

Ethics & Medicine

A Christian Perspective

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The Revd Dr Nigel M. de S. Cameron (General Editor)

Warden of Rutherford House, Edinburgh

Dr Ian L. Brown (Review Editor)

*Lecturer in Pathology and Consultant Pathologist
Western Infirmary, Glasgow*

Dr Paul K. Buxton

*Consultant Dermatologist
Fife Health Board and Royal Infirmary, Edinburgh*

Dr George L. Chalmers

*Consultant in Administrative Charge,
East District Geriatrics Service,
Greater Glasgow Health Board*

Dr Richard Higginson

*Tutor in Ethics, Cranmer Hall,
St John's College, Durham*

Miss Pamela Sims

*Consultant Obstetrician and Gynaecologist
to the Hexham Hospitals*

Miss Dorothy A. Whyte

*Lecturer in Nursing Studies
Edinburgh University*

Gilbert McAdam (Managing Editor)

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Editorial Correspondents: The Revd Dr David Atkinson, Chaplain, Corpus Christi College, Oxford; Dr E. David Cook, Head of Theology, Westminster College, Fellow of Green College, Oxford; Dr Huw Morgan, General Practitioner, Bristol; Dr Anne Townsend, Director of CARE Trust; Dr Gordon Wenham, Senior Lecturer in Religious Studies, College of St Mary and St Paul, Cheltenham; Dr Richard Winter, L'Abri Fellowship, Hampshire; Professor Verna Wright, Department of Medicine, University of Leeds.



**Rutherford House
Medical Ethics Project**

Aims: The aim of the Project is to develop a Christian mind on the complex and fundamental challenges posed to society by technological advance in medical science. Rutherford House is a research centre whose theological position is both Protestant and conservative, but the Project is intended to draw together those with a common concern for a distinctively Christian approach to Medical Ethics.

The Project is currently engaged in publishing and in organising conferences, and hopes to be able to expand these and other areas as support allows.

Associates of the Project: Those who support the Rutherford House Medical Ethics Project financially will become Associates of the Project and will receive news of the Project together with a complimentary copy of *Ethics & Medicine*. Publishing and administrative costs are high, and those who share our concern are encouraged to become Associates. Suggested minimum annual donation £25 (students £10). Please write for details.

Ethics & Medicine is indexed in *Religious and Theological Abstracts*.

Angel of Death

AIDS is not going to go away, and whatever we make of its significance there can be no doubt about one thing: it has reminded man of his mortality in a way in which nothing else could. Yet even here the message has still to get through. Much of the discussion seems to assume that only those who develop the symptoms, or perhaps also the (far larger) number who are seropositive, need really worry themselves about the possibility of the final sundering of body and soul. And what of the rest of us? AIDS, we are being somewhat misleadingly informed, is not prejudiced. But then, neither is death.

Of course, AIDS *is* prejudiced; that is the whole point. Were it not – were it simply another general and unprejudiced disease like measles – while it would remain a dreadful thing it would be an altogether *different* thing. It may yet come to that, in the sense that some fear a further mutation of the virus into a form which would (like measles) be transmissible in social contact, and which could portend an unmitigated cataclysm for the human race. But it is not that, and its rapid diffusion since it was first identified can be principally associated with sexual practices which Christians have seen as deeply wrong. This remains true even though one of the consequences of the initial spread has been the widespread infection of haemophiliacs, intravenous drug users and, most tragically of all, the new-born babies of (mostly) this last class.

It is hoped that this symposium issue of *Ethics & Medicine* will help shed light on some of the many issues which this strange disease has thrown up. We can hardly claim to be comprehensive in our treatment! There follows an article by an American philosopher on one of the dilemmas which is emerging in discussions of public policy, and an assessment of the medical situation which has special reference to the British situation. We are also including the text of the recent Report on AIDS of the Surgeon-General of the United States, which has not been generally available outside the U.S. although it was widely reported on its publication in October of last year.

We intend to carry further material on this subject in future issues of *Ethics and Medicine*, and would be particularly pleased to receive correspondence for publication (which should be sent as soon as possible).

NIGEL M. de S. CAMERON

Note: Due to the importance of the subject dealt with in this issue of *Ethics and Medicine*, we have held back the usual Student Forum, letters and book reviews until June.

Conferences on AIDS

As a further contribution to discussion, the Rutherford House Medical Ethics Project is convening two public conferences on, 'AIDS: A Christian Perspective'. They will be held in Edinburgh and London on Saturday April 4th and 11th respectively.

Speakers and subjects are as follows:

EDINBURGH:

Professor Donald Macleod:

AIDS: Are there Biblical Perspectives?

Dr Ian L. Brown:

AIDS: A Medical Perspective

Mr Archie MacLulich:

Professional and Pastoral Issues

LONDON:

Dr R.T. Kendall:

AIDS - God's Judgement?

Dr Elliott Larson:

AIDS, Medicine and Moral Absolutes

Mrs Valerie Riches:

Aiding the Young

Bishop Maurice Wood:

Counsel and Care

A representative of HM Government has been invited to speak at each of these conferences. Others taking part include Professor Penny Proffit, the Revd James Philip, the Revd Denis Lennon, Mr Luke Gormally.

A booking form is enclosed with this issue of *Ethics & Medicine*.

GROVE BOOKLET ON AIDS

AIDS: A Christian Response

by Roy McCloughry and Carol Bebawi

Grove Ethics Booklet No.64

Price £1.50

SURGEON GENERAL'S REPORT ON AIDS

Foreword

This is a report from the Surgeon General of the U.S. Public Health Service to the people of the United States on AIDS. Acquired Immune Deficiency Syndrome is an epidemic that has already killed thousands of people, mostly young, productive Americans. In addition to illness, disability, and death, AIDS has brought fear to the hearts of most Americans – fear of disease and fear of the unknown. Initial reporting of AIDS occurred in the United States, but AIDS and the spread of AIDS virus is an international problem. This report focuses on prevention that could be applied in all countries.

My report will inform you about AIDS, how it is transmitted, the relative risks of infection and how to prevent it. It will help you to understand your fears. Fear can be useful when it helps people avoid behaviour that puts them at risk for AIDS. On the other hand, unreasonable fear can be as crippling as the disease itself. If you are participating in activities that could expose you to the AIDS virus, this report could save your life.

In preparing this report, I consulted with the best medical and scientific experts this country can offer. I met with leaders of organizations concerned with health, education, and other aspects of our society to gain their views of the problems associated with AIDS. The information in this report is current and timely.

This report was written personally by me to provide the necessary understanding of AIDS.

The vast majority of Americans are against illicit drugs. As a health officer I am opposed to the use of illicit drugs. As a practicing physician for more than forty years, I have seen the devastation that follows the use of illicit drugs – addiction, poor health, family disruption, emotional disturbances and death. I applaud the President's initiative to rid this nation of the curse of illicit drug use and addiction. The success of his initiative is critical to the health of the American people and will also help reduce the number of persons exposed to the AIDS virus.

Some Americans have difficulties in dealing with the subjects of sex, sexual practices, and alternate lifestyles. Many Americans are opposed to homosexuality, promiscuity of any kind, and prostitution. This report must deal with all of these issues, but does so with the intent that information and education can change individual behaviour, since this is the primary way to stop the epidemic of AIDS. This report deals with the positive and negative consequences of activities and behaviours from a health and medical point of view.

Adolescents and pre-adolescents are those whose behaviour we wish to especially influence because of their vulnerability

when they are exploring their own sexuality (heterosexual and homosexual) and perhaps experimenting with drugs. Teenagers often consider themselves immortal, and these young people may be putting themselves at great risk.

Education about AIDS should start in early elementary school and at home so that children can grow up knowing the behaviour to avoid to protect themselves from exposure to the AIDS virus. The threat of AIDS can provide an opportunity for parents to instill in their children their own moral and ethical standards.

Those of us who are parents, educators and community leaders, indeed all adults, cannot disregard this responsibility to educate our young. The need is critical and the price of neglect is high. The lives of our young people depend on our fulfilling our responsibility.

AIDS is an infectious disease. It is contagious but it cannot be spread in the same manner as a common cold or measles or chicken pox. It is contagious in the same way that sexually transmitted diseases, such as syphilis and gonorrhea, are contagious. AIDS can also be spread through the sharing of intravenous drug needles and syringes used for injecting illicit drugs.

AIDS is *not* spread by common everyday contact but by sexual contact (penis-vagina, penis-rectum, mouth-rectum, mouth-vagina, mouth-penis). Yet there is great misunderstanding resulting in unfounded fear that AIDS can be spread by casual, non-sexual contact. The first cases of AIDS were reported in this country in 1981. We would know by now if AIDS were passed by casual, non-sexual contact.

Today those practicing high risk behaviour who become infected with the AIDS virus are found mainly among homosexual and bisexual men and male and female intravenous drug users. Heterosexual transmission is expected to account for an increasing proportion of those who become infected with the AIDS virus in the future.

At the beginning of the AIDS epidemic many Americans had little sympathy for people with AIDS. The feeling was that somehow people from certain groups 'deserved' their illness. Let us put those feelings behind us. We are fighting a disease, not people. Those who are already afflicted are sick people and need our care as do all sick patients. The country must face this epidemic as a unified society. We must prevent the spread of AIDS while at the same time preserving our humanity and intimacy.

AIDS is a life-threatening disease and a major public health issue. Its impact on our society is and will continue to be devastating. By the end of 1991, an estimated 270,000 cases of AIDS will have occurred with 179,000 deaths within the decade since the disease was first recognized. In the year 1991, an estimated 145,000 patients with AIDS will need health and supportive services at a total cost of between \$8 and \$16 billion. However, AIDS is preventable. It can be controlled by changes in personal behaviour. It is the

responsibility of every citizen to be informed about AIDS and to exercise the appropriate preventive measures. This report will tell you how. The spread of AIDS can and must be stopped.

C. EVERETT KOOP, M.D., ScD.
Surgeon General

AIDS

AIDS Caused by Virus

The letters A-I-D-S stand for Acquired Immune Deficiency Syndrome. When a person is sick with AIDS, he/she is in the final stages of a series of health problems caused by a virus (germ) that can be passed from one person to another chiefly during sexual contact or through the sharing of intravenous drug needles and syringes used for 'shooting' drugs. Scientists have named the AIDS virus 'HIV or HTLV-III or LAV'. These abbreviations stand for information denoting a virus that attacks white blood cells (T-Lymphocytes) in the human blood. Throughout this publication, we will call the virus the 'AIDS virus.' The AIDS virus attacks a person's immune system and damages his/her ability to fight other disease. Without a functioning immune system to ward off other germs, he/she now becomes vulnerable to becoming infected by bacteria, protozoa, fungi, and other viruses and malignancies, which may cause life-threatening illness, such as pneumonia, meningitis, and cancer.

No Known Cure: There is presently no cure for AIDS. There is presently no vaccine to prevent AIDS.

Virus Invades Blood Stream: When the AIDS virus enters the blood stream, it begins to attack certain white blood cells (T-Lymphocytes). Substances called antibodies are produced by the body. These antibodies can be detected in the blood by a simple test, usually two weeks to three months after infection. Even before the antibody test is positive, the victim can pass the virus to others by methods that will be explained.

Once an individual is infected, there are several possibilities. Some people may remain well but even so they are able to infect others. Others may develop a disease that is less serious than AIDS referred to as AIDS Related Complex (ARC). In some people the protective immune system may be destroyed by the virus and then other germs (bacteria, protozoa, fungi and other viruses) and cancers that ordinarily would never get a foothold cause 'opportunistic diseases' — using the *opportunity* of lowered resistance to infect and destroy. Some of the most common are *Pneumocystis carinii* pneumonia and tuberculosis. Individuals infected with the AIDS virus may also develop certain types of cancers such as Kaposi's sarcoma. These infected people have classic AIDS. Evidence shows that the AIDS virus may also attack the nervous system causing damage to the brain.

Signs and Symptoms

No Signs: Some people remain apparently well after infection with the AIDS virus. They may have no

physically apparent symptoms of illness. However, if proper precautions are not used with sexual contacts and/or intravenous drug use, these infected individuals can spread the virus to others. Anyone who thinks he or she is infected or involved in high risk behaviours should not donate his/her blood, organs, tissues, or sperm because they may now contain the AIDS virus.

ARC: AIDS-Related Complex (ARC) is a condition caused by the AIDS virus in which the patient tests positive for AIDS infection and has a specific set of clinical symptoms. However, ARC patients' symptoms are often less severe than those with the disease we call classic AIDS. Signs and symptoms of ARC may include loss of appetite, weight loss, fever, night sweats, skin rashes, diarrhea, tiredness, lack of resistance to infection, or swollen lymph nodes. These are also signs and symptoms of many other diseases and a physician should be consulted.

AIDS: Only a qualified health professional can diagnose AIDS, which is the result of a natural progress of infection by the AIDS virus. AIDS destroys the body's immune (defense) system and allows otherwise controllable infections to invade the body and cause additional diseases. These opportunistic diseases would not otherwise gain a foothold in the body. These opportunistic diseases may eventually cause death.

Some symptoms and signs of AIDS and the 'opportunistic infections' may include a persistent cough and fever associated with shortness of breath or difficult breathing and may be the symptoms of *Pneumocystis carinii* pneumonia. Multiple purplish blotches and bumps on the skin may be a sign of Kaposi's sarcoma. The AIDS virus in all infected people is essentially the same; the reactions of individuals may differ.

Long Term: The AIDS virus may also attack the nervous system and cause delayed damage to the brain. This damage may take years to develop and the symptoms may show up as a memory loss, indifference, loss of coordination, partial paralysis, or mental disorder. These symptoms may occur alone, or with other symptoms mentioned earlier.

AIDS: the present situation

The number of people estimated to be infected with the AIDS virus in the United States is about 1.5 million. All of these individuals are assumed to be capable of spreading the virus sexually (heterosexually or homosexually) or by sharing needles and syringes or other implements for intravenous drug use. Of these, an estimated 100,000 to 200,000 will come down with AIDS Related Complex (ARC). It is difficult to predict the number who will develop ARC or AIDS because symptoms sometimes take as long as nine years to show up. With our present knowledge, scientists predict that 20 to 30 percent of those infected with the AIDS virus will develop an illness that fits an accepted definition of AIDS within five years. The number of persons known to have AIDS in the United States to date is over 25,000; of these, about half have died of the disease. Since there is no cure, the others are expected to also eventually die from their

disease.

The majority of infected antibody positive individuals who carry the AIDS virus show no disease symptoms and may not come down with the disease for many years, if ever.

No Risk from Casual Contact: There is no known risk of non-sexual infection in most of the situations we encounter in our daily lives. We know that family members living with individuals who have the AIDS virus do not become infected except through sexual contact. There is no evidence of transmission (spread) of AIDS virus by everyday contact even though these family members shared food, towels, cups, razors, even tooth-brushes, and kissed each other.

Health Workers: We know even more about health care workers exposed to AIDS patients. About 2,500 health workers who were caring for AIDS patients when they were sickest have been carefully studied and tested for infection with the AIDS virus. These doctors, nurses and other health care givers have been exposed to the AIDS patients' blood, stool and other body fluids. Approximately 750 of these health workers reported possible additional exposure by direct contact with a patient's body fluid through spills or being accidentally stuck with a needle. Upon testing these 750, only 3 who had accidentally stuck themselves with a needle had a positive antibody test for exposure to the AIDS virus. Because health workers had much more contact with patients and their body fluids than would be expected from common everyday contact, it is clear that the AIDS virus is not transmitted by casual contact.

Control of Certain Behaviours Can Stop Further Spread of AIDS: Knowing the facts about AIDS can prevent the spread of the disease. Education of those who risk infecting themselves or infecting other people is the only way we can stop the spread of AIDS. People must be responsible about their sexual behaviour and must avoid the use of illicit intravenous drugs and needle sharing. We will describe the types of behaviour that lead to infection by the AIDS virus and the personal measures that must be taken for effective protection. If we are to stop the AIDS epidemic, we must all understand the disease – its cause, its nature, and its prevention. *Precautions must be taken.* The AIDS virus infects persons who expose themselves to known risk behaviour, such as certain types of homosexual and heterosexual activities or sharing intravenous drug equipment.

Risks: Although the initial discovery was in the homosexual community, AIDS is not a disease only of homosexuals. AIDS is found in heterosexual people as well. AIDS is not a black or white disease. AIDS is not just a male disease. AIDS is found in women; it is found in children. In the future AIDS will probably increase and spread among people who are not homosexual or intravenous

drug abusers in the same manner as other sexually transmitted diseases like syphilis and gonorrhea.

Sex Between Men: Men who have sexual relations with other men are especially at risk. About 70 percent of AIDS victims throughout the country are male homosexuals and bisexuals. This percentage probably will decline as heterosexual transmission increases. *Infection results from a sexual relationship with an infected person.*

Multiple Partners: The risk of infection increases according to the number of sexual partners one has, *male or female*. The more partners you have, the greater the risk of becoming infected with the AIDS virus.

How Exposed: Although the AIDS virus is found in several body fluids, a person acquires the virus during sexual contact with an infected person's blood, semen and possibly vaginal secretions. The virus then enters the person's blood stream through their rectum, vagina or penis.

Small (unseen by the naked eye) tears in the surface lining of the vagina or rectum may occur during insertion of the penis, fingers, or other objects, thus opening an avenue for entrance of the virus directly into the blood stream; therefore, the AIDS virus can be passed from penis to rectum and vagina and vice versa without a visible tear in the tissue or the presence of blood.

Prevention of Sexual Transmission – Know Your Partner: Couples who maintain mutually faithful monogamous relationships (only one continuing sexual partner) are protected from AIDS through sexual transmission. If you have been faithful for at least five years and your partner has been faithful too, neither of you is at risk. If you have not been faithful, then you and your partner are at risk. If your partner has not been faithful, then your partner is at risk which also puts you at risk. This is true for both heterosexual and homosexual couples. Unless it is possible to know with *absolute certainty* that neither you nor your sexual partner is carrying the virus of AIDS, you must use protective behaviour. *Absolute certainty* means not only that you and your partner have maintained a mutually faithful monogamous sexual relationship, but it means that neither you nor your partner has used illegal intravenous drugs.

AIDS: You can protect yourself from infection

Some personal measures are adequate to safely protect yourself and others from infection by the AIDS virus and its complications. Among these are:

- * If you have been involved in any of the high risk sexual activities described above or have injected illicit intravenous drugs into your body, you should have a blood test to see if you have been infected with the AIDS virus.
- * If your test is positive or if you engage in high risk activities and choose not to have a test, you should tell your sexual partner. If you jointly decide to have sex, you must protect your partner by always using a rubber (condom) during (start to finish) sexual intercourse

(vagina or rectum).

- * If your partner has a positive blood test showing that he/she has been infected with the AIDS virus or you suspect that he/she has been exposed by previous heterosexual or homosexual behaviour or use of intravenous drugs with shared needles and syringes, a rubber (condom) should always be used during (start to finish) sexual intercourse (vagina or rectum).
- * If you or your partner is at high risk, avoid mouth contact with the penis, vagina, or rectum.
- * Avoid all sexual activities which could cause cuts or tears in the linings of the rectum, vagina, or penis.
- * Single teen-age girls have been warned that pregnancy and contracting sexually transmitted diseases can be the result of only one act of sexual intercourse. They have been taught to say *NO* to sex! They have been taught to say *NO* to drugs! By saying *NO* to sex and drugs, they can avoid AIDS which can *kill* them! The same is true for teenage boys who should also not have rectal intercourse with other males. It may result in AIDS.
- * Do not have sex with prostitutes. Infected male and female prostitutes are frequently also intravenous drug abusers; therefore, they may infect clients by sexual intercourse and other intravenous drug abusers by sharing their intravenous drug equipment. Female prostitutes also can infect their unborn babies.

Intravenous Drug Users: Drug abusers who inject drugs into their veins are another population group at high risk and with high rates of infection by the AIDS virus. Users of intravenous drugs make up 25 percent of the cases of AIDS throughout the country. The AIDS virus is carried in contaminated blood left in the needle, syringe, or other drug related implements and the virus is injected into the new victim by reusing dirty syringes and needles. Even the smallest amount of infected blood left in a used needle or syringe can contain live AIDS virus to be passed on to the next user of those dirty implements.

No one should shoot up drugs because addiction, poor health, family disruption, emotional disturbances and death could follow. However, many drug users are addicted to drugs and for one reason or another have not changed their behaviour. For these people, the only way not to get AIDS is to use a *clean, previously unused* needle, syringe or any other implement necessary for the injection of the drug solution.

Hemophilia

Some persons with hemophilia (a blood clotting disorder that makes them subject to bleeding) have been infected with the AIDS virus either through blood transfusion or the use of blood products that help their blood clot. Now that we know how to prepare safe blood products to aid clotting, this is unlikely to happen. This group represents a very small percentage of the cases of AIDS throughout the country.

Blood Transfusion

Currently all blood donors are initially screened and blood is *not* accepted from high risk individuals. Blood that has been collected for use is tested for the presence of antibody to the AIDS virus. However, some people may have had a blood

transfusion prior to March 1985 before we knew how to screen blood for safe transfusion and may have become infected with the AIDS virus. Fortunately there are not now a large number of these cases. With routine testing of blood products, the blood supply for transfusion is now safer than it has ever been with regard to AIDS.

Persons who have engaged in homosexual activities or have shot street drugs within the last 10 years should *never* donate blood.

Mother Can Infect Newborn: If a woman is infected with the AIDS virus and becomes pregnant, she is more likely to develop ARC or classic AIDS, and she can pass the AIDS virus to her unborn child. Approximately one third of the babies born to AIDS-infected mothers will also be infected with the AIDS virus. Most of the infected babies will eventually develop the disease and die. Several of these babies have been born to wives of hemophiliac men infected with the AIDS virus by way of contaminated blood products. Some babies have also been born to women who became infected with the AIDS virus by bisexual partners who had the virus. Almost all babies with AIDS have been born to women who were intravenous drug users or the sexual partners of intravenous drug users who were infected with the AIDS virus. More such babies can be expected.

Think carefully if you plan on becoming pregnant. If there is any chance that you may be in any high risk group or that you have had sex with someone in a high risk group, such as homosexual and bisexual males, drug abusers and their sexual partners, see your doctor.

Summary

AIDS affects certain groups of the population. Homosexual and bisexual males who have had sexual contact with other homosexual or bisexual males as well as those who 'shoot' street drugs are at greatest risk of exposure, infection and eventual death. Sexual partners of these high risk individuals are at risk, as well as any children born to women who carry the virus. Heterosexual persons are increasingly at risk.

AIDS: what is safe

Most Behaviour is Safe: Everyday living does not present any risk of infection. You *cannot* get AIDS from casual social contact. Casual social contact should not be confused with casual *sexual* contact which is a major cause of the spread of the AIDS virus. Casual *social* contact such as shaking hands, hugging, social kissing, crying, coughing or sneezing, will not transmit the AIDS virus. Nor has AIDS been contracted from swimming in pools or bathing in hot tubs or from eating in restaurants (even if a restaurant worker has AIDS or carries the AIDS virus.) AIDS is not contracted from sharing bed linens, towels, cups, straws, dishes, or any other eating utensils. You cannot get AIDS from toilets, doorknobs, telephones, office machinery, or household furniture. You cannot get AIDS from body massages, masturbation or any non-sexual contact.

Donating Blood: Donating blood is *not* risky at all. *You cannot get AIDS by donating blood.*

Receiving Blood: In the U.S. every blood donor is screened to exclude high risk persons and every blood donation is now tested for the presence of antibodies to the AIDS virus. Blood that shows exposure to the AIDS virus by the presence of antibodies is not used either for transfusion or for the manufacture of blood products. Blood banks are as safe as current technology can make them. Because antibodies do not form immediately after exposure to the virus, a newly infected person may unknowingly donate blood after becoming infected but before his/her antibody test becomes positive. It is estimated that this might occur less than once in 100,000 donations.

There is no danger of AIDS virus infection from visiting a doctor, dentist, hospital, hairdresser or beautician. AIDS cannot be transmitted non-sexually from an infected person through a health or service provider to another person. Ordinary methods of disinfection for urine, stool and vomitus which are used for non-infected people are adequate for people who have AIDS or are carrying the AIDS virus. You may have wondered why your dentist wears gloves and perhaps a mask when treating you. This does not mean that he has AIDS or that he thinks you do. He is protecting you and himself from hepatitis, common colds or flu.

There is no danger in visiting a patient with AIDS or caring for him or her. Normal hygienic practices, like wiping of body fluid spills with a solution of water and household bleach (1 part household bleach to 10 parts water), will provide full protection.

Children in School: None of the identified cases of AIDS in the United States are known or are suspected to have been transmitted from one child to another in school, day care, or foster care settings. Transmission would necessitate exposure of open cuts to the blood or other body fluids of the infected child, a highly unlikely occurrence. Even then routine safety procedures for handling blood or other body fluids (which should be standard for all children in the school or day care setting) would be effective in preventing transmission from children with AIDS to other children in school.

Children with AIDS are highly susceptible to infections, such as chicken pox, from other children. Each child with AIDS should be examined by a doctor before attending school or before returning to school, day care or foster care settings after an illness. No blanket rules can be made for all school boards to cover all possible cases of children with AIDS and each case should be considered separately and individualized to the child and the setting, as would be done with any child with a special problem, such as cerebral palsy or asthma. A good team to make such decisions with the school board would be the child's parents, physician and a public health official.

Casual social contact between children and persons infected with the AIDS virus is not dangerous.

Insects: There are no known cases of AIDS transmission by insects, such as mosquitoes.

Pets: Dogs, cats and domestic animals are not a source of infection from AIDS virus.

Tears and Saliva: Although the AIDS virus has been found in tears and saliva, no instance of transmission from these body fluids has been reported.

AIDS comes from sexual contacts with infected persons and from the sharing of syringes and needles. There is no danger of infection with AIDS virus by casual social contact.

Testing of Military Personnel: You may wonder why the Department of Defence is currently testing its uniformed services personnel for presence of the AIDS virus antibody. The military feel this procedure is necessary because the uniformed services act as their own blood bank in a time of national emergency. They also need to protect new recruits (who unknowingly may be AIDS virus carriers) from receiving live virus vaccines. These vaccines could activate disease and be potentially life-threatening to the recruits.

AIDS: what is currently understood

Although AIDS is still a mysterious disease in many ways, our scientists have learned a great deal about it. In five years we know more about AIDS than many diseases that we have studied for even longer periods. While there is no vaccine or cure, the results from the health and behavioural research community can only add to our knowledge and increase our understanding of the disease and ways to prevent and treat it.

In spite of all that is known about transmission of the AIDS virus, scientists will learn more. One possibility is the potential discovery of factors that may better explain the mechanism of AIDS infection.

Why are the antibodies produced by the body to fight the AIDS virus not able to destroy that virus?

The antibodies detected in the blood of carriers of the AIDS virus are ineffective, at least when classic AIDS is actually triggered. They cannot check the damage caused by the virus, which is by then present in large numbers in the body. Researchers cannot explain this important observation. We still do not know why the AIDS virus is not destroyed by man's immune system.

Summary

AIDS no longer is the concern of any one segment of society; it is the concern of us all. No American's life is in danger if he/she or their sexual partners do not engage in high risk sexual behaviour or use shared needles or syringes to inject illicit drugs into the body.

People who engage in high risk sexual behaviour or who shoot drugs are risking infection with the AIDS virus and are risking their lives and the lives of others, including their unborn children.

We cannot know yet the full impact of AIDS on our society. From a clinical point of view, there may be new manifestations of AIDS – for example, mental disturbances due to the infection of the brain by the AIDS virus in carriers of the virus. From a social point of view, it may bring to an end the free-wheeling sexual lifestyle which has been called the sexual revolution. Economically, the care of AIDS patients will put a tremendous strain on our already overburdened and costly health care delivery system.

The most certain way to avoid getting the AIDS virus and to control the AIDS epidemic in the United States is for individuals to avoid promiscuous sexual practices, to maintain mutually faithful monogamous sexual relationships and to avoid injecting illicit drugs.

Look to the Future

The Challenge of the Future: An enormous challenge to public health lies ahead of us and we would do well to take a look at the future. We must be prepared to manage those things we can predict, as well as those we cannot.

At the present time there is no vaccine to prevent AIDS. There is no cure. AIDS, which can be transmitted sexually and by sharing needles and syringes among illicit intravenous drug users, is bound to produce profound changes in our society, changes that will affect us all.

Information and Education Only Weapons Against AIDS: It is estimated that in 1991 54,000 people will die from AIDS. At this moment, many of them are not infected with the AIDS virus. With proper information and education, as many as 12,000 to 14,000 people could be saved in 1991 from deaths by AIDS.

AIDS will Impact All: The changes in our society will be economic and political and will affect our social institutions, our educational practices, and our health care. Although AIDS may never touch you personally, the societal impact certainly will.

Be educated – Be Prepared: Be prepared. Learn as much about AIDS as you can. Learn to separate scientific information from rumor and myth. The Public Health Service, your local public health officials and your family physician will be able to help you.

Concern About Spread of AIDS: While the concentration of AIDS cases is in the larger urban areas today, it has been found in every state and with the mobility of our society, it is likely that cases of AIDS will appear far and wide.

Special Educational Concerns: There are a number of people, primarily adolescents, that do not yet know they will be homosexual or become drug abusers and will not heed this message; there are others who are illiterate and cannot heed this message. They must be reached and taught the risk behaviours that expose them to infection with the AIDS virus.

High Risk Get Blood Test: The greatest public health problem lies in the large number of individuals with a history of high risk behaviour who have been infected with and may be spreading the AIDS virus. Those with high risk behaviour must be encouraged to protect others by adopting safe sexual practices and by the use of clean equipment for intravenous drug use. If a blood test for antibodies to the AIDS virus is necessary to get these individuals to use safe sexual practices, they should get a blood test. Call your local health department for information on where to get the test.

Anger and Guilt: Some people afflicted with AIDS will feel a sense of anger and others a sense of guilt. In spite of these understandable reactions, everyone must join the effort to control the epidemic, to provide for the care of those with AIDS, and to do all we can to inform and educate others about AIDS, and how to prevent it.

Confidentiality: Because of the stigma that has been associated with AIDS, many afflicted with the disease or who are infected with the AIDS virus are reluctant to be identified with AIDS. Because there is no vaccine to prevent AIDS and no cure, many feel there is nothing to be gained by revealing sexual contacts that might also be infected with the AIDS virus. When a community or a state requires reporting of those infected with the AIDS virus to public health authorities in order to trace sexual and intravenous drug contacts – as is the practice with other sexually transmitted diseases – those infected with the AIDS virus go underground out of the mainstream of health care and education. For this reason current public health practice is to protect the privacy of the individual infected with the AIDS virus and to maintain the strictest confidentiality concerning his/her health records.

State and Local AIDS Task Forces: Many state and local jurisdictions where AIDS has been seen in the greatest numbers have AIDS task forces with heavy representation from the field of public health joined by others who can speak broadly to issues of access to care, provision of care and the availability of community and psychiatric support services. Such a task force is needed in every community with the power to develop plans and policies, to speak, and to act for the good of the public health at every level.

State and local task forces should plan ahead and work collaboratively with other jurisdictions to reduce transmission of AIDS by far-reaching informational and educational programs. As AIDS impacts more strongly on society, they should be charged with making recommendations to provide for the needs of those afflicted with AIDS. They also will be in the best position to answer the concerns and direct the activities of those who are not infected with the AIDS virus.

The responsibility of State and local task forces should be far reaching and might include the following areas:

- * Insure enforcement of public health regulation of such practices as ear piercing and tattooing to prevent

transmission of the AIDS virus.

- * Conduct AIDS educational programs for police, firemen, correctional institution workers and emergency medical personnel for dealing with AIDS victims and the public.
- * Insure that institutions catering to children or adults who soil themselves or their surroundings with urine, stool, and vomitus have adequate equipment for cleanup and disposal, and have policies to insure the practice of good hygiene.

School: Schools will have special problems in the future. In addition to the guidelines already mentioned in this pamphlet, there are other things that should be considered such as sex education and education of the handicapped.

Sex Education: Education concerning AIDS must start at the lowest grade possible as part of any health and hygiene program. The appearance of AIDS could bring together diverse groups of parents and educators with opposing views on inclusion of sex education in the curricula. There is now no doubt that we need sex education in schools and that it must include information on heterosexual and homosexual relationships. The threat of AIDS should be sufficient to permit a sex education curriculum with a heavy emphasis on prevention of AIDS and other sexually transmitted diseases.

Handicapped and Special Education: Children with AIDS or ARC will be attending school along with others who carry the AIDS virus. Some children will develop brain disease which will produce changes in mental behaviour. Because of the right to special education of the handicapped and the mentally retarded, school boards and higher authorities will have to provide guidelines for the management of such children on a case-by-case basis.

Labor and Management: Labor and management can do much to prepare for AIDS so that misinformation is kept to a minimum. Unions should issue preventive health messages because many employees will listen more carefully to a union message than they will one from public health authorities.

IDS Education at the Work Site: Offices, factories, and other work sites should have a plan in operation for education of the work force and accommodation of AIDS or ARC patients *before* the first such case appears at the work site. Employees with AIDS or ARC should be dealt with as are any workers with a chronic illness. In-house video programs provide an excellent source of education and can be individualized to the needs of a specific work group.

Strain on the Health Care Delivery System: The health care system in many places will be overburdened as it is now in urban areas with large numbers of AIDS patients. It is predicted that during 1991 there will be 145,000 patients requiring hospitalization at least once and 54,000 patients who will die of AIDS. Mental disease (dementia) will occur in some patients who have the AIDS virus before they have any other manifestation such as ARC or classic AIDS. State and local task forces will have to plan for these patients by utilizing conventional and time honored systems but will also have to investigate alternate methods of treatment and alternate sites for care including homecare. The strain on the health system can be lessened by family, social and psychological support mechanisms in the community.

Programs are needed to train chaplains, clergy, social workers, and volunteers to deal with AIDS. Such support is particularly critical to the minority communities.

Mental Health: Our society will also face an additional burden as we better understand the mental health implications of infection by the AIDS virus. Upon being informed of infection with the AIDS virus, a young, active, vigorous person faces anxiety and depression brought on by fears associated with social isolation, illness, and dying. Dealing with these individual and family concerns will require the best efforts of mental health professionals.

Controversial Issues: A number of controversial AIDS issues have arisen and will continue to be debated largely because of lack of knowledge about AIDS, how it is spread, and how it can be prevented. Among these are the issues of compulsory blood testing, quarantine, and identification of AIDS carriers by some visible sign.

Compulsory Blood Testing: Compulsory blood testing of individuals is not necessary. The procedure could be unmanageable and cost prohibitive. It can be expected that many who *test* negatively might actually be positive due to recent exposure to the AIDS virus and give a false sense of security to the individual and his/her sexual partners concerning necessary protective behaviour. The prevention behaviour described in this report, if adopted, will protect the American public and contain the AIDS epidemic. Voluntary testing will be available to those who have been involved in high risk behaviour.

Quarantine: Quarantine has no role in the management of AIDS because AIDS is not spread by casual contact. The only time that some form of quarantine might be indicated is in a situation where an individual carrying the AIDS virus knowingly and willingly continues to expose others through sexual contact or sharing drug equipment. Such circumstances should be managed on a case-by-case basis by local authorities.

Identification of AIDS Carriers by Some Visible Sign: Those who suggest the marking of carriers of the AIDS virus by some visible sign have not thought the matter through thoroughly. It would require testing of the entire population which is unnecessary, unmanageable and costly. It would miss those recently infected individuals who would test negatively, but be infected. The entire procedure would give a false sense of security. AIDS must and will be treated as a disease that can infect anyone. AIDS should not be used as an excuse to discriminate against any group or individual.

Updating Information: As the Surgeon General, I will continually monitor the most current and accurate health, medical, and scientific information and make it available to you, the American people. Armed with this information you can join the discussion and resolution of AIDS-related issues that are critical to your health, your children's health, and the health of the nation.

Aids, HIV Testing, and the Ethics of Informed Consent

DIANE RAYMOND

Associate Professor, Department of Philosophy
Simmons College, Boston, Ma 02115

"Although vice and virtue are not equivalent to disease and health, they bear a direct relation to these concepts. Insofar as a vice is taken to be a deviation from an ideal of human perfection, or 'well-being', it can be translated into disease language To be ill is to fail to realize the perfection of an ideal type, to be sick is to be defective rather than to be evil. The notion of the 'deviant' structures the concept of disease"¹

Aids and HIV: Introduction

Hardly a day goes by without some media attention to the problem of Acquired Immune Deficiency Syndrome (AIDS). Though treatment of the topic has varied greatly, in the quantity of articles² as well as sensitivity to the issue, both mainstream periodicals and more specialized journals have taken up the topic. Sensationalized treatment of the issue of AIDS, though, has fueled the fires of already existing homophobia. The cover of one issue of LIFE Magazine, for example³ reads 'The New Victim' and carries a cover picture of a black soldier, white woman, and a white family, all, presumably, 'new victims' of AIDS. In an opening statement of that same issue, the editor apologizes for not bringing readers a 'light, bright cover story'⁴ amidst reports of high school proms and celebrity gorilla Koko. In another article, one scientist referred to AIDS as 'the disease of the century', while another judged only nuclear war to be worse.⁵ And much of the attention of these popular periodicals has focused on the growing numbers of heterosexuals expected to come down with AIDS. Most treatments can hardly restrain the censorious tone. One proclaims that the 'AIDS minorities are beginning to infect the heterosexual, drug-free majority.'⁶ In yet another article, a picture of a baby and a nine year old hemophiliac, both of whom got AIDS from transfusions, carries the caption: 'The most blameless victims.'⁷ Others worried that new cases of AIDS would strain the medical system, perhaps even leading some private health insurers to 'collapse under the weight of the epidemic.'⁸

Similarly, right wing groups have used AIDS to justify more aggressive campaigns against gays and other sexual minorities. Cal Thomas, Vice President of the Moral Majority, urging criminal penalties for homosexual sex, says, 'sex is not a constitutional right, like free speech, that can be exercised at will with no consequences.'⁹ Another Moral Majority spokesperson, claiming the average person

with AIDS has upwards of 1600 different sexual partners, notes, 'It's unpleasant to have to say homosexuality is disgusting, but that's the truth.'¹⁰

Acquired Immunodeficiency Syndrome (AIDS) is the medical term used to describe the set of clinical signs and symptoms caused by a deficit in the functioning of the immune system. The system was first described in 1981, and by January 1985, more than 8000 cases have been reported to the Center for Disease Control 9CDC0. The number of AIDS cases in 1984 was 74% higher than the number reported in 1973, and it is expected that the number of cases in 1985 will double that of 1984. Half of all people (49%) with the disease have died, and 73% of patients diagnosed before January of 1983 have died.¹¹

'To some extent the AIDS epidemic is a unique experience in public health,'¹² in part because the AIDS virus reproduces incredibly rapidly, in fact 100-1000 times faster than flu viruses. This led one researcher to liken finding a cure for the disease to 'trying to hit a rapidly moving target.'¹³ And since AIDS antigens keep changing, 'today's vaccine could be ineffective tomorrow.'¹⁴

AIDS is believed to be transmitted from person to person through the transfer of certain body fluids such as blood or semen. To date, there are no documented cases of AIDS resulting from casual contacts like sharing meals, coughing or sneezing, or even exchange of saliva (through, for example, kissing). 72.8% of all reported cases of AIDS in this country are among male homosexuals. In Africa, however, AIDS strikes men and women in equal proportions; and 1/3 of all reported cases of AIDS in the US military have been suspected to be resulting from heterosexual contact.

Though no definitive treatment thus far is available for this condition, recent research has identified a retrovirus (human T-lymphotropic virus type III, or HIV), as the probable cause of AIDS. This virus infects and destroys certain white blood cells (called T-lymphocytes) essential for the body's functioning immune system. In addition, it often leaves those remaining T-cells weakened and less able to fight off infection. It is termed a 'retrovirus' because it can reverse the process of gene expression when it infects cells, leading to what are called 'opportunistic infections.'¹⁵ Further, studies using the ELISA test (enzyme-linked immunosorbent assay) to detect the presence of antibodies to HIV virus in persons have found the presence of the antibody to range from 68-100% among persons with AIDS, and from 84-100% among persons with AIDS-related conditions.¹⁶ This is a test to identify antibodies to the HIV virus; it is not a test for AIDS itself. The presence of antibodies, therefore, means only that the person's immune system has been exposed to the virus.

When a person is infected by a virus, the body's immune system normally begins to fight the infection through white blood cells which produce substances called antibodies. Antibodies, therefore, indicate that a person has been infected by a specific virus.¹⁷

It is important to recognize that a positive finding for HIV only means that the person has been exposed to the virus. No one knows the probability of a positive finding becoming AIDS, though the CDC estimates that 5-10% of those who test positive for three years will go on to develop advanced disease. The person could eventually develop the symptoms of AIDS or could be an asymptomatic carrier or could have already beaten off the disease. Similarly, a negative test does not necessarily mean that the sample is free of AIDS virus, since if there was a recent exposure the antibody may not have yet developed or may be in the early stage of incubation and not be detectable. Further, there is no way to know if it is transmittable, based on a positive finding. Thus, the test does not indicate carrier status.

No one knows why some people exposed to HIV remain well, merely harboring the virus, while others progress to different stages of clinical illness.

Since AIDS is a newly discovered disease and the time between exposure and the onset of clinical disease can take several years, it is too soon to tell what percentage of persons exposed to the virus will develop AIDS. It is also too soon to tell whether persons exhibiting milder manifestations of disease (e.g. fever, some depression of immune functions, enlarged lymph nodes) will eventually develop AIDS, continue to exhibit signs and symptoms of mild diseases, or get well. 18

Indeed, research indicates that most people with a positive antibody test result do not have AIDS.

There is an additional problem in the significant number of false positive and negative test results. It has been estimated that as many as 100,000 to 200,000 false positive results may be generated by the ELISA test; and, unlike other tests now in use in the medical community which also yield some inaccurate results, no other reliable diagnostic tools are available to confirm the test result. Because of this, some critics of the test have conjectured that testing might lead to increased contamination in our blood supplies, since those who test negative may wrongly assume that it is safe for them to donate blood. Repeat testing, it would appear, might mitigate some of these difficulties, though not all.

No one doubts the magnitude or the severity of AIDS or the importance of further research to find treatments for those afflicted with it and cures for the disease itself. And the discovery of HIV provides an important theoretical foundation for our understanding of the syndrome. Further, no one doubts the importance of ensuring that our blood supplies are free from contamination. Given this, I want to explore some of the normative issues which have arisen regarding testing for HIV. In doing so, I shall argue that this test in principle violates the canons of informed consent I shall sketch out below; and, additionally, that our haste to quell public anxiety in an effort to 'do something' has sadly led us to bypass certain basic tenets of social justice.

Informed Consent: Some General Considerations

It is by now old news to report that medical practice - scientific research as well as patient care - is by no means 'value free'. The growing importance and credibility of the field of medical ethics, a burgeoning of interest in 'consumer rights', and key public revelations of abuses in research and clinical care have led to the reformulation of professional codes and guidelines for medical practitioners. More and more medical journals emphasize issues like informed consent, responsibility, patient autonomy, confidentiality and the like. Such efforts can only be commended, as they serve to empower lay people in the decision-making processes which affect them, as well as to make professionals more conscious of their own normative assumptions and their accountability for that process.

Similarly, much of the recent material on AIDS¹⁹ - even in more scholarly journals like the *Journal of the American Medical Association* - has been cognizant of the ethical issues which this disease provokes. Almost all of the authors I surveyed include some discussion of consent and confidentiality as they affect AIDS research and provision of care. And many went further to stress that, because 70% of AIDS victims are gay men who not only suffer from great social prejudice, but also lack certain legal protections, special sensitivity to the ethical dimensions is essential.

But most commentators seem also to conclude that it is at least theoretically possible - given good intentions and careful record-keeping²⁰ - to uphold the rights of patients and research subjects. For example:

Physicians, laboratory and nursing personnel, and others should recognize the importance of maintaining confidentiality of test results. Disclosure of this information for purposes other than medical or public health could lead to serious consequences for the individual. Screening procedures should be designed with safeguards to protect against unauthorized disclosure. Donors should be given a clear explanation of how information about them will be handled. Facilities should consider developing contingency plans in the event that disclosure is sought through legal process. If donor deferral lists are kept, it is necessary to maintain confidentiality of such lists. Whenever appropriate, as an additional safeguard, donor deferral lists should be general, without indication of the reason for inclusion.²¹

It is this contention which I wish to question as it relates to at least one recent practice,²² HIV testing.

Informed consent is an important notion in all fields involving relationships between clients and providers; but the life-and-death nature of medicine may make its urgency more obvious. The increasing sophistication of medical practice means that the patient may know less about the alternatives to and consequences of a recommended treatment than do clients in other professions. Further, this information may be more difficult to understand precisely

because of the client's physical condition and the heightened anxiety accompanying it. Also, the consequences to the client of a prescribed course of treatment are often more serious than might occur as a result of other professional/client interactions. Finally, there has been in medical practice - both research and clinical care - a history of treatment without obtaining prior consent, leading many to insist on the importance of clarifying rights and responsibilities to avoid future abuses.

Indeed, almost all medical codes acknowledge the value of respect for informed consent. The American Hospital Association's Patient's Bill of Rights emphasizes informed consent in its outline of patient's rights and responsibilities. The American Nursing Association's Code for Nurses (1976), states:

- 1.1 Each client has the moral right to determine what will be done with his/her person, to be given the information necessary for making informed judgments; to be told the possible effects of care; and to accept, refuse, or terminate treatment.

None of this, though, answers the question why we take consent to be important.

Most discussions link this concept to the classic liberal right to self-determination and the claim to 'bodily integrity'. With sufficient information conveyed in a language that can be understood, a patient can more easily make irrational decisions, but only that (1) there may be a greater likelihood of my coming to a sound decision with all relevant information; and (2) without the necessary information, any decision - whether or not a 'reasonable person' would agree with it - is probably more the result of irrelevant factors or a response to pressure from the medical provider. And 'consent' implies not only information but also 'voluntariness' which is centrally connected with the notion of individual responsibility. How can I be accountable for the consequences of my decisions if I did not know the information relevant to an enlightened decision or I did not voluntarily agree to the procedure?

Paul Ramsey describes the principle of informed consent as the cardinal 'canon of loyalty' which joins together the profession and client in a partnership; without it, we reduce the patient to the status of dependent child, incapable of making a properly informed decision. A 'contractual model' of the professional relationship assumes that it is possible to join together in a common purpose (in this case, 'to cure' or 'to treat') and that respect for the client's autonomy is fundamental to that contract.²³ This notion is consistent with the Kantian imperative to respect persons, to treat others as ends and not as means to our ends. And, further, if patients do not trust their medical providers, they may give inaccurate information which might ultimately hamper the research or treatment. Thus, there are sound formalist and consequentialist reasons to insist on respect for and preservation of patient autonomy:

Autonomy is a value which deserves to be promoted,

through a doctrine of informed consent and elsewhere in the law as well, because it encourages better interactions between the patient-subject and others. In protecting his autonomy of choice, the doctrine assures the patient that in going to a physician he will not be trapped into decisions which he does not want the absence of such assurance would increase the inclination to delay seeking medical intervention even for serious conditions.²⁴

The courts have generally followed these guidelines, allowing only for two exceptions: when the patient is unconscious or otherwise incapable of giving consent, and the harm from a failure to treat is imminent and outweighs the harm of the proposed treatment; and when the risk-disclosure poses a clear and serious threat to the patient's welfare so as to be contraindicated from a medical point of view. In these cases, though, decisions to treat appear not to threaten autonomy, but rather to preserve *future* autonomy; indeed, legal scholars sometimes use the concept of 'implied consent' in their defence. But, regardless of our interpretations of the exceptions, in most cases, the courts have defended the classic right to self-determination.²⁵

Informed consent, however, is not simply a vehicle which mandates respect for the autonomy of the patient. Rather, it provides a means by which we seek to empower those persons who by virtue of a variety of circumstances are *not* equal. It seems obvious that the professional may have other interests at stake, and may promote some policy - through fraud or duress - not in the best interests of the client. But, even further, the patient is in a vulnerable position *vis a vis* the medical provider: lacking technical knowledge, awed by the 'mystique' of the physician, and anxious, very likely physically ill, the patient lacks the power of the medical professional. All too often, accounts of informed consent seem to suggest that adherence to proper procedures acknowledges the equality of the relationship between client and provider; that abuse occurs when the client is treated as a 'dependent' rather than, in recent accounts, a 'friend' or a 'colleague' or a 'co-equal'. But this analysis ignores the realities of the dynamic. Truly informed consent acknowledges that the client is, to some extent, dependent, and strives, insofar as it is possible, to empower her.

What does it mean, then, to inform someone properly? Surely it does not mean complete disclosure of even the most insignificant details of one's course of treatment. At one time, physicians argued that standard medical practice should be the basis for deciding how much to tell the patient. Thus, the custom and practice of physicians within the medical community would set the standard for disclosure of information. But several court decisions have adjudged the professional practice standard insufficient. If 'every human being of adult years and sound mind has a right to determine what shall be done with his own body' in order to evaluate the alternatives knowledgeably, then the patient's need, not customary medical practice, should set the standard.

The duty to disclose, we have reasoned, arises from phenomena apart from medical custom and practice ... Any definition of scope in terms purely of a professional standard is at odds with the patient's prerogative to decide on projected therapy himself.²⁶

Thus, courts have generally maintained that whatever information is material to the patient's decision, as judged by the standard of what a reasonable person would want to know, is what the physician is required to reveal.

The patient's right of self-decision is the measure of the physician's duty to reveal. *That right can be effectively exercised only if the patient possesses adequate information to enable an intelligent choice.* The scope of the physician's communications to the patient, then, is measured by the patient's need, and that need is whatever information is material to the decision.²⁷

Obviously, the physician cannot be expected to second-guess every patient's needs or personal idiosyncracies, but rather has to assess what information is necessary to weigh the costs and benefits of some proposed alternatives.

What seems clear from the preceding comments is that informed consent is more than a signature on a form; it includes the elements of disclosure and comprehension as well as voluntariness on the part of the client. Any number of personal and/or social factors can affect these elements; further, the patient's/subjects's agreement though necessary is not a sufficient condition to guarantee informed consent. With this in mind, let's look at the ethical issues of HIV testing.

Informed Consent and HIV Testing

AIDS has been referred to as a 'legal emergency' as well as a medical crisis.²⁸ Indeed, the issue is fraught with normative questions, whose answers depend at least in part on technical information which is not yet available. HIV testing is especially ambiguous, for a number of reasons.

There is powerful evidence for a strong association between HIV and AIDS. In high risk groups tested recently, more than the majority of the population in some communities was already infected. 75% of haemophiliacs and 70% of IV drug users were found to be HIV positive, and 65% of gay men in San Francisco are HIV positive, compared to 1% in 1978.²⁹ For this reason, many have urged that all persons in high risk groups be tested, or that all blood donors be tested, or that individuals who believe they are at risk should be tested for HIV exposure. Though no one questions the value of an uncontaminated blood supply or the need to prevent the transmission of AIDS, one must be wary of considering such issues in a social vacuum.

As we have seen, no one knows who of those who test HIV positive will come down with AIDS. In fact, most of those

who test positive will *not* come down with the disease. Further, some persons who have the virus in their blood do not produce antibodies and can also be symptom-free.³⁰ Because of the long incubation period, antibody seroconversion may be relatively late after infection in some persons.

Despite this, there has been a great deal of misinformation about this test. Margaret Heckler, ex-secretary of the U.S. Department of Health and Human Services, announced in April 1984 that this blood test could 'identify AIDS victims with essentially 100 per cent certainty.' This confusion has let to a good deal of 'AIDS anxiety' on the part of members of high risk groups and increasing talk of public sanctions against homosexuals. In addition, some have expressed a fear that there may be persons who will offer to donate blood just to find out their HIV status. The creation of alternative testing sites is an attempt to discourage that practice; in one study, 30% of the people tested at an alternative site said they would have tried to donate blood to find out their status had there been no alternative site available.³¹

Further, no one knows if testing HIV positive means that one can transmit the disease to someone else, though it may be reasonable to assume that there is some ability to infect others. Nor does anyone know if subsequent behaviour makes a difference to the natural history of the illness after HIV exposure. Many groups around the country have formed to promote 'safe sex' practices, and there is some evidence which suggests that education has brought about changes in attitude as well as actual practice. One study of gay men in San Francisco, for example, noted that the average number of partners per month dropped from 5.9 in October of 1982 to 2.5 in the same period in 1984.³² And the number of cases of rectal gonorrhea in San Francisco in 1984 is a quarter of what it was in 1980.³³ But no one knows if changing sexual practices will affect the development of the disease.

As the seroprevalence of HIV antibody increases in the high risk communities in centers around the country, it takes fewer partners doing less risky behaviours to result in a significant likelihood of being exposed and subsequently seroconverting.³⁴

And there is even some evidence from the epidemiology that having multiple partners is not a necessary precondition of susceptibility to AIDS. In one study, for example, 17% of the symptomatic seropositives had fewer than 25 lifetime male partners, and 14% of the asymptomatic seropositive men had more than 50.³⁵

Obviously, the sexual behaviour of homosexual men is extremely heterogenous, and seldom do individuals practice one sexual behaviour exclusively; this makes it difficult to generalize from sexual patterns to development of the disease. In fact, it is possible that if higher risk behaviours (e.g. receptive anal sex) are eliminated, less efficient means of transmission (e.g. receptive oral sex) may become the major source of spread.

Finally, so far it appears that the infectious period for HIV may be lifelong; 'reversions from the retroviral infection to a virus-free state have not been described.'³⁶

Thus, at this time, we do not know *what* a positive HIV finding means, nor do we know what practices (if any) or methods of treatment will affect one's status. We can urge 'safe sex' practices, but, given the severity and range of this disease, it is probably wise for all sexually active individuals, *especially* bisexuals and gay men, to follow safe sex practices. And many of those who urge testing emphasize the importance of counselling for those who test positive and strict adherence to guidelines for confidentiality. Other guides emphasize the limited use of the test. For example:

At the present time, the HIV antibody test has extremely limited utility for purposes other than stated above, and is not a useful screening test for AIDS. The test does not have applicability except in specific medical circumstances. The HIV test should not be used for generalized screening or as a precondition for employment, evidence of insurability, or admission to school, or the military.³⁷

It is not unusual to find such caveats in the literature about HIV testing. Indeed, almost all of the discussions criticize mandatory screening programs and suggest strict guidelines to protect the patient's right to confidentiality.³⁸ Yet each of these cautionary proposals presupposes that the test itself is ethically justified; what differences do exist among competing perspectives seem, for the most part, to arise over what are the 'specific medical circumstances' which warrant the procedure. I want to argue, though, that the test cannot be justified for clinical use; and that its use in research must be carefully limited in accordance with principles I shall detail below. To do so, I want to examine another case out of our recent public health experience: screening for sickle-cell anemia. I am not unaware of the fact that there are relevant difference psychosocial as well as medical between the two procedures and the conditions for which they test. My intent, though, is to suggest that there are sufficient similarities between the two to make the comparison a fruitful one; and that what we have learned from the sickle-cell experience may provide a basis for a view of informed consent which has significant and far-reaching implications for HIV testing.

Sickle-Cell and Informed Consent

Unlike AIDS, sickle-cell is inheritable; in fact, it is an autosomal recessive condition, so that one may carry the gene for the trait but not personally demonstrate it. Like AIDS, there is no known treatment for it. And just as the victims of AIDS are primarily gay men, so too does sickle-cell predominantly afflict one group: blacks.³⁹ About one out of every 484 blacks (.3%) has the disease, totalling about 55,000. Further, about 7 - 9% of American blacks or one in every 11 carry sickle-cell trait.

Persons with the *disease* suffer during an attenuated life span from a multitude of symptoms which may include poor physical development, jaundice, weakness, abdominal pains, lowered resistance to infection, bouts of swelling and pain in muscles and joints. For some, the condition is tolerable; for others quite painful. At times, death occurs because of infection; in other cases, liver and renal malfunction and bone destruction may cause death. In contrast, persons with the *trait* lead mostly normal lives.

In 1970, a relatively simple, safe and reliable test for sickle-cell hemoglobin was available. Though this test was heralded as an important contribution to health care for black Americans, it soon became clear that the test was problematic. One reason was the significant number of false positives in the test results. In addition, there was a good deal of misunderstanding and misinformation about what the test results meant. In particular, there was confusion over the significance of a positive finding. Much of the testing occurred with little or no counselling, and, as a result, many individuals with carrier status mistakenly believed they had the disease. Ethical questions about disclosure arose: was a physician justified in withholding the test results if she believed it to be injurious to the patient's well-being? What if the test results raised questions of paternity?

Many states rushed to pass laws relating to sickle-cell screening. At least twelve states passed mandatory screening laws, and only three states had policies that were completely voluntary. Eight states and the District of Columbia required screening for all public school children; New York passed legislation requiring testing of all school age children in urban areas, whereas testing of children in the suburbs was 'discretionary'. Kentucky required sickle-cell screening for any blacks who sought a marriage license. New York obliquely required the test of all applicants for a marriage license who were not 'Caucasian, Indian or Oriental.'

Yet sickle-cell *trait* is not a condition which requires any medical care; and if one has the disease, it is almost always obvious from infancy. Despite this, many insurance companies charged higher premiums for the policy holder who was a known sickle-cell trait carrier, and increasing numbers of employers required sickle-cell screening tests in company physicals. Some observers reported the injury done to personal relationships where the individual(s) involved were carriers of the trait. What promised to be a boon to public health instead fell tragically short of its goal.

Several medical researchers have recently cautioned their colleagues of the potential for misinterpretation of the clinical meaning of sickle 'trait' and 'disease'. We are concerned about the dangers of societal misinterpretation of similar conditions and the possibility of widespread and undesirable labelling of the individuals on a genetic basis. For instance, the lay public may incorrectly conclude that persons with sickle trait are seriously handicapped in their ability to function effectively in society. Moreover, protecting the confidentiality of test results will not

shield all such subjects from a felt sense of stigmatization nor from personal anxieties stemming from their own misinterpretation of their carrier status.⁴⁰

What is important, from an ethical point of view, is that the test for sickle-cell was *not premised on treatment*. As the condition itself is incurable and the trait does not affect one's health, it would appear that screening - particularly mass screening - offers few if any benefits and the potential for great harm. Indeed, one could argue that, since treatment was not possible, sanctions of some sort against the individuals with the trait were inevitable. Though the courts have sometimes overridden the individual's right to self-determination in cases where there is refusal to accept compulsory medical treatment, the cases in question concerned grave threats to public. In *Jacobson v. Massachusetts*,⁴¹ for example, the courts overruled a man's request to refuse a vaccination for smallpox; yet smallpox is a highly contagious disease, whereas sickle-cell anemia is transmitted only by inheritance. What ought we to do with a positive finding? Refuse permission to marry? Mandate sterilization? Require amniocentesis and compulsory abortion? These strategies would be effective in reducing numbers of those afflicted; yet clearly, they are all morally repugnant.

Finally, one must question the ethics of singling out a specific group for screening. It is obvious that targeting certain groups - even those who are 'high risk' - would miss any of those outside the group who may be carriers. But, more importantly, one must not dismiss the social realities which pervade our lives. Can such a program be administered fairly and impartially when blacks already suffer from racism and discriminatory policies? Even if we grant that these policies were motivated originally by beneficence, the end result was to burden an already disadvantaged group. Informed consent, then, can be compromised by one's position in a social context.

HIV and Informed Consent: Conclusion

I have argued that informed consent is a fundamental principle of justice in medical practice, as it empowers the patient in situations where s/he most likely lacks power. On an individual basis, we may be vulnerable due to illness or anxiety and lack the expertise and authority of the practitioner. Further, we may wish to take into account factors beyond the purely medical in our deliberations about our proposed course of treatment. On a social level, we may be members of groups already suffering from disenfranchisement and prejudice. No technique *qua* technique is good or evil, but rather must be evaluated in this context.

Mandatory testing for HIV, whether done universally or among high-risk groups alone, cannot be justified. Homosexuality is still a criminal offence 'carrying severe penalties' in 23 states and the District of Columbia.⁴¹ Lest one dismiss these statutes as archaic relics of a more

authoritarian past (and it is true that these laws are seldom enforced), note that the U.S. Supreme Court recently refused to extend the right of privacy to consenting homosexual practices. Likening homosexuality to incest and child abuse, the majority view rejected attempts to extend equal protection to homosexuals; to do so, they claimed, would contradict 'centuries of moral teaching.'

Gay men have been evicted from their apartments, fired from their jobs, refused medical or dental treatment because of fear of AIDS. The US military is now requiring the test for all service personnel; the U.S. Navy, for example, recently ousted thirteen seamen who were HIV positive, accusing them of 'erroneous enlistment'. A positive HIV finding could result in a loss of insurance coverage, and the individual has no legal recourse. Most recent figures estimate \$147,000 as the average cost for each AIDS patient. It is not surprising, then, that insurance companies are anxious to require this test of applicants.

At present, there are no guarantees that confidentiality will be protected. AIDS is a reportable disease in over 30 states, and the legal status of an HIV positive finding is now unclear. There is a good deal of misunderstanding still about the meaning of a positive result, with many people mistakenly believing that it is the inevitable precursor of AIDS. To what use, then, should we put these findings? Some have already suggested quarantines for gay men, others have argued that 'promiscuity' should be criminalized. In a key decision recently, the US Justice Department argued that Section 504 which prohibits job discrimination on the basis of handicap does not include protection of those who are HIV positive. In a statement remarkable for its sophistry, the Department maintained that an employer may not terminate the employment of a person who is HIV positive solely because of his positive status but may if the reason is fear of contagion. Such a distinction is a meaningless one, which in practice would permit any dismissal. In addition, it ignores the fact that, since the disease is not transmitted through casual contact, such a 'fear of contagion' is irrational.

The law is only beginning to tackle the many difficult issues which this disease provokes. Should someone who is HIV positive be required to inform his/her lover or potential sexual partner(s)? In one case, a hemophiliac who received AIDS from a blood transfusion tried to subpoena the name of the donor; we can expect many more such cases in the not-too-distant future.

One might argue that HIV testing resembles screening for sickle-cell trait less than one at first imagines. In particular, AIDS is contagious, whereas sickle-cell is transmitted genetically. Perhaps public need outweighs the rights of individuals to privacy or self-determination, just as we require individuals to accept vaccinations (even if they are opposed on religious grounds). But this argument does not work in the case of HIV testing, for two reasons. For one, there is no vaccine or serum that will prevent or treat AIDS. Second, though AIDS is contagious, it is not highly contagious, and does not pose the threat of infection in the way that a disease like smallpox does. In one study, for example, siblings of

children with AIDS were followed, and none was found to have any of the symptoms of the disease though all shared close living arrangements. Thus, though there may be times when public interests override individuals wishes, this case seems not to qualify as one.

Even if we reject mandatory mass screening programs, what about the 'high-risk' individual who wants to undergo testing? I would argue that, even on a voluntary individual basis, the principles of informed consent cannot be met. Being empowered means, at least in part, having relevant information that one previously lacked; it means being better able to make an informed decision about the future course of one's life. HIV testing does not empower, for a number of reasons.

There is no way to know, given a positive finding, if or when I will get AIDS. There is no way to know, given a positive finding, how if at all, I should change my behaviour. Any of the prescriptions one might follow are likely to be advisable for any sexually active individual, regardless of their HIV status. Mendelian genetics informs me that if my mate and I are both sickle-cell carriers, there is a one in four chance that we will have a child with sickle-cell; amniocentesis provides me with an option. But testing for HIV does not increase my options, does not provide me with information necessary for an enlightened decision, nor does it enhance my understanding of my medical status; I would argue that, without these criteria, there is no possibility *in principle* of informed consent. Or, as one critic of this test puts it:

Say you get a positive test: what do you do then? Do you eat better, get more sleep, hit the jogging trail and limit yourself to safe sex? Most of us are doing those things already. All of us ought to - to be fair to ourselves and to each other.

Or, if the test is positive, do you worry yourself to death? This is not a metaphor. Anxiety causes stress and stress produces chemical changes which weaken the body. So the test could make you worried sick.

Say you get a negative test: what do you do then? Do you hit the circuit - cruising only for others with the hanky that identifies them as other 'negatives'? Oops. Guess what. Some people lie.⁴²

I would *not* argue that an individual who insists on being tested should be denied the test. Further, those who volunteer to participate in research projects may want to know the results. But I do want to argue that, until medical science provides us with more answers, a reasonable person should not take the test. And experience at one alternative testing site bears this out: 88% of the individuals who came to be tested decided after education not to take the test.⁴³

It is no coincidence that so much popular discussion of AIDS has focused on the 'innocent victims' of the disease. While Rock Hudson tragically lay dying,

tremendous public attention was riveted on the fact that he had kissed actress Linda Evans. The obvious assumption in all this is that some victims of AIDS are 'guilty', while others -- presumably, the heterosexual, drug-free community - are innocent. There is no question that research on a treatment for AIDS must be a national health priority. But this issue is not simply a medical one. Our approach is fraught with assumptions about homosexuality and sexual promiscuity in general. Though few accept the Moral Majority's claim that AIDS is a sign of God's wrath, many more have urged us to embrace monogamy unquestioningly, and to return to 'responsible sex'. Gay activists have insisted that AIDS is not a 'gay disease', but rather can affect anyone. At the same time, though, 'gay rights' bills are being defeated, and legislators are citing AIDS in their defence. Given the fact that this testing is not predicated on treatment, along with much deep-seated prejudice against homosexuals, these policies, regardless of their intent, are punitive in their consequences. For example, reports reveal that granting agencies have withheld funds earmarked for 'AIDS education' if the designated institutions focus on 'safe sex' practices rather than celibacy. Such decisions, it is clear, are far more than merely technical.

I have tried to argue that consideration of one practice - HIV testing - should not be divorced from the social setting in which it occurs. But this conclusion has broader implications for AIDS and even medicine in general.

Philosophers have a certain fondness for puzzling out dichotomies. In meta-ethical discourse, we address ourselves to the 'is-ought problem', the elusive connection between facts and values. In bioethics, we clamor over the 'tension' between autonomy and paternalism, the apparent 'competition' between the value we place in personal liberty and self-determination and the principle to 'do no harm.' I leave the resolution of these conflicts to philosophers more skillful than I. But, in the case of HIV testing, no such conflicts exist. More precisely, there is a powerful dynamic at work here between facts and values such that our lack of knowledge of certain key facts undermines the possibility of informed consent; thus, my opposition to the test is contingent on our ignorance of the connection between a positive finding and AIDS itself. Similarly, in this case, 'informing' does not empower, does not preserve or enhance autonomy and is not justified by the principle of beneficence.

Would that all ethical dilemmas were so clear-cut.

Notes

1. H. Tristram Englehardt, Jr., 'The Disease of Masturbation: Values and the Concept of Disease', in *Contemporary Issues in Bioethics*, ed. Tom Beauchamp and LeRoy Walters (Belmont, CA.: Wadsworth, 1982), pp. 59-62.
2. For example, in an 11 month period in 1984, the *New York Times* ran 41 stories about AIDS, as opposed

(continued on page 20)

AIDS - A Modern Black Death?

IAN L. BROWN

Lecturer in Pathology and Consultant Pathologist
Western Infirmary, Glasgow

Introduction

Aids has received extensive publicity in the seven years since the first patients with the syndrome were described, and in the initial stages at least there was public and professional anxiety that this mysterious, untreatable condition would destroy mankind. This fear has been increased by descriptions of the condition as God's judgement on man's sinfulness and in particular as punishment for homosexuals.

In addition, the fact that the cause of the condition was unknown made it all the more fearsome.

1700 cases of AIDS had been reported worldwide by 1985, and it is calculated that, for every proven case of AIDS, 50 to 100 individuals have been infected with HTLV-111. By October 1985 241 cases of AIDS had been diagnosed in the UK, and 92% of the people ill with the syndrome in 1982 had died. It has been estimated that the number of cases is doubling every 8 months.

What is this new disease? Is it God's judgement? Or is it an old disease just recently discovered. This paper attempts to explain the nature of this strange condition, and to put it in the context of our understanding of infectious diseases. I hope it will also allay some of the anxiety the popular press has stirred up about AIDS.

What is AIDS?

The Acquired Immune Deficiency Syndrome (AIDS) appeared for the first time in homosexual men in urban *foci* in the USA in 1979: New York and California, with very large numbers of promiscuous 'gays' were the twin epicentres of this medical earthquake. Of the first recorded 300 patients, 291 were American and several of the remainder had recently been to the US. The condition was defined and described on the basis of the first 300 patients, and although the features have been expanded, the basic description still stands.

AIDS was originally defined as histologically proven Kaposi's sarcoma (an unusual tumour of blood vessels, common in parts of Africa) or a life threatening opportunistic infection (i.e. an infection by an organism which does not usually infect normal individuals, and which takes the opportunity of infecting a patient whose resistance is lowered), or both in a patient under 60 who has no history of an illness or treatment which causes a decrease in the defence mechanisms of the body. There is now a range of associated

infections and tumours associated with AIDS, and also various abnormalities seen in otherwise normal people who have been infected by the causative organism:¹

- i. a transient flu-like illness within 14 days of exposure to the virus, usually with swollen glands
- ii. persistent swollen glands, diarrhoea and night sweats, with continuing antibody in the blood
- iii. AIDS-related complex i.e. the presence of 2 symptoms, 2 positive laboratory tests, and HTLV-111 positivity

Although in fact AIDS is by no means limited to homosexuals, it is certainly true that the condition did make its appearance in the homosexual population of the USA in 1979, and early studies indicated that there were certain practices which were associated with the development of AIDS. These included promiscuity with each individual having multiple sexual contacts, receptive anal intercourse, and the use of sexual stimulants or muscle relaxants to facilitate anal intercourse. Intravenous drug abuse was also involved in many cases.

What Causes AIDS?

The pattern of spread of the disease is similar to that of hepatitis B, which is caused by a virus transmitted in blood, and this led to the suggestion that AIDS might also be a viral disease. This idea was supported when the condition began to appear in haemophiliacs, who had received multiple blood transfusions and certain blood products to prevent bleeding - these patients also have a higher incidence of hepatitis than the normal population.

Very intensive investigation confirmed that a virus was involved, one of a recently described group of viruses known as retroviruses. There are currently three members of this family, known as Human T-cell Lymphotropic Viruses (HTLV); HTLV-I causes one type of adult leukaemia in areas where the virus is endemic; HTLV-II has not been linked to any particular disease; HTLV-111 is the cause of AIDS. A feature common to all these viruses is that they infect a subgroup (T-4) of human T-lymphocytes which are responsible for the control of the body's immune defences.

Investigation of AIDS patients confirmed that the virus could be isolated from patients and also that antibody (a protein present in blood responsible for resistance to infection) was produced by patients. For example 9% of Danish homosexual men were infected in 1983 and this was associated with travel to the USA in 1980-81.²

Questioning of this group established the fact that being the recipient of anal intercourse, rather than the donor, was dangerous and that oral intercourse was not involved. Continuing study has confirmed these findings in other population groups including the UK. Indeed infectivity of the virus seems to be related to sexual intercourse and intravenous injection. Casual contact, even of a sexual

nature, is not effective in transferring the virus. Thus much of the public panic about the risks of infection in hospitals, prisons, schools and even in churches is without any scientific foundation.

By 1985 it had become apparent that the other major groups at risk from HTLV-111 infection were haemophiliacs and intravenous drug users. A large study from Newcastle³ confirmed that a significant proportion of patients with haemophilia A (76/99) had been infected by the virus, whereas none of a group of 18 patients with haemophilia B were infected. This disparity is due to the differences in treatment - haemophilia A requires treatment with a concentrate of the blood clotting factor, Factor VIII. This concentrate is prepared from pooled blood donations and each batch requires several thousand donations for its production. The UK does not produce enough Factor VIII and has to import it. Unfortunately the source of blood donation in other countries is often commercial and it has been known for a long time that many drug addicts in the US finance their habit by selling their blood. Blood was of course tested for hepatitis B infection but it was not possible to test for HTLV-111 until 1984. Blood products are now tested for HTLV-111 and are heat treated to destroy the virus.

How Is The Diagnosis Made?

The blood tests used detect the presence of antibody to HTLV-111. They do not diagnose AIDS itself. It is essential to realise this fact. An individual who is seropositive i.e. who has antibody detected in the blood, has been infected by the virus in the past, but may be particularly healthy and may not be infective to any other person. Nor is it possible to predict from a positive result whether a healthy individual is going to develop AIDS at a later date.

Another complication is that there is a considerable delay between infection with the virus and seroconversion, i.e. the time when antibody appears in the blood: the patient may be infective during this time and may therefore infect blood donations. There is no screening test for AIDS itself - it can only be diagnosed once the illness is fully developed clinically.

How Is AIDS Spread?

Study of the Newcastle haemophilia patients confirmed that sexual transmission could occur within heterosexual relationships - 3/36 partners of haemophilia A patients were seropositive on HTLV-111 antibody testing. Again the fact that the virus did not spread by casual contact was emphasised: no health care staff were seropositive despite handling blood and blood products in the haemophilia units.

There has been considerable public anxiety about spread of AIDS to the innocent contacts of AIDS sufferers, and this has been inflamed by the knowledge that the virus is excreted in many body fluids. HTLV-111 has been identified in blood lymphocytes, bone marrow cells, spinal fluid, brain tissue, lymph nodes, plasma, semen, saliva and tears. These

must therefore all be regarded as potentially infective *but* the route of infection is important in the spread of the virus and direct injection into the tissues and particularly into the blood stream is essential. There is no evidence that social contact with HTLV-111 positive individuals is dangerous. There is no evidence that the infection is transmissible by airborne droplets resulting from coughing or sneezing, nor by sharing washing, eating and drinking utensils, or other articles in general use or the sharing of toilet facilities.⁴ In addition HTLV-111 is more easily disposed of by routine disinfection procedures in hospitals, clinics and surgeries than is hepatitis B virus.

There has been considerable fear in health care workers that injury from needles might spread HTLV-111. Extensive experience in the USA of 666 patients who were exposed to fluid or blood from HTLV-111 infected patients by sticking needles in themselves has shown that none have become seropositive; 26 were seropositive when tested, but 23 of these were from at risk groups for AIDS. A nurse in the UK has become seropositive after injecting herself accidentally with blood from an AIDS patient.

Perhaps the most bizarre mode of spread reported has been the infection of women participating in artificial insemination by donor programmes in which the donors of the sperm have been asymptomatic carriers of the virus: 50% of the women receiving donations from infected donors seroconverted. At present it appears that female to male transmission is less common than male to female. This may represent the fact that far fewer women than men in Western countries are, as yet, infected. In some cities the main pool of infection is in the female prostitute population. This is probably because many of the prostitutes are drug addicts. Some 5-40% of prostitutes are infected.

AIDS is obviously an international disease. The first reports came from America but were rapidly followed by isolated European cases. In Europe the epidemic in homosexuals appears to be approximately 2 years behind the American experience - but the rate of increase is parallel. In the USA drug users are 17% of cases: in Europe, 4% are addicts. However some European centres appear to have a much higher rate of drug addict patients with an accelerating increase in this group. Edinburgh seems to have achieved some notoriety in this group.

Where Has AIDS Come From?

Examination of stored blood from America has shown that before 1977-78 it was not present, even in the homosexual population. It appeared slightly later in Europe as mentioned above.

It has been proposed that HTLV-111 virus first appeared in Africa and has spread from there to the New World and thence to Europe. There is no really good evidence for this, although retrospective studies on blood have shown the virus to be present in the early 1970s.

HTLV-111 is a complex virus, and even evolutionary scientists find it difficult to accept that it has suddenly 'appeared'. There are two possible explanations: it may have been an animal virus which has suddenly begun to infect humans; or it was a minor virus causing little in the way of illness in humans and either the virus has altered or human behaviour has altered.

It is certainly possible that it was an animal virus. There are several very similar viruses which infect monkeys e.g. Simian T-Lymphotropic Virus-III (STLV-III) causes disease very like AIDS in macaques. In addition African green monkeys are infected with this virus, but they do not suffer from AIDS.

Interestingly several areas in Africa are experiencing epidemics of AIDS with high percentages of patients positive for HTLV-111. Homosexuality does not appear to be the vector in these areas - it is the female prostitutes and poor medical standards (usually due to poverty) where needles are reused and blood transfusion is less sophisticated, that are the sources.

If it was a human virus it is possible that it has recently 'changed its spots'. Many viruses are known to do this e.g. influenza virus visits us with a different type each winter. HTLV-111 is different from HTLV-I and HTLV-II in its ability to change its structure and to multiply rapidly.

It is however tempting to speculate that it is human behaviour that has changed in the last decade to allow this virus easy access into a very wide population. The communities in which AIDS first appeared were the 'gay' cities of California and New York, in which there are whole districts, indeed small towns, peopled entirely by homosexuals. The use of intravenous drugs by the same people, who suffer continual low grade infections at their injection sites, results in endemic viral hepatitis. Their immune system is permanently activated and some of the drugs and sexual stimulants and muscle relaxants also depress immunity. Thus, communal sexual and drug abuse could have allowed this virus access into a much wider population than it would normally encounter. Many of these gays will have a dozen sexual contacts per day, and this frequent exchange of semen and blood almost parallels the ability of mosquitoes to spread infection by biting and injecting malaria contaminated saliva.

The Future?

What of the future? At present there is no cure for AIDS, although much effort has been put in to producing a vaccine. Prevention is therefore the only measure available, and government publicity has been seen in our daily papers urging those at risk to reconsider their lifestyle, and to ensure that their sexual activity is 'safe'. Blood products are heat treated to inactivate the virus, and extensive screening programmes have been instituted. Haemophiliacs and those receiving blood transfusions should not now be at risk, but those already infected have still to develop the illness.

For the Christian the answer is clearly to be found in Scripture: 'In the same way the men also abandoned natural relations with women and were inflamed with lust for one another. Men committed indecent acts with other men, and received *in themselves* the due penalty for their perversion.' (Romans 1:27).

The human body is beautifully designed in all its parts for particular functions: the female vagina is designed for the reception of the penis - it is lined by specialised cells and contains its own lubricants. The anal canal was not designed to be used in this way and has none of these specialised features. It is abused by receptive anal intercourse.

As Christians we must surely propagate God's will for sexual behaviour. It is not for us to condemn the sinner, but we have a responsibility to mankind - an ethical responsibility - to clearly and firmly underline what Scripture proclaims. Preventive measures must start with a return to God's pattern of sexuality, of man and woman coming together in a lifetime commitment to one another dependent on God's grace.

A final quotation from Emeritus Professor A.P. Waterson, a distinguished virologist from the Royal Postgraduate Medical School, London:

Ironically this disease is essentially preventable. The abandonment of promiscuity, homosexuality, and drug abuse could eventually stop it in its tracks - though that is hardly likely to prove an acceptable solution.⁵

Notes

This article has been compiled from a wide range of articles in the medical literature. Reference is only given to a few selected articles.

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4. *Acquired Immune Deficiency Syndrome, AIDS, Booklet 3: Guidance for Surgeons, Anaesthetists, Dentists and their teams in dealing with patients infected with HTLV-111*, Scottish Home and Health Department, 1986
5. Waterson A.P., 'Acquired Immune Deficiency Syndrome', *British Medical Journal*, 1983, 286, 743

A Bishop on Morals

The Rt Revd Graham Leonard, Bishop of London, at odds with his fellow bishops on several issues, has the courage to stick by his convictions, according to a recent interview with Geoffrey Levy in the *Daily Mail*. The Anglo-Catholic bishop engaged in some straight speaking.

'AIDS', he said, 'is the natural consequence of sin, because we have disregarded the way we were made. We were not made for promiscuity, any kind of promiscuity, and we have disregarded it at our peril. I believe passionately that so much that goes for modern permissiveness is in fact contrary to the way human beings are made. We were mesmerised by the '60s, church and people alike, and we are now reaping the fruit of extreme permissiveness when people thought you did what you like and somebody else would pick up the consequences. Never was a strong moral voice needed more than during this period, but our voice was not loud enough.'

The bishop was highly critical of his own denomination, saying:

'The Church of England has let the people down; it has not wanted to be seen swimming against the tide. Take divorce. I am very sorry to say that is was the Church of England who produced that deplorable report *Putting Assunder* - it's really staggering to think that is was actually the church that put forward a report with such a title. It gave the impression that, if marriage didn't work, you could just toddle along and get divorced. The church did that on the grounds that you had to accept the situation as it is. That has been a tragic mistake, as we now see from the increasing number of abused and maltreated children who almost invariably are from marriages which have broken down.'

Returning to the subject of AIDS, the bishop continued:

'AIDS will also, I believe, bring the Church of England to its senses. Surely, we will all realise that, while the world is what it is, and not what we would necessarily like, it is absolutely vital to give strong moral leadership at all times, whatever the current fashion may be. The church has collaborated in ignoring some of the great truths of life, of chastity and the sanctity of marriage, that men must take a long-term view, that there is a fundamental distinction between good and evil, between right and wrong. It is not and never has been, simply a matter of what is expedient, or what is acceptable and fashionable at the time.'

'Another great truth', said the bishop, 'is that suffering is not the greatest evil, it is the doing of evil that is the worst thing. How can we fail to recognise it

now, that while man has a degree of freedom, he is not totally free. But we are free to act responsibly.

'The church as a whole hasn't come out clearly on homosexuality, and I believe that is wrong, but then I also believe that fornication is wrong.'

Continuing to comment about the church, he said:

'I feel the church has allowed its principles to become eroded away and to become slippery and soft. The church has lost her nerve and at times it shows an almost pathetic desire to be loved. People see no point in a church simply trying to be an adjunct of society.

'People have been getting round sin by making convenient laws to permit it. The truth is that there is no legislation, no social reform, which can save us in spite of ourselves, because all legislation and all social reform is the work of fallible and sinful human beings.'

The bishop concluded poinedly:

'There is nothing lonelier than sin. It is the ultimate in deliberate selfishness.

'No amount of planning or legislation can make us good. That lies not within, but outside ourselves. That is the lesson which, but for AIDS, we might have forgotten.'

Jack Budd.

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Condemnation Without Rejection

'However clearly the church condemns the life-style which has produced AIDS, it cannot distance itself from the victims. ... When others (the very people who destroyed the Christian basis of our society?) talk of isolating the sufferers and treating them like lepers, the church must protest with all its might and give an absolute assurance that it will never reject them. Christians will treat them, nurse them, visit them and accept them, confident that the God who will have all men to be saved reaches out to the homosexual (as to others) with the offer of forgiveness and deliverance. And even if they reject all we stand for on the religious level, our care will continue, sustained by the recollection of our common humanity and by the knowledge that although the details may differ, our own lives, too, are indefensible.'

Reproduced, with permission, from *The Monthly Record of the Free Church of Scotland*, edited by Professor Donald Macleod. Professor Macleod is to address our Edinburgh Conference on AIDS on Saturday 4th April 1987. See page 1 for details.

(continued from page 15)

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7. *Newsweek*, August 12, 1985, p.29.
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31. As reported in *Gay Community News*, November 2, 1985.
32. University of California/San Francisco study cited in *Time*, August 12, 1985, p.46.
33. Ken Mayer, M.D., 'Testing for HIV and AIDS Risk Reduction: Clinical and Epidemiologic Quandaries', a paper given at Workshop on Risk Reduction held at the First International Symposium on AIDS, Atlanta, GA., April 4, 1985.
34. *Ibid.*, p.3.
35. Ken Mayer, M.D., 'HIV Antibodies and Sexual Behaviour', forthcoming in *American Journal of Medicine*, p.8.
36. *Ibid.*
37. Association of State, Territorial Health Officials Foundation, *Guide to Public Health Practice: HIV Screening in the Community*, 1985, p.5.
38. The AFL-CIO, for example, recently issued a statement rejecting the use of the test as a condition for employment.
39. Though, as with AIDS, this is not the case around the world. A high frequency of sickle-cell has also been found among Greeks, Sicilians, Arabs, some Native Americans, and some Mexican populations.
40. Lappe, M., Gustafson, J.M., Roblin, R., et al., 'Ethical and Social Problems in Screening for Genetic Disease'. *New England Journal of Medicine* 286 (1972), p. 1132.
41. Boggan, E.C., et al., *The Rights of Gay People*. New York: Bantam Books, Appendix A, p. 131.
42. Brian Jones, letter in LIFELINE (newsletter of the AIDS Action Committee), March 1985, p. 4.
43. Janet Swanson, head of HIV testing at Fenway Community Health Center, Boston.