beings from them. These monkeys are hardly harmed by the virus. Other animals do not seem to be affected by it either. It is known that a change of the host organism for the virus often leads to a pathological eruption of lethality. The change of host can enhance the lethal properties of an organism drastically. It is the opinion of some experts that sexual abuse of the monkeys by humans (bestiality) led originally to the transfer of the virus to humans. Others are of the opinion that injections of monkey blood have been used as an aphrodisiac and that this led to infection with the virus. All this is mere speculation.³

Since May, 1981, the CDC had been receiving reports on occurrences of strange diseases in homosexuals (e.g. a rare form of pneumonia, pneumocystis carinii⁴). This illness occurs almost exclusively in patients who are severely immune deficient. The fact that all those being treated for pneumocystis were homosexual was known to the doctors treating the cases. There seemed to be a connection between the homosexuality and the pneumocystis carinii infection. The question was whether homosexuality as such led to immune suppression and as such to pneumocystis carinii.

Dr. Alvin Friedmann-Kien reported in the *AIDS Weekly Surveillance Report, US - AIDS Activity Center for Infectious Diseases, CDC, January 4, 1985*, of similar immune deficient cases that showed the rare Kaposi sarcoma, a form of cancer, which normally does not occur in young men. Could immune deficiency be the cause of this cancer, too? The first cases had been reported on in 1978. Abroad, the same trend was observed in two cases of Kaposi sarcoma being reported on⁵ in Copenhagen in 1981. Even though the number of these cases was small the CDC started a "Task Force on Kaposi Sarcoma and Pneumocystis Carinii Pneumonia" in the USA. Later it was renamed to "Task force on AIDS" and was estab-

lished⁶ as part of the American Public Health Service. One of the six departments of this service is the Center for Infectious Diseases (CID), which is responsible for AIDS research.

After that it was found that homosexuals showed generally a higher rate of venereal diseases. Intestinal diseases that are transmitted by parasites and may also be transferred sexually, were called “Gay Bowel Syndrome” (Homosexual Intestinal Syndrome).⁷

Dr. Alvin Friedmann-Kien found that most of the men showing this syndrome were active homosexuals who in some cases had ten and more sexual contacts per night with various partners.⁸ Sometimes this happened up to four times per week. The immune system of these patients was very much dysfunctional, but what was the cause?⁹

The Rate of Replication of the AIDS Retrovirus

The AIDS retrovirus replicates about a thousand times faster than most other biological organisms including bacteria.¹⁰ Therefore, an infection with AIDS puts a lot of stress on the host organism and the virus can be easily transferred from one person to another. Just one virus in the blood stream is believed by some to be able to cause the infection.¹¹ Also, the high proliferation rate opens the door to a fast mutation rate of the virus that then complicates the development of a vaccine. Each new mutation gives rise to new HIV subspecies that may need different sub-antibodies in order to be fought.¹²

The high replication rate of the virus is linked to its capacity for infection, as we have seen. “It seems probable that even a single virion, directly injected into the blood stream, will cause the infection,¹³ as we have observed with so many other virulent diseases.” This is why personnel may contract AIDS from even the smallest injury with needles. On the other hand it seems likely

that healthy people may have a longer incubation period than weakened persons, therefore it may take longer before the consequences of an injury become obvious by causing the active AIDS syndrome.

After having entered the blood circulation, the virus gets into all parts of the body. It has been found in the following secretions and tissues: plasma, serum, saliva, sperm, urine, cerebrospinal fluid, and brain tissue. Recently, it has also been found in vaginal secretion and in tears. Thus, all these tissues and secretions can harbor the virus. Additionally, there are the endothelial cells that cover the blood and lymphatic vessels, the epithelia (skin cells), the ganglia cells of the nervous system and the neurons themselves¹⁴ — all can harbor the virus.

The observations reported on are very important for the understanding of how the AIDS epidemic works since they allow for the casual transfer of the AIDS virus just as in the case of hepatitis A and the influenza virus. In the case of HIV, however, the long incubation period prevents an early discovery of the infection. Finally we must point out that some scientists believe the AIDS virus can also be present in perspiration (sweat; see e.g. Dr. Laurence, *Dallas Morning News*, 10/7/85).

Function and Attack of the AIDS Virus

We mentioned in the introduction that the AIDS retrovirus attacks the human organism by two main routes:—

a) The indirect route — via the immune system.

This route is the better known one and has given the AIDS virus its name. The virus attacks certain white blood cells - the T cells of the immune system - that normally help other cells in antibody production against viral and other invasion. This attack weakens the T cells and limits their functionality such that they lose their power. This with time destroys the immune system.

Many infections and illnesses that are normally controlled by the immune system now become active. Such attacks are called “opportunistic infections” or diseases.

This fact led to the following type of statement: “People do not die of AIDS, they die of other illnesses that they can no longer fight due to AIDS.”¹⁵

b) The Direct Route — not via opportunistic infections — ARC (AIDS related complex)

Dr. J. Seale, the well known AIDS expert, states about this route of AIDS virus attack: “The AIDS virus may kill directly, by causing brain diseases without opportunistic infections or immune suppression.”¹⁶

This route culminates in the killing of a human being without having first destroyed his immune system. It does so by progressively destroying brain cells and other tissues. Progressive brain death is the consequence of this second route of the viral attack. It does not involve the suppression of the immune system at all. This has to be emphasized since this second, direct route is often disregarded. This route of attack was formerly not even classified with to the term AIDS but called ARC, even though the same organism, the same retrovirus HIV, is involved.¹⁷

In other words, the AIDS retrovirus shows both neurotropic and lymphotropic behavior.¹⁸ It damages the brain independently of the immune system, which may also be destroyed. AIDS-induced brain damage is a very significant aspect of the AIDS problem. It gives a one-sided picture of AIDS if one counts only the cases that show an immune suppression as AIDS. However, this kind of discrimination is still practiced in some parts of the world even today. If a patient shows the AIDS antibodies in his blood but no immune suppression developed, then his death was formerly not linked to AIDS. In reality the patient may have died from HIV induced brain damage without immune suppression (ARC).¹⁹ As we shall see,

this anomaly has now been removed by the new definition of AIDS to include ARC.

Englishman J. Seale, among others have reported repeatedly on this aspect of HIV infections. The Memorial Sloan Kettering Cancer Center, New York, confirms the same fact: "The retrovirus responsible for the AIDS infection normally also affects the central nervous system."²⁰ Dementia and senility, caused by AIDS attacks, are well known. Statistics, however, reported until recently only the AIDS immune suppression, i.e. the full blown AIDS syndrome, as AIDS, even though dementia is also caused by the AIDS retrovirus without necessarily overt immune suppression.

The Stages of an HIV Infection

a) The Mechanism of an HIV infection — the first stage.

The AIDS retrovirus HIV penetrates through any damaged membrane into the blood stream without causing the overt symptoms of an infection. If any symptoms do show, they may resemble those of a temporary minor flu. This is called the asymptomatic stage of the infection. This stage can persist for years, and the infected person remains, from his outer appearance, absolutely healthy. As far as we know, he may not show any antibodies against HIV in his blood for a long time. In this stage of the infection, the sperm, blood, eyes, brain, lungs, liver, kidneys, spleen and lymphatic system become infected with the AIDS retrovirus. The individual remains, however, completely free of other overt symptoms.²¹ Those thus infected may, however, infect other people with AIDS.²² During this period the body begins to excrete the virus in various secretions. A person who has once been infected with the AIDS virus remains dangerous for others because of these excretions. In the spring of 1988, it was noticed that some AIDS positive individu-

als had become AIDS negative. To what extent this affects their potential for infection is not yet known. Damaged membranes are the *conditio sine qua non* for any infection with the AIDS virus²³ — although infants can contract AIDS by being nursed at their AIDS-infected mother's breast.

A person who has been infected once in his or her life may endanger others as far as we know by sexual intercourse during his entire lifetime. In reality, this means that no infected person should have any sexual contacts, for he or she may risk his or her partner's life due to a possible transfer of an AIDS infection. Condoms do not eliminate totally this lethal risk so far as we know at present.

The CDC summarizes this AIDS situation in the statement: "AIDS-infected persons have to be educated so that they no longer practice sexual intercourse, no longer kiss others and no longer seek medical or dental treatment since they may endanger their partners, doctors or dentists who treat them."²⁴

Today, there exists the general consensus that some of these dangers can be eliminated by the use of condoms during sexual intercourse. The potential threat to the life of a sex partner by having intercourse with an AIDS infected person raises serious questions as to the reliability of condoms in the absolute prevention of an HIV infection. The life of the sex partner depends on the total reliability of the rubber or other material of condoms. Even though condoms may theoretically prevent the transfer of HIV infected sperm or other secretions, reality could produce a different scenario. One must take into account that not only is the sperm infected, but other secretions of the AIDS carrier, such as saliva, sweat, tears, blood and urine as well. One has to think only briefly what could happen during passionate intercourse before one questions whether condoms are enough to prevent the transfer of the virus. Intercourse with an

AIDS infected person, whether homosexual or heterosexual, may be like Russian Roulette, even though condoms are worn. Recently it has been shown that rubber condom membranes tend to become porous under the influence of ozone in the air. Thus old condoms could be dangerous.

Only time will tell whether this is really a problem. But until this problem is resolved one may risk one's life in practicing intimate relationships with AIDS carriers.²⁵

Babies of HIV infected parents are also endangered, even though both parents may be symptom free. Not having symptoms does not mean non-infection.²⁶ It is assumed today that the number of symptom-free antibody negative as well as antibody positive infected AIDS carriers is probably about a factor of a hundred higher than the number of the registered AIDS cases. Since HIV/HTLV-III/LAV is a retrovirus, one would expect that all persons infected once would remain infected for life. However in 1988, some HIV positive cases were reported to have become negative as mentioned above.²⁷

b) The second stage of an HIV infection

This stage starts with the occurrence of the first really overt symptoms, such as: sudden weight loss, sweating during the night, persistent diarrhea, enlargement of the lymph nodes in the armpits and in the lower abdomen, as well as chronic sleepiness accompanied by psychotic episodes.

This stage is often referred to as ARC (AIDS Related Complex). There are over 50 variations of ARC, among them dementia and psychotic disorders resembling senility.²⁸

As an example we quote the following case: A young homosexual suffered from a paranoid psychosis. He declared he would cause an accident and that God had given him supernatural powers. At times he behaved like an infant and at others he would snap out of this episode. Later on he became mute, tried to throw himself in front

of cars, retrieved things with his mouth and no longer communicated with anyone. In the end he alternated between aggressiveness and depression. He heard voices (hallucinations) and could no longer concentrate on anything. The patient did not show any sign of Kaposi's sarcoma and no other opportunistic disease or other immune suppression appeared.

The above HIV-induced syndrome with its center in the brain neurons is — as far as we know — irreversible. Since it does not involve opportunistic infections caused by immune deficiencies, it was formerly not counted as AIDS (as of mid 1987). To qualify as AIDS the illness at that time had to reach Stage 3 — the state known as full-blown AIDS. That is it had to show opportunistic infections based on a deficient immune system. Anything else, according to this older definition of AIDS, did not qualify as AIDS! The infections that did not reach this stage were eliminated at that time from the AIDS statistics. This has now been rectified in the U.S.A. and in some other countries as well, since the fall of 1987.

Some AIDS researchers believe that there are about ten times more AIDS patients at Stage 2 than those at Stage 3. Thus the statistics and the characterization of the AIDS epidemic have been used to cover up the real AIDS picture. Some statistics may still be inaccurate if ARC has not been accounted for under HIV infections.

c) The third stage of an HIV infection (full-blown-AIDS)

The boundary between Stage 2 and 3 is somewhat ill-defined. In Stage 3, the third and last stage of the terminal AIDS syndrome, opportunistic infections set in massively. Infections of this kind also occur without an AIDS infection, but without such an infection the functional immune system of the body helps to fight the infections. After an HIV infection, the body is helpless against otherwise even rather insignificant infections

and becomes literally overwhelmed by them. Chemotherapy and other therapies help if the body can help itself too by means of its own immune system. As soon as this latter is limited by AIDS, external therapies help only a little and palliatively.

What are the characteristics of such opportunistic infections? They include the following diseases:

1.) *Pneumocystis Carinii* Pneumonia (PCP). This disease is a lung infection that causes the patient to be short of breath, to suffer from chest pains and a dry cough, resulting in only small amounts of a white expectorate being produced. The patient gets the feeling of suffocating. Normal therapies against bacterial lung infections do not help much with AIDS patients since the functional immune system is missing completely or partially.

2.) Kaposi Sarcoma (KS). This is an invasive skin cancer. Normally, cancer starts out with a single malignant cell which infects other organs by metastasis. If the primary tumor is removed in the case of normal cancers, then, theoretically, the patient is healed. The situation is different for the Kaposi sarcoma. New cancers develop everywhere — and at the same time in various organs, independently of the metastasis of old cancers. The new centers develop in the lung, in the lymphatic nodes, liver, stomach, spleen and intestines. The skin develops small bluish spots on the neck, legs, arms, genitals and anus. KS and PCP are among the most horrible diseases associated with AIDS.²⁹

3.) Candidiasis (thrush). This fungal infection, which also occurs without HIV infections, causes white spots on the tongue and in the mouth. Candidiasis is often accompanied by swollen lymphatic nodes, perhaps one of the very early symptoms of AIDS. The fungal infection of the mouth may spread from there into the blood stream and into the central nervous system. There is hardly a successful therapy for HIV related cases, even though it is possible to obtain temporary relief.

4.) Cytomegalovirus (CMV). CMV is a viral infection that infects the lungs and often the whole body. This viral infection may cause retinitis and even blindness. In the United States, many adults have successfully coped with a CMV infection because they could conquer it with their functional immune system. If, however, the immune system has been damaged by AIDS, the body will no longer be able to deal with the CMV. Homosexuals contract CMV in various forms. Homosexuality is therefore, as we have already seen, not a viable alternative sex option.

5.) Herpes Simplex (HSV). This viral infection is much more severe for AIDS patients than for those who have a normal, functioning immune system. HSV may be lethal for some AIDS patients.

6.) Herpes Zoster (HZV) is the cause of shingles. This disease is much more serious in AIDS patients than in those having an intact immune system. With HIV patients, HZV causes the development of large blisters that liberate secretions and leave big black scars on the mouth, nose and anus.

7.) Toxoplasmosis (*Toxoplasma Gandii*) and Cryptosporidiosis. Both infections are caused by organisms that occur in cats, dogs and other domestic animals. The symptoms of Cryptosporidiosis are similar to those of Cholera. Diarrhea of up to 10 liters per day may occur. Therapy shows little effect on both conditions since the AIDS immune system is no longer fully functional.

8.) Cryptococcosis is a fungal disease that causes a diffuse meningitis. The symptoms include stupor, changes in personality, headaches, diplopia and a weakness of facial muscles. The dementia that may be observed here shows a different etiology to the one that is caused by HIV itself.

The examples given above should be sufficient to describe the third stage (immune suppression) of an AIDS infection. We will now focus on the attacks of other

viruses since they may shed some light on the problems associated with an HIV infection.

***The Parallel Etiology of Hepatitis B and HIV/
HTLV-III in a Human Population***

The American CDC states categorically that the spread of Hepatitis B and HTLV-III runs parallel: "The epidemiology of an HTLV-III/LAV infection is similar to that of Hepatitis B."³⁰ It is said today that in most of the Western world non-sexual contacts in the same household would not pose the threat of contracting an HIV/HTLV-III infection. However, if the routes of infection of Hepatitis B and of HTLV-III retrovirus are truly parallel, then we might have to modify this CDC statement. Social contacts are dangerous with respect to contracting the Hepatitis B infection. On June 7, 1985, the CDC issued the following rules for the prevention of Hepatitis B infection:

"The role of the carrier is central for the epidemiology of the Hepatitis B virus (HBV). Carriers and persons suffering from an acute infection will show the highest concentrations of HBV in the blood and in other bodily liquids such as saliva and sperm. The transfer of HBV occurs through the skin and through the mucosa. Infectious blood or other infectious body liquids can be transmitted via dirty needles or via sexual contacts. An infection may also occur via social contacts as between persons belonging to the same household."³¹

If HBV and HIV, HTLV-III and their infection routes run parallel, why are social contacts dangerous in the case of HBV but harmless in the case of HIV?

The Council on Scientific Affairs for the American Medical Association maintains: "The distribution of AIDS cases in the United States suggests that the syndrome is caused by an infectious organism and is transferred just like Hepatitis B. Hepatitis B can be contracted

via the mucosa, mouth and eye secretion.³² We do not exclude that besides sexual contacts, contacts between mucosa (while kissing, etc) may lead to an AIDS infection.”

From AIDS statistics alone, there might be just a chance that social contacts between members of a family may lead to the same result: “AIDS occurs with babies and older children in a way that might suggest an in utero or perinatal infection. We use as an illustration of this possibility, the case of three brothers from Ruwanda and their parents who all showed a T-cell deficiency and antibodies against HTLV-III/LAV. The transfer probably was dependent on routes other than sexual routes.³³

The *Wall Street Journal* of August 5, 1985 reported that persons living under the same roof with AIDS infected individuals are 300 times more likely to contract AIDS than the rest of the population.

The *JAMA* of November 22, 1985 (Dr. Fauci) writes: “There is indirect evidence that anyone exposed to an AIDS infected person may be substantially more prone to contract AIDS than other people not so exposed. This relation, however, is in no way proven.”

The *JAMA* of January 10, 1986 reported from the “Center for Infectious Diseases,” on persons living in close contact with hemophiliacs. These hemophiliacs suffered from AIDS which they had contracted from infected blood products and transfusions. At the same time the reactions of individuals living together with AIDS free hemophiliacs were studied. The results showed that those people living together with AIDS infected hemophiliacs showed much lower T-lymphocytes and T-suppressor lymphocytes concentrations than those living with AIDS antibody negative hemophiliacs. The routes of contracting AIDS seem to certainly resemble those of Hepatitis B. Indications of an immune dysfunction, as given above, may point to possible early warnings of an AIDS virus infection.³⁴

It cannot therefore be maintained with complete accu-

racy that ordinary social contacts with AIDS-infected persons are always harmless with respect to HIV transfer. The same holds for Hepatitis B in medical and dental contacts.³⁵

However, until now there are no registered cases of AIDS infection by contacts with doctors, dentists or nurses. A surgeon suffering from AIDS was able to prove that none of his patients had been infected by social or professional contact.³⁶ It may be that these negative results with respect to the HIV infection stem from the fact that the incubation period and antibody formation take much longer with AIDS than they do with Hepatitis B. But AIDS experts still recommend the supervision of social contacts with HIV infected persons.³⁷

According to existing law in Europe a surgeon or dentist who knows of his HIV infection may still conduct invasive operations without notifying his patient. This holds as well for AIDS-virus carriers as for full blown HIV cases (Stage 3). Ought not the patient to possess the right to know whether his doctor is AIDS infected? He does not have that right to date. There are, however, illnesses under which an infected and practicing surgeon must get written permission from his patient for any operation. In case the doctor has Hepatitis B, his patients might get infected. This is not very pleasant, but it will kill fewer patients than AIDS will. There is no anonymity for the Hepatitis B carrying doctor. Why isn't there the same consensus in the far more lethal AIDS, — in the true interest of the safety of patients?

Expanded Definition of AIDS

As we have mentioned before, the definition of AIDS was in the early days of the epidemic too narrow. Only full-blown AIDS cases with immune suppression, followed by opportunistic infections was counted as AIDS for statistical purposes. Dementia (AIDS-Encephalopathy) and

AIDS wasting syndromes (AIDS weight loss plus diarrhea, with or without fever) formerly did not qualify for the full-blown AIDS syndrome diagnosis and therefore were not counted as AIDS. As mentioned before, we do not think that this is justifiable today.

On September 1, 1987, the journal *Morbidity and Mortality Weekly Report* (36, addendum 1S,) expanded the AIDS definition to include those kinds of AIDS that did not show any immune suppression. Dementia (AIDS-Encephalopathy) and the HIV wasting syndrome are now to be regarded as AIDS and are showing up in the full-blown AIDS statistics. After the new definition and the new rules came out, the AIDS diagnosis can be made without even stressing the laboratory results — as long as the patients test positive to the AIDS antibody tests.

The result of this new definition is as follows: A substantial fraction (about 10-15 percent) of new AIDS patients gets counted. The United States AIDS statistics will thus be blown up and look more frightening than formerly. Formerly, a doctor had to prove an immune suppression and opportunistic infections before being allowed to diagnose an illness as being caused by HIV. For example, he had to show pneumocystis carinii and HIV together. Now he may diagnose P. Carinii by means of a chest x-ray, or other tests, and the antibody tests are no longer deemed necessary. The same holds for dementia (AIDS-Encephalopathy), CMV (Cytomegalovirus) and for KS (Kaposi Sarcoma).

HIV-2 in Europe

Montagnier reports his experience with 35 cases of HIV-2 in France (*New Scientist* of September 3, 1987, p. 29), 30 in Portugal, 2 in the Federal Republic of Germany, 2 in Sweden and 1 in Norway. There are no HIV-2 cases reported from Great Britain. All cases involved Africans or patients who had contacts within Africa.

The incubation period may be much longer for HIV-2 than for HIV-1. According to Montagnier, therefore, it might be possible that many more people in Europe have been infected with HIV-2 without knowing it.

Some Examples of Today's AIDS Cover-up

As we have already seen, the AIDS epidemic may be attributed in part to a breakdown of the family, loss of ethical values and sense of moral consequences and to a more or less total sex emancipation. Sex taboos based on religion are now regarded as backward. Sex emancipation, on the other hand, is seen as progressive and as an achievement of today's ideologies. Certain avant-garde circles teach that a promiscuous life is perfectly normal and based on physiological needs, It has nothing to do with religion. Just as eating and drinking are necessary, so we have to fulfil our sex instincts to "find ourselves". By this sort of propaganda, sex emancipation becomes a political goal. One may not say a word against promiscuity today, and religion has become irrelevant at least in Europe. However, even religious taboos are relevant — if they help prevent AIDS epidemics.

Homosexuality, lesbian love and even abortion have at least some of their roots in sex emancipation and are the norms today that have been legalized. "My belly is mine" has become a political slogan and it means that the unborn child does not have the right to live if the mother decides differently. Homosexual and even lesbian couples have been married, some in churches that are called Christian but which accept those three practices, at least pro forma, even though they are forbidden by the Bible. AIDS is certainly linked to promiscuity, regardless whether homosexual or heterosexual. What if AIDS and promiscuity are some of the results of this change in morals, brought about by the new political ideology? If some of the fruits of the revolution are lethal — as full

blown AIDS is 100% lethal — then the revolution itself also has to be declared lethal in its consequences because it poses in reality a threat to the survival of the human race. Biblical laws would, then, not really be a straight jacket, but rather a hidden protection — a blessing in disguise.

If, however, the new revolutionaries are in fact anti-Christian, or at least anti-religious materialists, should they not openly declare their anti-Christian sex revolution to be hostile to the survival of the human race and that it therefore does not seek the best for humans? If the promiscuous way of life leads to disaster and not to health, shouldn't the revolution and its progress be declared to be what it is — a regression? Wouldn't the so called "progress" lose face through this new insight?

It is said that the consequences of the "progressive" way of life are not dangerous as long as one practices "safe sex". The rigorous use of condoms would allegedly render sexual contact harmless with respect to HIV infection. Other contacts, the side effects of intimate encounters (french kisses, etc) are not labelled as dangerous. In addition it is claimed that AIDS cannot be contracted via social contacts. A complete campaign has been developed in this way that is led in part by government agencies and in part by members of the press. The AIDS threat is minimized by the so-called condom solution. This so-called solution ignores the psychological disaster of free sex regardless of the AIDS menace. For sexual promiscuity and intimacy cannot be practised without psychological consequences to both partners.

The "safe-sex" campaign is propagated in direct denial of the discoveries of philosophically neutral scientists.³⁸ First the link between AIDS and homosexual and heterosexual promiscuity is obscured. Several years ago when it was discovered that homosexuality was associated with certain intestinal symptoms, doctors called this disease "Gay Bowel Syndrome" (Gay Related Intestinal

Disease) or GRID. A disease that was thought to be directly linked to homosexuality was thus categorized as such. Homosexuality would thus cause illness. "We have fought hard for our right to be homosexual," the new ideologists said. Immediately a new lobby was formed in the USA in order to protect the already achieved homosexual freedom. Consequently: being gay must not be allowed to make you ill! The term GRID had therefore to disappear, because GRID pointed out the real roots of the illness. Under the political pressure developed by the homosexual lobby the term GRID was eliminated. A new name, AIDS, which was politically neutral, was chosen and installed. The term, "immune suppressive," in AIDS is not weighted. One has of course to remember that immune suppression does not constitute the sole property of the virus. Homosexuality should not be associated with any disease because the association may mean discrimination. Homosexuality thus gets propagated as a normal, healthy alternative in sex and is no longer pathogenic — allegedly.

With most epidemic diseases a doctor may conduct all the necessary tests in order to substantiate the diagnosis and to prevent the spread of any contagious disease. Thus, if someone is a carrier of the Hepatitis B virus and excretes it, he may not deal with food. He may not work with foods, since the infection is dangerous, and the public has to be protected. The common good has to take priority over the individual, is the perfectly just slogan. No one would call this protection of the public discrimination. Medical Research made all these diagnostic tests possible and necessary and therefore they should be used to protect the public from the consequences of the epidemic in question.

But not so with AIDS, the disease that in its roots is based on promiscuity. Promiscuity is allegedly our right, at least according to the principles of the new sexual revolution. It is taught therefore that it is healthy and

normal. That is the reason why the pathological consequences of this revolution have to be covered up. For the same reason therefore it is not routinely permitted to conduct AIDS tests, even where high risk groups are concerned. The results of any such tests may not be coupled with the patient by name. This allegedly might discriminate against AIDS carriers. One may not put such patients in quarantine under any circumstances, that would constitute discrimination. AIDS cases must have to have the right to work anywhere, with foods, in hospitals, as doctors etc. They may not be fired because of AIDS, even though the threat of public contagion might be present in some cases.

The British trades' union TUC demanded in September 1987 that nobody be fired from any kind of job in the U.K. because of his being an AIDS carrier. One may well ask: By what right does a purely political organization such as the TUC have any say in questions of the medical strategy required to fight a lethal epidemic? Who would think of heeding the TUC administration if it were to declare its opinion on the fight against Hepatitis B? With respect to AIDS, however, the TUC is allowed to discuss these medical and public health matters as it wishes without anyone complaining. This is simply because AIDS is linked to a ruling sex ideology that wishes to overturn traditional established moral values at any cost. The politically based conclusions of the TUC are of no help whatever in promoting medical success in the fight against a lethal epidemic and in assuring public protection against HIV-infection.

When one begins to understand the AIDS syndrome as a partially medical consequence of an ideology based on the promiscuous sex revolution, then one is questioning and endangering the political-ideological "achievements" of current sex emancipation. A fruit of this revolution (AIDS) had proven itself to be rotten. This is a fact that can no longer be denied. The homosexual lobby

does deny it, however. The next step? The sex revolution they say has to continue under all circumstances but without the AIDS involvement. We want promiscuity as before, but without AIDS, is the slogan! So the propaganda is developed that a promiscuous sex life is not dangerous and is, indeed normal — as long as one uses condoms. The sex revolution may not be overturned not even under the threat of AIDS!

In the following paragraphs, we cite some points from the propaganda that has been used consciously or unconsciously to perpetuate promiscuity — without AIDS. We summarize the whole argument in a table:

***Publicly Released Information on AIDS:
The Difference Between Facts and Propaganda***

Propaganda: To date, only a few people have contracted AIDS in Switzerland. By the end of December 1985 the Bundesamt fuer Gesundheitswesen counted about one hundred AIDS cases. Practically all of them belonged to high-risk groups. There are about 22,000 cases worldwide.³⁹

AIDS threatens principally those people who submit to known risks.⁴²

To date, about 2 to 9% of those who have contracted the disease show symptoms of the AIDS illness, i.e. lymphotropic symptoms. Others suffer from

Fact: Switzerland today leads Europe in per capita AIDS cases! Dr. Dani Bolognesi testified on July 22, 1987, before the United States Congress that two million Americans might be infected with AIDS and might develop full-blown AIDS.⁴⁰ Ten to 20% of the infected will develop AIDS (full-blown, Stage 3 lymphotropic) — 38,000 in the United States alone. This number does not include ARC (AIDS related complex, neurotropic).⁴¹

The AIDS virus to date is so widely spread (1-2 million Americans infected) that all people living pro-

severe inflammation of the lung, the intestines and of the brain, or from a rare form of skin cancer (Kaposi sarcoma). The fully developed AIDS syndrome ends almost always with the death of the infected.⁴⁴

miscuously are endangered. Since the incubation period of AIDS is so extended, everyone is threatened who receives blood transfusions in which not all the viruses have been eliminated. The number of AIDS infected persons roughly doubles every year.⁴³

AIDS is no longer the problem of others. The rate of AIDS infected persons has not yet appreciably flattened out. In 1986, more people were diagnosed with AIDS than during the years 1978-1985. Unfortunately, there has been an uninterrupted campaign based on disinformation about AIDS from the Bundesgesundheitsaemtern (BAG) in Switzerland and Western Germany and the media in general. The AIDS syndrome was redefined on September 1, 1987 in the U.S.A. so that one no longer may speak of "actual" AIDS.⁴⁵ The new definition now summarizes ARC under AIDS so that the 2-9% full blown AIDS cases of Prof. Roos is devoid of meaning today.

Propaganda: The illness is not transferred via saliva or tears. A risk of infection remains almost exclusively in cases of intimate contact with persons who are already carriers of the virus. French kisses are presumably not the cause of an infection with AIDS even though this is often maintained.⁴⁶

Propaganda: About eight weeks after an infection, the body starts to produce antibodies against the AIDS virus. These can be detected in the blood with a special, yet simple, laboratory test.⁴⁷

Fact: Hepatitis B and AIDS viruses are contracted easily through close, non-sexual contact with infected wounds, in particular by contact with ulcers and lacerations or by the exchange of blood, organs, blood products or serum of other persons.

Fact: The long incubation period of the virus — months to 10 years — means that the infection with AIDS may have started a few years before 1970.⁴⁸ The incubation period may be much longer than eight weeks. Roos (BAG, Switzerland) does not point out that the blood may be infectious, even though it does not show any antibodies against AIDS. This blood may initiate a lethal AIDS infection even though it has been tested and found AIDS antibody negative and even though special measures have been taken to get rid of HIV. AIDS infections, after transfusions with negative blood, prove this.^{48a}

Propaganda: There is no threat of contagion with most of the activities of everyday life. All social contacts with AIDS infected patients are harmless and free of risk if one does not engage in intimate contacts. No one can contract AIDS by shaking hands, embracing or kissing.⁴⁹

The virus is not transferred by the coughing or sneezing of AIDS infected patients.⁵⁰

The sharing of dishes, linen and other articles of everyday life is harmless.⁵²

Propaganda: The AIDS virus cannot be transferred via food, although infants contract AIDS by drinking their infected mother's milk.⁵³ Donating and receiving blood is not dangerous! Every single blood donation is tested in Switzerland! Blood that tests positive to the antibody test will not be used for transfusion nor for the manufacture of blood preparations.⁵⁴ (this is supreme disinformation!)

All consultations and

Fact: The AIDS virus is found in the plasma, serum, saliva, tears, sperm, urine, the cerebro-spinal fluid, in the brain tissue, in vaginal secretion and in neurons. Also, the AIDS virus can be found in epithelial cells (skin). This means that the virus might be transferred via everyday casual contacts. Hepatitis B and flu viruses are certainly transferred in this way.⁵¹ Sweat may also be infected and the viruses might be transferred theoretically via lacerations and skin infections.

Fact: How then have 80% of all hemophiliacs in western countries become AIDS infected via blood transfusions with tested blood and with blood products from hospitals? The AIDS virus may be present in the donated blood without the presence of antibodies — a consequence of the long incubation period. One needs to take special measures in order to free antibody negative blood from active viruses. Since this fact was not recognized

operations at the doctor's or dentist's office, or the hospital, and the visit to the hairdresser or the cosmetician are not dangerous. The disinfection measures observed at these places are sufficient to render the AIDS virus inactive.⁵⁵

early enough, many recipients of blood transfusions that tested antibody-negative contracted AIDS. In fact about 80% of hemophiliacs in certain western countries are now HIV positive due to infection by this route.

General statements such as the one given above ought therefore not to come from any medical administration. Such statements undermine any kind of trust in the long run. It is not true either that the coughing and sneezing of AIDS patients are without risk for third parties. Where AIDS/TBC infections exist contemporaneously, there droplet infections containing TBC mycobacteria and AIDS viruses are. These are, theoretically, as well as practically, infection risks due to TBC caused fissures in the mucosa. Tuberculosis is now common in some homosexual circles that show AIDS infections. Doctors and dentists who carry Hepatitis B have to protect themselves or otherwise give up their

profession.

It is therefore careless and indeed untrue to maintain that donating blood and receiving blood donations do not carry any risk with respect to AIDS. Robert Schwab, a homosexual activist who died of AIDS, reportedly said on his death bed: "We developed the idea that all homosexual men should donate blood (in order to infiltrate the blood banks) if there was not enough money for AIDS research forthcoming. Anything is permitted to attract the national attention even to the extreme of blood terrorism."⁵⁷ In this way, the blood banks could be infiltrated. It would be impossible to clean them up by any known methods. Many homosexual men are AIDS infected but do not show any antibodies because of the long incubation period. Procedures to kill the virus already present in blood have not yet been perfected. This fact would open the door to blood terrorism as suggested above.

Propaganda: Hospital visits, caring for and nursing AIDS-infected people are not dangerous. Contacts between children and AIDS-infected are not dangerous. Contact with pets does not lead to the contraction of AIDS.⁵⁶

Fact: Since it is conceivable and has indeed been suggested that AIDS was originally an infection coming from green monkeys and has spread into humans, the above statement is somewhat problematical!

Aside from the already mentioned danger of infection in cases of tuberculosis/AIDS combinations, in particular for nursing personnel, we will cite here the following report: "International researchers are worried about the fact that in the United States three nurses tested positive for HIV antibodies after spilling large amounts of HIV-infected blood, despite their not having any open or obvious wounds. No consequences were reported for 500 other cases in similar circumstances. In England, an elderly woman with eczema of her hands became infected while caring for her AIDS-infected neighbor. In the United States, a mother got infected, presumably from dealing with the infected bloody excrements of her

child who had received a transfusion with HIV infected blood in the course of intestinal surgery. This is why all pediatric nurses have been advised to wear rubber gloves when dealing with HIV antibody positive children.⁵⁸ Why did Rita Süßmuth, former health minister in the German Federal Republic force every German motorist to carry rubber gloves in his car pharmacy kit in case he ever transported an AIDS patient? Actions speak louder than words! And Rita Süßmuth positively shouted to the whole world that social contact in AIDS is harmless.

A British Radio 4 report on September 13, 1987 stated that, according to a then recent poll, the population at high-risk for AIDS had not changed its sexual habits since AIDS appeared. The fear of AIDS has not worried these people. They continue to live as before, regardless of whether they die or not by contracting an HIV-infection.

Here is an example of some more propaganda, this time not from an official administration. The following tale is often heard: "The AIDS virus is easily destroyed outside the human body and any way large quantities of the living virus are necessary to effect an infection."

According to recent research: "the enormous rate of proliferation of the AIDS virus enables an invasion even by the smallest amounts of the virus. According to Dr. John Seale, it is possible that one virus only, provided it gets directly into the blood stream, may cause a viral infection, as is the case with viral diseases in general.⁵⁹" Is this a large quantity? Research shows that HIV is remarkably stable outside the body. Details are given under the appropriate section. (pages 64-66)

Political activists have changed the social structure of the family and of intimate life. Promiscuity has superseded monogamy. Some medical and moral consequences of this change are now becoming visible in the form of AIDS. The same activists are now therefore trying to play down some of the consequences (among them AIDS) of their revolution, in order to protect themselves and their ideology.

The fact that AIDS not only shows up as a medical but also as a political problem is clearly seen in a footnote in a flier that was sent by the Bundesamt fuer Gesundheitswesen to all Swiss households in the autumn of 1987. Quote: "The Bundesamt fuer Gesundheitswesen and the "AIDS-Hilfe Schweiz" guarantee that no names and/or addresses obtained in the course of distributing information will be stored, used or given to third parties in any

way whatsoever. Orders will be destroyed after they have been carried out.”

The necessity for this promise, is proof positive of how political the AIDS problem has become. In the case of a Hepatitis B epidemic, such measures were not necessary, since it was not linked to politically maneuvered morality. It was purely a medical problem. AIDS has become an acute political and moral problem because the disease is linked to the politically based breakdown of sexual and family morality.

Chapter III

HIV (the Retrovirus). HIV-Infection: Incidence and Characteristics

The Incidence of an HIV Infection Among Young Men and Women Volunteering for Service in the U.S. Armed Forces

The Donald S. Burke report on the occurrence of AIDS antibodies among young men and women volunteering for service in the U.S. military is important to examine.¹ Burke worked 6 months (October 1985 - March 1986) and tested 306,061 young men and women seeking military service, but who had not yet been accepted as soldiers or in clerical jobs. All of them were tested for AIDS antibodies with the Western Blot (immune) Reactivity Test.

Out of this pool of the 306,061,460 cases showed HIV antibodies. That means that 1.50% had already had contact with the AIDS virus. Persons of black race showed a higher incidence rate than Caucasians. Men were infected more often than women. And the older the tested person, the more likely it was to get a positive HIV antibody test.

Burke assumed that the average incubation period between infection and full-blown AIDS is 4-5 years (cf. Roos).^{2,2a} This period, however, may be longer.³ Burke found that 61% of the discovered cases of AIDS in the United States

were non-hispanic Caucasians, 24% were non-hispanic blacks and 14% were hispanic. The uncorrected incidence rates were highest among blacks and lowest among whites. The hispanic population was in between. The incidence was correlated with the population density. These findings confirmed that AIDS occurred most often among blacks, since they came from densely populated areas. In spite of these statements, new AIDS infections are now occurring everywhere - in sparsely as well as densely populated areas in the United States. In areas with a high AIDS incidence, young women are now infected almost as often as young men.

The AIDS Virus HIV-1 Human Immunodeficiency Virus, or Lymphadenopathy Associated Virus, LAV, or Human T-cell Lymphotropic Type III, HTLV-III, or AIDS related Virus, (ARV)

AIDS as a clinical entity was discovered in 1981 and has since spread to reach epidemic proportions. In 1986, 38,000 cases were known in the United States and 90% of the patients died within 3 years after the appearance of full-blown AIDS.

Meanwhile, there are 1-2 millions of Americans who have been infected with the virus. The Public Health Service anticipates 270,000 active cases for the United States by 1991. Outside the U.S., there are now thousands of Europeans, and perhaps millions of Africans, who are HIV positive.

The virus itself has a fatty envelope, its diameter is somewhat larger than 100 nm. A dense cylindrical nucleotide that contains the nucleic proteins, genomic RNA and the reverse transcriptase enzyme characterizes HIV as a retrovirus. HIV is a unique retrovirus, however, because it contains at least 5 additional genes apart from the standard genes for retroviruses, the *gag*-, *pol*- and *env* -genes, which encode for the nucleic proteins, the reverse tran-

scriptase and the envelope proteins. Two genes, the multiple exons *tat* and *tr_s/art* are presumably necessary to work as post transcriptional regulators of the HIV synthesis. Inactivation of *tat* or *tr_s/art* inhibits the replication of the virus. Two more genes, *sor* and *3'orf* are functional, since their protein products can be found *in vitro* and antibodies can be found in the serum of infected persons. Their particular role is unknown at present (see Figure 1).

HIV is closely related to a group of cytopathic retroviruses (lentivirus). In this group there is the Visna Virus and Caprine Arthritis Encephalitis Virus, which both cause chronic neuro-degenerative processes in sheep and goats. A third virus of this kind, a lentivirus, is the carrier of infectious anemia in horses. It appears HIV is also closely related to the Simian T-cell lymphotropic virus type III, STLV-III, a virus that causes a disease similar to AIDS in monkeys. A different group of lentiviruses (HIV-2,/LAV-2 or HTLV-IV) has been isolated from West Africans. HIV-2/LAV-2 is associated with immune deficiency and shows clinical symptoms that are very similar to that of HIV-1. HTLV-IV was originally isolated from Senegalese prostitutes. The virus is so similar to STLV-IV that one could hold it was not an independent type. It could be a type of simian infection in humans. Figure 2 shows the so called evolutionary relationship between retroviruses. Figure 3 shows the control processes which regulate the gene expression in multicellular eukaryotes.

How HIV Attacks

HeLa cells, (laboratory human cancer cells of cervical-epithelial tissue) do not produce the T4 antigen and are resistant to an HIV infection. When the T4 gene is injected into the HeLa cells, they become susceptible to an HIV infection. Thus, the infected HeLa cells form gigantic cells (=syncytia) with many nuclei. Such syncytia do not survive very long. This probably means that the T4 molecule is the

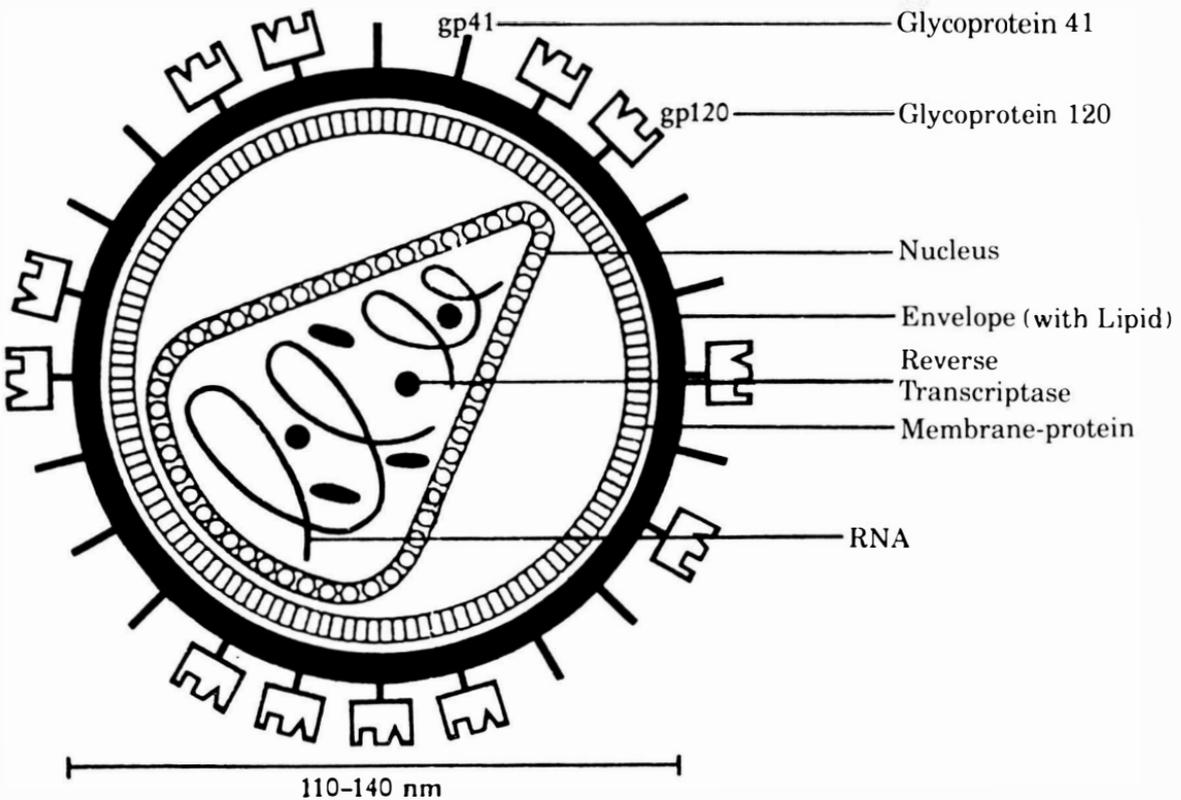


Figure 1: The HIV (AIDS) virus.

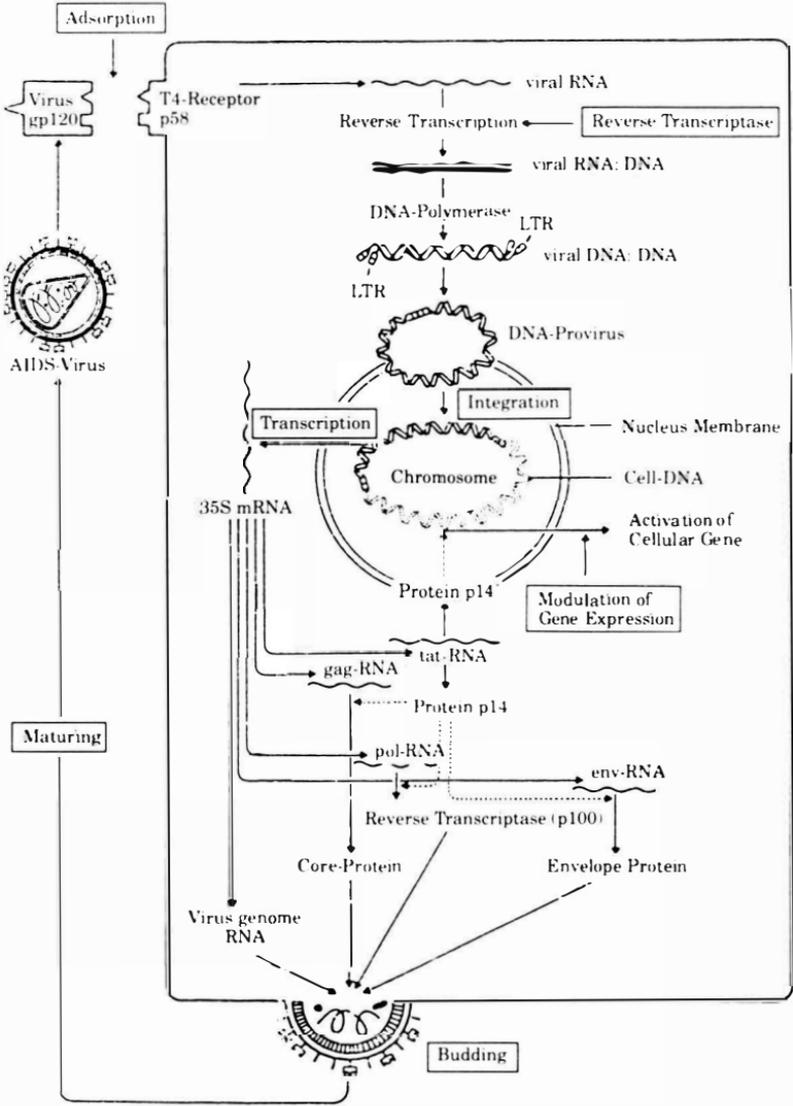


Figure 2: — T4 - Cell

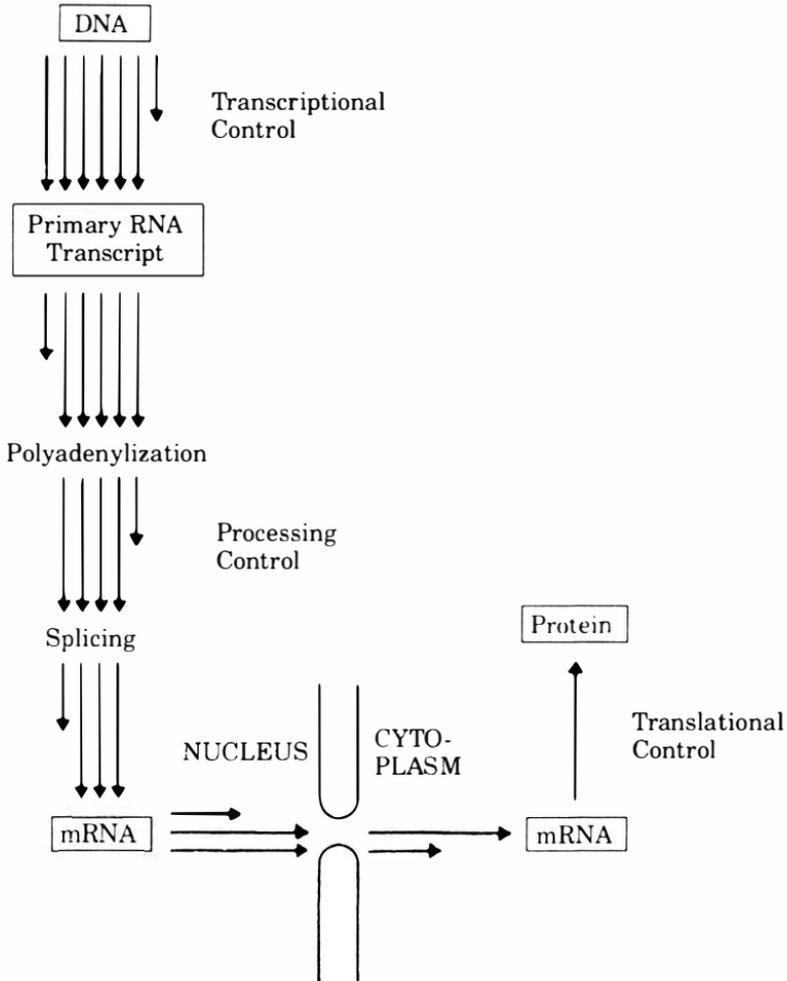


Figure 3: Control systems which regulate gene expression in multicellular eukaryotes, such as a human being. The number of arrows is meant to show the multiplicity of the RNA transcripts.

receptor for HIV since HeLa cells can only be infected by HIV after the T4 gene has been inserted. (This conclusion has been called into question by recent (1988-89) research.)

Further Routes of Attack by HIV

After attaching to the host cell, as described above for the HeLa cells, the HIV gets into the cell and loses its envelope. Exactly how the HIV gets into the host cell has not been discovered. We only know that it is facilitated via the T4 gene. (but see note above) That is why the process is known as a receptor mediated endocytosis. Some researchers believe that HIV may penetrate via fusing the cell membrane with the HIV envelope.⁴

In the next stage, the genomic RNA is transformed into DNA via the reverse transcriptase process. The thus produced DNA gets into the genome of the cell and is integrated into the host DNA. A substantial amount of the HIV-DNA is not integrated into the cytoplasm. At this stage, the cycle of the HIV replication remains restricted - until an activation occurs. In vitro, this activation can be facilitated via mitogenic, antigenic or via allogenic stimuli. In vivo, however, the process is different: Other pathogens strongly stimulate the replication process, such as cytomegalovirus, hepatitis B virus, or herpes simplex virus. One should notice that semen, blood or allotransplantations (allografts) can facilitate the proliferation of otherwise inactive HIV. In this way, semen in the rectum (as anal-rectal intercourse in homosexuality) can cause dormant HIV infections to erupt.⁵

After activation, transcription occurs. Protein synthesis, protein fission and glycolysation set in. Viral proteins and genomic RNA are gathered at the cell surface and complete virions are formed (cf. Figure 3).

As soon as the HIV replication sets in, the T4+ cell begins to die, but we do not know exactly how. It is an open question as to whether one of the five new genes with HIV

plays a role in the killing. *TAT* and *trs/art* are both post-transcriptionally active. They are transcriptional regulators. This indicates that they are not actively involved in the killing of the T4+ cells.⁶ There is no proof that *sor* or *3'orf* play an active role in the killing of the T4+ cell.

There is the assumption that the accumulation of unintegrated HIV-DNA is the killing mechanism. The T4 molecule does not only play an important role for the HIV tropism but also for the cytopathic action of the HIV.

The HIV envelopes play apparently an important role in killing the T4+ cells too. The mechanism of this killing, which is so important in understanding the lethality of the HIV, is probably via fusion from cell to cell. This results in multinucleic cells or syncytia (cf. Figure 4). The cytoplasm swells to balloon-like structures that die within a day. The syncytia consist of infected and non-infected T4+ cells.⁷ Lifson showed that syncytia formation occurred after injecting only the *env* gene into the T4+ cells. The same procedure did not cause syncytia with T4 cells. The T4 molecule is thus necessary for the fusion. The syncytia formation is a way of killing both infected and non-infected cells. However the same process cannot be responsible for the killing of T4+ cells because normal peripheral blood lymphocytes are killed by HIV infections *in vitro*, even though the syncytia are rare in this case.

A productive Cytomegalovirus infection occurs when T-cells first become infected with HIV or when they get transformed through the human T-cell into leukemia (Type 1). Cytomegalovirus and unprepared T-cells result only in an abortive infection. We have pointed out the necessity of a preceding Cytomegalovirus infection before an HIV infection can become active. This phenomenon is known as enhancement. It plays an important role apparently in the development of clinical AIDS after initial infection.

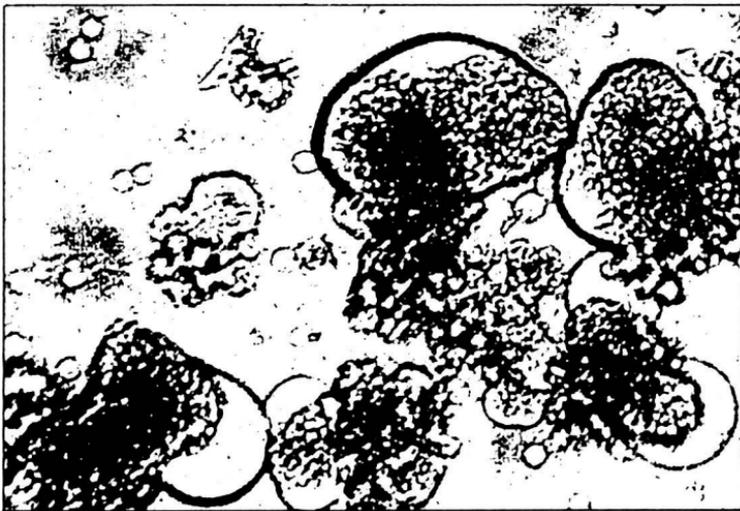
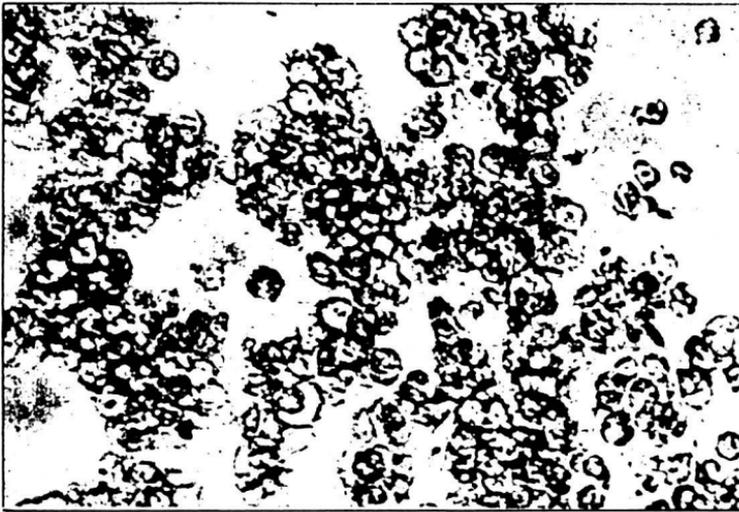


Figure 4: Infected cells: One reason for the declining number of T-Helper cells may be the formation of giant cells with multiple nuclei, called Syncytia (lower part). Normal cells (upper part) formsyncytia when they are mixed with single HIV infected cells.

The T4+ lymphocyte is a key cell in the immunization process. Along with monocytes and macrophages, cytotoxic T-cells, natural killing cells and B-cells, the T4+ cell is essential in the immune system. This is why a decline in the number of T4+ cells is so effective in producing immune deficiency. The deficiency finally leads to opportunistic infections that are a symptom of full-blown-AIDS.

Certain populations of monocytes and macrophages also develop the T4 antigen. New studies⁸ have shown that both are subject to infection with HIV. Normal monocytes and macrophages from blood can be infected in vitro with HIV. However, monocytes and macrophages are rather resistant to syncytia formation and killing, which means that they store a viral infection longer. This reservoir would take care of the infectiousness of the host organism.

The increased release of Interleukin-1, or the factor for tumor necrosis, might explain the chronic fever episodes of AIDS because endogenic pyrogens produced by monocytes are occurring. The tumor necrosis factor is also strongly catabolic and could be responsible for the pathogenesis of AIDS cachexia in Africa⁹ (known as Slim Disease).

The infected monocytes might be used to transport HIV to the central nervous system (CNS).¹⁰ About 80-90% of all AIDS patients show neurological anomalies during autopsy. Disorders such as toxoplasmosis, crypto-coccosis and primary lymphoma of the CNS occur. In addition, subacute encephalitis, vacuolar myelopathy, aseptic meningitis occur along with peripheral neuropathy. Subacute encephalitis (AIDS encephalopathy or dementia complex) constitutes the most frequent neurological complication. This AIDS complication is characterized by poor memory, lack of concentration, lack of interest and psychomotor retardation. In 80% of all cases, these symptoms develop rapidly and end within a year in a full-blown dementia complex.¹¹ These changes have been shown etiologically by Shaw,¹² to be a consequence of the HIV infection in the tissue. D.D. Ho and Levy and their associates, have

isolated HIV from brain tissue and from cerebro-spinal fluid.¹³ The amount of virus isolated from the brain was often larger than that which could be isolated from the blood or from other tissues. These findings confirm that the AIDS lentivirus was the cause of the changes because they are in agreement with other findings from other lentiviruses (Visna Virus, Caprine Arthritis Virus and STLV-III). Thus, HIV is not only lymphotropic but also strongly neurotropic. The CNS acts as a reservoir for HIV.

The data we have mentioned to date allow us to outline the path of an AIDS infection as given in Figure 2:

HIV infects the peripheral monocytes, which are then used as a transport mechanism through the blood-brain barrier into the central nervous system. The HIV replicates in monocytes and macrophages. It is possible that these infected cells release proteolytic enzymes that are toxic to the neural cells. This hypothesis is supported by the fact that necrotic centers are almost always infiltrated by macrophages and lymphocytes. However, there are other postulates currently under discussion. The permeability of the blood brain barrier has to be damaged in such a way as to allow for the observed dysfunctions. It seems clear, though, that direct HIV infection of neurons is not an important mechanism in the eruption of subacute encephalitis. Today the opinion is that the human brain can express T4 receptors¹⁴ and that normal glia cells can be infected in vitro with HIV. Further research in this field will have to find the exact process of infection.

“Once Infected with the AIDS Virus-Always Infected?”

“Persons infected with AIDS carry the virus for the rest of their lives.” Until a few months ago, this was believed to be true. However, some positive patients have become HIV-antibody negative (*New Scientist* June 9, 1988 p.41). It is not yet clear whether this is due to some false positive

results in the first place or whether the patients who have become negative are still infective to third parties.

Various properties of the HIV result in the high persistence of the virus:

1) HIV is a retrovirus. The DNA that results from the transcription of the virus RNA is introduced into the host genome. For this reason it is very difficult to remove or to kill the HIV without damaging the host chromosomes.

2) There have been observations of *in vivo* restriction of the Visna Virus. The same phenomenon has been found for HIV. Very little virus is found without cellular material in infected persons. Less than 0.01% of the circulating lymphocytes generate HIV-m-RNA in quantities that can be traced. It seems, therefore, as if the major portion of the virus is latent in the body and not susceptible to immune clearance. Monocytes and macrophages are relatively resistant to the cytolytic activity of the HIV. This is why monocytes and macrophages may be a reservoir for HIV.

There is a rather large diversity among isolated HIV which is caused by genome differences. The various mutations of HIV show their large variety in the outer envelope of glycoproteins. These different forms inhibit recognition by the immune system, which is, of course, favorable for viral persistence. For this reason it is unlikely that simple vaccines against HIV will ever be effective. There is, however, no proof to date that the immune system could not recognize the different forms. The variability of HIV could have its cause in errors arising during the reverse transcription process which leads in consequence to a functional selection process. The retroviral reverse transcription shows a much higher rate of error than that found with eukaryotic DNA polymerase. The errors in the reverse transcription are enhanced due to the cytolytic action of HIV. This results in multiple recurrence of the infection, and each round needs many reverse transcriptions.

Other retroviruses, especially types which undergo transformations, do not need so many rounds of reverse tran-

scriptions and show less heterogeneity. The HIV variations are able to survive as long as the mutations do not affect the central functions of the virus. The areas of most variability are mainly to be found in the outer glycoprotein envelope of the organism or the envelope which has no major functional importance. The main function of these areas is either the T4 molecule which facilitates the binding to the cell or in the introduction of the virus-to-cell or the cell-to-cell fusion.¹⁵

Protection Against AIDS and other Epidemics by Condoms?

In some European states and in some influential United States circles, the surest protection against AIDS is seen via the use of condoms. How safe are condoms in view of the lethal outcome of an HIV infection contracted during intercourse? We are going to quote here from the authentic *Lexical Compendium of Medicine*, "AIDS,"¹⁶ which is issued by the Wellcome Foundation. This foundation is very active in AIDS research and developed Zidovudin (AZT).

"Condom" is named after the English physician Dr. Condom, who introduced this mechanical contraceptive in the 17th century. The condom does not absolutely protect against contraception or venereal diseases. The Pearl-index (the number of unwanted pregnancies during 1200 months of use, i.e. 100 women use the method for a year) for condoms is between 8-15. For the methods based on biological rhythms (e.g. Knaus-Ogino), a value of 14-32 is quoted. There are various studies proving that the use of condoms is also associated with a statistically significant, but very small incidence of sexually transmitted diseases. Lubrication should be applied externally to the condom; such media should be water based since paraffin based media could render the condom porous. HIV-infected women should choose a condom for protection against the infection and a safe contraceptive (the pill).

The condom does thus not give absolute protection against a lethal disease such as AIDS is. On the contrary, its use in AIDS prophylaxis is a gamble with ones life, statistically speaking. Ought the health ministries in various countries to declare the use of condoms as “Safe Sex” when they know that this claim is not strictly true, — even though the incidence of infection is lowered by their use? Today it is generally known, as already pointed out, that the ozone in the atmosphere is able to render the rubber of condoms porous and therefore unreliable.

Chapter IV

Homosexual and Other Sexual Habits. The Stability of the Virus

The Mechanism of the Spread of the AIDS Epidemic

In the 80's, 75% of all AIDS infected people in the United States were found within the male homosexual population. This is not the case in Africa. Even today, the AIDS epidemic in Africa is mainly limited to promiscuous heterosexuals. In Europe, statistics recorded up to 1986 showed over 85% of all AIDS-infected persons have been homosexuals. Recently, this trend has shifted toward an increase in infected drug users. There are several exceptions that confuse this epidemiological picture somewhat: for example, the complication of AIDS-infected persons who do not carry the AIDS retrovirus exclusively. AIDS carriers are the target of other infectious organisms and show the well-known opportunistic infections. Among those infections we find mycobacterium tuberculosis var. hominis and other parasites that normally infect only pets such as dogs and cats. The human body normally can cope with these infections by means of its immune system. However, if the host organism is immune deficient many parasites may invade it.

It is in the nature of anal homosexuality that the sperm

depositing homosexual comes into contact with the feces of the passive partner and may thus get infected via the excrements of his partner. We shall have to say here a few further words with respect to anal homosexuality in general.

Male homosexuals often practice what was in former times called "sodomy" or anal intercourse, which replaces in homosexuals normal heterosexual vaginal coitus. Today, the meaning of "sodomy" has changed somewhat. It is used often in the sense of "intercourse with animals." (See *Webster's Seventh New Collegiate Dictionary* 1971, G & C. Merriam Company, Springfield, Massachusetts) As we have already mentioned, rectal intercourse may damage the walls and mucosa of the rectum, since this region was not designed to withstand the friction which occurs during intercourse. The rectal walls are thin and cannot easily withstand the pressure of the penis. In contrast, the walls of the vagina are multi-layered and withstand this pressure. In addition, the vagina possesses a thick mucosa that provides lubrication during intercourse. That is why lacerations are generated easily during anal intercourse and bleeding tissue gets into contact with feces but not during vaginal intercourse.

Such injuries provide an ideal path for the transfer of viruses and other infections. If, in addition, there are hemorrhoids present, these may also be damaged, and all kinds of infections may ensue. Feces also facilitate the transfer of all sorts of bacterial infections, so it is no wonder that homosexuals are burdened with many types of infections. Moreover, many of those who have become immune-deficient through contact with sperm but who are not HIV infected cannot fight those infections. This aspect needs further explanation which will be given later.

If the anal sphincter is injured during anal intercourse it may transfer infections too. The passive partner can

become incontinent as a result of the anal intercourse. Therefore, a mixture of feces, blood and secretion may be deposited on toilet seats and benches in baths as well as in private homes. These are not only not hygienic, they can become dangerous because homosexuals often suffer from immune deficiencies caused by effects of sperm (foreign protein) on the immune system. Physicians and other personnel involved in the care of homosexuals know this kind of incontinence very well. Is AIDS spread via these infections? There are two classes of opinions about this matter: —

One class thinks there is no danger of contracting AIDS through casual contacts of this kind, since the AIDS virus is allegedly very fragile outside the human body and perishes rapidly there.

The other class teaches that HIV shows a remarkable resistance to destruction outside the body and that therefore a danger of casual contact exists for AIDS.

We should listen to both sides of this debate for its outcome may be vital: Professor Roos¹ (class 1) writes in his report: "The virus cannot exist for very long outside the human body so that there is no danger of casual infection with AIDS". The *Lexical Compendium of Medicine*² states: "There have to be two conditions met for a successful transfer of the HIV infection: 1. Availability of a culture medium is needed for the virus; 2. The virus or the infectious secretion has to penetrate the organism actively or be transferred into it. It is because of these conditions that it is practically impossible to get infected with HIV in everyday life. It needs highly artificial conditions in order to keep the virus alive outside of the human body (laboratory cell cultures, blood transfusions). In no way is this possible as far as door knobs, stethoscope membranes, hand palms or drinking glasses are concerned. The infection only occurs if the virus gets into the organism alive. This is possible in the following situations: sexual intercourse, transfusion of infected

blood, use of shared needles and paraphernalia in drug abuse, organ transplants from an infected donor, heterologous insemination with untested sperm pools, intra uterine infections, and needle injuries during blood work.

It is unclear for the time being, whether the virus can penetrate the organism via the mucosa, and if so, to what extent. Epidemiological data contradict the view that uninjured mucosa provides a frequent port of entry. A remaining, avoidable risk has to be recognized, at least psychologically, if one wishes to make the statement that French kissing is devoid of infection risk. In fact it is well known that the eyes and mouth should be protected during dental treatments, endoscopy and surgery, for here the risk of infection of the operator exists.

Outside the human body, the virus cannot survive longer than is needed for an immediate transfer between people. An exception to this finding exists only for body fluids preserved under careful conditions. The above is taken from the Compendium above cited.

As a general rule, the Compendium concludes: "HIV is, in principle, transferable in much the same way as the Hepatitis B virus. However, HIV is many times more sensitive and therefore more difficult to transfer."

So much for the class 1 quotations from the *Lexical Compendium of Medicine*, published by the reputed Wellcome Foundation. *The compendium does not supply any sources for the information given above.*

On the other side, class 2, there is a second school of thought representing a quite different opinion. James Slaff and Brubaker³ report on the following laboratory experiments with HIV: "The AIDS virus is remarkably stable in contrast to the above statements. The HIV remains active for 9-15 days at 20 degrees C (68 degrees F), even when dried. In this regard, HIV seems to be more stable than other retroviruses that lose their activity outside the human body. This means, very specifically,

that toilet seats which get contaminated with feces, might remain infectious for 9-15 days at room temperature of 68 degrees F."

F. Barre-Sinoussi and associates⁴ have given us the following additional information regarding the stability of the HIV retrovirus: "...HIV has been isolated from the following body fluids: blood, semen, saliva and tears. The presence of HIV in saliva prompted us to look into the possibility of a transfer of AIDS via saliva. This is why we investigated the stability of HIV at room temperature outside of the human body ... The virus was left at room temperature in a test tube for 0, 2, 4 or 7 days ... or in a petri dish under dry conditions. After these periods, the virus was used to infect stimulated T-lymphocytes. The viral production was determined in a cell free liquid via the reverse transcriptase activity twice weekly. *The data showed the unusual activity and stability of HIV. Between 0, 2 and 4 days there was no significant loss of HIV activity. After 7 days there was a small reduction in the activity which leads to the conclusion that some of the infectious particles become inactive after that period.*"

Similar tests with petri dishes showed that the virus remains active upto 10 days when dried and kept at room temperature.

Slaff and Brubaker came to the conclusion that the occurrence of AIDS in the low risk groups has its cause in HIV stability. The two researchers suggest, therefore, the need to improve general public hygiene. Instruments that pump saliva in laboratories and hospitals involved in HIV research should be protected. They also suggest the use of HIV active disinfectants.

When quoting the afore-mentioned results of researchers regarding the stability of the HIV outside of the human body, one generally is regarded by the opposite school of thought as ignorant. The fact of the relative stability of HIV has almost disappeared from the official and political AIDS literature. In spite of this, L. Resnick

and associates⁵ have repeated the work of the above mentioned French researchers and have found substantially the same results. They write that, in view of the lethal consequences of any HIV infection it is very important to know exactly how stable HIV is outside the human body. They conducted their experiments under wet and dry conditions and at temperatures ranging from 23-27 degrees C (73-81 F), 36-37 degrees C (97-99 F) and 54-56 degrees C (129-133 F). *Activity of the HIV virus has been found after up to 15 days at room temperature. Total inactivity of the HIV virus was reached between 11 and 15 days at 36-37 degrees C. The active virus could be found in dried cells after 3 days at room temperature. In water at room temperature, activity was found after 15 days. At 54-56 degrees C in water, the active virus still existed after three hours.*

These findings explain why there are still HIV infections arising in hemophiliacs who receive blood products. Blood cannot be freed of HIV through raised temperatures alone since temperatures much above 37 degrees C degrade the blood. For this reason, the blood terrorism that has been threatened by some AIDS activists still remains a real and unpleasant possibility, which cannot be overcome by the thermal sterilization of HIV infected blood.

Sodomy (Recto-Anal intercourse)

The practice of Sodomy, in the original meaning of the word, may lead in itself to a dysregulation of the immune function of the human body through sperm (foreign protein) deposited in the rectum. This dysfunction does not occur in heterosexual intercourse, as we have already mentioned. The thick, multi-layered walls of the vagina (mucosa) protect the blood from the direct penetration of sperm into the circulation. However, if sperm penetrates the thin and damaged walls of the rectum, it is recognized

in the blood as foreign protein which challenges and thus stresses the immune system. This results in an immune dysfunction — even without the classical HIV mediated immune suppression.

For this reason alone even monogamous sodomy (anal intercourse with one partner) is not a safe alternative to heterosexual monogamy since about 75% of passive partners in monogamous homosexual couples showed sperm induced immune dysfunction. Their immune systems showed abnormal function even though they were not infected by HIV.⁶

Therefore, it is physiologically abnormal to deposit sperm in the rectum since it overstresses the immune system of the recipient if it reaches the blood stream. The immune system cannot cope with the massive quantities of antigens of the sperm. The body then becomes endangered by infections since the sperm penetrating the rectum weakens the defence afforded by the immune system. Rectal intercourse can, therefore, not be normal either functionally or physiologically, because the physiology of the immune system is damaged potentially by it. This makes anal intercourse a physiologically unnatural perversion of physiological sex.

Oral Coitus (Fellatio)

Oral-penile coitus is an act during the course of which the penis is inserted into the mouth of the passive partner and is often practiced by homosexuals.⁷

If the mouth presents open wounds or lacerations (ulcers, gingivitis, bleeding gums, herpes), and receives infected sperm from an AIDS carrier, then the conditions favoring an AIDS infection are present, because the AIDS virus from the infected sperm can easily penetrate through open spots in the mucosa directly into the circulation of the receiver.

Among homosexuals various infections of the gums are

frequent and are often problematic. The lesions in the mouth provide a port of entry for various kinds of infections. If the saliva and sperms of an AIDS carrier are exchanged, the wounds provide direct access to the blood. They offer, however, also a path of viral exit. Theoretically, infected saliva alone might be sufficient to infect an AIDS negative patient if it penetrates from an AIDS infected patient directly into the blood stream of a non-infected partner. French kissing (the penetration of the active partner's tongue into the mouth of the passive partner and the exchange of saliva) could theoretically be sufficient to transfer AIDS from an infected to a non-infected partner.

The *Lexical Compendium of Medicine*⁸ states: "French kissing is not without the risk of infection. Eyes and mouth should be protected during dental treatments, endoscopy and surgery." How does this advice agree with that given by the official Swiss Minister of Health who maintains that HIV was not aggressive and could not persist very long outside the human body or be transferred by kissing?

The magazine *Leben und Gesundheit*, ("Life and Health"), reports in its of October 1987 issue, "To grasp the hand, to embrace, to flirt and to kiss are not dangerous, just as crying with another person is harmless....Blood preparations have been tested for antibodies against AIDS virus since 1985 in Switzerland⁹." Missing antibodies, as we have shown so often, are no proof that HIV is absent because the HIV incubation period may last for years without the production of antibodies.

For political and propagandistic reasons a potentially lethal infection is being played down. Is the aim of this suppression of information the preservation of the promiscuous sex revolution and of the permissive society at all costs?

It is not yet known whether the digestive secretions in

the stomach are able to kill the AIDS virus. It is possible, however, that swallowing infected sperm might cause an AIDS infection, especially in the presence of ulcers or other open wounds. For this reason, viral infection through the consumption of fish or other food that has been infected with a retrovirus, is not impossible. The AIDS retrovirus is, as we have seen, in no way fragile.

Sadomasochistic Homosexual Practices

Anal intercourse in itself is a sadomasochistic act because both partners, the sperm depositing and the receiving partner, are being physiologically abused. Injuries to the rectum, the anal sphincter and the receiver's immune system by foreign protein (sperm) are frequent, the latter mediated by a reaction against the foreign proteins of the sperm. The fissures caused in the rectal passage are among the mechanical injuries.

We have to mention, however, other kinds of sadomasochistic homosexual practices. Dealing with these matters, is by no means pleasant but is necessary to make understanding and appreciation of the dangers of AIDS infection among homosexuals clear. A Christian in particular, should take a biblical-Christian attitude, that is he should be able to distinguish between the homosexual person and homosexual practice itself. God loves mankind but calls for his repentance. He disapproves, however, of the sinful attitudes of mankind and perverted practices. To put the matter more forcefully: He loves the sinner but not his sin.

a) Fisting

In this homosexual act, the fist is thrust into the rectum or even as far as the colon of the passive partner. This maneuver not only injures the sphincter but also the walls of the mucosa of the rectum and the colon. The resulting fissures and lacerations provide a path for

many types of infections. Fisting is seen as an active factor with AIDS infections and with homosexuality in general.¹⁰

b) Mechanical objects, Dildos, Vibrators

Many mechanical objects, dildos and vibrators, for example, are inserted into the rectum for stimulation during "fisting". These objects, however, injure the mucosa and may cause injuries that then leak feces into the peritoneum. The resulting infections are life threatening if they are not treated, surgically and antibioticly, immediately. Cases of "Fisting" have been observed in which the sphincter had been damaged so much that a sphincterectomy (removal) and/or a colostomy had to be performed. (After that, homosexual acts were performed through the colostomy)!¹¹

In San Francisco there have been murders among homosexuals that were mixed up with homosexual sadomasochism.¹² Soon after such occurrences started, homosexual associations issued instructions to educate homosexuals how to conduct sexual torture without actual killing.¹²

c) Homosexual Torture and Water Sports

Dominant homosexual partners tie and torture a submissive partner ("slave"). Acts of this kind are part of homosexual sadomasochism. Often, the "slave" is dressed in tight rubber or leather garments and then gets whipped or sodomized. Burning cigarettes are often used to traumatize sensitive body parts. During this kind of sadomasochism the genitals are specially favored. As a result ulcers of the penis and the scrotum often arise.¹³

After such treatment, the bleeding body parts often get washed off with urine. This washing with the urine of the dominant partner is called "water sports". Such water sports are popular. If it happens to be the urine of an AIDS-infected partner then the injuries of the "washed"

person may get infected with AIDS retrovirus. It is also possible that the urine is infected with other organisms, so these infections may also get transferred. "Water sports" are not only practiced as part of the ritual of sado-masochism and as part of the torture. It is said that these games are fun and not harmful "as long as the urine does not penetrate into the body."¹⁴ This quotation was revised in *Risk-Reduction Guidelines for Healthier Sex* since there were so many infections and epidemics in homosexual circles.

A final word about homosexual torture. Some homosexual clubs hold slave auctions where those who let themselves be tortured in the afore-mentioned way, get sold to the highest bidder.¹⁵

d) Bestiality

Recently, a club in the United States was closed because of bestiality (intercourse with animals). Peter K. Lewin, of Toronto, thinks bestiality could be one of the original causes of the AIDS epidemic.¹⁶ Organisms that are present in the abused animals and are harmless there, may suddenly get virulent if introduced into the human organism via intercourse. Examples of this change in virulence are known. It is the transfer of the organism (the virus in this case) from the animal host to homo sapiens that causes enhanced lethality of the virus.

e) Oral-anal coitus ("Rimming" and "Scat")

This kind of homosexual practice has to be mentioned, even though it makes one sick. In oral-anal intercourse (Ani-lingus, "Rimming"), the partner swallows the infected and parasite-loaded secretions and feces directly from the rectum.

Another kind of intercourse is that which is called "scat" — after the French word for feces. Scatology in French covers the subject of dirty or filthy pornographic literature. "Scat" includes the direct defecation into the

mouth of the partner.^{17,18}

Of course, not all homosexuals descend to the standards of "rimming" or "scat". Nevertheless, one has to consider that anal intercourse, (which is linked to subsequent infections of all kinds derived from the remnants of feces and the bleeding rectal canal), aims in the same direction as "rimming" and "scat."

Human physiology is just not suited for homosexual practices. If a machine — the body is a biological machine — gets used for purposes it was not made for, the machine is abused, be the machine mechanical or biological. Abuse and perversion are concepts not very far apart even with respect to homosexuality.

Social Contacts and AIDS Therapy

Today, AIDS patients are often treated in open hospital wards together with non-AIDS patients because social non-sexual contact is not regarded as being dangerous. One has to consider, however, that the situation changes when an AIDS patient suffers from tuberculosis or pneumonia and at the same time coughs. The AIDS patient can spread AIDS infected droplets when he coughs. If the patient has developed TBC, with mucosal fissures, active infectious virus may penetrate into the circulation of other patients for the virus is inactivated only slowly.¹⁹

In order to bolster the view that social contacts with AIDS patients are harmless, British TV showed how the Princess of Wales (Lady Diana) visited AIDS patients in the Middlesex Hospital in London, shook their hands without gloves or other protection and talked to them for extended periods of time. All this information was given to confirm that AIDS is not as contagious as had been feared. Allegedly only intimate contact with AIDS patients is dangerous. Therefore, social contacts are harmless and AIDS patients do not have to be "discriminated" against — that is quarantined.

The stability of the AIDS retrovirus outside the human body might explain the fact that up to 6% of all AIDS cases in children and babies belong to low-risk groups. This means that these children did not contract their infection through sexual intercourse or blood transfusions, nor through perinatal circumstances. They surely were not drug abusers, either. Somehow these children must have contracted their infection by contagion in the household, in public transportation or otherwise.²⁰ In view of this rather constant 6% infection in low risk groups, one has to consider infection through insects or other vectors. For these very reasons some laboratories that deal with AIDS, suggest that physicians, dentists, nurses and other personnel should take greater precautions in order to enhance their protection against AIDS infections.

We will now cite some examples of advice on this topic as issued by the Swiss Bundesamt für Gesundheitswesen (Swiss Ministry of Health): "All social contacts with AIDS infected persons are harmless, as long as there is no intimate contact. No one can contract the disease by shaking hands, embracing or normal kissing. The virus does not get transferred by coughing or sneezing on the part of the AIDS infected person. No one gets infected by using public swimming pools, saunas or toilets. Blood donations and blood transfusions are safe. Each and every donation is tested in Switzerland. Blood with a positive-antibody test is not used for either transfusion or the manufacture of blood preparations."²¹

The Swiss administration should know and does know that after an infection by the AIDS retrovirus the antibodies show up after weeks, months or even years. A person may have contracted the AIDS virus and may not show any antibodies at all during this incubation period. Even though he is antibody-negative he may infect other people, without any knowledge of that fact. He may even infect the blood bank without hematologists noticing either, since there are no antibodies to be found in his

blood. For this reason many hemophiliacs have become infected through the use of infected blood. (80% of all hemophiliacs in the U.K. are AIDS-positive — the direct result of tested but infected blood banks.)

Dr. Sidney Finegold, President of the Infectious Disease Society of America, suggests that all immune suppressed or pregnant patients should be treated separately from AIDS patients. Pregnant patients show a stressed immune system so that they should be protected against any additional stress. The baby they carry would be endangered by an AIDS infection in the mother. That is why the mother should not be exposed in any way to AIDS patients. In addition, there is the risk of a cytomegaly virus infection that could damage the brain of the baby. Cytomegaly virus infection appears often where there has been an earlier AIDS retrovirus infection.²² This is why the 1980 report cited suggested that pregnant women should not be brought together with AIDS patients at all (which constitutes a form of quarantine in the wider meaning of the word).

Such precautions ought to include the exclusion of AIDS patients from any work involving food or baby food. Also, since babies have a developing immune system, they should not be exposed to the risk of having any contacts with AIDS patients. Some Swiss newspapers reported last year that the Director of the Inselspital in Bern had issued a directive under which the nursing personnel should enjoy better protection against AIDS infections from patients. After a short time, however, this medical directive was cancelled by the non-medical administration of the hospital! Can one conclude otherwise than that medical science and prudence is now overruled in purely medical matters by non-medical ideology/and administration?

Chapter V

AIDS Therapy

General Therapeutical Possibilities

Goodman and Gillman's well-known textbook *The Pharmacological Basis of Therapeutics* treats the problem of the therapy of viral diseases in general as follows: "It has always been difficult to treat viral diseases. Viruses are more resistant to treatment than other microorganisms since they are obligatory intracellular parasites that require the active cooperation of the mechanisms of the host organism. Consequently, the substance that kills the virus will probably kill the host organism, too. Even though the search for antiviral substances has been long and intensive, very few suitable antiviral medications for clinical use have been found. Some medications show a small activity spectrum and are active against a small number of viruses."¹

Dr. John Beldekas, who works at the Department of Microbiology of the Boston University School of Medicine, writes the following about AIDS: "This virus is a biological mystery. There is evidence that it changes its surface properties in going from one person to the other. These small changes may lead to the conclusion that it is probably impossible to develop an effective vaccine against these constantly changing forms. Another prob-

lem to date is that no one has developed any successful vaccine against any retrovirus. No one knows whether such a vaccination can be effective."²

Some Other Factors of Importance in the Therapy of AIDS

a) The Immune System

The body's natural defense against infections by means of the immune system does not work in the presence of the AIDS virus. For most other infections the immune system generates antibodies that inactivate or kill the intruder. With such infections vaccines can be used to enhance the antibody level in the blood. When the level is high enough the intruders become neutralized.

This is not the case for an AIDS infection. **Some time after the first HIV infection, sometimes after weeks, months or even years, the human immune system generates antibodies. Testing the blood of an HIV infected person, for example for a blood donation, one may not find any antibodies at all in the blood. So the anti-body negative blood may perhaps be donated to a hemophiliac or to another patient as a transfusion during surgery. This antibody free blood that is infected, gets directly (or indirectly in the form of blood products) into the system of another patient who then becomes infected, The antibody free patient might also infect his wife or other sexual partner during intercourse without knowing it. During this period his blood is AIDS antibody negative but infectious**

When the blood of the patient after years perhaps finally shows the antibodies, they provide little or no protective effect against the AIDS virus. *Researchers do not dare risk injecting even the smallest amount of the AIDS virus as a vaccine into their patients in order to have these small amounts produce the protecting (?) antibodies. For the antibodies thus produced do not afford any*

effective protection. It is feared that even one HIV virion (one virus particle) might trigger the whole infection if tried out as a vaccine.³

Recently a genetically mutant AIDS virus was discovered, which is probably not infectious, but which causes AIDS antibodies to be produced.⁴ This virus is now the object of intensive research. Other researchers have found that even in the presence of rather high levels of antibodies in the blood the AIDS virus continues to replicate. The large amount of antibodies helps but little and the virus continues to multiply.⁵

b) The Genome

Up to now there is no therapy that prevents the destruction of the immune system or of the central nervous system by the AIDS virus. The fatal opportunistic infections that are characteristic for full-blown AIDS are the consequences. Suitable medication may diminish the force of these infections and also the progressive degradation of the immune system. However, the infections return over and over again. This is why the action of most medications with AIDS remains merely palliative.

Since the AIDS retrovirus hides within the human genome (DNA) it is inherited by all the successors of the cells of the host organism. The virus has thus become actually a part of the human genome. The whole line of cells coming from an AIDS-infected precursor now contains the information that is needed to build the AIDS virus. This is why medications can hardly reach the AIDS genes without destroying or damaging the human genes.

There are suitable antibiotic therapies for a fraction of the *opportunistic infections and tumors* in AIDS. But even their action is limited by the damaged or missing immune system, since antibiotics always work in conjunction with the immune system. As such, if the immune system is as good as non-existent, the result is nil or at least greatly reduced. Up to now there is no

effective therapy against the immune deficiency.

c) The Neurotropic Action

The AIDS virus does not only act on the immune system. It also attacks the central nervous system.⁶ The viral attack on the neurons of the brain is also not yet susceptible to treatment. This attack ends in the destruction of the central nervous system which may be irreversible. Finally, this attack on the neurons leads to the host organism's death. The virus penetrates the blood brain barrier and rapidly multiplies in the neurons. Again, the virus hides in the genome of the cells where it is protected against therapy.

d) Mutations

In the course of the extraordinary fast mutation rate (triggering spontaneous genetic changes) in the HIV, many different subgroups of the virus are produced that all apparently require different immunological antibodies. For this reason one has to neutralize many different subgroups of antigens and each of these will require a different vaccine for its inactivation.

This genetic drift, the mutation into different subgroups, has been observed in individual host organisms for the infectious anemia of horses and for the Visna virus. All subgroups will require different antibodies in order to be neutralized. This kind of genetic drift, — variation through mutation —, is characteristic for lentiviruses.⁷

However, it has been found additionally that HTLV-I and HTLV-II, and some other lentiviruses, are less heterogeneous than HTLV-III (=HIV) and show less tendency for genetic drift and mutation. This means probably that HIV mutates faster and becomes heterogeneous faster than other retroviruses of a similar kind. The consequence is that HIV is more difficult to neutralize than other retroviruses. Its five or six genes are highly

unstable so that there aren't any genetically uniform viruses within a host. Each patient hosts a multitude of subgroups of HIV. Genetic drift is apparently responsible for this unpleasant phenomenon and may be the reason why the antibodies produced in the body cannot get control over the virus. The target is like a chameleon. By the time the body has created antibodies, the target has changed into something different.

e) Consequences of the Mutation Rate

In 1986, about two million people were infected with a multitude of AIDS subgroups. These two million people may, apparently for the duration of their life, infect other people with any of the subgroups of AIDS. Until a vaccine has been developed which is able to neutralize *all* these AIDS subgroups, no vaccine will be effective against AIDS. One will have to develop a polyvalent vaccination which is effective against the products of all genetical HIV drifts.

Recent Therapeutical AIDS Research

In the following, we wish to describe the more recent therapeutical substances that have found use in AIDS therapy. Some are more promising than others. It goes without saying that this overview is not complete.

a) Azidothymidine (AZT, Retrovir, Zidovudin)⁸

The fight against AIDS could possibly be facilitated by direct chemotherapeutic action on the virus. Burrows-Wellcome synthesized Azidothymidine under the brand name of Retrovir, which is now registered for AIDS therapy in most industrialized countries.⁹ Thymidine (the basis for AZT) is obtained from the sperm of herring or salmon. Azidothymidine is then synthesized from thymidine by normal organic chemical methods. During the replication process the AZT is built into the DNA by

the HIV, rather than thymine. AZT, however, cannot fully substitute for the thymine so that the replication is stopped under these circumstances. Fortunately, the normal cells are not as sensitive in their nucleus to AZT as the HIV is, probably because HIV proliferates very rapidly and needs much more of the basic substances for synthesis than normal cells.

AZT is not a new product. It was tested first in 1860 as a possible anti-cancer agent. However, since AZT blocks the synthesis of blood in the bone marrow, it has been given up as an anti-cancer agent. Another disadvantage of AZT is its price. The chemical synthesis and the basic substances are very expensive. Since the effect of AZT in the body does not last long (it is metabolized and is eliminated rapidly), the patient has to take the medication 24 hours a day. There is, however, no better medication around at the moment. In the western world more than 9,000 AIDS patients take AZT daily. If AZT could be combined with other anti-viral drugs one could possibly hope to reduce the dosage which would be beneficial with respect to the toxicity of AZT (Retrovir).

b) Avarol and Avaron — Chemotherapy Against AIDS¹⁰

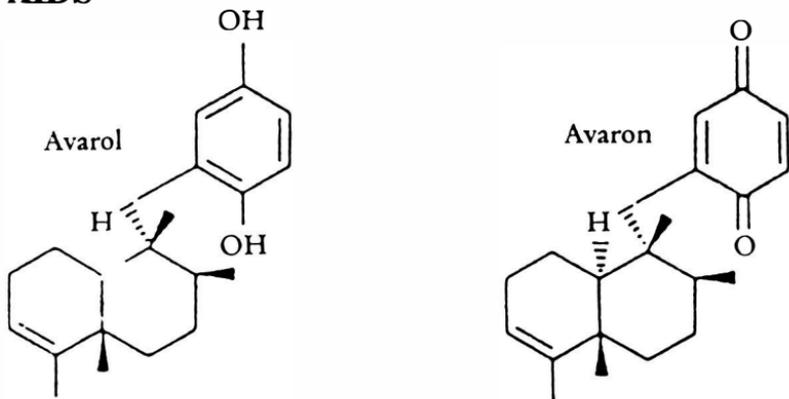


Figure 5: Structural formulae for Avarol and Avaron

Central to chemotherapeutical AIDS research are experiments aimed at blocking the key enzyme of the retrovirus, the reverse transcriptase. *In vitro* and *in vivo*, the inhibition of the reverse transcriptase enzyme has been carried out successfully by using nucleoside analogs (i.e. synthetic substances which have a structure similar to those required for the synthesis of the natural DNA building blocks). Substances such as 3'-Azidothymidine, Ribavirin or enzyme poisons such as antimonytungstate, suramin or phosphono-formate, inhibit the enzyme *in vitro*. These experiments, however, have not been repeated in any *clinical* study.

The extreme toxicity of the HIV organism comes at least partly from the fact that the virus possesses an additional gene, the so called "tat" (transacting transcriptional factor), a gene that is missing in many other retroviruses. A possible therapeutical handle would be that of inhibiting the expression of the corresponding genes.

The "tat" gene codes a protein "p14" (cf. Figure 1) that:

- 1) Enhances by a factor of about a thousand the translation efficiency of the viral m-RNA and therefore the synthesis of the viral proteins.

- 2) Modulates the expression of cellular genes. It is the latter that render HIV viruses so dangerous. Perhaps it is also the "tat" gene, which after its expression and the synthesis of protein "p14", causes the death of the cell. See Figures 2 and 3.

Avarol and Avaron (Figure 5), which are extracted from a sponge (*dysidia avara*), occur in large quantities in these sponges: 2.7 grams per kilogram wet weight of the sponge. Both substances show anti-HIV activity *in vitro* and *in vivo*. Avarol and Avaron show a large cytoprotective effect in HIV-infected cells. This antiviral effect occurs at relatively low concentrations - lower than the concentrations needed for the anti leukemia effect of both substances.

Avarol and Avaron inhibit the expression of the HIV-gag proteins p24 and p15 in the infected cells. An also nearly complete inhibition of the virus production in H-9 cells that had been cultivated in the presence of Avarol was noted. The consequence is that in petri dish tests, both substances, Avarol and Avaron, killed the AIDS virus. Few concrete reports on clinical tests with either substance were found in the literature to date.

c) Peptide T, a new AIDS drug¹¹

A new AIDS-therapy test is being conducted in Sweden. Physicians of the Karolinska Institute in Stockholm want to treat 18 AIDS patients with a new medication called Peptide T. European and American scientists issued objections to the experiment since they could not repeat the basic experiments on which the test was built: — the Swedish claim that Peptide T can prevent the infection of white blood cells with HIV.

Peptide T is a chain of eight amino acids, five of which carry names that start with the letter T — hence the name. The same order of amino acids occurs in the viral protein gp120, which is in the viral envelope and is involved in the attachment of the virus to the T4 lymphocyte.

Candace Pert and her colleagues at the National Institute of Health in Bethesda first reported on Peptide T in 1986. These researchers claim that Peptide T is able to block the T4 lymphocyte receptor, which attaches HIV to the cell. If this were the case, it would indeed inhibit the infection of the cell with HIV. This finding might be helpful in the development of a vaccine against AIDS. On the other hand, Peptide T or other related substances could prevent the spread of the virus in already infected patients.

In itself, peptide T is not toxic, yet it may influence the immune system. The University of California, Los Angeles, held a conference on Peptide T in April 1987. All

participants informed Candace Pert that they were not able to repeat the experiments on the T4 receptor block via Peptide T. Even Professor Wigzell, Professor of Immunology at the Karolinska Institute in Stockholm, could not confirm the results. According to Wigzell, Peptide T cannot influence the attachment to the envelope protein gp120 or the viral replication *in vitro*, in the laboratory.

The experiments with Peptide T at the Karolinska Institute do not seem to be too promising because the experimental basis for the clinical trials is lacking. Many scientists would not consider clinical tests with patients because of this. It shows how desperate the situation is in the search for an efficient treatment of AIDS that some scientists are prepared to carry out clinical trials which rest on no adequate experimental basis.

d) Other substances that might be effective against AIDS: Dideoxycytidin (DDC, a nucleoside-analogue) and Ampligen (a double stranded RNA, (ds-RNA))

DDC had been conceived as an anti-cancer drug, but proved to be non-effective against clinical cancer. In certain cell cultures, it has been as effective against cancer cells as AZT. The clinical results in cancer patients, however, were less encouraging. DDC is at present in the opening stages of clinical trials against AIDS. Initial results show the side effects of DDC are less severe than those of AZT.¹²

The manufacturer, Hoffmann-LaRoche, has high hopes of DDC, even though latest results report unpleasant skin rashes. One may not be able to draw any valid clinical consequences before the end of 1988.¹² None have yet come in (May 1989) that we have seen.

Ampligen belongs to a totally different category of anti-AIDS drugs than does DDC and AZT. *Ampligen* is only slightly toxic. It stimulates endogenous interferon

production and acts on the immune system, which it may even activate. Additionally it is decomposed and excreted very quickly. Ampligen penetrates the blood brain barrier and acts in cell cultures, enhanced by the presence of AZT. It reduces the activity of HIV in infected cells and, in addition apparently activates the immune system.

Small clinical trials with Ampligen on AIDS and ARC patients showed encouraging results, even though the dose has to be administered intravenously. A dose was given twice a week. Physicians were of the opinion that Ampligen could be administered even in small amounts.¹²

Another substance under investigation is *HEM* (from a United States company of the same name), a "substitute virus". DuPont has taken over the license for this product.

e) Foscarnet (Foscarvir, (cf. Astra, Sweden))

This substance prevents the replication of many viruses, including HIV, without damaging the host cell. Foscarnet is eliminated quickly so that the drug has to be given intravenously and continuously. Foscarnet, however, does not penetrate well into the central nervous system. Thus, if the infection is neurotropic, the drug is not going to do much good. For this reason, Foscarnet is seldom used against AIDS, even though it is effective against some secondary viral infections.

f) Ribavirin (Virazol)

This substance is a synthetic nucleoside analogue with a broad efficiency spectrum. It is produced by ICN Pharmaceuticals under the brand name *Virazol* and is being used in the treatment of Lassa fever. With daily doses of 800-1,000 milligrams it shows severe, but reversible, hematological side effects.

Virazol is more active in laboratory tests (in vitro) against AIDS than in clinical studies. In the United

States Virazol is only licensed in the form of an aerosol spray for children with respiratory viral infections. The manufacturer claims the drug prevents the manifestation of full-blown AIDS in already infected patients or at least slows it down. This is, however, not yet proven. Desperate Americans who have to deal with AIDS patients purchase Virazol in Mexico, where it is licensed.¹³

g) Contracan

Medirace, a British company,¹⁴ attacks the problem of "AIDS therapy" from a completely different point of view. The ratio of saturated to non-saturated fats in the cell membranes is normally lower than it is in an HIV-infected patient. This fact weakens the overall cell structure of an AIDS patient. Medirace investigated a fatty acid derivative they named Contracan.

Contracan is said to restore the ratio between saturated and non-saturated fats and thus to strengthen the cell membrane. Consequently, the virus that replicates within the cells no longer escapes and infects other cells. If this mechanism proves correct then the spread of the virus in the organism could be prevented. The effect has been observed in cell cultures. An effective clinical trial has not yet been carried out.

If clinical tests were successful, the drug would be suitable for the fight against AIDS because it is inexpensive and shows a good, lasting effect in cell cultures.

h) Suramin (Naphuride, Antrypol, Germanin, Bayer 205)¹⁵

Suramin is one of the few non-metallic substances that are active against trypanosomes. It was introduced around 1940 and was used as a trypanocide. Recently, it was discovered that Suramin is also active against AIDS. However, the *in vivo* tests did not, as of yet, replicate the hopeful *in vitro* experiments. This is why the drug has been effectively given up for AIDS therapy.

i) Viral proteins as vaccines?¹⁶

Professor William Jarrett, director of the Department of Veterinary Pathology at the University of Glasgow, in Scotland, has developed a vaccine against AIDS that he wants to test with AIDS patients within the next few months (1988).

Jarrett maintains that AIDS researchers have more hope today of finding an anti-AIDS vaccine. He believes that such a substance can be found in spite of the difficulties due to rapid mutations. As we have seen, some conventional experiments towards producing a vaccine have been in vain. Jarrett has thought of a different way and works on Immuno-stimulatory Complexes (ISCOMS). These complexes are small lattice structures that enable the production of viral proteins in the same way as they occur on the virus' membrane.

Jarrett starts from the assumption that even though the immune system generates antibodies against AIDS, the antibodies cannot inactivate or neutralize the virus because they cannot reach the receptors on the virus. ISCOMS boost the low antibody levels so they can become active in the end. If, by boosting the antibodies in AIDS infected people, higher yields of the antibodies could be achieved, then the AIDS infection could be fought. This is Jarrett's method of thinking.

Jarrett's Glasgow team concentrates on one particular viral protein, the Glycoprotein 120, gp120. This protein is bound to the viral envelope and is involved in the attachment of the receptors for the T-helper cells. (These cells are among those that get attacked by the HIV). The glycoprotein, gp120, is now being generated on a baculovirus vector. The baculovirus is a virus that attacks certain insects. The gene that supplies the information for the synthesis of gp120, also synthesizes the protein. When it has been spliced (that is bits of information are introduced into a gene or chromosome to add new information to the gene) into the baculovirus, the infected

insect generates large amounts of gp120. The next stage is the production of ISCOMS. The viral protein (gp120) is mixed with source A (from the bark of the Amazon Oak) in the presence of a detergent and ISCOMS is produced spontaneously.

Tests with monkeys have shown that the toxicity of ISCOMS is low. Such a vaccine has been successfully developed against the leukemia virus in cats and has been shown to be 100% efficient in the production of immunity.

Jarrett does not intend testing his vaccine on himself or on any of his collaborators since he wants to be sure whether the antibodies stem from the vaccine or from the disease. Therefore, he wishes to establish a committee that would decide on the participation of volunteers and on the question of the ethics of this experiment.

As far as we are aware there are no results on hand as yet (May 1989) and the technical complications of this experiment should not be underestimated. There is no proof that antibodies could be effective against the viral envelope of AIDS. The virus rests as mere information within the host's genome where it is, (without its envelope), safe against any attack from the outside. One should also note that this procedure does not take into account the rapid rate of HIV mutation. This approach may be possible with a vaccine relatively constant in its structure, which cannot be said of HIV and its mutating genetic information.

j) AL 721: A new AIDS drug

A United States company by the name of Praxis Pharmaceuticals, which has acquired the global rights on AL 721, intends to thoroughly test this drug in seven medical centers.¹⁷

Three of these centers will be in New York, London and Tel Aviv. A British caritative organization is also working to make the substance AL 721 available for AIDS

patients.¹⁸

What is AL 721? It is a mixture of natural fats that are obtained from egg yolks. AL 721 stands for "active lipids" and the number 721 indicates the ratio of three different lipids that are contained in the mixture.

The medicament itself is a yellow oil that patients may take in orange juice or on bread. The mechanism of action, if it exists at all, is unknown as yet. One theory claims that AL 721 removes cholesterol from the virus membrane. This deprivation of cholesterol blocks the virus from infecting white blood cells and damaging the immune system.

Dr. Anthony Pinching and Dr. Susie Forster, of St. Mary's Hospital in London, will conduct part of the London tests. Further publications on this treatment had not been found up to May 1989 (AEWS). The AL 721 tests should have started about a year ago, because the United Kingdom Department of Health and Social Security had given its OK. Dr. Forster, however, stated that she had waited over 18 months for the delivery of the drug. It was planned to test the non-toxic drug AL 721 with certain patients who could not be given the toxic AZT. It was discovered later that Praxis Pharmaceuticals had difficulties in the manufacture of AL 721.

AL 721 was discovered initially at the Weizmann Institute for Science in Tel Aviv, Israel. The substance had been developed because it was found to be able to remove cholesterol from the cell membrane. This seemed to be important because, with increasing age, the cholesterol level in the membrane increases and the activity of the membrane decreases. This is why elderly people had been treated with AL 721.

The Weizmann Institute sold the rights to AL 721 to Praxis in 1980. The interest in AL 721 was, and still is, focused on the efficiency of the drug against viruses of all kinds. In 1978, researchers at the University of Virginia discovered that there are viruses that need large

amounts of cholesterol in their membranes before they can infect other cells. If cholesterol were extracted from the membrane, the virus would be rendered inactive and could no longer infect other cells. An inverse test confirmed these results.

Some researchers are now of the opinion that the virus membrane changes its density when losing its cholesterol content. The ramifications of this change would be that proteins (receptors), which normally protrude from the membrane, would sink into the membrane which would affect their efficiency as receptors. Shinitzky, Skornick and Bentwich²⁷ first recognized that AL 721 could be of use in the fight against AIDS after the substance had shown a pronounced and good effect in a lymphoma patient. The first tests with AIDS patients were done in an ad hoc manner and without any control patients. The results, therefore, are questionable, but are quoted here for completeness' sake:-

Sixteen patients suffering from full-blown AIDS received AL 721. Fifteen gained weight, opportunistic infections became rarer and their clinical condition improved. One patient died during treatment. Blood tests showed small improvements. The biochemical tests did not agree with the clinical improvements so the subjective clinical improvements are the only basis for the assessment of the drug. This does not constitute a solid basis for the efficiency of the drug. A small test with eight HIV patients was done during June, July and August of 1986. Again, the clinical results were encouraging. With five patients the concentration of HIV in the blood decreased dramatically. With some patients there was no further sign of viral activity (no viral enzyme activity) after a treatment period of two months with AL 721. The immune system of the patients also recovered. However, as soon as the AL 721 was no longer taken, the virus appeared again in the blood. Unfortunately, the treatment could not be continued because of a shortage of

AL 721. The planned large-scale tests should now show definitely whether AL 721 is effective against AIDS. None are to our knowledge yet on hand (1989).

k) Padma 28

A lesser known and unorthodox medication against HIV is said to be Padma 28, which was discovered by Professor Dr. Carlo de Bac, of the Institute of Infectious and Tropical Diseases at the University of Rome. Orthodox scientists and statisticians have objections to herbal drugs such as Padma 28. In addition the drug has been tested on only eight AIDS patients during one year.

Mechanism: Padma 28 is an herbal drug, the origin and composition of which is being kept secret — a negative point. Allegedly, it should act on the immune system by means of "weak signals." These "weak signals" should stimulate the regulatory mechanisms in the immune system so that the latter could regenerate.

Professor Dr. Witold Brzosko, director of the Immune-Pathological Institute of the University of Warsaw, Poland, has worked clinically and experimentally almost seven years on Padma 28 in Hepatitis-B infections. The drug was the only one that is said to have been efficient against Hepatitis B without side effects. Professor Dr. Carlo de Bac, the Italian "liver-pope," checked the work of his Warsaw colleague and found Padma 28 efficient against Hepatitis B infections. He publicly confirmed this finding.

After that, Professor Dr. de Bac started to test Padma 28 with heavily infected AIDS patients. These cases were full blown AIDS patients showing opportunistic infections. He started immediately, without any preceding laboratory tests, testing AIDS patients clinically once he knew from his previous work on Hepatitis B that he wouldn't have any Padma 28 side effects. Unfortunately, there is no information whatsoever on the origin and composition of Padma 28 in the only report that has been

made available.¹⁹ Also, any details on the clinical observation standards being used by de Bac are missing - as is unfortunately so often the case in the assessment of this type of drug. The clinical and immunological status of the eight patients is passed over in silence. Since this important information is missing there can be no reasonable assessment of Padma 28 until the information is provided. We mention this work here only because the drug has received much public attention through the above-mentioned publication.

1) Autovaccines

The treatment of AIDS and ARC (AIDS related complex) with a lymphocytal autovaccine has been described in the journal "Deutsches Aerzteblatt."²⁰

In the preface to the article, Rudolf Gross writes on three main groups of methods used to fight the AIDS virus:

1) The viricidal group. This group includes substances such as azidothymidin or azacytosin.

2) The group which aims at hardening the T4 lymphocytes against the attacks of HIV, i.e. at making the cell more resistant against the AIDS virus.

3) The group of substances that comprise vaccines, i.e. that generate antibodies to inactivate the virus.

Brüster and his colleagues tried to concentrate on group three. The following considerations have been the primary ones in their work:

Retroviruses have only one RNA as the carrier of the virus genetic information, in contrast to many other viruses. Left on its own, the virus cannot generate energy, so that it is completely dependent on the host cell and its genetics (in part, these are the T4 cells). Only when the virus can develop double strand DNA can it penetrate directly into the cell nucleus. The virus gets into the T4 cell chromosomes and blocks the body immunological barrier against the virus or prevents the body

from recognizing it. Brüster has tried to overcome these difficulties by developing an autovaccine. He proceeded as follows:

TB lymphocytic cell material was gained from 14 AIDS-infected patients by autocytophoresis, then put into a protective medium and the virus containing cell material set free, first by ultrasound treatment and then by cryoshock treatment at -80 degrees Centigrade. The active virus material was incubated at 50 degrees C for 30 minutes in order to kill the virus. After a double-thermo treatment, the lymphocytic plasma and modified RNA and DNA molecules (after separation from the cell membrane by filtering) were retransfused back to the patient six times in a vaccination cycle of two weeks. After six weeks, a second treatment period of two weeks was initiated. After another six-week pause, a third vaccination treatment was performed. In order to boost the effects, a new cycle was started six months later.

The result of the treatment with autovaccines was encouraging. Ten ARC (AIDS Related Complex) and four AIDS-infected patients (full-blown) were treated this way. All patients initially showed a high antibody level, positive immune-florescence, and a positive Western Blot for the genes p24, gp41, p51, p55, gp120 and gp160. The patients were severely ill (Pneumocystis carinii, Kaposi sarcoma scinale, etc). Even after the second phase of treatment, a visible decline in the clinical symptoms was detectable. Also, the HIV-AK-levels were lower after the second and third phase. All patients were much improved clinically, and the severe side effects, such as Herpes zoster, Lymphadenopathy and other symptoms were reduced. All patients have been reintegrated into the work process. Three other patients who served as a control group remained unchanged in their clinical condition.

One cannot, however, speak of any healing on the basis of so few patients and after such a short period of time. As

to how far an improvement of the Kaposi sarcoma has been achieved cannot be judged at present. One would have to continue this work, repeat many things and prolong the treatment period before firm conclusions could be drawn.

m) New vaccines

Tests on a new vaccine were performed without previous animal tests.²¹ MicroGeneSys, a United States company, has produced a new vaccine that has already passed tests for toxicity on animals. The test animals, however, had been infected with HIV so one cannot say anything much with respect to the efficiency of the vaccine.

American researchers have tried²² to protect chimpanzees against an HIV infection with this vaccination. But they were unsuccessful.

The vaccine consists of the envelope protein of the virus, gp160. Utilizing gene technology, MicroGeneSys produced the gp160. The viral gene necessary for the coding of gp160 is injected into a baculovirus. When the modified virus infects insects, it produces large amounts of gp160.

MicroGeneSys is conducting experiments with the help of the National Institute for Allergy and Infectious Diseases, Maryland, USA. Eighty-one patients were selected for the tests, and of them, two-thirds will receive the vaccine. The rest of the group gets a placebo, (a pill with no active ingredient). All patients are homosexual men and volunteers. All of them are tested for HIV infections (HIV antibodies). Only those patients that test antibody free are being used for the test. This poses some problems, as we have seen already, because one may be infected and still not show any antibodies. The patients receive additional detailed instructions how to stay HIV-free during the duration of the test. In this way, it would be possible to test whether it is possible to induce, via vaccination, the HIV antibodies in HIV free persons. At

the same time the toxicity is tested with 81 volunteers. We look forward to the results of this test series.

Another type of vaccine was tested at the same time.²³ Six chimpanzees were vaccinated with a vaccinia virus, which contains gp160. The immune system of all six chimpanzees reacted to this challenge with the production of antibodies. When, however, these animals and their activated immune system became infected with HIV through injection, all of them died from the infection. This means that no protection against HIV had been initiated through the antibody production.

n) Anti-Ideotype-Research

Further research is being conducted in other places in order to synthesize a plurality of vaccines.²⁴ In Great Britain the government made available to the Medical Research Council (MRC) £ 14.5 million to support the research being conducted there. Part of this money is being used in the research on anti-ideotype antibodies. "Anti-ideotype antibodies" are antibodies that are active against antibodies.

What does that mean? When a foreign molecule (antigen) penetrates a human, or any other organism, the immune system generates the well-known antibodies in order to neutralize the foreign body. Antigens may recognize certain molecules that occur on the surface of some bacterium or of a virus - or on the surface of an organ transplant. The antibodies recognize an antigen. The two fit together like two pieces of a jigsaw puzzle. To put it differently: Antigen and antibody fit together like a hand into a glove. The specific part of an antibody is called the ideotype. This is the part of the antibody that attaches to the corresponding parts of the antigen. The dialectic part is called epitope. The fit of hand and glove is very specific and very exact with respect to the form. A foreign protein has epitopes anywhere on its surface that are very specific in their attachment to antigens.

Antibodies, however may react as if they were antigens. If antibodies against anything are injected into a second animal, this animal will recognize those antibodies as foreign proteins. The second animal will then synthesize antibodies against the antibodies of the first animal. In this way one gets antibodies against antibodies, which are called anti-ideotypical antibodies. Since HIV antibodies may not be able to neutralize HIV, the hope is that anti-ideotypical antibodies may show an effective reaction against all mutational subgroups of HIV. This idea is now going to be tested experimentally.

The first experimental work in this field was done on mice. It was found that anti-ideotypical antibodies were active against various mutations of HIV and that they neutralize HIV infections. This mechanism is now taken a step further. Not only were the various kinds of HIV mutations neutralized, but so was HIV-II and other closely related retroviruses. Even SIV (monkey-AIDS) was found in the list of neutralized organisms - not merely HIV-I, but also HIV-II and SIV belonged to the sensitive organisms.

The receptor had to be constant for all these mutations and types of viruses. This is necessary since the organism would not recognize the CD 4 receptor on the T cell. The immune system normally does not generate such a universal antibody, perhaps because the glycoprotein receptor is not accessible under normal circumstances.

These ideas are now being tested with two ARC patients. They are going to get these special antibodies by injecting for seven to ten days in order to verify whether the virus can be expelled from the blood using these vaccines.

However, there are also difficulties to be overcome in using this scheme. Under normal circumstances the body produces many antibodies against AIDS. They cannot, however, change or neutralize the course of AIDS. Luc Montagnier of the Pasteur Institute in Paris

suggests, as an answer to this unexpected problem, the following: 1. The receptor for the antibody located on the virus envelope could be covered by a sugar molecule or blocked. 2. The receptor might be retracted into the surface. 3. The receptor might simulate antibodies already present in the body.²⁵

Until now, however, the anti-ideotypical method is the only one that generates fully active, neutralizing antibodies against a whole range of HIV groups, including HIV-II. The research so far has delivered the most hopeful results with respect to an AIDS active vaccine. Thus the method is to be pursued further. Clinical results must be awaited before a final assessment can be made.

o) Irradiated HIV as basis of a vaccine against AIDS²⁶

Experts are of the opinion that irradiated, and inactive AIDS viruses might be a good therapy for AIDS-infected patients who do not show AIDS symptoms. As soon as initial tests are completed, this vaccine could be used with persons not yet infected with AIDS.

In California, it was hoped to start on experiments of this kind before the end of 1987, — as soon as the United States Food and Drug Administration (FDA) issued permission for tests on human beings. Physicians at the University of California Medical Center in Sacramento asked for 40 volunteers for this clinical trial. Only 20 would actually receive the drug, the others would receive a placebo.

The 20 patients would receive HIV which has been irradiated so much that it is no longer able to infect any cell. Scientists at the University of California will test each sample of the irradiated virus in order to find out whether everything is clean and non-infectious.

The company that will produce the new vaccine is the *Immune Response Corporation of La Jolla, California*. This corporation collaborated with Jonas Salk, who de-

veloped in 1954, the inactive virus against poliomyelitis. Salk does not use the name "vaccine" for the new drug. He calls it "a potentially immune therapeutical agent." The purpose of the drug is to prevent the full development of the AIDS disease in already infected persons. (Normally, vaccines are applied to non infected persons).

As soon as the tests begin, the physicians will investigate whether the patients, already infected, show a longer incubation period before the symptoms of AIDS become manifested. This procedure (to look only at already infected persons) avoids the ethical problem in applying whole HIV viruses to non-infected persons. The risk could be too high.

Don Martensen, Director of Public Affairs at the School of Medicine at the University of California comments: "This is only the first stage in a long term study. We do not expect that the first patients will be receiving many advantages. We expect altruism of those who participate."

The first animal studies using this method showed that some animals developed antibodies. Nobody could draw firm conclusions from this, though. Tests with rhesus monkeys and chimpanzees must first be concluded before further clinical studies are undertaken. Martensen points out preceding cases that prove that dead organisms do provide safeguards against living organisms. The polio vaccines developed at the University of California at Davis protected monkeys against a similar type of AIDS. Further research is necessary before one decides whether such a vaccine is of interest for clinical use.

The author is well aware of the fact that this summary of Anti-AIDS drugs is not complete. However, real research has only just started and final results cannot be expected at this point.

Chapter VI

AIDS—The Geographical Distribution of the Infection

Using selected examples, the AIDS situation in different continents and cultures will be discussed in this chapter.

AIDS in Hong Kong¹

In Hong Kong a major educational campaign has been initiated against AIDS, even though the population there respects the Victorian type of laws against homosexuality and promiscuity.

As a result of the strict laws in Hong Kong (and, of the strictly conservative attitude of the population in general), there is a low incidence rate of AIDS in the colony. Many international visitors of Hong Kong could, however, change this situation drastically by importing the AIDS virus. In late autumn of 1987, about 90 persons showed the AIDS antibody in their blood. Tests for HIV antibodies in the blood started in Hong Kong in April 1985.

One has to keep in mind that even the best AIDS tests *initially resulted in one false positive test for every two true positive tests.*² The tests have improved now but still depend on the skill of the laboratory personnel. One has

to be careful with AIDS statistics, especially when the tests are carried out in countries that do not have much experience. It is known among people who deal with AIDS that AIDS antibody tests are still not absolutely reliable. A consequence of this uncertainty is that many people do not stop their promiscuous habits until they are overtaken by the AIDS symptoms — they do not trust public health officials and their antibody tests. Then they panic when the actual AIDS symptoms turn up and they join other homosexuals to spread riots and violent demonstrations because allegedly not enough money is spent on research to help them.

Out of the 90 positive AIDS antibody cases discovered in Hong Kong, forty-five were hemophiliacs who became antibody positive via the injection of contaminated Factor VIII from American blood banks. The remaining 45 cases were either homosexual or heterosexual.

Among the 90 positive cases, six developed full-blown AIDS and died from it. Five of the deceased were homosexuals. One was a Filipino woman.

a) Anti homosexual legislation in Hong Kong.

Homosexual acts among men are punished by a life sentence in Hong Kong. For this reason, the medical institutions and the health administration had to be very careful in their anti-AIDS campaign in Hong Kong. Absolute discretion had to be observed and guaranteed with the homosexuals since all patients were afraid of the law and the legal measures of the administration. This is why absolute discretion was the *sine qua non* with each antibody test carried out during the campaign.

The main dangers with respect to AIDS in Hong Kong are still homosexuality and the infection of hemophiliacs by contaminated blood products. If the epidemic continues, the effective importance of homosexuality will be shifted; blood banks (unless more selectivity in blood donors is observed) and drug abuse will then spread the

epidemic further. The names of HIV positive persons in Hong Kong are never published. They are replaced by codes. A complication of the situation in Hong Kong is that homosexuality has been pushed into hiding by the strict laws and is hard to discover.

b) Financial efforts against AIDS in Hong Kong

The government of Hong Kong has put up £ 90,000 for an Anti-AIDS Campaign. Theoretically, the campaign stresses the following advice: 1.) Stay with only one sexual partner, homosexual or heterosexual. 2.) Use condoms for "safe sex". Since the Chinese are very conservative, the language used in Anti-AIDS work in Hong Kong is highly discreet when it comes to matters of sex, in contrast to Europe, where the tendency is towards utter bare-faced shamelessness even in official Anti-AIDS literature.

The campaign in Hong Kong seems to be successful because within a few weeks, the number of telephone calls seeking advice on these matters jumped to 9,000 (in 15 weeks).

Not only is homosexuality difficult to deal with in Hong Kong. The colony has about 20,000 drug abusers. Surprisingly, none of the 1,352 addicts tested for HIV antibodies showed a positive result. Apparently, the drug addicts in Hong Kong are either not promiscuous or they do not share needles. It is possible that they do not have to get the money for their drug consumption from promiscuity.

Since Hong Kong hosts about 3.7 million tourists per year, it could well be that there will be a wave of AIDS infections in the future. About 90 million people yearly visit the neighboring countries and Hong Kong. On the other hand, Hong Kong's native population is about five million.

Even though the government does not yet request health certificates (including an AIDS antibody certifi-

cate) for visitors, it is probably only a matter of time before there is an AIDS epidemic in Hong Kong.

AIDS in California and in Illinois, USA³

There was a report on October 1, 1987, that there was a bill (AB 1952) on California Governor George Deukmejian's desk with the goal of allowing for the quicker testing of new drugs against AIDS. Governor Deukmejian signed the bill, and California became the first state in the Union in which AIDS drugs could be tested, produced and sold in California without prior approval by the FDA.

For a long time Californian politicians have been in general skeptical of the Federal Government. They felt that it took too much time to get the approval of the federal bureaucracy for the use of new AIDS and other drugs. The federal bureaucracy is too inflexible. The new bill is meant to cut the red tape (i.e. overcome the bureaucrats).⁴ It was approved by the California Assembly by a 79 to 0 vote and the California Senate by a 38 to 0 vote).

We report this in order to illustrate the mood in the United States (of interest for Europeans). AIDS research should proceed with the strongest possible encouragement. A similar development is seen in Illinois, where Governor James Thompson signed 10 measures meant to accelerate and to enhance the fight against AIDS.

A new bill in Illinois will allow the State Health Administration to identify sex partners of AIDS-infected persons. The information, provided by the AIDS infected person is being used as the basis for identification. The administration will have the right to put AIDS patients under quarantine if "clear and unmistakable evidence persists that the public health is threatened." This last sentence is, of course, very important and conforms with the medical rules for the limitation of most other conta-

gious diseases.

Another item in the new bill in Illinois provides that the public health administration has to test all blood, sperm and tissue donations for AIDS antibodies. Additionally, each couple must be tested for AIDS antibodies before getting married.

The first measures against a worldwide plague, similar to the medieval Black Death, have thus found entry into the statute books of the world. If effective therapy against AIDS is unable to be found, these measures will be necessary because half-hearted measures will never be able to limit such an epidemic. Even if a spiritual revival were to take place in the world that led to the spontaneous limitation of promiscuity, there will be blood transfusions, drug abuse and organ transplants that can propagate the epidemic further. This is because there is a certain "critical mass" of infected people who, once established, will perpetuate the infection even without the help of promiscuity.

AIDS in Thailand⁵

The government of Thailand has decided against an anti-AIDS campaign. The reason is that Thailand expects many tourists and is advertising in order to attract even more. If one were to launch an anti-AIDS campaign at the same time, many tourists would be scared off.

In 1986, more than 2.5 million tourists visited Bangkok. My wife and I were there in 1987 and had a chance to get a personal impression. Bangkok is famous for its bars and massage parlors. It is estimated that there are about 100,000 prostitutes in the town. It is therefore surprising that Thailand has not done anything against the looming AIDS threat. There is a greater fear of an AIDS panic than of AIDS itself. According to the government, this panic would have been counter-productive in the "Visit Thailand this year" advertising campaign.

Since 1984, there have been six known AIDS cases in Thailand. All have been homosexuals — four foreigners, two Thais. However, the latter contracted AIDS in the United States. Both are now dead.

In spite of this, Thailand has conducted approximately 10,000 AIDS antibody tests with prostitutes and homosexuals. Another 10,000 tests were done with Thais, who had looked for work in Saudi Arabia, which requires an AIDS certificate. Only 26 cases among the 10,000 tested showed positive results (ELISA test, i.e. Enzyme Linked Immunosorbent Assays). *However, according to the Western Blot test, all 26 cases were negative.*

Other action has been taken against AIDS in Thailand, in contradistinction to the above statements. Every three months a group of physicians chose 200 members of high risks groups (homosexuals and prostitutes) and tested them for HIV antibodies. These 200 people received detailed instructions on how to prevent AIDS. Physicians tested a small group since AIDS antibody tests for the whole high-risk group were too expensive. The physicians recommended condoms as a protection against AIDS.

In order to avoid any misunderstanding we have to mention once again here that condoms provide only a limited protection against HIV, in particular where anal intercourse is practiced, since they can be penetrated by the virus. Condoms made from natural materials are particularly dangerous in this respect.⁶ But even condoms made from synthetic materials will not stand up to anal intercourse, particularly when used with fatty lubricants, in that they are then penetrated more easily by viruses. Ozone is well known to attack rubber and to destroy its elastic properties. Ozone is present in low concentrations in the atmosphere particularly where there is smog and/or high voltage electrical apparatus.

There is little public discussion about AIDS in Thailand. The occurrence of a resistant kind of gonorrhoea

(Supergonorrhoea) has already been reported. The propaganda that was made on this "Supergonorrhoea" epidemic had negative effects on tourism. There is fear that additional public discussion of AIDS would have negative effects on tourism. That is why there is silence. There seems to be, however, a fertile ground for AIDS in Thailand.

AIDS in the European Community⁹ Including Scotland⁷

During 1987, there were two new cases of AIDS per month in Scotland. By 1991, the expectations are for more than one new AIDS case per day.⁸

By the end of January 1987, there were 17 HIV cases in Scotland. All had had heterosexual contacts with HIV carriers. Most of the cases in this country were originally due to drug abusers. Alcohol abuse is more common than in England, which could affect the sexual transmission of the HIV.

The Ministers of Health in the European Community made the decision to fight in co-ordination against the AIDS problem. The distribution of research information is handled accordingly. AIDS testing at the national borders has been considered. There has been some consensus, though, that this measure would be inefficient, considering the current state of affairs in Europe (—widespread travel etc.). In order to limit the epidemic, there would have to be additional stringent measures.

Reliable AIDS information on the progression of the epidemic in the Federal Republic of Germany is rare — a direct consequence of having only recently introduced obligatory but anonymous reporting on AIDS cases. Some recent propaganda in European schools is appended at the end of this book.

***AIDS in the Western Industrialized World*¹⁰**

The AIDS situation in today's western industrialized world can perhaps best be assessed by the attitude of the pharmaceutical industry to the problem. Pharmaceutical corporations in the west are engaged in a major piece of competitive research in the search for efficient AIDS therapy since there is a lot of money to be earned in this field. This is why so many companies seek a place "on the sunny side" of this market. Should an efficient therapy be found any price in the world would be paid for it. The threat of the AIDS epidemic brings many otherwise conservative businessmen to willingness to spend enormous amounts of money on research projects.

***AIDS and the Inuit (Eskimos)*¹¹**

The Danish health administration has warned that a possible occurrence of the HIV infection in Greenland could decimate or eliminate the whole population. Eighty percent of the population in Greenland are Inuit and live highly promiscuously. These people suffer from the highest rates of sexually transmitted diseases in the world. Each year, about 10,000 persons (20% of the total population) contract gonorrhoea. The susceptibility rate is about 100% higher than in Denmark itself.

If the AIDS virus does arrive in Greenland and persists, the situation could quickly become epidemic. It is expected that the population would be decimated in a short time.

Consequently, the Danish health administration campaigns under the slogan: — "More condoms, less sex." Will this help when so few people are strong willed enough to change their sex life by their own efforts and good resolutions?

Most physicians in the north are afraid of an AIDS

catastrophe in Greenland, unless one can find an efficient therapy against AIDS quickly.

Chapter VII

Further Clinical and Economical Aspects of AIDS

AIDS medications can be classified as of two categories:

- 1) Substances that attack the AIDS virus directly. In this group we have the chemotherapeutical substances and vaccines.
- 2) Substances designed to repair damage to the immune and other systems.

One must not forget, however, that, as we have so often pointed out, AIDS is not only lymphotropic, but also neurotropic and that it will therefore attack the cells of the central nervous system (CNS) as well as those of the immune system. Once the CNS cells have been destroyed by HIV, the destruction of the original virus cannot replace the ruined neurons, for these cells do not replicate under normal circumstances. As a result, one could define a hypothetical third group of substances that would repair the neurotropic damage to the CNS, which, according to current knowledge, would hardly be possible. A completely new area of research would have to be initiated in order to help with ARC (AIDS Related Complex). These substances would then hopefully help in the case of AIDS dementia, — at least theoretically. Many neurologists would simply be over-extended with any such project, for little material is available from current

knowledge. So prevention is still better than cure.

But who wants to trade an abstinent life for a nearly impossible chance of cure? Many scientists and physicians have clearly recognized that this is the actual choice to be faced by everyone today: prevention is better than cure.

Maintaining that the AIDS virus itself does not kill is actually untrue, even though such is often stated. It is often pointed out that the opportunistic infections do the killing, — as a consequence of the immune deficiency. This holds for the *lymphotropic activity* of the virus, but not for the *neurotropic activity* in the CNS. If the virus kills the lymphocytes, the host organism is killed only indirectly, — via the opportunistic infections. The killing of CNS neurons by the virus, however, leads directly to the death of the organism.

In investigating the first group of the afore-mentioned substances, there are some major obstacles to be overcome by the scientists, since the AIDS virus is situated directly in the genome of the host organism. It is difficult to attack the virus selectively in this situation without damaging the host organism. Substances such as Azidothymidine (AZT, Retrovir, Zidovudin) are approved as anti-AIDS medicaments in most of the industrialized countries today even though they are quite toxic. These nucleoside analogs cause anemia and make blood transfusions necessary. It may be that the rapid replication of the HIV virus (faster than any other organism known to science) necessitates the supply of a large amount of thymidin derivative needed for the chemistry of this process. For this reason the virus could be more sensitive to the "wrong" thymidine (i.e. the Azidothymidine) derivative than normal cells. This would support the fact that Azidothymidine is selectively efficient against the AIDS virus.

In western industrialized countries research on the second group of substances for AIDS therapy is being

carried out too. Some substances appear to prolong the period in which an AIDS-infected person tolerates the AIDS virus without showing any symptoms, and often without showing any antibodies against AIDS either. Even if a person is antibody positive, he does not necessarily show symptoms for a while. The period between AIDS infection and the appearance of AIDS antibodies or AIDS symptoms is not constant. One may be HIV infected without developing HIV antibodies or one may carry AIDS antibodies for a long time without showing AIDS symptoms. These two latency periods may have something to do with the reaction of the immune system. Could certain medications enhance this natural reaction and perhaps prolong the latency period? AZT apparently prevents the HIV infection from manifesting itself and, as it were, taking root.¹

If the western pharmaceutical industry can achieve success in this field it can count on a large market for this kind of therapy against AIDS. Insiders expect an AIDS epidemic worldwide although they firmly believe that the AIDS epidemic will follow the way of smallpox, poliomyelitis, tuberculosis, gonorrhoea (super gonorrhoea?), and malaria (resistant malaria?) — that is, that eventually a therapy will be discovered against the virus.

Efficiency and costs of AZT (Azidothymidine, Zidovudin, Retrovir) therapy.

The clinical costs of AIDS medication today are already very high indeed.² Even before the first anti AIDS drug was marketed (AZT = Retrovir), AIDS had been the most expensive disease known to treat. Retrovir costs between \$8000 and \$10,000 for one year's treatment of a patient. Hospitals in New York calculate that AIDS treatment is about 25% more expensive than the treatment of all other patients. In addition, these patients need about 40% more nursing than regular patients. AIDS drugs cost

almost twice as much as all other medications. The average hospitalization period of AIDS patients is two weeks longer than for any other condition.

Costs incurred for nursing an AIDS patient until his or her death are on the average about \$75,000. In 1986, the total cost for AIDS treatment in the United States was about \$1 billion, which is roughly 0.3% of the total health related costs in the U.S.

There are expectations that the number of AIDS patients in the U.S. will have grown by a factor of five by 1991. In 1986, there were 32,000. By 1991, it could be 172,000. AIDS costs will make up the largest fraction of the expense of all medical care. Costs incurred by car accidents however are larger. In about four years—using 1987 as a base—costs for medical care for AIDS patients will have reached \$8.5 billion. AIDS-related research, blood tests and education will incur another \$2.3 billion per year. Indirect costs due to AIDS, (such as loss of productivity and salaries) will increase the total to \$66 billion. These prognoses are made on the assumption that new efficient drugs against AIDS will not be found in the foreseeable future and that science will not discover any other therapeutic substances that could bring the AIDS epidemic to a standstill.

The Burroughs Wellcome Foundation, the huge pharmaceutical corporation in Great Britain, estimated that \$386 million could be saved in AIDS related costs if 20,000 patients were to take their drug Retrovir (AZT). The calculation is made on the basis that Retrovir reduces the costs for medical care of an AIDS patient by one-quarter in the first year. This is based on the reduction of the hospitalization period of the patient. Burroughs Wellcome has invested about \$80 million in the research on and the production of AZT. The corporation will have gotten twice this amount back in about a year.

In the Burroughs Wellcome Foundation calculation there is a second aspect to be considered. AZT patients

need a lot of extra nursing care. They depend on blood transfusions. In addition, they are not cured by AZT. Their lives will be extended only if they are treated regularly with AZT, but the patient will eventually die. Each additional day in their painful and miserable life costs a lot of money. The best therapy today only delays death. The central question is whether the quality of life is improved with AZT rather than without it. If so, then the treatment is worthwhile. But who decides on the question of the quality of life in the case of someone condemned to die painfully anyway?

AZT is one of the most expensive of all prescription drugs. It was rediscovered in 1964 in Detroit and could no longer be protected by patents after 1984. In 1984, Dr. Samuel Broder of the National Cancer Institute discovered the activity of the drug against AIDS and gave the data and the substance to the Burroughs Wellcome Foundation to initiate a program of urgency for AIDS tests on the substance. In July 1985, the Federal Drug Administration (FDA) gave AZT an "Orphan Drug Status", meaning that the drug is protected by exclusive marketing rights and receives tax benefits. The FDA also refrains from price regulations, so that a company developing a non-patented drug of this type can recover its development costs.

Under these conditions AZT was tested clinically. After one year, it was found that the patients who received AZT showed better results than the control group. AZT patients showed a mortality rate of one in 145 patients. Those patients who received a placebo showed a rate of 13 in 137 patients— all within a treatment period of one year. The results appear to be significant.

After these tests, AZT was approved by the FDA and was named Retrovir. Until now, more than 5,000 patients have received Retrovir free of cost from the Burroughs Wellcome Foundation. The patients were used to obtain more test results, thus the medication was free.

However, even these patients are going to have to pay now or in the near future for their therapy with Retrovir. The company has produced treatment for about 15,000 patients. By the end of 1987, the aim was to produce twice as much.

The US-Medicaid program supplies AZT for all patients who cannot otherwise afford it. This program runs at about \$50 million per year. Next year, it expects to triple, to \$150 million. The sources for this money have not yet been identified since the program is financed by the states, not by the Federal government. State resources are scarce, so the AIDS program does not only have medical aspects. Financial aspects play an important role today.

About 40% of U.S. AIDS patients are being cared for by Medicaid and Medicare (health program for people over 65). It is impossible that this fraction of the costs could be carried by Medicaid alone without external help in the near future.

New York has to take care of about 30% of all AIDS patients in the U.S. Of these 30% about 66% are supported by Medicaid. In San Francisco, about 20% of the AIDS patients have been eligible for Medicaid. San Francisco is the second largest center of AIDS in the U.S.

Before we discuss the financial aspects of AIDS further, the dispute over AIDS patents between the Pasteur Institute and the United States ought to be mentioned, for this is a financial matter.

The Litigation Between Paris and New York Over AIDS Tests.

Certain tests for AIDS antibodies have been developed in Paris and in New York. They had to be protected by patents. The licenses were meant to finance further research. Luc Montagnier first discovered the AIDS virus. After that, American Robert Gallo discovered the

same virus. Both groups then worked on tests to detect the presence of antibodies to the virus in the blood. It almost had to be expected that under these circumstances there would be a legal battle over the patents for these HIV antibody tests.

President Ronald Reagan and French Premier Jacques Chirac met to sort out this matter. They agreed that the profits from the patented AIDS tests should be split between the United States and France. Eighty percent of the \$5 million licencing fees would be paid to a new research institute and an AIDS foundation, which is to be run internationally and is to carry out AIDS research. The Institute is required to give 25% of its income for basic research on AIDS viruses and for AIDS education in the Third World.

Private donors have also given a great deal of money for AIDS victims. For example: through the sale of the estate of the Duchess of Windsor in April 1987, in Geneva, Switzerland, over \$50 million were raised and made available to the Pasteur Institute in Paris.

Thus AIDS is not only a medical and a research problem, it also causes many large and previously unexpected financial problems.

AIDS and US Politics

There have been to date (1988) about 25,000 people in the United States who have died of AIDS or its consequences. The question of the costs incurred by an AIDS patient until his death has been thoroughly investigated. The insurance problems of AIDS patients, the discrimination against AIDS patients, of quarantine, the role of the loss of sexual morality as a cause of AIDS have all been thoroughly discussed in the U.S. press. There is hardly a country better informed about AIDS than the U.S. But, the government has shown an indecisive and amateurish attitude towards the pandemic.³ (See the fights between

the U.S. Surgeon General Dr. Koop and evangelical leaders Dr. Dobson and Dr. Kennedy).

President Reagan started a large scale initiative against AIDS. In July, 1987, he founded a committee, which, within a year, was to develop a national AIDS policy and publish an official report. After a few months, all the commission had accomplished was the organization of one meeting. Moreover, only three out of the planned 15 committee members were installed. The chair of the commission and two other members had backed out under protest. During this time of bickering another 10,000 people had contracted AIDS.

AIDS patients and homosexuals demonstrated publicly because only one homosexual had been nominated to the committee. They complained that AIDS patients were discriminated against. Dissension to the degree of aggressiveness surfaces everywhere when the topic of AIDS is mentioned, even more so if one is willing to act and do something.

One has to firmly recall that AIDS was introduced into the western world through the practices of homosexuals. Only later did other routes of infection develop. It is clear then that the demonstrations on the part of homosexual AIDS patients in the U.S. amount to attacking the society that is suffering from AIDS on account of the folly of the very same homosexuals. The very people who introduced AIDS to our society demand more money, more research and treatment from those who have to deal with the consequences of and pay for the folly of a homosexual lifestyle. This is as though smokers aggressively accuse society of conducting too little research on cancer of the lung and lip caused by smoking, when they have caused their cancer by their own smoking habit. The same applies to certain forms of heart disease and smoking. They forget that the public that should pay for research gets cancer, also — by enduring their smoke in airplanes, offices and public buildings. Passive smoking is 50% as

effective in causing lung cancer as active smoking is. Would it be tolerated if smokers with lung diseases were to demonstrate against the public as the homosexuals with AIDS do? They would not find much understanding from the public! Of course, now, at this late stage in the pandemic not only homosexuals suffer from AIDS but many, many innocent people as well.

AIDS originally was linked to homosexuality in the U.S. in the same way as lung cancer and certain forms of heart disease are linked to smoking. Hemophiliacs, drug abusers and AIDS infected children have to be excluded here. The disease today is no longer exclusively linked to homosexuality — hemophiliacs, drug abusers and children with AIDS are proof of that. Could it be that the leading media people, who control the propaganda in the mass media, feel sympathetic, morally and ideologically, towards the habits of homosexuality? And that they therefore successfully lobby for the repeal of old anti-sodomy laws

Everyone avoids contact with those infected in a flu epidemic. No one would think that this reasonable act would be classed as discrimination. What is different in the case of AIDS? Naturally, the problem gets more complicated by the fact that today, many infected people are carrying AIDS for no fault of their own. One has only to think of those who have contracted AIDS through contaminated blood or blood products. One may think of the innocent children and babies who have been infected through their parents. But apart from these cases, one of the best ways of fighting AIDS is surely to avoid the habits (homosexuality and drug abuse) that have brought AIDS into the western world.

Years ago, no one would have thought that smoking leads to lung cancer. Many people became addicted to cigarettes long before this connection was known. Now it is very difficult indeed to break the smoking habit. But, today, every child in school should know what lung cancer

is and how to avoid it by not taking up the smoking habit!

Had our schools and their teachers known and appreciated the words of the Holy Bible with respect to homosexuality, had today's priests and religious instructors taught lessons on the Old and New Testament in a conscientious manner, then many children would have had the chance of appreciating that anal intercourse is a perversion of human sex life that has psychological (aggression) and physiological (epidemic disease) consequences. These teachings are so serious that homosexuality was punished by death and the exclusion from God's People in Israel⁴. The terminology used in the old scripts about sodomy is unambiguous. *Sodom* and *sodomy* were the direct causes of God's judgment and the New Testament confirms the rationale of this severe sentence. The fact that the modern world thinks differently about these practices is only a confirmation that today's society is becoming blatantly and aggressively post-Christian.

Back to American policy on AIDS:—President Reagan selected the members of his AIDS committee such that everyone of them had distinct opinions on the subject on hand: a cardinal, a homosexual, a sex therapist, a blood tester, a legislator, a publisher and a business man. A large fraction of his committee was "right" wing in the political sense of the term. Some believed in obligatory blood tests, quarantine, the danger of casual contacts with AIDS, and in the physical insufficiency and psychological consequences of the use of condoms against AIDS.

Therefore it is no real surprise that various members of the committee backed out. The chair of the committee, Dr. Eugene Mayberry of the famous Mayo clinic, did, as well as the vice chairman. The committee was thus deprived of much of its medical competence. Then the homosexual committee member, Dr. Frank Lilly, also threatened to withdraw if all new members were not approved by himself. Admiral James Watkin was going to try and take the chair and named a new Executive

Director. The AIDS committee is just as split as the government itself. But now that the Reagan Administration has come to an end one wonders what President Bush will do about AIDS. One hopes against hope for decisive action on this front which should take top priority in the agenda of any responsible politician.

There were two divided opinions that prevented efficient work. On one side were the pragmatists and on the other side the top bureaucrats of the Public Health Service. Main exponent of the pragmatists was the Surgeon-General, Dr. C. Everett Koop, a strong character with strong views on many subjects and a friend of President Reagan, who appointed Koop against the will of the democrats. But it is unbelievable that a conservative like Koop with strong religious convictions should actually become a leader of the pragmatists. In 1987, Koop wrote an article for "The Journal of the American Medical Association," emphasizing the necessity of physicians recommending the use of condoms in cases where sexual abstinence could not be expected. William Bennett, the U.S. Secretary of Education, sent a booklet to all American schools emphasizing the necessity of premarital abstinence. This would be the method that would fight AIDS in the most efficient way. Bennett mentions condoms only to point out that they are inefficient even in the fight against AIDS.

Friends of Bennett were dominant in the White House. In particular, Gary Butler, advisor for Interior policy, supported Bennett, without however much support from physicians. The Public Health Service did not support President Reagan, Bennett or Butler. This polarization in the hierarchy led to a standstill in public policy on the AIDS question. Conservatives wanted obligatory AIDS tests for a wide spectrum of public life, an obligatory test before marriage, for example.

On the other side in this conflict of convictions were the top bureaucrats of the Public Health Service and Center

for Disease Control. They believed unanimously that obligatory AIDS tests would be counter-productive and that condoms should be recommended. According to their view, infected people would vanish into the underground if antibody tests became mandatory. Many non-infected persons would be afraid and believe that they were infected. This attitude is very understandable because tests available showed in the early days one wrong positive result for two actual infected cases. (For further test results on AIDS see Chapter VIII).

AIDS and Condoms

AIDS tests are not the only subject that has caused a division of opinions. Condoms, sex education in schools, confidentiality on AIDS test results and the necessity of major propaganda campaigns are topics that still divide. All publicity implies, it is argued, that pre-marital sexual intercourse happens, otherwise such a campaign would not be necessary. This statement that pre-marital sexual intercourse is practiced is unthinkable in many circles (except for Dr. Koop). This is why the government did not act. They only counted the dead bodies.

The situation in Congress was not much different. Senator Edward Kennedy drafted a bill that was meant to prohibit discrimination against AIDS patients and guaranteed absolute confidentiality.

On October 14, 1987, the U.S. Senate decided to block funds for sex education in schools that recommend homosexual sex and described it as a normal alternative. Many States have passed their own AIDS laws. Nine of them have altered their quarantine laws such that prostitutes have to be tested for AIDS. Most new laws are intended to trace persons who spread AIDS intentionally. Some states plan pre-marital AIDS tests as soon as the epidemic has reached a certain level. The state of Utah forbids marriage between AIDS infected couples.

Polarization in the United States becomes more complex each day. Among the above mentioned groups, there are many militant subgroups. Even the scientists are polarized. The National Institute of Health, for example, fights with the Center for Disease Control. Homosexuals and AIDS infected groups disagree among themselves as the demonstrations in autumn 1987 in Washington have shown.

Has this anything to do with the situation in Europe? Yes, since the disease is the same here as there and has originally been caused by the same life styles. It is just that people are different in their ideology in Europe compared to the U.S. The U.S. has a strong, influential conservative faction that, in spite of some weak points, thinks religiously — Judeo-Christian. In Europe, the same conservative groups are present, but they are few and weak. They do not have any influence to speak of in politics. Therefore a strong and healthy polarization in questions concerning the treatment of AIDS is scarcely present in any force in Europe. Left wing politicians and media men have it all their own way, especially in Western Germany. By causing a healthy debate between two strong groups in the U.S., both of which are well informed, one will arrive, in the end at both a level policy and a healthy consensus. But where, as in Europe, there is a hegemonic power of the “progressive that is “left” faction,” a sound debate is hardly possible. Too often the atheistic hegemony wins in Europe — whether the policy is good or bad. This is why real democracy in Europe is sickeningly weak, with the possible exception of Switzerland. Is this the reason why the last couple of centuries have produced dictators in Europe again and again?

AIDS in the USA: Differences in Education

Professor Dr. Erwin Häberle, a German teaches at the Institute for Advanced Study of Human Sexuality at the

University of San Francisco. Some time ago, he visited Germany and gave an interview to the *Welt am Sonntag* on September 1, 1985. In it, he said: "I am ashamed at the failure of science in Germany". Helmut Voss, who interviewed him, wrote: "The scientist who choses those strong words has been living for the last 14 years in San Francisco and works ... at the Institute for Advanced Study of Human Sexuality. Professor Häberle traveled through the Federal Republic, unpaid, uninvited and certainly not welcomed, and has tried to point out to administrations and colleagues the threat of AIDS, which is now in his opinion coming at us. He estimated the result thus: 'I could not pull those people out of their lethargy. If they just knew what is about to come'..."

In the meantime a lot of things have happened in Europe and the administrations there have become attentive. Most governments in Europe have initiated large AIDS programs. Something however has remained — a grudge. When Professor Häberle was here two years ago, there was not only lethargy but also ill-will on the part of European continental scientists who would not believe that there was someone living who knew more than all of them combined. European scientists were not only way behind in knowledge, they also did not appreciate being alerted to this backwardness. Many European continental scientists have discovered better environments abroad for their research since richer countries spend more money on research.

Meanwhile, the European public has been educated on a broad front about what is dangerous in sex habits and what is not. However, this education is mostly based on the knowledge available in other parts of the world two to three years ago. The "education" on AIDS in Switzerland has already been mentioned. In other European continental countries the situation is similar. Scientific knowledge concerning AIDS has grown rapidly, and so it is difficult to follow up and to present the actual current knowledge especially in view of language barriers.

Chapter VIII

AIDS—Research in Recent Months up to May, 1988

New Anti-AIDS drug DDC (Dideoxycytidine) is shown in clinical trials to be too toxic

A new composition, DDC, has proven to be too toxic during clinical trials with AIDS patients. DDC was much more toxic than Zidovudin (formerly known as AZT), even though it stops the viral replication with just one tenth of the dose of Zidovudin. There was hope that the smaller dose of DDC could compensate for the higher toxicity of Zidovudin. Unfortunately, DDC was much more toxic to the peripheral nerves of the patients than Zidovudin.

Zidovudin causes anemia. As soon as this is noticed, the dose has to be reduced. Surgeons performing emergency operations on AIDS patients often take Zidovudin prophylactically. But it is not known yet whether the substance really helps prophylactically against AIDS infections.¹

AIDS — The Situation in Great Britain

Great Britain had more than 1,000 full blown AIDS cases by December 1987. The Department of Health and Social

Security reported in September 1987, that 1,013 cases were known. Of those so infected, 572 were now dead. There were reports of 13 new cases in hemophiliacs, which supports the view that the British blood banks still could not deliver virus free blood in spite of the propaganda to the contrary. In the course of August 1987, 75 male and 32 female cases were reported. Forty-three new AIDS patients died in August 1987. In addition, there have been 10 new male cases among drug abusers and three more among women. The total count of homosexual and bisexual AIDS infections among men rose from 808 to 860 in August 1987, the number of AIDS related deaths from 446 to 476. In total there have been 17 new cases of AIDS among heterosexuals.²

AIDS in 30 US Cities

During 1985, only 4% of drug abusers in the United States had new HIV infections. By 1986, the number doubled. In 1987, it doubled again. By 1989, expectations are to find 64% of all addicts to have an HIV infection. By the end of October 1987, about 2% of drug abusers in California were HIV positive. In total there are 9,500 AIDS-infected persons in California. Women, who were not drug abusers, contracted the infection through intercourse with addicts³.

Zidovudin (formerly AZT) could be a possible prophylaxis for AIDS researchers who could become HIV-positive in accidents during work.

Large scale tests started in the U.S. in the autumn of 1987, which will probe whether Zidovudin is suitable to be used prophylactically against HIV infections after accidents or blood transfusions. Burroughs Wellcome found that in certain animals Zidovudin can stop the development of the disease if taken immediately after the

HIV infection. These tests should be extended to humans because there is an intensive search for prophylaxis against AIDS infections that occur in accidents in the laboratory or at work. Within 72 hours after the suspected infection, the action of Zidovudin will be checked at doses of 200 milligrams, every four hours, over 30-60 days. This dose does not present any problems with toxicity in humans.

Researchers successfully prevented further infections with cats and mice after giving Zidovudin between four and 96 hours after the infection with a dose of retrovirus that would normally be lethal. In the world today there are only two cases of laboratory workers and 12 cases of hospital personnel who have contracted the disease in an accident. In Great Britain, only one such case is known. A further study is planned in order to see whether HIV prophylaxis with Zidovudin can be successful after rape has been committed by AIDS-positive persons. Similar prophylactic measures are being conducted in prisons, where homosexual rapes happen frequently — even, though there are hardly any cases of HIV-infections known that were caused by acts of this kind.⁴

It is very important that the patients take Zidovudin immediately after the symptoms appear and not when they are already very ill.⁵

Is Our Nutrition the Key to an Efficient AIDS Therapy?

Green monkeys (= *Cercopithecus aethiops*) from Africa are often infected with SIV (a type of monkey AIDS) without showing the symptoms of AIDS. Some researchers are of the opinion that the nutrition of these monkeys is protective against the infection or against the development of the symptoms of AIDS.

HIV-2 and SIV are more closely related than HIV-2 and HIV-1. Tests have been planned in order to find out

whether there is a nutrition factor responsible for this resistance against SIV. The tests are based on the theories of Carper and Dobson,⁶ who tried to find a reason for the resistance of green monkeys to SIV. Rhesus and Maka monkeys are closely related, and their nutrition is roughly the same. But the former are immune to SIV while the latter are not. They suffer from AIDS related symptoms. One would have to conclude that genetic factors are responsible for the immunity and not nutrition alone.⁷

The Planned US AIDS-CDC Flier and the Influence of Politics on Medical Practice

The United States had planned an anti-AIDS campaign for the autumn of 1987. The title of a planned flier was "America Responds to AIDS." It was to be sent to every U.S. household. AIDS problems have been seen primarily in the light of politics rather than in the known rules of medicine, particularly in Europe. This is not so very different in the U.S. Political influence and bureaucracy in the U.S. has blocked publication of this important AIDS information, even though the health administration has supplied substantial funds for it. The company Ogilvy and Mather, Public Relations Consultants, were given \$4.5 million for the document that encouraged parents to talk freely with their children about morality and family religious beliefs. The children have been encouraged to deal actively with the problem and to be faithful to their parents. Nancy Reagan, wife of the former president, personally led a campaign against drug abuse (the famous "Just say no to drugs" campaign). In parallel, adolescents were advised to say "no" to promiscuity. The government and Mrs. Reagan thus dealt with the problem on a philosophical-moral level.

The flier advised young people to form stable sexual relationships. Condoms were mentioned three times as

an additional safety factor. In contrast, the word "homosexual" does not get mentioned even once, though homosexuals still constitute over 70% of all AIDS cases in the U.S. Political fear surely plays a role here!

Former Surgeon General C. Everett Koop recently published a 36-page information brochure, which is on a much more explicit level than the above mentioned CDC flier. Koop refers to details, such as anal intercourse and describes some kinds of homosexual and heterosexual activities. He deals with the problem more on the pragmatic level.

Many Americans are convinced that it is the declared aim of certain U.S. politicians to prevent any measures on AIDS education. One thing is certain, however: the long planned CDC flier was not sent to all households as of October 1987. Koop's information, however, was ordered by 38 members of the U.S. congress. Over seven million copies were given away. This fact should cause a major ruffle in the U.S. when it is known, because the U.S. congress paid the CDC an *additional* \$20 million for AIDS education and information in the fall of 1987. These funds should have been used for the distribution of the CDC AIDS flier, but the money was apparently not used for this purpose.

It is a fact that political influence wished to suppress any kind of public link between AIDS and homosexuality, even though in the western world at least, AIDS has its historical roots in homosexuality. We expressively exclude Africa in this respect. Some politicians who try with all propagandistic means at their disposal to deny this fact have been homosexual themselves or have been promiscuous. Of course, this politically-based delay of practical measures against AIDS reduces the chances of limiting the AIDS epidemic.

Politics should play only a minor role in the fight against this lethal disease and should not try to tell medicine what to do. Finally, it has to be emphasized that

the Swiss AIDS information, with its primitive descriptions and illustrations of heterosexual and homosexual intercourse, is much more offensive and indeed inaccurate than the US-CDC information.⁸

Do Blood Banks Today Still Deliver Infected Blood (HIV Negative)?

Rumor has it, that since the end of 1987 many complaints about the British "National Health Service" are directly linked to the failure of the British blood bank system. The English system draws much criticism from the Scotch. Just recently, British radio reported that in late autumn of 1987, 1,200 British hemophiliacs were HIV positive.⁹

Other blood banks reported infections with other types of viruses, such as hepatitis.

The normal procedure used to kill HIV and other viruses in the blood does not always work satisfactorily since there are certain viruses that survive a normal thermal treatment. Factor VIII for hemophiliacs is now produced directly via a different procedure¹⁰ so that Factor VIII can be manufactured without risk of infection.

AIDS in Mexico — Blood Banks

The government of Mexico realized the necessity of closing all private blood banks and of placing them under direct governmental control. It had been found that seven percent of all donors were HIV positive. Between 0.1% and 0.2% of the general public in Mexico shows HIV antibodies in their blood. Probably infected needles are responsible for the large number of HIV positive results in Mexico.

When the Mexican government realized this, it took immediate action: All private blood banks were immediately nationalized and handed over to the Red Cross. Up to July 1987, there were 584 AIDS cases in Mexico, with

85% being homosexuals. Up to autumn 1987, all tested prostitutes in Mexico were HIV negative.¹¹

How to “Cover-up” the AIDS Problem

World health administrations now have to face the big question: How far has the AIDS epidemic spread already? And how quickly will it spread further?

AIDS experts ought to be able to know within the shortest possible time how fast the HIV has now spread. To date, only those AIDS cases are known that are reported voluntarily or have become known through hospitalization. These numbers often lag far behind the real infection rate since the incubation period is very long and there is a large variability in the type of eruption of the disease after the infection. Some patients develop AIDS symptoms (neurotropic or lymphotropic) after only some months, others develop them years after the infection made them HIV positive.

It has been suggested¹² that all pregnant women be tested for HIV antibodies. Legally, however, a blood test without the full and specific permission for the specific test is an assault on the patient. One therefore has to inform the patient before performing an HIV test on his or her blood.

The problem can be overcome (legally?) in that one takes blood that remains over from other tests for the HIV test. The United Kingdom Social Services Committee has however, refused such anonymous tests, because they would lead to other problems that would be difficult to solve. For example: What should one do if one of these tests were HIV positive? Should the patient be notified of the finding that he/or she is HIV positive? How about her husband or his wife?

Unfortunately, the virus does not wait for these political and theoretical decisions — not even for the decision of this important committee, before it will further infect

and eventually kill people.¹³

***Rifabutin (Ansamysin) —
An Antibiotic for AIDS Therapy?***

Preparations have been made in London for new clinical AIDS trials with Rifabutin. Patients who have tested HIV positive but do not yet have other AIDS symptoms, neither neurotropic nor lymphotropic, will receive the antibiotic Rifabutin. Rifabutin restricts the action of the enzyme Reverse Transcriptase. This might slow down or even prevent occurrence of AIDS symptoms after the patient has become HIV positive.¹⁴

***Zidovudin (formerly AZT) Necessitates Twice
the Number of Blood Transfusions for
AIDS and other Patients***

AIDS patients receiving Zidovudin need about twice as many blood transfusions as those who do not receive treatment with this drug. Since blood banks already are short of blood, treatment with Zidovudin has to be limited if there is not additional blood available for transfusions. There is far too little blood being donated to satisfy the needs of the Zidovudin treated patients.

Not only is blood in short supply. The funds that support blood banks and hospitals have become scarce too. The costs of treating AIDS patients far exceed the existing means that are available to hospitals, in particular in view of the number of AIDS patients^{15,16} now arriving for treatment.

***AIDS Related Dementia Can Occur
Before Signs of the Lymphotropic Full
Blown AIDS Symptoms Show up***

Recent clinical results on AIDS symptoms indicate that

AIDS dementia (neurotropic AIDS symptoms) is often the first symptom of a developing AIDS infection. The general behavior of the patient, the lack of or chaotic memory, and the inability to perform coordinated body movements, often are the first signs of a developing infection. Lack of memory indicates the patient may become HIV positive.

For this reason some AIDS patients are no longer able to perform muscular precision tasks. *This new evidence of AIDS symptoms has to be taken into account for pilots and others who have to work precisely.* When someone tests HIV positive, sooner or later he or she may suffer from neurological symptoms.

Many experts still believe that AIDS dementia might be the first sign of AIDS symptoms and that those symptoms could affect 90% of the patients. The very first symptoms, however, are often of the kind described above: the patient can no longer perform coordinated muscular movements. There are small memory lapses. Only later do the more easily recognizable symptoms follow.

Some researchers have discovered that with about 40% of a small sample of HIV positive cases these insignificant neuropsychological abnormalities were observed while other AIDS-related symptoms did not show up. However, nine percent of the same abnormalities were observed with HIV negative patients who were at a high risk of contracting the infection. This means that active homosexuals who still test HIV negative already showed, in about nine percent of all cases, neurological symptoms of toxicity.

Other AIDS researchers report that HIV positive cases remain free of symptoms up to three to five years. Would those cases show the beginning neurological symptoms of toxicity if they were more closely scrutinized?¹⁷

The neurological symptoms of an AIDS infection have worried public health administrations for a long time.

Obviously, many people working in high technology areas would be endangered if these suspicions hold.

Jonathan Mann, Director of the WHO-AIDS program, reported that Geneva decided not to test bus drivers, crane operators, computer engineers, and personnel of atomic power plants. It has been said that HIV positive patients who did not show full blown symptoms would not constitute a threat to public safety (in spite of severe psychiatric and neurological problems).

This amounts to a strategy of "problem cover-up" since it has been exactly this problem of public safety that needs to be investigated by tests. Jonathan Mann denies the existence of a potential safety hazard before he has tested it experimentally.

Igor Grant of the Veterans Administration in La Jolla, California, reported that seven out of 13 people who tested HIV positive and who did not show any other symptoms had shown abnormal psychoneurological results. This fact has to be considered seriously, since 10% of all AIDS patients consult their physician because of psychoneurological symptoms. On top of this we have the fact that 30% of all AIDS patients develop subacute symptoms of encephalitis. This means they develop confusion, lack of muscle coordination and depression. In the terminal stages, 70 % of all AIDS patients show acute lack of memory, personality changes, language problems and other abnormal psychological symptoms.

Other researchers could not find any neurological differences between HIV positive and HIV negative patients. Perhaps one should investigate this possible threat to public safety, particularly with pilots. Not doing so would be irresponsible.

Further research is needed to find out whether or not AIDS dementia is reversible.

***AIDS patients will inundate
New York hospitals by 1991***

It is estimated that in New York about 25,000 to 40,000 new AIDS cases will be hospitalized by 1991. This means that about one-half of all hospitals in New York will be filled to capacity with AIDS patients.¹⁸

In December 1987, about five percent of all hospital beds in New York were occupied by AIDS patients. In New York alone there are between 70,000 and 100,000 ARC patients. More than 10,000 of them already suffer from full blown lymphotropic AIDS with opportunistic infections. By the end of 1987, AIDS was the main cause of death for men between 25 and 40 years of age. For women, the age group, was between 25 and 34 years.¹⁹

***Contracting HIV Infections from
Blood that is HIV Antibody Free²⁰***

Public reports of various health administrations are based on the assumption that blood which has been tested for HIV antibodies is safe, because it has tested negative. Since there is a long incubation period of HIV in humans we have voiced our doubts. John W. Ward and associates have quantified the problem of the possible threat of HIV-tested blood. Ward's work is of major importance in the fight against AIDS. Hence, the main results of his findings are reported here.

Since the spring of 1985 all blood donations in the United States have been tested for HIV antibodies. On the basis of several assumptions some AIDS researchers are of the opinion that four to five blood donors in one million would be HIV-infected and test HIV-negative. If, in the U.S. about 18 million blood units are transfused every year, then the assumption is that between 72 and 90 persons will get infected with HIV via transfusions, even though they received tested blood. This calculation

was done on the basis of existing HIV infections. The situation, however, could become decisively worse if one takes into account the blood donors who have been freshly infected and who do not have a sufficient, detectable number of HIV antibodies. On this basis there could be up to 460 patients in the U.S. per year who received tested, antibody-free blood and nevertheless contract HIV.

Before the introduction of the antibody tests in the spring of 1985, estimates showed that in 1984 about 7,200 patients contracted HIV in this way.

Ward investigated the risk of getting an HIV infection with 13 patients who had received HIV antibody-free blood from various donors. Twelve of the 13 patients were not at risk for HIV, as far as researchers could assess. Their sole risk was the blood transfusion. About 8-20 months after the transfusions, symptoms of an HIV infection were found in three of the patients. One patient showed full-blown AIDS. All seven blood donors showed an HIV infection and all seven were interviewed. Six reported on risk factors (homosexuality etc) for HIV infections, five had participated in high risk activities up to four months before donating blood, after their blood was tested HIV antibody negative. It shows that all of those donors were newly infected and their blood was antibody negative at the time of the donation.

Ward concluded that there is a small yet clearly defined risk of contracting AIDS from tested negative blood. In order to reduce this risk, Ward recommended pointing out this risk to all blood donors in a way they could understand. Contacts with homosexuals, drug abusers and prostitutes are reasons for refusing the blood donation or for postponing it, especially since there are employers who exert pressure in order to force blood donations from their employees. Donors comply, but do not admit that they belong to a high risk group. Others donate blood regularly in order to obtain reliable but

anonymous information whether they are HIV antibody positive or negative.

For these reasons, all U.S. blood donors receive an information leaflet listing the conditions under which they may donate blood. The donors then have to sign a statement that they have understood this information. Donors are not to have had any contact with homosexuals or drug abusers. This regulation has been extended such that a man who has had sexual contact with any other man since 1977 is excluded from donating blood.²¹ Another addition was made in October 1986. This addition was necessary since corporations, fellow employees or other groups exerted pressure in order to encourage blood donations. In order to counter this, each prospective donor receives a confidential declaration in which he can decide whether the donated blood should be used for transfusions or not.²²

In countries like Switzerland, where there is no compensation for blood donations, the situation is somewhat different. Infected persons are not tempted to earn money via donations. Since drug abusers cannot earn money, they will generally not want to donate their blood. Thus the overall risk is somewhat lower in countries where there is no compensation for blood donations. The risk of an infection through blood or blood products is excluded nowhere, as Ward has shown in his tests. Since any HIV infection is potentially lethal, the situation continues to be serious.

For this reason, antibody-free blood can receive special treatment in the hope of killing potential viruses. One would not expect, therefore, to have administrations make rash statements, which has happened in the AIDS information services of some European countries, to the effect that tested blood with negative antibody count was always harmless. This is not in agreement with the facts and a small, defined risk is always present. AIDS is and remains a lethal disease for which there is still no effec-

tive cure. It might be assumed that the administrations would wish to prevent an AIDS panic at all costs. But the truth will surface sooner or later anyway, with the result that the public will lose faith in any administration which makes rash and untrue statements. Misinformation does nobody any good.

Why have these findings been kept secret from a large portion of the population even though they might be important in the fight of a potentially lethal virus? Could it be that people want to disguise AIDS, because they know it to be in the West originally a homosexual disease? Presumably one does not want to call infected persons promiscuous or perverted, which is understandable, considering the many innocently infected people today. But the infectiousness of the virus is being played down, which is no longer understandable. So far, all infectious diseases have been brought under control using the appropriate medical measures (quarantine and the follow up on contacts). With AIDS and its homosexual implications in the west, people want an exemption, and the well tried postulates of Robert Koch and others are not being applied. Why? Present propaganda does not help contain the lethal AIDS epidemic as its rapid spread proves — a fact with which Dr. Koop would surely agree.

AIDS in Switzerland

The *Neue Zürcher Zeitung* of April 23/24, 1988, featured a detailed report on AIDS by Dr. Med. Hans Baumann (Winterthur). Dr. Baumann writes that about one-half of the children of HIV infected mothers contract AIDS and cannot be saved. He quotes some of the usual pieces of knowledge — that once the disease has been contracted, one remains infected for life. As we have already mentioned, there have been some cases of reversion of AIDS antibodies. If, however, full-blown AIDS has once developed, the patient will certainly die. Dr. Baumann main-

tains that each HIV carrier will contract AIDS sooner or later. Happily we now know somewhat better today. In addition, today remedies are being actively investigated that might prevent the eruption of the disease in HIV carriers. We will have to elaborate on this aspect later on. It is linked to the statement that there is no acquired or inherent immunity against AIDS. There are people who carry the virus for years and who do not develop full-blown AIDS symptoms for long periods. Until now it is not known why the incubation period is so long in these cases.

“At the end of December of each year, the following numbers of AIDS cases in Switzerland have been registered between 1983 and 1987: 18, 40, 100, 92, 355” (cf Figure 6).

The numbers show how important it is to reduce the propagation rate as fast as possible.

Dr. Baumann continues: “The steepness of this approximately exponential curve does not necessarily reflect today’s increase of HIV infections. *Due to a lack of reliable statistics, we do not know the ratio between HIV infected and AIDS patients. According to assumptions, this ratio may lie between 25:1 and 100:1.* It is urgent, therefore, that the Bundesamt für Gesundheitswesen (BAG) (Swiss Ministry of Health) make *obligatory* the reporting of *anonymous information* about HIV positive blood tests obtained by laboratories and physicians starting on December 1, 1987. With this measure, we will know in a couple of years what the problems in health politics will be in the future.”

In Switzerland, a positive HIV test is not a valid illness for health insurance purposes as defined in the law concerning health insurance (*Berner Zeitung* 3.24.88, page 5). The *Berner Zeitung* of 3.12.88, p. 28 reports, “that it does not know anything about secret AIDS tests in hospitals ... Last November, the health management had reminded all physicians and workers in public and pri-

vate laboratories *that these tests may only be conducted with the consent of the patients.* “ Again we note the governing role of politics in today’s medicine since physicians may better know whether such a test ought to be carried out than the patient (layman) threatened by the disease with a lethal outcome.

Until the propagation rate of the HIV infection is better known, the extrapolations on future AIDS contraction rates do not mean much. The exponential curve of Figure 6 is, however, highly suggestive as is the information shown in Figure 7 on aids incidence by patient group type and in Figure 8 for 28 European countries.

Figure 6: AIDS cases in Switzerland. Assuming a better prognosis, and with a proliferation of the HIV infection of only about 40% per year, an AIDS-HIV ratio of 1:100 would indicate 100,000 cases by 1990, 200,000 by the end of 1992 and 250,000 in December 1993. These numbers indicate the annual new infections as a result of the various assumptions. Calculating the cumulative numbers for a yearly propagation rate of the HIV infection of 85% in comparison to 40% as above, we get for the years between 1990-1993 the following numbers:

HIV infected				
Year	1990	1991	1992	1993
85% propagation rate	224,000	415,000	769,000	1,423,000
40% propagation rate	97,200	136,000	190,000	267,300

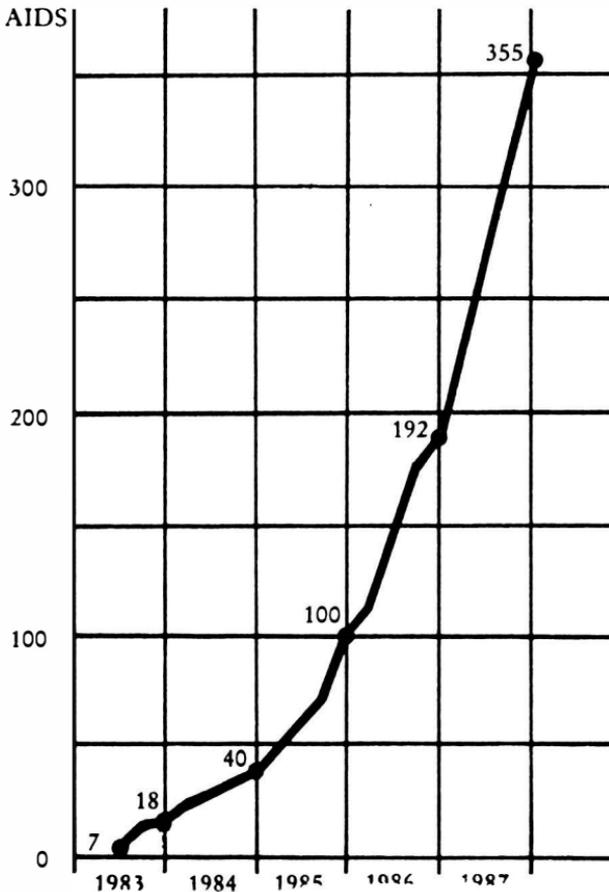


Figure 7

AIDS incidence sorted for patient groups: heterosexual, i.v. drugs, homosexual and bisexual, others. Based on the date of diagnosis of cases reported up till March 31, 1988.

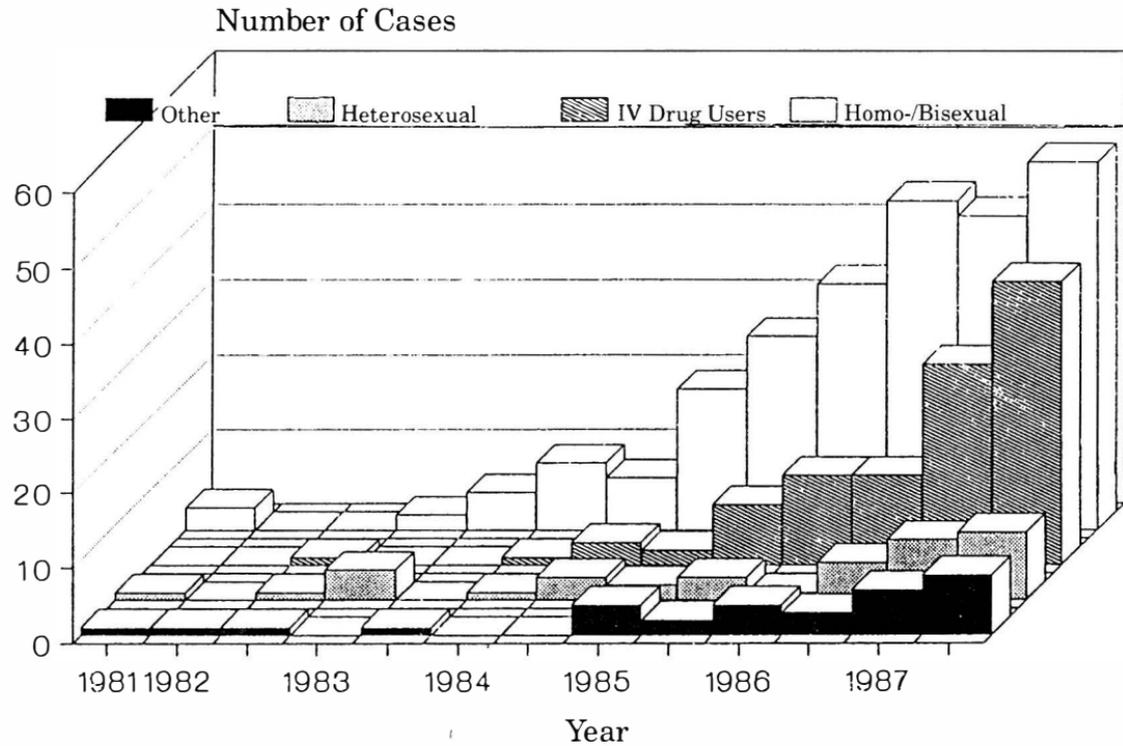


Figure 8

The officially announced AIDS development per quarter year from 28 European countries and the estimated rate of incidence in the general public. Source: Institut de Medecine et D'epidemiologie Africaines et Tropicales (Fondation Leon MBA)

Country — Pays	December 1986 Decembre 1986	March 1987 Mar 1987	June 1987 Jun 1987	September 1987 Septembre 1987	December 1987 Decembre 1987	Rate per million! Taux par million*
Austria — Autriche	54	72	93	120	139	18.3
Belgium — Belgique	207	230	255	277	277	28.0
Bulgaria — Bulgarie	—	—	1	1	1	.1
Czechoslovakia — Tchecoslovaquie	6	7	7	7	8	.5
Denmark — Danemark	131	150	176	202	228	44.7
Finland — Finlande	14	19	19	22	24	4.9
France	1 221	1 632	1 980	2 523	3 073	55.3
German Democratic Republic — République démocratique allemande	1	3	4	4	6	4
Germany, Federal Republic of — Allemagne, République fédérale d'	826	999	1 133	1 400	1 669	27.4
Greece — Grèce	35	41	49	78	88	8.8
Hungary — Hongrie	1	3	5	6	8	.8
Iceland — Islande	4	4	4	4	4	20.0
Ireland — Irlande	14	19	19	25	33	9.4
Israel — Israël	34	38	39	43	47	10.7
Italy — Italie	523	664	870	1 104	1 411	24.6
Luxembourg	6	7	7	8	9	22.5
Malta — Malte	5	5	6	7	7	17.5
Netherlands — Pays-Bas	218	260	308	370	420	28.8
Norway — Norvège	35	45	49	64	70	16.7
Poland — Pologne	1	2	2	3	3	.1
Portugal	46	54	67	81	90	8.7
Romania — Roumanie	2	2	2	2	3	.1
Spain — Espagne	264	357	508	624	789	20.2
Sweden — Suède	90	105	129	143	163	19.4
Switzerland — Suisse	192	227	266	299	355	53.8
United Kingdom — Royaume-Uni	610	729	870	1 067	1 227	21.6
USSR — URSS	1	3	3	3	3	—
Yugoslavia — Yougoslavie	8	10	11	21	26	1.1
Total	4 549	5 687	6 882	8 508	10 181	

* Source of population figures: *Population & Sociétés*, INED, Paris, 1987 (N° 216). — Source of et chiffres relatifs à la taille de la population: *Population & Sociétés*, INED, Paris, 1987 (N° 216).

Four other European countries have reported AIDS cases directly to WHO — Quatre autres pays européens ont fait rapport sur les cas de SIDA directement à l'OMS:

Albania — Albanie: — San Marino — Saint-Marino: —
Monaco: 1 Turkey — Turquie: 21

SOURCE: INSTITUT DE MÉDECINE ET D'ÉPIDÉMIOLOGIE AFRICAINES ET TROPICALES (FONDATION LÉON MBA)

Directions for the Social Treatment of AIDS Infected Patients

The *Deutsches Ärzteblatt* (German Physicians' Magazine", Number 85, volume 14, April 7, 1988) published the following directions for the handling of HIV infected persons in emergencies. These indicate more clearly than the utterances of many politicians the truth on the risk of contracting the HIV infection by non-sexual contacts.

AIDS Prevention Measures

Information for the members of the health services and for persons active in emergency units.

After consultation with the Deutsche Vereinigung zur Bekämpfung der Viruskrankheit e. V. (DVV, Professor Dr. Deinhardt and Professor Dr. Maass), (German Association for Combatting Viral Disease) and the Blutspendedienst Hessen (Blood Donation Service) of the German Red Cross (Professor Dr. Seidl), the German Red Cross published the following information for members of the health services concerning the threat of contracting HIV and concerning applicable preventive measures.

General information

The precipitating organism for AIDS is HIV (Human Immunodeficiency Virus) and is mainly contracted via sexual contacts, blood to blood and blood to open wound contact. The virus (HIV) has been found not only in the blood, sperm, vaginal secretion and liquor (liquid of the brain and spine), but in low concentrations also in saliva, tears, urine, and stool. The transfer of the virus through saliva, tears, stool and urine from one organism to a second, however, has not been proved to date.

According to current consensus, there is no transfer by droplet infection, water, food or normal social contacts with HIV positive persons or AIDS patients. A transfer of the virus between HIV positive mothers and their children is possible before and during birth or in nursing. (This latter contradicts the statement about food not being infectious—for milk obviously is. A.E. W-S)

Commercial disinfectants that are effective against the Hepatitis B virus, also quickly destroy the HIV virus. For hand disinfection alcohol containing disinfectants (in a concentration of between 70 and 80

volume percent) is well suited. The virus is also destroyed by heat (temperatures of above 60 degrees C, 10 minutes).

Work in health services

1) Handling of bleeding:

An infection with HIV implies a blood-to-blood contact, i.e. an open wound in the helper.

Probable threats:

- Injuries in the area of the hand of the helper
- Open skin, eczemas, nail injuries
- Squirting blood into eyes and mouth

Prevention:

- Avoid own injuries
- Protection of own injuries, open skin or eczemas by wearing gloves which can be carried in bags. After use, these gloves are to be destroyed and must be replaced.
- Avoid unnecessary blood contacts
- In principle, the wearing of gloves during the care of bleeding injuries

2) Handling of injection needles

Threats:

Puncture injuries with used needles, which have been contaminated with HIV positive blood, and has led to HIV infections in some single cases.

Prevention:

Used needles should not be bent and should not be tucked back into the pouch, but should be disposed of into a solid container and then be suitably destroyed.

3) CPR (mouth-to-mouth breathing) (Cardio-pulmonary Resuscitation)

As we have pointed out, HIV infection has never been proved via saliva.

Prevention in emergencies:

During a mission with the ambulance or other professional equipment, there will be breathing pouches or masks at hand. These should be used for CPR. Since this method is efficient only if it has been mastered beforehand, it should be practiced by all personnel repeatedly and often. The use of other breathing equipment cannot be recommended in general. A decision should be made according to the prevailing situation.

Note:

The most frequent reason for a respiratory arrest is a heart defect

(heart attack). This happens most often in the household. An immediate mouth-to-nose breathing is the fastest life saving measure. Also, drowning children can be helped with mouth-to-nose breathing without a general threat to the helper.

Working in rescue services

The following information is intended to help rescue personnel (RP in what follows) in the decision as to which part of their work involves a threat of infection. The information therefore is restricted to RP and their work.

1) Handling of bleeding injuries

An infection with HIV implies a blood-to-blood contact, i.e. an injury to the RP.

Possible threats:

- Injuries in the area of the hand of the RP
- Open skin, eczemas, nail injuries
- Squirting infectious material into eyes and mouth

Prevention:

- Avoid own injuries
- For protection against injuries in the rescue of injured persons the applicable protective gloves should be worn
- Avoid unnecessary blood contacts
- Protection of own injuries, open skin, eczemas by wearing disposable gloves.
- The wearing of disposable gloves is generally recommended in the handling of bleeding injuries.

2) CPR

It is assumed here that in the rescue service respiratory aid is principally carried out with a mask or pouch or via intubation. Mouth-to-nose respiration is seldom necessary in the rescue service and should be avoided.

a) Mask and pouch

This method is efficient only if it has been mastered before hand. It is to be practiced often.

b) Intubation

The physician has to be provided not only with the intubation hardware but also with disposable gloves. They should be used on principle with each intubation. Masks, pouches and intubation hardware are to be disinfected after use, to be cleaned and, as far as possible, to be sterilized.

c) Other means

The rigorous use of mask and pouch by the RP and intubation by the

physician make redundant any other means in the rescue effort. Should other means of CPR be used anyway, their use should be practiced beforehand.

3) Handling of injection needles, scalpels and similar apparatus

The RP has to protect himself by

- Not bending used needles
- Disposing of used needles and scalpels into thick walled containers which have been constructed according to the directions of the BG injury protection rules.

4) Handling of urine, stool and vomited material.

According to current consensus there is no direct risk. Nevertheless, the general rules of hygiene are to be obeyed.

5) Transportation of an AIDS patient or of a person suspected of being AIDS infected.

Here the same general rules hold as with the transportation of any other person with infectious disease.

Note:

In case there has been contact between one's own injuries and foreign blood, the injury must be flushed with an antiseptic immediately and a physician has to be consulted. He will decide on further investigations. According to our knowledge the best possible protective means against an HIV infection in the handling of patients is the strict observation of the hygienic precautions according to those in effect for Hepatitis B infections.

Prof Dr Günter Maass, Hygienisch-bakteriologisches Landesuntersuchungsamt "Westfalen", Von-Staffenberg-Straße 36, D-4400 Münster

B-692 (36) Dt. Ärzteblatt 85, Vol 14, April 7, 1988 "

Note: Nursing a baby (feeding it) is obviously an AIDS risk in infected mothers - food and feeding may not be so harmless as maintained. Physicians take AIDS infections from potentially AIDS infected patients very seriously indeed - even where no sexual intercourse takes place. Nursing babies and handling blood are recognized as potentially hazardous.

Hygienic Measures in Hospitals for the Prevention of the Transfer of HIV

The *Deutsches Ärzteblatt*, (German Physicians Magazine), 85, vol 5, February 4, 1988 [21] B-177, published an article under the above title. The journal writes: "The risk of a transfer of HIV in the hospital situation to medical personnel or patients is estimated as low according to our current knowledge. It can, however, not be absolutely excluded. This risk can be countered by strict observation of applicable rules of hygiene, through which the risk of a transfer within the hospital environment can be reduced to a minimum."

AIDS in the USSR

Almost any reliable information is difficult to obtain from the USSR! This is particularly true for epidemics and natural catastrophes. At Easter 1988, however, Soviet television showed a film by the World Health Organization, which dealt openly with AIDS. The leading Soviet AIDS expert, Walentin Pokrowski, reported in the introduction to the film, the number of AIDS patients in the USSR. He quoted 50 active cases of the disease.

Pokrowski said that they were mostly homosexuals, or prostitutes who "had slept with foreigners for blue jeans or other western luxury goods".

The 10 minute film was broadcast during prime time after the evening news. In view of the fact that in the Soviet Union there are 10,412 deaths per year due to the consumption of vodka (with a total number of inhabitants of 270 million), the 50 AIDS cases per year are a relatively small number (see *Schweizerische Ärztezeitung*, (Swiss Physicians' Newspaper), 69, 1988, Vol 16, April 20, 1988, p 55)

***AIDS — the Epidemiological
Situation in Western Germany***

The *Deutsches Ärzteblatt*, (German Physicians' Newsheet), 84, Vol 45, November 5, 1987 [23], B-2103, published a report on the situation regarding AIDS in the Federal Republic of Germany. The journal reports: "In the last 11 months, the total number of registered AIDS cases in Germany has doubled; 41 percent of all registered cases have been reported since January 1987. As a short term prognosis we shall have to expect about 1,500 new AIDS cases and about 600 to 700 new deaths within the next 12 months. For several thousand patients, clinical pre-stages of AIDS, i.e. ARC and LAS, will be diagnosed."

In the following we quote some of the Tables from the *Deutsches Ärzteblatt*.

Table 1: Registered AIDS cases for the Federal Republic of Germany by the Nationales Referenzzentrum für die Epidemiologie von AIDS (National Reference Center of Epidemiology of AIDS)

Manifestation of the Immune Deficiency	Number of Cases	% of Total	Patients Deceased	% Deceased
Kaposi-Sarcoma (KS) without Opportunistic Infection (OI)	215	15.4	67	31.2
KS und OI	199	14.2	121	60.8
OI without typical malignancy	986	70.4	439	44.5
Total	1,400		627	44.8

*) Isolated Lymphoma of the CNS; Burkitt-and Non-Hodgkin-Lymphoma with HIV-Infection

Table 2: Distribution of age and sex of AIDS patients (as of September 30, 1987)

Age	Number of Patients		% of Total Number
	Male	Female	
0-1 Year	5	4	0.6
1-9 Year	8	3	0.8
1-15 Years	9	0	0.6
15-19 Years	7	0	0.5
20-29 Years	215	37	18.0
30-39 Years	498	24	37.3
40-49 Years	389	10	28.5
Over 50 Years	159	8	11.9
Unknown	24	0	1.7
Total	1314	86	

Table 3: Distribution of risk groups of AIDS patients (as of September 30, 1987)

Risk Group	Number of Cases		% of Total Number
	Male	Female	
1. Homo- or bisexual males	1025	—	73.2
2. i.v. drug user	67	44	7.9
2. a) Risk 1. + 2.	18	—	1.3
3. Hemophiliac	82	0	5.9
4. Blood transfusion recipient	21	13	2.4
5. Heterosexual partner from risk group 1-4	30	17	3.4
6. Children under 13 years	9	4	0.9
7. Unknown	62	8	5.0
Total	1314	86	

Table 4: Registered AIDS cases and AIDS deaths (CDC case definitions) for the federal states and West-Berlin by the Nationales Referenzzentrum für die Epicemiologie von AIDS (as of September 30, 1987)

	Registered AIDS Cases in the Period From 1.1. 82-9.30. 87			Number of New Registered AIDS Cases in the Indicated Time Period				
	Total	Women	Deceased	1. 1. 82 — 12.31. 84	1. 1. — 10.4. 85	1. 1. — 9.30. 86	1. 1. —9.30 1987	
	Total	Women	Deceased	Total	Total	Total	Total	Deceased
Berlin	299	11	122	34	26	59	143	52
Hessen (Frankfurt)	228 (152)	16 (10)	99 (63)	25 (22)	29 (19)	49 (42)	96 (61)	21 (9)
Nordrhein-Westfalen	270	20	125	24	29	80	97	40
Hamburg	121	1	52	14	29	23	45	8
Bayern (München)	220 (167)	3 (2)	114 (87)	23 (19)	15 (9)	41 (38)	80 (50)	38 (25)
Baden-Württemberg	96	19	49	8	16	16	35	15
Niedersachsen	70	8	39	3	5	13	32	16
Bremen	31	1	9	3	3	2	19	7
Schleswig-Holstein	15	1	3	0	1	2	7	1
Rheinland-Pfalz	39	4	11	1	2	10	19	3
Saarland	11	2	4	0	1	3	4	2
Total	1400	86	627	135	156	298	577	203

B-2104 (24) Dt. Ärztebl. 84, Heft 45, 5. November 1987

Table 5: Registered AIDS cases and AIDS deaths, semi annually for the Federal Republic of Germany, sorted for date of diagnosis by the Nationales Referenzzentrum für die Epidemiologie von AIDS (as of September 30, 1987)

Time Period of Diagnosis		Number of AIDS Cases	Reported Deceased	% Reported Deceased
Unknown		14	6	
Before 1981		2	2	100.0
1981	Jan.-June	0	0	
	July-Dec.	0	0	
1982	Jan.-June	5	4	80.0
	July-Dec.	6	6	100.0
1983	Jan.-June	22	17	77.3
	July-Dec.	17	13	76.5
1984	Jan.-June	41	34	82.9
	July-Dec.	75	55	73.3
1985*)	Jan.-June	114	72	63.2
	July-Dec.	171	93	54.4
1986*)	Jan.-June	206	100	48.5
	July-Dec.	269	113	42.0
1987*)	Jan.-June	334	89	26.6
	July-Dec.	124	23	18.5
Total		1400	627	44.8

1) CDC Definition of medical diagnosis of AIDS used to determine point of time.

*) Data incomplete

***Natural HIV Variations Which do not Destroy
the Cells of AIDS Patients, but
Involve the Central Nervous System***

(*Deutsches Ärzteblatt*, 85, vol 16 April 21, 1988 [27], b-795).

The *Deutsches Ärzteblatt* published some reports taken from the English journal *The Lancet*, which are of major importance with respect to the mode of HIV infection (*The Lancet*, I, [1987], 234-238). The title of the English publication was: *Non-cytocidal Natural Variants of HIV isolated from AIDS Patients with Neurological Disorders*. Four AIDS patients with CNS manifestations yielded five AIDS-viruses that had been identified as HIV by antigen cross reactions and nucleic-acid hybridization on HIV specific antibodies and DNA samples.

"The replication and the cytopathological properties of these strains were investigated and compared to lymphadenopathy-related viruses (HIV, LAV). All hybrids showed test results equivalent to those of lymphadenopathy related viruses. Four hybrids, however, did not kill T4-(DC-4) cells."

This last finding is important because HIV attacks (it is thought) the immune system via the T4 group, that is via those cells that contain a T-4 group. If there is no T4-group on these cells then there is no attack and the cells are not killed. This is the consensus today. Now there are apparently four hybrids which had caused only neurological disorders, do not attack the T4-system, that is do not attack the immune system, even though they caused neurological symptoms.

Anand and his associates conclude from this: "This isolation of non-cytocidal natural variants of HIV ... increases the probability that...with some AIDS cases there are neurological disorders based on HIV variants which do not destroy T-4 cells." This means that some variants (mutations?) of HIV are neurotropic and others are lym-

phadenotropic. Some HIV mutations or variants of HIV attack the peripheral and central nervous system and cause the ARC symptoms (neurological disorders) and other variants cause full-blown AIDS with immune suppression and opportunistic infections. If this observation is confirmed, it constitutes a great advance in AIDS-related research.

These results may further indicate why tests on the virus and cell toxicity do not always coincide. For this reason apparently, HIV attacks first neurotropically and causes ARC. Later on, after mutations of HIV have appeared, full-blown AIDS develops with the occurrence of opportunistic infections and immune system depression. Two or more kinds of HIV are apparently responsible for these different modes of expression.

Chapter IX

AIDS Research Up-dated to May 1989

Since the publication in Switzerland of my book entitled *AIDS-verschwiegene Fakten* (AIDS-concealed facts) in the Fall of 1988 a great deal of fundamental research on the structure and metabolism of HIV has been carried out and published in the Western world. For this reason we wish to give the readers of the English edition of the above work the advantage of knowing something of the present state of the art, as it were, in AIDS research. Translations are often outdated before they appear in the book stores. This we wish to avoid as far as possible with the present new English edition.

An enormous amount of new details has become available since the first German edition appeared last year. We do not, however, wish to burden the English reader with a great deal of irrelevant detail but rather to supply him with the more fundamental discoveries on the subject which have since become available. We leave therefore the multitude of minor steps forward which have been taken on the subject of AIDS to the professional journals devoted to the subject and will concentrate here on the ramifications of the more fundamental progress which is now available.

The Nature of HIV

Professor Peter Duesberg is, I am afraid, often regarded as rather a heretic in official AIDS circles. But then most progress in science is initially regarded as heresy in orthodox circles of all kinds, so that this charge should not be taken too seriously at the outset. Any work in any science should be regarded solely on its merits and on its falsifiability and verifiableness.

What then is the charge concerning Professor Duesberg's alleged falsifiability heresy all about? Professor Duesberg does not believe that HIV is the sole causative agent behind the present AIDS epidemic but is convinced that other co-factors must be involved with or without the presence of HIV in AIDS infections.¹ The various criticisms of the "Duesberg heresy" may be checked in *New Scientist* of April 24th, 1988 page 34 and in *New Scientist* of May 5, 1988 page 32. A recent article² reports on further work of the same kind, this time by Dr. Shyh-Ching Lo of the American Armed forces Institute of the U.S.A.

Where then does the charge of heresy against Peter Duesberg enter and what are the points which divide the orthodox medical scientists from Duesberg and the other colleagues who support him? We cite here Duesberg's own abstract of his recent paper on his work. We shall thus avoid all charges of bias on our own part or on the part of orthodox AIDS scholars:

AIDS is an acquired immunodeficiency syndrome defined by a severe depletion of T-cells and over 20 conventional degeneration and neoplastic diseases. In the U.S. and Europe, AIDS correlates to 95% with risk factors such as about 8 years of promiscuous homosexuality, intravenous drug use or hemophilia. Since AIDS also correlates with antibody to a retrovirus confirmed in about 40% of American cases, it has been hypothesized that this virus causes AIDS by killing T-cells. Consequently the virus

was termed human immunodeficiency virus (HIV), and antibody to HIV became part of the definition of AIDS.

The hypothesis that HIV causes AIDS by killing T-cells is examined in terms of Koch's postulates and epidemiological, biochemical and genetic conditions of viral pathology. The HIV postulate violates Koch's postulates because:

1) free virus is not detectable in most cases of AIDS.

2) virus can only be isolated by reactivating virus in vitro from a few latently infected lymphocytes among millions of uninfected ones.

3) pure HIV does not cause AIDS upon experimental infection of chimpanzees or accidental infection of healthy humans.

Further, HIV violates classical conditions of viral pathology because:

1) Epidemiological surveys indicate that the annual incidence of AIDS among antibody-positive persons varies from nearly 0 to over 10%, depending critically on non-viral risk factors.

2) HIV is expressed in ≤ 1 of every 10^4 T-cells it supposedly kills in AIDS, whereas about 5% of all T-cells are regenerated during the 2 days it takes the virus to infect a cell.

3) If HIV is the cause of AIDS, it would be the first virus to cause a disease only after the onset of antiviral immunity, as detected by a positive "AIDS test".

4) AIDS follows the onset of antiviral immunity only after long and unpredictable asymptomatic intervals averaging 8 years, although HIV replicates within 1 to 2 days and induces immunity within 1 to 2 months.

5) HIV supposedly causes AIDS by killing T-cells, although retroviruses can only replicate in viable cells. In fact, infected T-cells grown in culture continue to divide.

6) HIV is isogenic with all other retroviruses that do not cause AIDS and does not express a late, AIDS-specific gene.

7) If HIV were to cause AIDS, it would have a paradoxical country specific pathology, causing over 90% pneumocystis and Kaposi's sarcoma in the U.S. but over 90% slim disease fever and diarrhea in Africa.

8) It is highly improbable that within the last few years two viruses (HIV-1 and HIV-2) that are only 40% sequence related would have evolved that could both cause the newly defined syndrome AIDS.

It is concluded that HIV is not sufficient for AIDS, and that it may not even be necessary for AIDS because of its minimal activity in both symptomatic and asymptomatic carriers. The correlation between antibody to HIV and AIDS does not prove causation because other indistinguishable diseases are now set apart only on the basis of this antibody.

It is proposed that AIDS is not caused by a conventional virus or microbe. No such virus or microbe would require almost a decade to cause primary disease, nor would it cause the diverse collection of over 20 degenerative and neoplastic AIDS diseases. Neither would its host range be as selective as that of AIDS, nor could it survive if it were as inefficiently transmitted as AIDS. Since AIDS is defined by new combinations of conventional diseases, it may be caused by new combinations of conventional pathogens, including acute viral or microbial infections or toxins. The long and unpredictable intervals between infection with HIV and AIDS would then reflect the thresholds for these risk factors to cause AIDS-diseases, instead of an unlikely mechanism of viral pathogenesis."

In commenting Professor Duesberg's reasoning even the orthodox virologists have to admit the difficulty with Koch's postulates which the professor cites. It is a fact, too, that very few experimental infections with AIDS in the laboratory have occurred by accident. It is not a clinching argument, however, to maintaining that because one cannot experimentally infect a chimpanzee with pure cultures of HIV, therefore HIV is not the

causative agent. For the chimpanzee being a different species, that is, not being human, it may well be immune to a specifically human viral organism.

However, one matter has long bothered many virologists about the HIV organism as the supposed exclusively causative agent in AIDS. It is the following: It would be the first case of a foreign organism causing the production of antibodies by its presence in the body where the antibodies provide no protective activity against the so called causative agent. In addition: In general where antibodies are produced, they are produced about the same time as the infection occurs and do provide some protection against the intruder. In the case of HIV the disease symptoms arise sometimes long after the appearance of antibodies and when the latter are present, they provide no protection, as far as can be seen, at all. This is indeed strange if HIV is indeed the sole causative agent such as orthodox virology teaches today. Such a state of affairs would seem to be unique in all biology, if it is indeed true and factual.

It is, then, not surprising that a rebellion seems to be arising in virology as far as HIV as the sole causative agent of the AIDS syndrome is concerned. In all branches of science where received doctrine is called into question, vituperation on the part of the Establishment is bound to occur almost as surely as day follows night. The reception accorded to Duesberg's work by the Establishment provides us with no exception to this expectation.

But let this point be quite clear: Every person who receives AIDS infected blood, be it with an organ transplant, through an infected needle or through sexual intercourse with an infected homosexual or heterosexual is liable to infection with AIDS. Such persons do not need to have had 8 years of promiscuous homosexual experience before they are susceptible to infection leading to the AIDS syndrome. Obviously then — at least so I should have thought — there must be an infectious agent or

agents in the blood or organs or secretions of AIDS patients which is capable of infecting anyone with the AIDS syndrome regardless of his life style.

Proof of this fact lies in the figures for AIDS incidence among hemophiliacs, who in some countries show at present an 80% incidence of the AIDS syndrome though never having practiced drug abuse or promiscuity of homosexual or heterosexual type. Such much tried patients have received an infectious agent in the blood or blood products which have infected them regardless of any predisposing life style. Thus the opening sentences of Duesberg's abstract quoted above must be read with a good deal of reserve when he mentions "about 8 years: of promiscuous homosexuality." I suspect he is referring to AIDS as it generally occurs in homosexual circles and did not reflect how his statement could be misinterpreted.

***The Work of Dr. Shyh-Ching Lo of the
U.S. Armed Forces Institute of Pathology
and the National Institutes of Health***

The *Los Angeles Times*³ reports on the work of Dr. Shyh-Ching Lo and his colleagues published in the March issue of the *American Society of Tropical Medicine and Hygiene* (1989).

These researchers have discovered in AIDS patients a new and somewhat mysterious virus-like agent which they describe in detail in the above mentioned Journal. Their finding may well upset current wisdom on the causative agent behind the AIDS epidemic — if they are confirmed by other workers in the field.

Shyh-Ching Lo believes that the new viral-like agent may lie behind infections striking patients suffering from damaged immune systems such as occur during AIDS attacks. He goes further than this when he suggests that this agent may act as a co-factor with HIV in triggering an AIDS attack. It cannot yet be determined which role is

likely to be the actual one but colleagues in Shyh-Ching Lo's laboratories are convinced that they have discovered unequivocally a previously unrecognized virus-like infectious agent which has until the present gone through the research workers' research mesh.

As is usual in findings of this type, other virologists are justifiably very cautious in assessing the value of the new work which is a more detailed follow up on work first reported on briefly in 1986. As yet few if any workers have risked a definitive opinion on the value of Shyh-Ching Lo's work. Norbert Rapoza of the American Medical Association ventured the opinion that the work should certainly be looked at more closely, even though the orthodox consensus is that HIV gradually attacks and destroys the human immune system — a mechanism which would account for the extended incubation periods. However, such a mechanism would not necessarily account for the ineffectiveness of the antibodies produced by the immune system before its destruction by HIV is complete.

The new viral agent just recognized by Shyh-Ching Lo has been named VLIA and was found in one single Kaposi's sarcoma patient. VLIA can infect cells and is distinct from numerous other viruses which have in the past been suspected of being co-factors in causing AIDS.

By way of confirmation of the above work Shyh-Ching Lo examined organs from 10 AIDS patients. Seven patients of these 10 showed pieces of DNA similar to that found in VLIA. DNA from patients not suffering from AIDS showed no such DNA pieces in their genetic molecules. The researchers conclude therefore that VLIA may represent a new opportunistic infection in the severely debilitated patients investigated. On the other hand it may play a more fundamental role as an AIDS precipitating co-factor.

The American Journal of Tropical Medicine and Hygiene is a highly respected specialist publication. All

articles published in it are peer reviewed so that they must be taken seriously by fellow specialists. The general spectrum of consensus among virologists consulted by the *Los Angeles Times* on this subject varied from a statement to the effect that the new organism might be anything from a contributing cause of AIDS to a mere contaminant. The virologist Norbert Rapoza maintained that Lo's findings were not faked, that the agent does exist. "He has something: he has a virus." Other virologists are looking for more evidence before they are prepared to discuss the matter further.

Many scientists and virologists are still worried by the fact that current AIDS theories contravene Koch's Postulates and do not account for the fact that antibodies produced in AIDS patients do not neutralize the AIDS virus. This is a phenomenon which is one of the main stumbling blocks in all attempts to find a vaccine active against the AIDS syndrome.

Newer Chemotherapeutical Research on AIDS Therapy

Since to date no effective vaccine for AIDS treatment has been found and all antibody concentrations have been found to be useless against the AIDS pandemic, much research work has concentrated on finding chemotherapeutical agents active against the viral agent itself.

To date the most useful agent has been, as we have already pointed out in the appropriate chapter of the present book, nucleotide analogues such as AZT (Retrovir or Zidovudine). This agent is still the most effective but it is not curative but only palliative. It prolongs the life and improves the life's quality in the dying patients and some 10,000 AIDS patients are now taking this drug on a 24 hour a day basis. But as we have pointed out at the appropriate place in this book, this nucleotide analogue shows undesirable properties in precipitating anaemia

and bone marrow disorders. Work has therefore proceeded in the past year in an attempt to reduce this toxicity by modifications of the molecular structure of several nucleotide medicaments of this type.

Whether a better, less toxic drug than Zidovudine will be found is still a matter of suitable research - and speculation.

A New Rapid Test for HIV-Antibodies in Blood

An article of Dr. Lorraine Day, head of orthopedic surgery at the San Francisco General Hospital, throws interesting light on very recent developments in the treatment of AIDS, particularly as far as it concerns the risks of infection run by surgeons asked to operate, often at short notice, on patients who may be HIV positive.

In view of his or her own risk in operating on such patients (Dr. Lorraine Day is a surgeon who often operates on AIDS patients) Day insists that it is in the vital interest of the operating surgeon to know whether the patient is negative or positive to HIV-antibodies. "Operating room precautions depend on knowing if a patient is HIV positive or not. Surgeons are at risk. That is more important than patient confidentiality", maintains Dr. Day.⁴

Further Dr. Day continues: "The extent of the risk is not clear, even though the Centers for Disease Control in Atlanta have data on the number of health care workers infected with the virus. By this year the CDC listed 25 health workers who had become HIV positive after accidental exposure to the virus in the course of their job. They were known to be HIV negative at the time of the accident and subsequently developed antibodies, so linking the infection to the accident.

There is, therefore, an urgent need now for a really rapid HIV-antibody test, a test that can be carried out just before the operation so that the precautions in the oper-

ating theater can be decided before risking surgeons' lives by having them operating on HIV positive patients without knowing that they are positive.

A new test has been developed by the Cambridge Bioscience Company in the the US and marketed by Baxter International.

The new test supplements rather than supersedes the older, slower test which are, however, more reliable than the quick new test, which gives a result within 5 minutes. The opposition to this quick new test has been and still is great, for, it is maintained by the AIDS lobby that the patient has the right to refuse any AIDS test at all. Surgeons maintain, however, quite rightly that they too have rights—namely that they need to know whether the patient they are operating on is HIV positive or not. For, if the patient is HIV positive, special precautions in the operating theater are mandatory which are otherwise not necessary. If the patient is HIV positive, it is well known today that the risk run by the operating surgeon of contracting AIDS herself or himself is high. Dr. Lorraine Day has calculated that she faces, as things stand today, a 49% risk of becoming HIV positive in the next 5 years if she stays at her present job taking presently prescribed safety measures.

As well as the risk caused by cuts from sharp instruments and needles in the operating theater, new research by Gregory Johnson, Joseph Barrise and William Robinson at the Orthopedic Surgery and Infectious Diseases Division at the Stanford University claims to show that HIV is present in the vapors produced from the body fluids of HIV positive patients by the powerful surgical instruments in use in modern operating theaters.¹⁻⁴

Some surgeons agree that the risk of their own infection by HIV is high but see it as a risk that surgeons have to accept. Bill Shecter of the University College Medical Center in San Francisco, however, agrees with Dr. Day: "My own approach is to apply universal precautions to all

patients. The risk is not low if you happen to be the person doing all the work. I don't think I am far away from Lorraine Day at all."¹⁴

It would seem to be pure common sense that the surgeon should have the right to know about the risks in operating on a patient before he starts so that he can take the necessary precautions against infection which the state of the art demands. He should be able to do this at his own discretion. If the patient refuses to allow an AIDS test then the surgeon should obviously have the right to refuse to take foolish risks in operating under unknown conditions of infection.

Dr. Day, as well as challenging patients' rights to confidentiality on matters of HIV status, advocated in addition the frequent testing of surgeons at risk who might be carrying the virus unwittingly and accidentally infecting patients during operating. It does seem rather remarkable that HIV is about the only virus which one may carry "confidentially" without the operating surgeon having any right to know that his patient is carrying it. Of course, the treating physician has a right to know whether hepatitis B is involved in his patient before he does any invasive or other work on that patient. The exception is HIV for the simple reason that politics — and pressure politics at that — has been allowed to play at science and medicine for far too long a time. The surgeon's life may be risked according to these theses just to allow the patient to carry his HIV "confidentially"! The situation is too ridiculous — and too tragic for words to describe it. All physicians and surgeons should have the legal right to know the total viral or other infectious status of the patient they are treating otherwise one is playing Russian roulette with the health workers' life.

Epilogue

Plagues, epidemics and pandemics are nothing new. Syphilis ran rampant among the Spanish, the Plague (the black death) among the French, tuberculosis among the Eskimos and poliomyelitis among the population of the United States. Now a new disease threatens the whole western world — a disease that has been directly associated initially with sexual morality. As with most of the new epidemic diseases and epidemics, there is initially no treatment and the disease is terminal in most patients and spreads rapidly.

What is new in today's AIDS epidemic is the fact that in many countries politicians are deciding on the medical strategy to fight the epidemic rather than medical scientists. Today, political ideologies and lobbies help to decide which way a contagious disease, such as AIDS, should be controlled. Scientists may be consulted but often do not have the last word in practice.

Politics decide whether certain kinds of quarantine mean discrimination or are medically necessary. It was politics that made promiscuity socially acceptable and propagated condoms to contain the epidemic but not continence. Whenever medically oriented bills are drafted, politics and lobbies decide that they constitute a discrimination against AIDS patients! Politics decide whether the social and sexual freedom of the patients should be restricted or not. Leading politicians disregard

medical (but not ideological) criteria and rules with impunity. A lethal disease should be fought with the best medical technology available, and only secondarily, with purely political methods. Medicine should be the legislative, politics the executive side of containment. Today, however, medically naive lawyers and politicians have determined the rules according to which the AIDS epidemic should be fought medically. The consequences cannot help turning out accordingly. The lethal AIDS epidemic is taking off exponentially before our very eyes — and with the active support of our own tax money which is being abused by these politicians — cum medicals — cum ideologists.

We will take as a practical example the AIDS lobbies: That is, groups of people who have special interests for or against certain AIDS measures. These lobbies decide whether high-risk AIDS groups should or should not be subject to mandatory testing for HIV antibodies. The same groups determine whether AIDS contacts should be actively followed up or not. Follow up is a medical necessity for the fight against any kind of contagious disease. Again these same often lay groups often decide on propaganda and on AIDS education.

It was obvious from the beginning of the AIDS epidemic that there has been a purely ideological, political lobby determining AIDS policy, for many states in the world had laws against homosexuality before the outbreak of the AIDS epidemic. These laws against homosexuality were derived from traditional Christianity or Judaism. A homosexual subculture caused these laws to be either abandoned, rescinded or disregarded, in particular in cities such as San Francisco and New York. And it was just this very subculture that provided the infrastructure for the spread of the virus. Once the virus had been imported it replicated rapidly and spread in this environment. Thus the conditions for an AIDS epidemic were almost ideal in such a homosexual subculture which

decided on the laws which, if respected, would have hindered the spread of the virus.

Sexual emancipation (the sex revolution), which has been strongly propagated politically among the general population, constitutes the second factor in the spread of the disease. General heterosexual as well as homosexual promiscuity became a modern fact with the help of an already permissive society which chose its politicians accordingly. Promiscuity was then massively supported by political propaganda.

A third factor in the spread of the AIDS virus worked hand in hand with the sex revolution and permissiveness: Religion, its laws and taboos have little influence any more on every day life, at least in Europe this is the case. Religious restrictions in sexual relations were given up with the decay of religion. A consequence of sincere religious belief is that the religiously-oriented human spirit is no longer ruled alone by bodily instincts. Christ himself said: "He who cannot say "No" to himself cannot follow me" (Luke 14:33). With the introduction of the permissive society, the decay of many sexual and other inhibitions was not far away. In this way, an unrestrained society developed — which was just ideal for the rapid spread of HIV.

The psyche of man should obviously rule his bodily instincts and desires, for the psyche resides in the human brain — perhaps the most important human organ. The fidelity of a husband to his wife is based largely on this psychical consideration. Where fidelity was breached, it was considered a mistake or shortcoming in former times. Today, in the era of the permissive society, this is hardly the case, since even Swiss law does not recognize any longer *guilt* as a legal factor in divorce cases. To be unfaithful is therefore no longer wrong, i.e. not a matter of guilt.

These purely ideologically based sex tabus or laws have been changed by the sex revolution. The conse-

quence is that instead of inhibition and discipline between the sexes, license has superseded. The logical consequence again is that the loss of inhibition between sexes soon ended in licentiousness. What man or woman can in the long run tolerate five to ten or even more sexual encounters per night with orgasm (which indeed happens often enough in certain circles and with anonymous partners) without having his (or her) productivity reduced in all other areas of life? If such habits are repeated four to five or more times per week then we will soon have a society such as described in the book by Dr. Johann Millendorfer *Konturen einer Wende* ("The Contours of Change") — a society that is simply below standard with regard to productivity, creativity and joy of living. The relation between sexual permissiveness and productivity of men and women is well described in Millendorfer's book with statistical, factual analyses. The data are presented dramatically. If this kind of sex revolution continues, a race of people will result that thinks about little else than sex — and is good for little else—they are just "copulation machines", as one New Zealander expressed himself! See *The Ethics of Safe Sex*, Neil D. Broum, New Zealand Medical Journal, 14 December 1988, pp. 823-826.

The psyche and the physical bodies of mankind were obviously conceived for many things and not only for sex. Sex should be the expression of the utmost unity of body, soul and spirit between a man and his wife. In this sense, true sex satisfies spirit, soul and body. This is why anonymous sex, homosexual or heterosexual is to be rejected. For it has little to do with soul or with spirit. In particular, the nightly-sexual anonymous multi contacts of certain homosexuals make no sense from this perspective. The partners often know each other only for the moment when their bodily desires are satisfied. Thus the expression of the most intimate love and altruistic unity — the most intimate secret between two lovers — is

converted into humiliating anonymous license and bodily self-gratification.

For politics to be engaged in the general emancipation of mankind surely has been well meant. It is, however, regrettable if this emancipation degrades and caricatures the best properties of both sexes. The ideologically based promiscuity which has been cultured in Africa and in the West has served as port of entrance for the lethal worldwide AIDS epidemic. The psychological sexual degradation of man has in due course dragged him down to the physical degradation of AIDS.

Aggression and Aggressiveness

It seems to be rather certain today that some lifestyles cause aggressiveness. The eruptions of violence and aggressiveness everywhere are giving many politicians headaches. Movies and TV show more and more violence — for violence is entertainment indeed! In the spring of 1988, a 13 year-old girl went on trial for an alleged knife murder of another adolescent. In America some teachers have asked to be allowed to carry weapons during school hours.

In line with this trend, 200,000 homosexuals violently demonstrated in Washington in 1987. They threatened to terrorize blood banks by infecting them with the HIV virus. They would encourage other homosexuals to donate blood if more money was not made available for AIDS research. If this threat became reality it would constitute the pitiless murder of patients who received the infected blood during surgery or for other reasons. This kind of murder is pure terrorism, just as is the case with hijacking. Only the actual technique would be more subtle.

The Bible gives indirectly the first authentic story about some of the consequences of homosexuality (sodomy). The city of Sodom was known for the practice of

homosexuality and of violence in the ancient world. Chedorlaomer (Genesis 14), a mighty king in this area, attacked the town of Sodom and took Abraham's nephew, Lot, his whole family, and the kings of Sodom, Gomorrah and Zoar hostage and brought them to Damascus. When Abraham and his people heard about this, they surprised Chedorlaomer north of Damascus and brought Lot and the kings of Sodom and Gomorrha back without loss. Abraham did not request any reward for this courageous action — only the provisions that he and his people had used.

Why cite this example? To show that Sodom and Gomorrha should have had every reason to be grateful to Abraham and Lot, But they were not. When God (the God of Abraham) decided to send his envoys to Sodom to get further first-hand information about matters in Sodom, the envoys spent the night at Lot's house. But when the men of Sodom found that out, they besieged Lot's house and threatened to break in the doors. They demanded the envoys as prisoners so that they could rape the men homosexually. Lot instead offered them his own two daughters for the night! Apparently, the Lot family had absorbed a little bit too much of sodomic culture! The men of Sodom rejected the offer and again set about breaking in the doors of Lot's house. The divine envoys then struck them with blindness so that they searched for the doors in vain. But the Sodomites were certainly violently and unjustifiably aggressive when they ought to have been grateful to Lot.

We conclude that the homosexual Sodomites did not feel in the least obligated towards Abraham and his family, including Lot, although without them they all would have been the slaves of King Chedorlaomer. Secondly, they were in no way thankful. On the contrary, they were violent to a degree. Their homosexuality was indeed a strong passion resulting in aggressiveness of the most shameless sort — they insisted on raping Divine

envoys and in preference to the opposite human sex!

During the course of lecturing at various European universities, I have had the opportunity of observing situations in some feeble ways similar to the one reported on in this biblical story. In some lectures, I have spoken about the medical aspects of AIDS. Groups of homosexuals and feminists have often attended. When some medical facts are not as they would like them, these people often start cacophonies with whistles, flutes and other instruments. This noise often makes continuation of the lecture impossible. One of my colleagues once tried for 2 1/2 hours to speak about abortion in a Northern German university. In vain. Every time it was mentioned that in the west AIDS was transmitted mainly by homosexuality, there was deafening cacophony in the lecture hall — whistles, trumpet blowing, etc. What an expression of blind aggressiveness!

The good Book links the homosexual practice of Sodom with the above type of violent behavior. One reads: "Because that, when they knew God, they glorified *him* not as God, neither were thankful (grateful): but became vain in their imaginations, and their foolish heart was darkened. Professing themselves to be wise, they became fools..... Wherefore God also gave them up to uncleanness through the lust of their own hearts, to dishonor their own bodies between themselves:.... For this cause God gave them up into vile affections: for even their women did change the natural use into that which is against nature: And likewise also the men, leaving the natural use of the woman, burned in their lust one toward another; men with men working that which is unseemly, and receiving in themselves that recompense of their error which was meet..... God gave them over to a reprobate mind, to do those things which are not convenient; Being filled with all unrighteousness, fornication, wickedness, covetousness, maliciousness; full of envy, murder, debate, deceit, malignity; whisperers, backbiters,

haters of God, spiteful, proud, boasters, inventors of evil things, disobedient to parents, without understanding, covenant-breakers, without natural affection, implacable, unmerciful:" (Romans 1:21-31). Surely little comment is needed.

It seems that homosexuality and its practice causes a behavioral stimulus which does not only interfere with the normal relationship between the sexes but which also gets into conflict with normal relationships in society in general. Harmonious human life becomes impossible. For these reasons alone I think it to be important to state that homosexuality does not only have medical consequences (AIDS where HIV infected partners are concerned), but also spiritual, psychological and mental consequences. The use of condoms certainly can reduce the risk of the bodily illnesses resulting from promiscuity. *The psychological, spiritual and sociological consequences, however, of promiscuity, even when practised with condoms will not be excluded.* Homosexuality and promiscuity involve the whole human being body, soul and spirit.

For these reasons, it seems no wonder that the fathers of the United States constitution and of other countries too, formulated their anti-sodomy and anti-promiscuity laws so forcefully. As long as the majority of a population kept to a monogamous way of life, the existence of some HIV or other virus posed relatively little threat. Whenever, however the virus was introduced into a promiscuous, heterosexual or homosexual society, then an ideal opportunity for the spread of viruses of this kind was offered. This is why sex emancipation is still providing the ideal "agar culture medium" for the spread of the AIDS epidemic.

How can one stop the AIDS epidemic?

Health administrations all over the world have launched

educational campaigns aimed at stopping the AIDS epidemic. The number of new HIV infections has thereby been reduced in homosexual circles within the United States. Since the incubation period is so long, however, the results of these efforts only appear rather slowly. Drug abusers, who spread the disease by means of their mutually used, infected needles, seem to have become more careful today too. In some cities, the distribution of sterile needles, at no cost, has been initiated in order to fight the AIDS infection rate among drug abusers.

Would a return to monogamy and a reduction of promiscuity halt the AIDS epidemic? Such a change in behavior on a broad basis would certainly slow down the spread of the virus at least somewhat. However, once the virus is widespread in the blood banks, everyone, including the hemophiliac, is threatened by AIDS infection. The return to a monogamous behavior would not re-establish the status quo with AIDS. Pandora's box has been opened. The epidemic is out in the world and it won't go back into the box. The use of condoms does not give absolute safety. It will only slow down the spread of the virus, but will not influence the spiritual problems of promiscuity.

In the few societies that are completely AIDS free today, a monogamous heterosexual life-style will certainly control the appearance of an AIDS epidemic, as long as the blood banks, blood and blood products have not been infiltrated with HIV infection. However, when HIV has once contaminated the blood banks (without the development of antibodies), then the situation is different.

Recent investigations have shown that among 288 homosexual men infected with the HIV virus, 144 developed full-blown AIDS within six years. Seventy-two of those 288 showed ARC (AIDS related complex) and no direct immune suppression (*British Medical Journal* 296, 1988, p745). This is the first research work that risks making a prognosis with respect to the development of an

HIV-infected person towards AIDS or ARC, based on the change in his blood tests. The Health Administration of San Francisco predicts now that very few homosexuals will get freshly infected with AIDS today. But the same administration estimates that by 1993 in San Francisco about 17,000 AIDS cases will surface in people who are already infected today (*New Scientist* March 31, 1988, p19). The Health Administration of San Francisco is convinced that the educational campaign is responsible for the declining number of new infections.

Since HIV has escaped from Pandora's box so that new infections are caused even by blood banks, particularly among hemophiliacs, the only real chance of limiting the epidemic lies in the development of new and more efficient therapies. This is no simple medical task. The virus has found a tremendous ecological niche within the human organism, within which it can hardly be fought without at the same time destroying the human host organism. Nevertheless, mankind is extraordinarily creative. Once we have enough knowledge about the structure and the function of the virus, it may be that science will develop means to interfere with the metabolism that allows the virus to survive, without blocking the human metabolism at the same time.

One has to take into account, though, that the problem of cancer has not been totally solved after more than 50 years of intensive research. Many measures can help in a palliative way and some kinds of cancers may today be curable. Nevertheless, lung cancer, breast cancer and cancer of the prostate are difficult to treat and still require long-term research efforts.

This is why for our society the first priority in overcoming the AIDS epidemic is by therapy and education. Equally important would be a return to ethical and moral basic principles. It is also the so-called scientific materialism that has penetrated our society and our science and which may be at least partly responsible for the conse-

quences of undermining the sexual and promiscuity taboos. This materialism destroys the belief in transcendence that must be the source of all absolute values and religious taboos.

It seems clear that without faith in transcendence and transcendent values, mankind will only be able to live up to his instincts. But modern society no longer believes in general transcendent or absolute values. Since the 19th century, materialistic science has exerted considerable effort to belittle all those who believe in the transcendent with all its values and taboos. Once those values were discredited, promiscuity and instinct took over. Such a Pandora's box was opened with the surfacing of HIV.

If the above thoughts are correct, then overcoming scientific materialism will be an important milestone in overcoming our current crises, including that of AIDS.

Fortunately, current materialistic science, particularly physics and mathematics, is successfully overcoming purely materialistic natural science. Scientists are developing a modern science which deals with the scientific reality of other dimensions including those of transcendency in addition to the material dimensions of space and time. In order to confirm these new developments, one only has to read for example one modern author, Paul Davies, a physicist of the University of Newcastle-Upon-Tyne in Northern England. His book, *God and The New Physics* (Penguin Books Ltd., 1983) is not orthodox, neither from the point of view of physics nor from the point of view of Christianity. But the reality of other dimensions that transcend space and time is certainly established in the eyes of modern physics.

If other dimensions do exist, one may safely assume that here rests the answer to the problem of the origin of all information — including that stored on the DNA molecule which governs the origin and maintenance of life. Perhaps the source of all signs of intelligence that we observe so clearly in nature lies in those other now

established transcendental dimensions. This is why I personally am convinced that the central role in overcoming today's crisis is to overcome the old incorrect scientific materialism which has governed society, science and life for so long.

For the above reasons, it is encouraging to note that progress in modern science is also making progress in overcoming the old so-called scientific materialism. For the latter was based on incomplete knowledge. Progress today often reverses the wisdom of yesterday. Further knowledge in this field may restore to us the trust in the old absolute values, which governed our society in former times and made us better people. (cf my new book: *The Scientific Alternative to Neo-Darwinian Evolutionary Theory*, T.W.F.T. Publishers, Costa Mesa, CA.)

The Challenge of AIDS to Christianity of Today

Potentially, the current AIDS epidemic threatens society in the same way as the plague did in the middle ages. This present calamity is a very big challenge for all thinking people. To help and to alleviate the misery of the present pandemic should have first priority now.

One thing has to be clear for all those who think in a Christian manner: It is wrong to discriminate against the sick no matter how such became sick. Now that the epidemic has erupted, each Christian should help not only with words, but with deeds. To think in a Christian way means to help everyone who is sick or endangered. What can be done practically?

The scientist or physician can engage in research in order to find better drugs or vaccines. "Normal" people can bring help to families when the mother or father or the children have become ill. Small errands such as shopping are a big help for people weakened by AIDS. In addition, most people could help financially by donating money to research and social help organizations, particu-

larly the Christian ones, earmarked for AIDS patients. The treatment of AIDS patients requires large amounts of blood transfusions — particularly those necessitated by modern chemotherapy. This also provides an opportunity to help, because the lack of blood donors is critical. In this way one can help to ease the suffering of patients and can improve their quality of life.

All AIDS therapies are expensive. Care and medication are very costly indeed. It is not obvious that the insurance companies will carry those costs in all cases, at least in some countries this is not the case. In this area, a practicing Christian could keep an open eye for the sheer misery of a family that has been struck by AIDS. If in the later stages of the disease the patient can no longer read, one can intensify sick visits in order to show the patient that he is not discriminated against and not forgotten — that someone understands him. Sensible conversations are priceless. In general, caring spiritual advice, combined with personal involvement, is important. Real love, not just pity, is the essence of this exacting work.

AIDS Help/Information Centers

The following organizations supply up to date information on AIDS and provide support services or refer AIDS victims to where they can be obtained. The organizations can be contacted by telephone or mail. Many provide 24 hour "Hot-Lines".

U.S. Public Health Service Hot-Line
800-342-AIDS

Southern California Aids Hot-Line
800-922-2437

AIDS Resource Ministry
1415 Santa Monica Mall #201
Santa Monica, CA 90401
213-395-9137

Beyond Rejection Ministries Inc., International
P.O. Box 2154
Hemet, CA 92343
714-925-0028
FAX 714-652-5848

Beyond Rejection Ministries, Midwest
P.O. Box 156
Rockford, Ill. 61107
815-963-0303

Beyond Rejection Ministries, East
P.O. Box 3188
Andover, Mass. 01840
508-685-5577

Courage
424 W, 34th St
New York, NY 10001
212-421-0426

Exodus International
P.O. Box 2121
San Rafael, CA 94912
415-454-1017

Hemophilia Council of California
1000 E. Walnut St., Suite 220
Pasadena, CA 91106
818-796-5710
also 3620 30th St., Suite C
San Diego, CA 92104
619-543-1355

Love And Action
3 Church Circle, Suite 108
Annapolis, MD 21401
301-268-3442

Victory House
Worthy Creation Ministry
3601 Davie Blvd.
Ft. Lauderdale, FLA 33312
305-463-0848

FOOTNOTES

Forward

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GLOSSARY

Abuse	To subject to use for which not intended
Coitus	Sexual intercourse — copulation
Colon	Part of the intestine terminating in the rectum
Contagious	Catching — spreading from one to another
Decimate	Destroy in great numbers
Defecation	Excretion/ elimination of body wastes
Dementia	Impaired mentality
Epidemiology	The branch of medicine which investigates and combats the cause, and spread of epidemics
Etiology	Explanation of the causes of diseases
Expression	Manifestation of a symptom (medical term). Also a genetical term
Fragile	Easily damaged or destroyed
Genome	The genetic content of a cell or virus
Gonorrhoea	A venereal disease
Hepatitis	Inflammation of the liver
Heterosexual	Relationships between persons of the opposite sex
Immune-suppression	Reduction of the normal capability of the body to counter-act disease/ infection
In vitro	Done under artificial conditions in the test tube

In vivo	Observed in a living organism, cell
Incontinence	Inability to contain urine or feces by will
Incubation period	Time between contagion and expression of a disease
Invasive	Growing without control into neighboring tissues – may be used of surgery
Irreversible	Permanent/incapable of being restored
Lobbying	To influence legislators by personal persuasion
Neurotropic	Relating to the nervous system
Pandemic	To spread to all people/over many countries
Permissive	Observing only loose control over norms of behavior
Promiscuity	Intercourse with various, frequently changing partners
Propagation	Multiplication of species by generation or reproduction
Quarantine	Separation of those who are suspected of carrying a communicable disease
Relapse	Recurring sickness
Replicate	Reproduction of organisms as exact copies of themselves
Retinitis	Inflammation of the retina
Safe Sex	Sex without passage of disease (or causing pregnancy)
Suppress	To conceal, to retain without making public
Transcendent	That which lies beyond what we can experience
Vaccination	To inoculate to procure immunity from a disease
Virus transfer	Passage of virus from one organism to another

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In 1957-58 Wilder-Smith was Visiting Assistant Professor at the Medical Center of the University of Illinois, 1959-61 Visiting Full Professor of Pharmacology at the University of Bergen Medical School in Norway. After a further two years at the University of Geneva, he was appointed Full Professor of Pharmacology at the University of Illinois Medical Center. Here he received—in succeeding years—three "Golden Apple" awards for the best course of lectures, together with four senior lecturer awards for the best series of senior-year lectures.

Wilder-Smith is also a well known speaker on many other topics. He is author and co-author of over 70 scientific publications and more than 30 books which have been published in some 17 languages. His *"Man's Origin, Man's Destiny"* and *"The Creation of Life"* are Christian classics. His *"A Scientific Alternative To Neo-Darwinian Theory"* published in 1988 is already widely accepted. His *"AIDS"* book was first published in Germany in October 1988 and currently is in its third printing.

The film series *"Origins"*, which enjoys great popularity in many countries was produced by Wilder-Smith. He has just produced two new films in the *"Origins"* series—one on thermodynamics and one on information theory.

Wilder-Smith's last Golden Apple award was inscribed: "He made us not only better scientists, but also better men".