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CONTINUUM

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CONTINUUM

towards a healthier body politic

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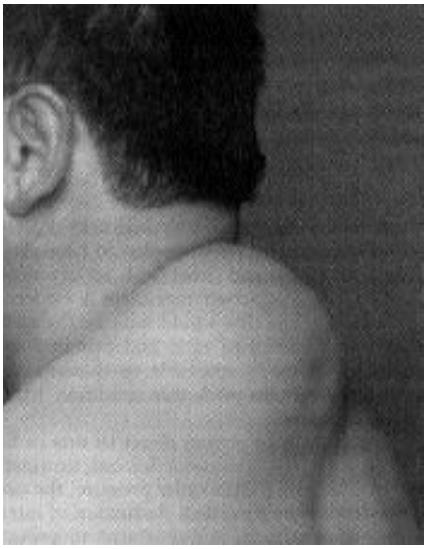
News and events

True to life

Science for health



52 year old man with lipodystrophy after a year of the drug indinavir.
New England Journal of Medicine. 339. 18

Human Rights

Plus

Genetically Modified food hurts immune systems in animals

London

Twenty scientists have signed an unprecedented memorandum supporting the controversial findings of suppressed research that rats fed on genetically modified (GM) potatoes suffered weakened immune systems and damage to vital organs, including diminished brain size. Artificially increased levels of the natural insect-deterring protein lectin in the food are suspected a possible cause. The scientists from 13 countries, also advise immediate professional rehabilitation of British scientist Arpad Pusztal, who made these preliminary findings last year and was forced to retire after speaking about his concerns.

The pioneering government-funded research, ethically and medically dubious in using captive animals with biology differing significantly from humans, showed that after 10 days of feeding trials the kidney, thymus, spleen and gut of the animals were adversely affected and their immune systems weakened.

London's *Guardian* reported February 12th a more recent piece of research on the same rats by pathologist Stanley Ewen of Aberdeen University Medical School, validates the findings. Vyvyan Howard, a foetal and infant toxico-pathologist at Liverpool University, who signed the memorandum, said of the GM food industry companies (which include pharmaceutical multinationals like Monsanto, new owner of Solgar Vitamins), "They will have to do rigorous hazard assessment and do it repeatedly." In an astonishing warning of possible things to come, Jonathan Rhodes, Professor or Medicine at Liverpool University, said: "One key problem that keeps coming back time and again is that regulation of food is nothing like as strict as the regulation for drugs. And when you start tinkering around with the genetic structure of food you have to move towards thinking of food products as pharmaceuticals."

Photo courtesy of Dr Shantilal Khotari

Dr Daulatrao Aher, Minister of Health, Government of Maharashtra, offers a glass of juice to Dr Shantilal Kothari, Director of the Academy of Nutrition Improvement and agrees to a joint meeting of scientists and doctors in January to evaluate the District's HIV/AIDS Programme. Dr Kothari, an opponent of the 'hiv' theory of aids, ended his 8 day hunger strike on 22nd December.

Photo courtesy of Dr Shantilal Khotari

Launch of the HIV Positive People's Club in Nagpur, 20th January .

Activist Club launched in India

Nagpur

A Club for people diagnosed 'hiv' positive has been formed in the Indian city of Nagpur with the support of health activist Dr Shantilal Khotari of the Academy of Nutrition Improvement.

Inaugurating the *HIV Positive People's Club* at the Academy on 20th January, Umesh Jain from Jalgaon, who tested antibody positive two years ago, said the Club's aim is to dispel misinformation and the fear-psychosis being created by vested interests.

Jain, 32, said he and his wife are testimony to how people are being misled. They had both lived in despair after testing positive and being told their days were numbered. Doctors advised an abortion, which the couple did most unwillingly, and they began living separately.

Three months ago, Jain contacted Dr Kothari, whose public campaign against misinformation about 'hiv', cites evidence that blood tests can show positive in up to 70 different conditions, including TB, Malaria, Jaundice, Leprosy, and malnutrition. Jain had suffered from jaundice a few months before. He shrugged off the fear of certain death and disease and the couple mended their relationship.

Five other diagnosed Club members, and Fathers John Anthony and John Monteiro, Umesh Choube, Dr Ashok Dhabekar and Manohar Gandhi were at the launch, which was reported in newspapers in Hindi, Marathi and English, including the *Indian Express*.

Club members encouraged nationwide stoppage of Elisa and Western Blot HIV tests and closure of test centres at the district level.

New England clinics have reported three cases of "misdiagnosis of HIV status" using branched-chain DNA and reverse transcriptase-polymersase chain plasma assays, highlighting the the problems of using 'viral load tests'. The three cases in question were that of a 12-year old boy, a pregnant 40-year old woman and a 20-year old man. The three 'false-positive' tests have caused investigators to urge doctors to "always exercise caution when using plasma viral load tests.."

BiGoldberg@aol.com; *Pink Paper* 22 Jan 99

Hoffmann-La Roche has prevaled to donate saquinavir, ddC, and AZT to hospitals in Kenya, Tanzania, Uganda, Zimbabwe, Zambia, Malawi, Cameroon and the Ivory Cost. The drugs are valued at £400,000. When the supplies run out, the company said it will sell the drugs at reduced prices. Roche will buy AZT from rival Glaxo Wellcome. Saquinavir is a protease inhibitor drug now believed in the 'aids industry' to be the last choice with which to begin 'anti-hiv' dosing.

New Scientist 26 Sept 98

Researchers found "high rates" of immunologic and infectious heart disease in people taking HAART (Highly Active Antiretroviral Therapy). "In 10 to 20% of patients these complications were severe. There is also anecdotal information suggesting that the risk of angina and myocardial infarction is increased with highly active antiretroviral therapy."

New England Journal of Medicine 15 Oct 98

The combination of the drug AZT plus lamivudine has a "synergistic hemato-suppressive effect" in patients. Dr. Alice Tseng *et al*. at The Toronto Hospital investigated 276 'hiv+' patients between Oct '93 and Nov '97 who required transfusion for severe anaemia. The drug combination was temporarily associated with

rapid decline in haemoglobin in 13 patients.
Clinical Infectious Diseases Oct 98

Shortly after starting on protease inhibitors, a high proportion of aids patients develop herpes (zoster), say Spanish investigators. The incidence was twice as high as that observed before administration of a PI said Dr. Estaben Martinez of Hospital Clinic in Barcelona who evaluated 193 aids patients .
Clinical Infectious Diseases 99

A support group of men in New York has been organised around not using antiviral drugs. The men, ranging in age from early 30s to early 60s, call themselves 'the drug naive group' say their bodies will be better in the long run. Mark Niedzolkowski, 50, operations director of People with AIDS, who organised the support group a year ago stated, "My resolve has been the same as it has always been, to hold off as long as possible. My life doesn't need to be saved yet. I feel there's an awful lot of hype out there about saving people's lives with these drugs".
New York Times 8 Nov 98

A powerful new clinical trial in Uganda has found "STD control had no effect on HIV incidence". Though rates of new STDs declined significantly in the 15,127 trial participants, new 'hiv' diagnoses remained unaffected. Dr Ronald Gray *et al.* say, "..most HIV transmission occurs independently of STD transmission" indicating test positivity is not transmitted sexually.
PRNewswire 11 Feb 99

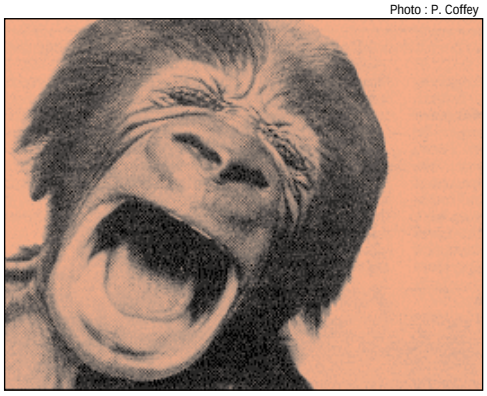
Three hospital medical schools lacking brains are receiving $6 million to collect the brains of dead 'aids' patients. Dr. Susan Morgello, principal investigator said: "Doctors will identify patients in the final stages of AIDS and recruit them to undergo neurological and psychiatric testing and donate their brains to the bank when they die" for

Chimp chimp cheree

Wild claims of the origin of 'hiv'

"Because virus isolation from the autopsy tissues was unsuccessful, we used PCR to amplify four overlapping subgenomic fragments…"

Photo : P. Coffey



In a widely publicised keynote presentation which kicked off the recent annual conference on retroviruses and opportunistic infections in Chicago, Beatrice Hahn, of the University of Alabama (wife of George Shaw, co-proponent of the Ho/Wei theory of 'hiv' dynamics) claimed to have found evidence that 'hiv' may have spread to humans from a group of chimpanzees - *Pan troglodytes troglodytes*. The controversial evidence was based on PCR amplification of genetic sequences (notably, virus isolation was "unsuccessful") taken from frozen tissues of a chimpanzee known as 'Marilyn', who died after 26 years in captivity, having been caught in the wild in an unspecified region of Africa. Marilyn had been the only one of 98 captive chimps to be identified as strongly antibody reactive with ELISA and Western Blot 'hiv' tests just before her death giving birth to twins in 1985.

The lack of virus isolation appears to be a seious flaw in the new claims. Commented Dr Valendar Turner from the Royal Perth Hospital, Western Australia, "The molecular data show that *Homo* and *Pan* are identical in 99.6% of the amino acid sequences and 98.4% of the DNA nucleotide sequences. What does that prove? A virus?"

The unproven suggestion that chimps are 'infected' with a close simian variant of 'hiv' which passed to humans is based on four animals - two caught in Gabon, a third known as Noah originating from Zaire, and now Marilyn.

Charles Geshekter, Professor of African History at California State University, says the latest 'finding' is old news: "It's extremely unimpressive and perpetuates some very longstanding stereotypes about chimpanzees, African sexuality and the rainforest. It's astonishing, really."

Hahn *et al*'s paper (*Nature*, 397, pp 438-441) states that Marilyn was never used in AIDS research, having been kept as a breeding female, "and had not received human blood products after 1969." What she received in the previous ten years, and why, is not said. It is however known multiple pregnancies in humans increase in themselves the likelihood of positive 'hiv' antibody tests.

Hahn and her colleagues intend to augment their research in the field in Africa, seeking groups of wild chimps to add to their theory of chimp-to-human infection. Few journalsist are reporting that no chimpanzee has ever developed an aids-like condition, whether after some 14 years of deliberate 'hiv infection' (injection of cell culture products) of some 150 animals in captivity, or amongst the four so-called 'naturally infected' wild-caught individuals.

Ukraine Ministry supports Continuum Project

Kiev

The first seminar in Continuum's international health education partnership took place in Kiev, Ukraine (national population 58m) from 8th - 12th February. The 19 month project, formally entitled the *Establishment of an information and promotional network with a multidisciplinary approach to HIV/AIDS, focusing on natural and complementary therapies, social support and counselling,* funded principally by the LIEN-Tacis Programme of the European Commission, began last September, with a budget of Euros 199,700 (US$222,000).

In the first seminar of the project, Social Work Consultant Michael Baumgartner, and Clair Walton, Co-ordinator of the International Long Term Survivors Network, gave training workshops to diagnosed people and health professionals in Kiev on the theme of Alternatives to Fear around HIV/AIDS. The Ukrainian Ministry of Health Protection is supporting the course of seminars with a declaration signed by the Minister, and attendance expenses for medical teachers from colleges in 30 Ukrainian cities.

Other modules from different trainers in the Certificate Course will include Medical Best Practice, Alternative Therapies, Nutritional Medicine and Healing Self and Society.

Working with Ukrainian partner organisation Mria, an NGO therapeutic self-help group, another main focus of the project is the translation into Russian of past and future articles from *Continuum* magazines, and the dissemination of this information through the development of a Ukrainian network. It is hoped the translated papers and articles will be useful anywhere Russian is understood.

U.K. Government rushes plans that can make health supplements illegal

Linda Lazarides

London

The British Government has been secretly preparing a new draft law proposing to allow the Medicines Control Agency quango sweeping new powers to categorise a health product as a medicine. Departing from the usual custom of consulting interested parties before drafting a law, the Government drafted it secretly, paid lip service to the democratic consultation process by allowing just a few weeks for objectors to state their case, and made plans for its introduction on 1st April. "They probably hope that this rapid schedule will not give us enough time to mobilise a campaign," says Linda Lazarides of the Society for the Promotion of Nutritional Therapy. "It does not even allow us time to prepare a proper reply. We received the consultation document in mid-November and were given until Christmas to prepare a professional document in response to it".

The new law, which would be an amendment to the Medicines Marketing Authorisations Regulations 1994, proposes that the quango known as the Medicines Control Agency (MCA), which raises funds for itself from the compulsory licensing of medicinal products, should have sole powers to decide whether any health product should be classified as a licensable medicine that must be taken off the open market. It will have the power to send its officers, accompanied by police, at any time to sweep vitamin products off health food shop shelves.

There is widespread feeling among health campaigners that this move is to ensure that last year's victory to keep vitamin B6 supplements on the open market is not repeated. According to the draft law, any product which the MCA decides is a medicine, would become a medicine. Unless its manufacturer could obtain a medicinal licence for it, it would be forcibly taken off the shelves.

Thanks to Britain's membership of the EU, the only criteria which the MCA now needs to apply in order to make such a decision are: Is the product capable of altering physiological function? and Is the product being used for medicinal purposes? Previously a product had to be either unsafe for human consumption, or else its manufacturer had to make illegal medicinal claims for it before it could be banned.

In theory under the new EU regulations, even glucose, coffee and brandy could be classified as medicinal. In practice, the MCA will say "Clearly these are mainly used as foods, whereas what possible use could a, high-dosage vitamin pill have except a medicinal one?" says Lazarides.

Manufacturers point out that a medicinal licence would not necessarily be possible to obtain. Even if the MCA says that their product is a medicine no licence will be forthcoming until they have 'scientifically' proved that it is a medicine. Cost estimates to do this range from £80,000 for a single-ingredient product, to £2,000,000 for a multi-nutrient product. These are prohibitive costs for vitamin manufacturers. And there is no simplified procedure. Everything from cancer chemotherapy drugs to simple vitamin preparations would be treated the same.

If the Government is allowed to have its way, then from 1st April 1999 there will be an immediate capability to remove herbal/nutrient combinations from open sale even if these products were not previously breaking the law. There will be no recourse in law, and if any retailer or practitioner disobeys, he or she can be imprisoned under criminal law.

Says Lazarides, "If you oppose these moves, please consider taking the following immediate action:

- Send a copy of this article to your MP, and ask him whichever of the following questions most concern you:

I take product ... because ... If the MCA suddenly decides that this should be banned as an illegal medicine, where will I be able to get hold of it if the manufacturer cannot prove to the MCA that it is a medicine and get a licence for it?

- As I am an interested party, could I please have a copy of the Government's new proposals?

Could you please find out for me why these proposals are being rushed through with such urgency?

- What is the legal definition of a dietary supplement, and how can products which I currently rely on be protected from the MCA trying to claim them under their own jurisdiction?

- How much money does the MCA make from its product licensing fees?

- How much money does the MCA quango envisage making for itself by declaring harmless vitamin products to be licensable medicines? Would this proposed new law not encourage corruption?

- May I have a list of MCA members' interests such as shareholdings, paid consultancies and research funding?"

Edited from *Nutritional Therapy Today*, the journal of The Society for the Promotion of Nutritional Therapy Tel 01825 872921

analysis. The program plans to recruit 90 doomed brain donors annually. A grant from the National Institutes of Health will assist the Manhattan HIV Brain Bank, operated by the Mount Sinai School of Medicine, Beth Israel Medical Centre, and St. Luke's-Roosevelt Hospital Centre.

Associated Press 16 Dec 98

A volunteer working to persuade South Africans not to discriminate against 'hiv+' people was beaten to death last December by neighbours accusing her of bringing shame on their community. Gugu Diamini, 36, a field worker for the National Association of People Living with HIV/AIDS, went public on World AIDS Day, about her 'hiv+' status on Zulu-language radio and TV. That night, a mob kicked and beat her with sticks. She died the next day.

New York Times 28 Dec 98

The CDC has flouted its own Human Rights rules in dozens of countries. "On nearly every inhabited continent, the U.S. government has fashioned scientific partnerships with foreign officials and undertaken scores of medical research projects without obtaining basic agreements to avoid human rights abuses, as the law requires," say investigators Epstein and Sloat. Medication was dispensed and research conducted without written assurance of compliance with rules that patients be fully informed, monitored for safety, told of known treatments and free to refuse experimental drugs in all 96 research projects conducted by the CDC in the last 10 years. Many studies involved 'aids', syphilis, malaria and TB.

Plain Dealer Online 8 Nov 98

Drugs giant Bayer has been involved in an industrial spying campaign of burglaries and bugging in the multi-billion dollar pharmaceutical market. Apotex, Canada's biggest generic drug manufacturer, was a target. Barry Sherman, Apotex chairman, said "Dirty tricks like this do not surprise us because the drugs business is controlled by what is clearly a cartel." There was "an

alliance" between Bayer and three other drug multinationals to pay for "special operations". Bayer paid £300,000 per year into a fund controlled by Carratu International, a firm of London private detectives.

Sunday Times 17 Jan 99

The recreational drug methylenedioxymethamphetamine (MDMA; Ecstasy) is a human neurotoxin, and one dose may be enough to damage neurons producing the 'feel good' hormone serotonin, according to scientists who met at the Novartis Foundation, London on December 4, 1998. A decade of research had shown Ecstasy causes a deficit of brain serotonin in every animal species tested. Andy Parrott (University of East London) noted: "There is a general consensus appearing that people taking a lot of Ecstasy are experiencing a range of problems". Fabrizio Schifano (Padova, Italy) added that individuals who had taken more than 50 MDMA pills had a strikingly increased risk of psychiatric disorders such as cognitive impairment, psychoses and depression.

The Lancet 12 Dec 98

By 2007, sales of 'antiretroviral' drugs are expected to exceed $5 billion per year, according to a new report by a company based in Waltham, Massachusetts. In 1997, the sales of 'antiretroviral' drugs were about $2.3 billion in the seven markets. This is pedicted to have been doubled by the year 2002, and to reach $5.1 by 2007.

Reuters Health 28 Jan 99

Following combo-therapy in pregnancy, a majority of 'hiv+' mothers and about half their children developed one or more adverse events, the most common being anaemia. Other complications included transaminase elevation, nausea and vomiting, glucose intolerance, nephrolithiasis and diarrhoea. Two infants whose mothers were on therapy with a PI developed intercerebral haemorrhage.

AIDS 1998

Photo courtesy of ACT UP San Francisco

San Francisco's Mayor Willie Brown shakes hands with HEAL LA Director Christine Maggiore

Health Dissidents Meet Mayor of San Francisco

Members of ACT UP S.F. and HEAL L.A. urge Willie Brown to question popular AIDS beliefs

San Francisco

Members of the direct action AIDS group ACT UP San Francisco joined forces with HEAL Los Angeles, the large alternative AIDS information network, to meet January 16th with San Francisco Mayor Willie Brown. Activists presented compelling evidence that AIDS is not an epidemic, that it is not caused by a virus, that antibody testing cannot reliably predict illness or impending death, and that toxic drugs like AZT and protease inhibitors harm and kill those designated HIV antibody positive.

Mayor Brown listened intently as Christine Maggiore, Executive Director of the Los Angeles chapter of the Health Education AIDS Liaison, along with David Pasquarelli and Michael Bellefountaine, from ACT UP San Francisco, outlined point-by-point their opposition to the theory that AIDS is an epidemic caused by a virus.

The historic half-hour meeting began with Maggiore, former AIDS educator for AIDS Project Los Angeles, speaking about her experiences as a woman who has endured several HIV-positive, negative then indeterminate test results. She condemned the practice of using antibody testing to "administer death sentences to people who test HIV-positive" by stating that antibodies can't cause disease, don't predict future illness, and frequently cross-react. Maggiore informed Mayor Brown that HIV tests are inaccurate, non-specific and non-standardised. She recounted the difficulties she faced as an expectant mother labelled "HIV-positive" and pointed out HIV tests are mandatory for pregnant women despite the fact that pregnancy itself can trigger a positive test result. Once designated HIV-positive, pregnant women are forced to take AZT or encouraged to abort. Maggiore called attention to the February 6th trial of parents in Eugene, Oregon charged with negligence and, ironically, intent to harm for refusing to give the toxic drug AZT to their HIV-negative infant son. The mother of the boy happened to test HIV-positive in a routine screening while his father and sister remain HIV-negative. "This isn't public health policy," Maggiore warned, "this is madness."

Next, Michael Bellefountaine provided moving personal testimony of losing a lover to AZT poisoning and argued that AIDS simply doesn't qualify as an epidemic. Bellefountaine informed Brown that according to the November 1997 article in the *Journal of AIDS and Human Retrovirology* entitled *Projected Incidence of AIDS in San Francisco: The Peak and Decline of the Epidemic* new putative HIV infections inexplicably peaked at 7,600 in 1982, years before the initiation of any comprehensive safe sex campaigns. According to the article's author, San Francisco Public Health Director Mitch Katz, also present at this meeting, "...our analysis shows that San Francisco would have experienced a significant decline in AIDS cases due to the decrease in HIV seroconversions even if combination antiretroviral therapy had not been developed."

Last, Pasquarelli presented Brown with two large graphs entitled *AIDS in Perspective* - the first illustrated the extraordinarily small number of cumulative AIDS deaths (390,000) from 1981 to 1997 when compared to fatalities from heart disease (16,150,000) and cancer (8,500,000) during the same period. The second graph showed a comparatively minute number of total AIDS diagnoses (633,000) from 1981 to 1997 when compared to truly contagious cases of sexually transmitted diseases like chlamydia (68,000,000), gonorrhea (13,600,000), and herpes (6,000,000).

Activists ended the meeting by demanding a voice for those who reject HIV treatment in health department literature and on government bodies that make decisions about AIDS funding. They also called for an immediate public hearing on the controversy surrounding the cause, identification and treatment of AIDS.

Change of address - from 1st March 1999 **CONTINUUM** will be in a fresh, larger workspace! The new address (including for post) will be:
Rear - Unit 4, 1a Hollybush Place, London E2 9QX.
(It's 30 seconds walk from Bethnall Green Tube Station, on the Central Line.)
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continu@dircon.co.uk projects@dircon.co.uk

WEBSITES

Eleopulos Perth group
www.virusmyth.com/aids/perthgroup.index.html
www.virusmyth.com/aids/perthgroup/geneva

HEALToronto
www.geocities.com/WestHollywood/Heights/7731/additions.html

Celia Farber
www.impressionmag.com/aids.html

Reappraising Aids
www.virusmyth.com/aids
www.virusmyth.com/aids/tour/index.htm
www.virusmyth.com/aids/data/cfmother.htm
www.virusmyth.com/aids/data/mgglanka.htm
www.virusmyth.com/aids/data/ah15years.htm

Continuum in development at
www.continuum.org

Duesberg
www.duesberg.com

Noam Chomsky Continuum interview at
www.homeusers.prestel.co.uk/littleton/ai_aids.htm

Death Camp
www.angelfire.com/ar/dthcamp

Swedish
www.dn.se/hivwww.virusmyth.com/aids/data/nheuropean.htm

French
perso.wanadoo.fr/sidasante/

German
pweb.uunet.de/pr-leitner.DO
privat.schlund.de/mleitner/papadop

Recommended, unexplored!
www.livelinks.com/sumeria/aids.html

alumni.umbc.edu/~akcont1/tmh/hivcont2.html

alumni.umbc.edu/~akcont1/tmh/clapp.html

alumni.edu/~akcont2/tmh/aidsbibl.shtml

Thanks to Ola Deraker

FRANCAIS, ITALIANO

French and Italian translations of Eleopulos interview with Christine Johnson *Continuum* vol 5 no. 1 are available on paper from Continuum office, cost £2.00

NEW PUBLICATION!

The UK journal ***Current Medical Research and Opinion*** will publish a special supplement with its next regular issue at the end of March/early April - an extensive new paper by the Perth group of researchers entitled

A Critical Analysis of the Pharmacology of AZT and its use in AIDS

by Eleni Papadopulos-Eleopulos, Valendar F. Turner, John M. Papadimitriou, Todd Miller, Helman Alphonso and David Causer.

Copies will be available at a discounted price through *Continuum*. Details next issue.

Editor's note

This space gets left till last and after a long night *en route* to the printers I'd best be economical with words. We're calling this the mid-winter issue (since we try to come out quarterly), yet the friendly softening of dawn light has intensified into a bright, piercing springlike morning here in London. Pineal glands all over the city will be stirring.

I think this issue is a bumper. It's utterly extraordinary the paucity of credible publishing around 'hiv/aids', and in this *Continuum* again some of the finest, most thorough *agents provocateurs* in the field have come into print. Parts of the magazine get translated into Russian now for distribution in Ukraine and beyond as part of a 19 month project. I hope these writers and their considerations will be read far and wide. By the way, we certainly could do with some more subscribers.

So! Everybody has some antibodies looked for by HIV™ ELISAs. Some people have richer concentrations, rich enough to fulfil the commercial criteria for positive. That may be significant for some people's health, but really it seems as yet nobody can testify as to whose and how. The 'hiv' tests are about concentrations of antibodies, and woefully distant from anything to do with specificity. No viral isolation of 'hiv', no specificity of antibodies.

How bright does the light have to be before a critical mass of people see it?

Courage!

readers' views

London *Times* rejects letter on media Chimps from author of *What is Aids?*

Chimps and AIDS
from Dr F. I. D. Konotey-Ahulu

Sir,
"Could the reason why humans sicken but not chimpanzees lie the small genetic differences between the two?" (*Times* Editorial, February 2). But could it rather not be because the whole scientific reasoning (*Times* Leader, February 1) is as flawed as those which not so long ago had similar media blitz? On May 2 1987 a team from one of the London University teaching hospitals produced evidence in *The Lancet* that some homosexuals and Central Africans possessed a particular genetic "something" called Gc1F which predisposed them to HIV infection. I became the first of 18 people to write to expose flaws (*Lancet* 1987, volume 1, p 1267) which led to the paper's withdrawal from publication because of "erroneous data" (*Lancet* 1988, volume 1, p 936). In 1988, 2 Harvard University professors presented evidence that retrovirus antibodies found in the blood of some Senegalese prostitutes were identical with those found in some monkeys. The authors' later admission of laboratory contamination led another Harvard professor to produce this Editorial: "A case of mistaken non-identity" (*Nature* 1988, volume 331, p 552). A Cambridge University professor presented his AIDS-origin theory of Africans injecting themselves with monkey blood (*tafracher**) to produce greater erection and sexual excitement (*New Scientist*, July 16 1987).
Each of these scientific publications was surrounded by about the same extensive media coverage that we have just experienced. But when, one by one, their evidence was discredited through the admirable co-operation of the Editors of *The Lancet* and *Nature*, the media that trumpeted the initial "discoveries" became silent. I make bold to forecast that this recent chimpanzee evidence produced by the 'Universities of Alabama/Nottingham International Team' will go the same way as its predecessors. When (rather than if) that happens, I beg you not to keep quiet about it.
Yours faithfully,

Felix I.D. Konotey-Ahulu MD FRCP DTMH (Consultant Physician)
Cromwell Hospital, London SW5 OTU
February 2
konotey-ahulu@cromwell-hospital-co.uk

Spanish Flu?
In the late Summer 1998 issue, Greg Bunker, in his article *Lust for Life*, comments on the disease epidemics that follow world wars and refers to the Spanish Flu disaster after WWI. It wasn't Spanish Flu at all that killed up to 50 million people, men, women and children world-wide. That was the medical cover-up. The real killer was typhoid vaccine.
In the United Statest it was a common expression during the 1914-I8 War that "more soldiers were killed by vaccine shots than by shots by enemy guns". This truth was borne out by Dr. H.M.Shelton, author of *Vaccines and Serum Evils* in which he revealed. "It was during WWI, when vaccination was enforced to the fullest extent, that the death rate from typhoid rose to its highest point in history...This death rate could not be blamed on bad sanitation or bad food as was the case in the tropics. The deaths occurred when typhoid vaccine shots were given in sanitary American hospitals and well-supervised army camps in France, where sanitation had been practised for years".
According to General Goodwin, the British army had 7,423 cases of typhoid with 266 deaths. In the French army, there-were 113,165 cases of typhoid with 12,380 deaths up to October 1916. Compulsory vaccination was in force in both countries.
After the war was over, world-wide typhoid vaccination was carried out on populations in order "to protect people from disease-ridden soldiers returning from the battlefields" as warned by suborned newspapers of the day (Shades of the HIV!). The result was the 50 million deaths now deviously attributed to the Spanish Flu by the medical fraternity.

Patrick J. Carroll
Waterford, Ireland

Science and Polypharmacy: Questioning the *status quo*
It is common practice in Medicine to put patients on combinations of drugs. The vast majority of these combinations of drugs (especially where 3 or more drugs are involved) have never been studied at all, let alone in double-blind trials (with the variable exception of Oncology/AIDS treatment, where the toxicity of the drugs demands study); yet it is frequent practice to prescribe these multiple-drug combinations.
It is well accepted in Pharmacology that it is scientifically impossible to accurately predict the side effects or clinical effects of a combination of drugs without studying that PARTICULAR combination of drugs in TEST subjects. Knowledge of the profiles of the individual drugs in question does not in any way assure accurate prediction of the side effects of combinations of those drugs, especially when they have different mechanisms of action, which is very common because polypharmacy is most often prescribed to patients with "multiple illnesses". About 180,000 patients in this country die from identified adverse drug reactions; the number who die as a consequence of polypharmacy is, to my knowledge, unknown.
The argument that the prescribing of drugs is the "Art" of Medicine is not valid in defending polypharmacy, because drugs are developed (indications, dose and administration, etc) and approved through a "scientific" process (double-blind, placebo-controlled studies). The fact that the medicines are often prescribed for "different conditions" is irrelevant (especially to the patient's physiology). The idea that "we are doing the best we can", a frequent defense of Polypharmacy, does not in any way uphold a scientific argument in favor of it. (We are, indeed, trying the best we can, with tools which do not improve at the rate we would wish!) The fact that "there is a limit to how much research can be done" in no way makes the research unnecessary in order to predict the side effects of specific combinations of drugs.
Are we looking closely enough at our way of practicing Medicine? Can the use of unstudied polypharmacy really be considered evidence-based, "scientific" Medicine?

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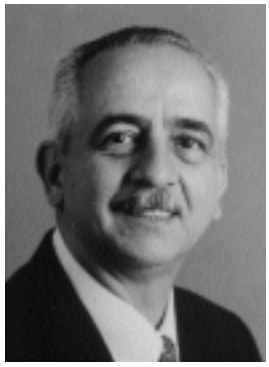
"Science progresses, funeral by funeral." - Max Planck

That's activism
I am a member of ACT UP!/San Francisco. For what seems like a very long time, we have been trying to help people to understand what an HIV test really is-and to question the toxic drugs that almost always accompany a positive HIV test result. Sometimes it's difficult to belong to a group that is often despised for its actions and beliefs, but that's activism, I guess. In this country, we are constantly force-fed misinformation about HIV and AIDS in the press and other media, and it makes our job even harder.
Your publication is very helpful. It's written in a way that is easily read, and that's important. *Continuum* lends credibility to the argument that HIV testing is dangerous.
It is my wish that medicine could better help those who are genuinely ill because of damaged immune systems... and determine what factors are most responsible for the harm - unfortunately, they are probably things like poor nutrition, living with poverty or stress and the environment... oh, well...
Anyway, again, your magazine is great - thank you for the vital information that you provide.

Betty Best
San Francisco

EVERYBODY REACTS POSITIVE ON THE ELISA TEST FOR HIV



Medical researcher Roberto A. Giraldo, MD*
is obtaining astonishing results

For the last 6 years I have been working at a laboratory of clinical immunology in one of the most prestigious University Hospitals in the City of New York. Here I have had the opportunity to personally run and get to know in detail the current tests used for the diagnosis of HIV status, namely, the ELISA, Western blot and Viral Load tests.

1. Diluting the serum for the ELISA test

The ELISA test is a test for antibodies against what is supposed to be the Human Immunodeficiency Virus or HIV. To run this test, an individual's serum has to be diluted to a ratio of 1:400 with a special specimen diluent. According to the test kit manufacturer this diluent contains

> *0.1% triton X-100, Bovine and Goat Sera (minimum concentration of 5%) and Human T-Lymphocyte Lysate (minimum titer 1:7500). Preservative: 0.1% Sodium Azide[1].*

This extraordinarily high dilution of the person's serum [400 times] took me by surprise. Most serologic tests that look for the presence of antibodies against germs uses neat serum [undiluted]. For example, the tests that look for antibodies to hepatitis A and B viruses, rubella virus, syphilis, hystoplasma and cryptococus, to mention a few of them, use straight serum [undiluted]. However, to try to prevent false positive reactions some serologic tests use diluted serum; for example this is the case with tests that look for antibodies to measles, varicelia and mumps viruses which use a dilution of 1:16, to cytomegalovirus [CMV] 1:20 and to Epstein-Barr Virus [EBV] 1:10.

The obvious questions are: What makes HIV so unique that the test serum needs to be diluted 400 times? And what would happen if the individual's serum is not diluted?

2. Testing the ELISA test without diluting the serum

To answer these questions I ran an experiment in a medical laboratory in Yorktown Heights, New York. I ran it using the same test kit reagents that are usually used to run the ELISA test in most clinical laboratories worldwide[1].

I first took samples of blood that, at 1:400 dilution, tested negative for antibodies to HIV. I then ran the exact same serum samples through the test again, but this time without diluting them. Tested straight, they all came positive.

Since that time I have run about 100 specimens and have always gotten the same result. I even ran my own blood which, at 1:400, reacts negative. At 1:1 [undiluted] it reacted positive. I should mention that with the exception of my own blood, the patient samples all came from doctors who requested HIV tests. It is therefore likely that most of the blood samples that I tested belonged to individuals at risk for AIDS.

According to Abbott Laboratories, the absorbance value [yellow color intensity]

> *develops in proportion to the amount of antibodies to HIV-1 which is bound to the bead[1].*

What I noticed is that the absorbance values of the specimens that tested negative when diluted [1: 400], but positive when undiluted [1:1], had lower values than the samples that, diluted, react positive on both the ELISA and Western blot tests. This would probably mean that the blood that is negative when diluted but positive when undiluted has a lower level of antibodies than the diluted blood that is doubly positive and, therefore, may probably test negative on the Western blot test. However, I have not had the opportunity to check this hypothesis.
The graphic below illustrates how blood that reacts negative for HIV at 1:400 ratio always turn positive when

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run at 1:1 [undiluted].

It is important to note that the Western blot antibody test for "HIV" also needs serum to diluted. Although it too has an unusually high dilution, here the individual serum is only diluted at a ratio of 1:50[2]. I have not yet had the opportunity to run this test with undiluted [1:1] specimens.

3.2. Everybody has different levels of HIV infection.

It is also believed worldwide that a person that reacts positive for antibodies against HIV has not only been exposed to but is infected with a deadly virus that causes immunodeficiency[3-6]. Therefore, the positive reactions of all undiluted sera would mean that everybody, or at least all the blood samples that I have tested, including my own, infected with this "deadly" virus. The ones that react

RUN OF ELISA TEST FOR HIV WITH TWO DIFFERENT CONCENTRATIONS OF THE PERSON'S SERUM

(a) RESULTS AT 1:400			(b) RESULTS AT 1:1		
91123246 B5	0.976	...	91123246 B5	0.268	REACTIVE
91123228 H1	0.881	...	91123228 H1	0.259	REACTIVE
91123265 H2	0.671	...	91123265 H2	0.338	REACTIVE
91123276 H3	0.868	...	91123276 H3	0.481	REACTIVE
91123286 H4	0.873	...	91123286 H4	0.345	REACTIVE
91123296 H5	0.862	...	91123296 H5	0.343	REACTIVE
91123306 J1	0.869	...	91123306 J1	0.234	REACTIVE
91123316 J2	0.877	...	91123316 J2	0.386	REACTIVE
91123326 J3	0.867	...	91123326 J3	0.248	REACTIVE
91123336 J4	0.896	...	91123336 J4	0.282	REACTIVE

Column (a) shows 10 specimens reacting negative at 1:400 dilution.
Column (b) shows the same specimens reacting positive at 1:1 dilution.

3. Discussion

The following are three possible explanations for why undiluted specimens of blood always react positive at the ELISA test:

3. 1. Everybody has HIV antibodies.

It is accepted worldwide that the ELISA test for HIV detects antibodies against what is known as the Human Immunodeficiency Virus[3-6]. And the pharmaceutical company that commercialises the ELISA kits states that

> *Abbott HIVAB HIV-1 EIA is an in vitro qualitative Enzyme Immunoassay for the Detection of Antibody to Human Immunodeficiency Virus Type 1 (HIV-1) in Human Serum and Plasma[1].*

Since all undiluted blood specimens react positive on the ELISA test, a test that supposedly tests for antibodies to HIV, the results presented here suggest that every single human being has HIV antibodies. And this suggests that everybody has been exposed to HIV antigens.

This would mean that all of us have been exposed to the virus that is believed to be the cause of AIDS. The people that react positive even at a dilution of 1:400, would be the ones that have had the highest level of exposure to HIV antigens. The rest of the people - the ones that only react positive with undiluted serum [1:1] - would have had a lower level of exposure to HIV.

positive at a ratio of 1:400 would simply have a higher level of "deadly" infection than the "deadly" infection had by the ones that react positive only with undiluted serum.

3.3. The test is not specific for HIV

The results presented here could also mean that the tests used for detecting antibodies to HIV are not specific for HIV, as has been explained previously[7-14]. In this case, there would be reasons other than HIV infection, past or present, to explain why a person reacts positive to it. The test also reacts positive in the absence of HIV[7-14].

The scientific literature has documented more than 70 different reasons for getting a positive reaction other than past or present infection with HIV[7,10,11,14,15]. All these conditions have in common a history of polyantigenic stimulations[15,16].

Even Abbott Laboratories is well aware of the specificity problems with the ELISA test. This is why they state:

> *EIA testing alone cannot be used to diagnose AIDS, even if the recommended investigation of reactive specimens suggests a high probability that the antibody to HIV-1 is present*

and

> *Although for all clinical and public health applications of the EIA both the degree of risk for HIV-1 infection of the person studied and the degree of reactivity of the serum may be of value in interpreting the test, these correlations are imperfect.*

Therefore, in most settings it is appropriate to investigate repeatably reactive specimens by additional more specific or supplemental tests[1].

Interestingly, there are countries like Great Britain where the diagnosis of HIV status is based on the ELISA test alone. No Western blot or any other test is needed there.

The only proper way for establishing the sensitivity and specificity of a given test is with a gold standard. However, since HIV has never been isolated as an independent purified viral entity[17-19], there cannot be a gold standard for HIV. The sensitivity and specificity of the antibody tests for HIV have instead been defined based on the assumption that HIV is the cause of AIDS. In this way,

The Abbott studies show that: Sensitivity based on an assumed 100% prevalence of HIV-1 antibody in AIDS patients is estimated to be 100% (144 patients tested)

and

Specificity based on an assumed zero prevalence of HIV-1 in random donors is estimated to be 99.90/o (4777 random donors tested[1].

At present there is no recognized standard for establishing the presence and absence of HIV-1 antibody in human blood. Therefore sensitivity was computed based on the clinical diagnosis of AIDS and specificity based on random donors[1].

[Emphasis is mine].

Since there is no scientific evidence that the ELISA test is specific for HIV antibodies, a reactive ELISA test at any concentration of the serum would mean presence of nonspecific or polyspecific antibodies[20]. These antibodies could be present in all blood samples. They are most likely a result of the stress response, having no relation to any retrovirus, let alone HIV[21,22]. In this case, a reactive test could be a measure of the degree of one's exposure to stressor or oxidizing agents[15,16].

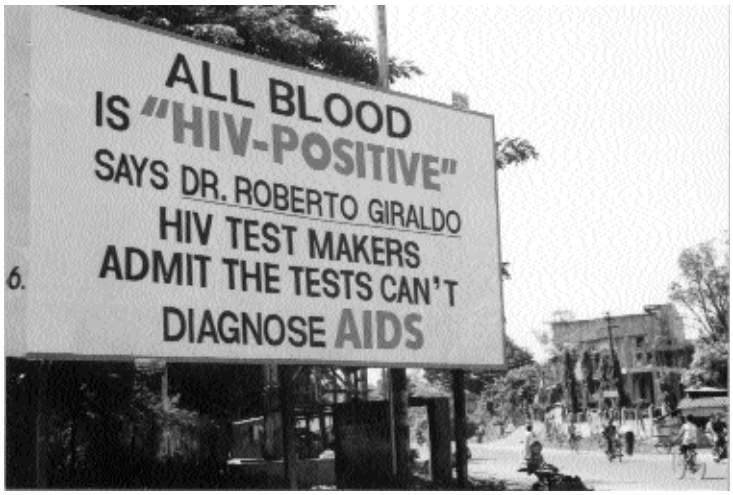
The inevitable conclusion is that all positive reactions for antibodies to HIV are simply false positives. If nobody is positive for HIV, then people who react positive on the ELISA test do so due to something other than HIV.

4. Proposal to find out the real meaning of the "HIV antibody" tests.

To uncover the meaning of these tests I propose a simple experiment: Take blood from three groups of people and run the tests highly diluted, undiluted and at a wide spectrum of dilutions in between. The first group would be a group of healthy people of many age groups; the second group would be a group of people from the conventional AIDS "risk groups"; the third group would be a group of people with clinical conditions both related and unrelated to AIDS. All groups would be subjected to both the ELISA and Western blot tests.

Additionally, all blood samples could be subjected to the "the viral load test for HIV".

The results of such an experiment could determine whether these test measurements bear any relationship to an individual's level of exposure to stressor or oxidizing agents. If so, the tests could be salvaged as a measure of an individual's level of intoxication.



News on the streets in Nagpur, India.

Let us find the economic support necessary to run this experiment. In the mean time, since people are reacting positive on tests that are not specific for HIV, let's please stop labeling them as "HIV posifive".

5. Acknowledgments

I want to thank Mr. Albert Padovani, Director of Yorktown Medical Laboratory for permitting me to run the experiments reported here in his laboratory and for providing the reagents for the tests. Also I thank Tom DiFerdinando Executive Director of Health Education AIDS Liaison (HEAL) in New York City for editing the manuscript for this article and for his valuable suggestions.

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Coming off Combos

Do you believe in life after 'AIDS drugs'?

Stephen Rogers

Photo : Clair Walton

"These new Protease Inhibitors are marvellous, pretty soon everyone will be on them," my consultant enthused with a dramatic flair that would put Gielgud to shame. The year was 1994, and the first time I remember hearing about these 'Wonder Drugs' that were heralded as a new treatment, even possible cure, for AIDS.

She was not the only one to have become intoxicated by all the hype. The doctor also eulogised at some length, 'At last we have a method for dealing with things, with the Viral Load Test and Combination Therapies. It's just a matter of finding the right combination for you, and when that stops working, we just switch it. The possibilities are endless with more and more drugs in the pipeline.' Quite a sales pitch. ' So I might be around to see in the year 2000,' I replied sardonically, totally unconvinced.

' Oh, I think I know how you'll be celebrating.'

As P.I.s had yet to be licensed for use, the only way of accessing them would be to take part in a two year trial, at the end of which, the drugs would be made available on a named patient basis, that is, if they worked. But the way in which it was said was as if this were a foregone conclusion, and they were doing an enormous favour by granting me early access. But still I remained unconvinced, and so the sales pitch intensified. 'We know you're well now (asymptomatic) but we want you to stay well'. They took such a personal interest in my wellbeing, so touching. But how could this be used to justify going on a trial? After all, I could be put on placebos, and the main point of a trial was to establish whether or not the drugs worked. Still I remained unconvinced.

The clinic appointments would now consist entirely of berating me and attempting to erode my resistance, to the point where the visits would fill me with dread. The one argument I still clung to in my defence related to the stories surrounding the side effects from taking AZT and its ineffectiveness, but as I had no actual proof, my argument soon crumbled. Again my doctor jumped in with the sales pitch: 'I know people who were on the Concorde trial and are fine. Just take it with a few biscuits, no problem'. What he neglected to mention was that there had been a 25% increase in the mortality rate of those who took AZT on the trial. That AZT, being a cytotoxic drug, destroyed the bone marrow, causing anaemia, resulting in the need for blood transfusions, and consequently, suppression of the immune system. That AZT can cause non-Hodgkins Lymphoma, a virulent form of cancer of the immune system, and after three years, there is a 46.4% chance of developing the condition. If I'd known these facts I would never have agreed to go on the trial, but I didn't, and after all, doctor knows best, at least, that is what we are taught to believe. And so in March 1995 I relented and agreed to take part.

The trial consisted of AZT, ddI, both nucleoside analogues, and Saquinavir, one of the P.I.s. Doubly blinded, neither I nor the hospital would know if I were on drugs or placebos; also the viral load would be known only by the pharmaceutical company. Immediately upon starting, my T-cell count plummeted and remained at the same low level. I was told that without the drugs, it would fall even further, but how could they say that when I might have been on placebos?

At the end of the two years, it was revealed I'd been on AZT monotherapy for the first six months, then all three for the remainder of the trial. If someone had asked me if I'd suffered from any side effects, the answer would have been no, but with hindsight of knowledge, the same could not be said. During the first year I'd needed one blood transfusion, although the reason was never fully explained. During the second year I experienced a mild attack of shingles. It has recently been revealed that there is a five fold increase of shingles amongst people on combination therapies. Worst of all I became affected by the condition lypodistrophy.

I'd begun to notice changes in my body shape. A slight paunch developed, and my upper arms became thinner, although the muscle definition increased. The veins of the lower limbs began to protrude, and the skin on the thighs became more translucent. All this I put down to my imagination, as at the time I hadn't even heard of the condition. Then in 1997, referred to as 'Crix Belly', said to only affect those on Crixivan (Nelfinivir), I read of the condition. But as time went by it emerged that lypodistrophy was a major side effect produced by all P.I.s.

By this time, the clinic possessed an entire menu of drugs to play around with, and therefore decided to change the combination to Ritonovir, 3TC, and 4DT. They could also now carry out their own Viral Load Test and so decided to make use of this new toy by doing mine. The result came back 24,000 'copies', a reasonably low level. My doctor surmised the load must have been incredibly high at the beginning of the trial, as I'd been diagnosed in 1990, and that it had fallen throughout to the present level. But when the results were finally released, they did not bear this out, and instead showed a constantly fluctuating low level. Upon seeing this he quickly shoved the paper into my file before I had a chance to see it further.

Image : Dissonance by Franz von Stuck (1863 - 1928). Oil on panel.

As with the first combination, I raised concerns about the drugs, specifically regarding Ritonovir. A long, indepth article had just been published in *Rolling Stone* magazine looking into the effectiveness of Combination Therapies centring on David Ho's attempts to eradicate the virus, making his subjects very sick in the process. More poignantly it also mentioned some people had died from liver failure whilst on Ritonovir. Once again my doctor brushed these concerns to one side as if I were crazy for even raising them. He did however warn me to expect dire side effects from the Ritonovir for the first two weeks. Parcelling me off with packets of anti-sickness and diarrhoea tablets he reassured me I'd be fine.Ironically, the first two weeks brought no ill-effects - only after this period, did the onslaught of side effects really kick in. Numbing tingling in the lips, burning sensation on the upper forearm, lethargy, insomnia, crippling stomach cramps, and chronic diarrhoea. Then a strange feeling I find hard to describe, like feeling hot and cold at the same time, and everything closing in, almost to the point of blacking out.

Admittedly most of these effects would only occur at regular intervals, a few hours after taking the drugs; the rest of the time I'd be reasonably fine. With the stomach cramps, which sometimes woke me during the night, I would just have to grit my teeth, knowing that after a few seconds they would stop. The diarrhoea presented different problems, creating an anal faucet - the anti-diahreoa tablets only controlled the flow and not abated it altogether. My doctor tried to blame a parasitic infection, but when the samples came back clear, he had to admit the drugs were the culprit, assuring me the diarrhoea would go away after six weeks. It did not.

The lethargic, sluggish feeling might have been more to do with having to eat two large fatty meals a day in order to take Ritonovir, not a very healthy pursuit. The doctor pointed out a rise in my cholesterol levels, saying this was to be expected on P.I.s, nothing to worry about. It is now known that people on P.I.s experience heart problems and blocked arteries, sometimes requiring surgery. I remember thinking, as I would feel a slight twinge in my chest, I'm more likely to die from a heart attack than AIDS.

'It is important to restore a person's quality of life', went one of the major selling points for the drugs. Well, all they succeeded in doing was to decimate any quality of life I possessed. No longer having the energy to go to the gym, a regular part of my social activities, no longer able to go out as much due to toilet problems, I lost count of the designer underwear ruined, No longer able to enjoy a social life meeting others, in case of an embarrassing and messy accident, I would now spend my days dossing about, watching cable TV, and popping pills. The practicalities of taking the drugs at certain times, with meals, with liquid, also made conducting a normal life impossible. All this only added to the feelings of depression and isolation.

As my Viral Load stubbornly refused to go down to undetectable, the doctor decided to reintroduce the Saquinavr. Although this P.I. had proved to be ineffective in it's old formulation, being poorly absorbed, combining it with Ritonovir was said to increase its absorption 40 times, even though they didn't know what effect this amount would have on a person. It is now accepted that if someone on one P.I. is suffering from side effects, then adding another, will only increase the suffering. This is precisely what happened in my case. I developed a skin abscess, which swelled to the size of a golf ball, then burst, oozing puss, then blood, then a combination of both. My doctor tried to blame it on my sexual pursuits and spoke of sending me to the surgeon to have it cut open. Skin abscesses can be a result of a build up of toxins in the body, and it is now believed they are yet another side effect of the drugs.

My clinic appointments now became torture. They had increased in frequency - whereas before they had been once every two to three months, they were now occurring every two to four weeks. I began to feel more like a Lab Rat than a person. I would look around the burgeoning Waiting Room, now standing room only, thinking, the drugs can't be working. I would overhear snippets of conversation from others suffering, some being taken up to the ward. A very different picture from that painted by the propaganda. My doctor would now spend the entire session reasserting over and over again that I was on the

very best treatment, the 'Gold Treatment' as he would call it, and if I failed on this, that would be it for me. A very different tale of endless combinations than that told to me a few years earlier. I would leave the hospital thoroughly demoralised and would spend the weekend feeling suicidal. Only these punitive sessions would make me adhere to the drugs.

The mountain of capsules and pills in the palm of my hand now filled me with dread. Each time before taking them I would pause and think, 'These drugs are killing me'. I had a strong gut feeling, both literally and intuitively, which conflicted with the rhetoric of my doctor and the pharmaceutical companies. I felt confused and frightened with no one to turn to. Organisations set up to help people like me, had now become nothing more than shadow puppets, projecting the images of living longer and better on combination therapies, with no actual substance to their claims.

What I needed was information, something I felt had been denied me, constantly being fed one side of the argument, only being told what they wanted me to know. Despite this, stories were constantly seeping through the barrier set up by the orthodoxy, regarding the mounting side effects, people dying, and the true reasons for people with AIDS living longer, and the real causes. What I had been denied was the basic right to make an informed decision, which without a full grasp of the facts, could not be achieved. And so, instead of accepting the situation, as many do, I pursued a relentless quest for the truth, constantly asking questions, constantly looking for information.

The one thing that provides any credence to the drugs is the Viral Load Test, the result of which is used to convince someone that they are riddled with a deadly virus, and when the result goes to 'undetectable', used to convince someone that the drugs work, in the face of ill health. It certainly worked on me, offering the only vestige of belief in the drugs. But when I learnt the Viral Load Test is highly inaccurate, abusing a technique called PER, that it basically picks up scraps of genetic material and amplifies the result, I lost all faith in the drugs, and my fear had been replaced with anger at being duped into taking a course of medication on the basis of flawed test results, which if anything, had taken its toll on my health. I made the decision to stop taking the drugs.

Within weeks I felt better, the diarrhoea dried up, the skin abscess cleared up, the stomach cramps disappeared and my T-cell count shot up. I had become unaware of the malaise I'd sunk into over the years - like with any drug, whether pharmaceutical or recreational, you become so used to the effects they induce to the point where this becomes an accepted state of being. You become unaware of the damage being done. People who say they are doing well on the drugs are often unaware of the destruction taking place within their own body. The nucleoside (AZT, D4T, 3TC, ddI, ddC), interfere with DNA, the very building blocks of life, effectively killing T-cells. The P.I.s destroy protease enzymes essential for some basic functions in the human body. All this in the hope of preventing a retrovirus from replicating. They are not anti-virals, they are anti-life.

At the final visit with my doctor, I lacked the courage to tell him I'd stopped, afraid he might begin berating me. Then fate stepped in - my last Viral Load, taken prior to cessation, had shot up dramatically. He took this as a sign that the drugs were no longer working, a victim of his own tests. He failed to take into consideration the fact I'd had flu at the time. His blind faith blinkered him from the more likely explanation that the result had been affected by the flu, and not by an increase in HIV activity. Despite now knowing the facts, I kept quiet and breathed a sigh of relief that my doctor would now make the decision to take me off the drugs, but the relief soon changed to despair when he announced he now wanted to put me on a combination of five different drugs. It has now been revealed that there is an increase of opportunist infections amongst those on 'quintet' combination therapies. I held nothing but contempt for my doctor and never saw him again.

It cannot be said that these drugs were responsible for keeping me 'well' for those three years, as the doctor would like me to believe. The first two years had been a trial utilising a combination that is no longer used due to acceptance of its ineffectiveness. The final year had been plagued with ill-health and the drugs had failed to achieve a sustained undetectable level. If anything I am now well in spite of the drugs, not because of them.

The decision to stop taking the drugs is a difficult one in the face of pressure from the clinic, propaganda from the pharmaceutical companies and organisations funded by them, and the media hype. You really have to believe in yourself, take responsibility for your own life back into your own hands and out of theirs, and just let go. Like Dumbo who believed he couldn't fly without the aid of a feather, once he let go, he realised he could fly without it. Once you take that leap of faith you realise there is life without the drugs.

human

rights & policy

Common medical practice as seen in aids

Accumulating developments in medical science, medical practice, policy making and law, media and communications are having direct implications for the way patients get treated and how their rights are viewed, reaching far beyond 'hiv' and aids.

The 'hiv-causes-aids' hypothesis was originally suggested at a US press conference in 1984. Immediately by the media, 'hiv' as the cause of so-named aids was touted as a fact. However several actual facts were overlooked by the media and the scientific community. To begin with, there was no isolation of the alleged human immunodeficiency virus, according to the Pasteur Institute protocols of retro-viral isolation - and there is still no such isolate today. Which may explain why there has never been scientific evidence of 'hiv' killing T-cells, which constitutes what it would have to do in order to fulfil the 'hiv/aids' theory. Furthermore, the signs suggested to mark the presence of 'hiv' could not be found in all of the 'aids' cases, and so should not have been considered specific to a retrovirus, especially without an isolate. These crucial facts pointing away from an 'hiv' as the cause of aids - rather embarrassing for both the over-speculative scientists and the overeager media - were joined by others equally revealing.

The initial sign of suggested aids, a low CD4 immune cell count, could be explained by Dr. Anthony Fauci's own research into the drop of CD4-cells in the blood through hypercortisolism. Given that Dr. Robert Gallo and his team heavily manipulated the cell-culture they used to 'prove' the presence of a novel retro-virus, with stimulants - hydrocortisone and other chemicals among them - could have brought the retro-viral ivory tower down, if scientific concerns had been the basis of the 'hiv-aids' dogma. It can be argued that Gallo and his colleagues tailored their "aids-tests" to match the state of stressed organisms of certain groups, later identified as 'aids-riskgroups'. Early validation mechanisms - e.g. peer-reviewing, matched controls, were abandoned. Mortality rates were implied to design aids as a 100% fatal disease, putting everybody at risk. Sex was introduced as the main route for 'aids' to subjugate humanity, despite the fact that sex (principally exchanging body products) is actually the main way of nature to guarantee the survival of almost any given animal species.

The unsound claims about sex were in many ways detrimental to the already fragile means by which today's increasingly individualistic people and especially vulnerable groups like gays could express physical intimacy. Sexual lust was now considered fatal. The new gospel of sexual dangers put forward as important public health measures by the scientific establishment meant either abstinence or so-called "safe sex". Religion could not have dreamed it up better, but only science was able to 'reform' sex in a reformed society. Clearly both prescribed measures to combat the suggested spreading of a phantom viurs are deeply non-humane and arguably condemned to fail.

A hypothesis is usually the basis of a scientific discourse, leading to treatments and policies. Hence, I will start by pointing out the marks left by the 'hiv-aids' dogma on human life by summarising scientific practice as seen in so called 'aids-research'.

In order for biased germ-hunting laboratories to raise research funds for their hiv/aids hypothesis, war-language and horror-scenarios with little to no factual basis were employed. Scientists were only too eager to manipulate public opinion into pressuring politicians to release research money. Studies designed to reaffirm the dogma and/or the therapeutic benefits of drugs were too small and too short to be of scientific value - a standard now in 'hiv-aids' research - receiving criticism from other scientific fields. Useful scientific standards such as postulates to identify an infectious disease (e.g. Koch's postulates), long-term studies, placebo-control groups and controls in general were dropped or avoided if they were not useful in 'proving' the hypothesis. Ill-identified 'surrogate markers' (e.g. viral load tests) were invented to link such pseudo-research to suggested medical practice.

Once the pharmaceutical industry understood the profitable benefits of the 'hiv-aids' dogma, studies were directly or indirectly financed by the industry. Results considered of interest for the diagnosed were often biased in favour of the product, or if unfavourable, not available to the public. Old and new drugs with suggested benefits in 'aids' were fast-track approved and marketed without sufficient knowledge of adverse and long-term effects (e.g. AZT, protease inhibitors). Public funds were used for research, while the profits were privatised for companies or individuals. Like all industries, the pharma-industry is money driven, not motivated by curing disease and diminishing the market, but rather by marketing more products to combat

Michael U. Baumgartner,
Secretary General of the International Forum for Accessible Science (IFAS), an educational Human Rights organisation in the field of science and health, will present Human Rights concerns around 'hiv/aids' again at the United Nations Human Rights Commission in March this year. He will be writing regularly in this column on issues challenging 'hiv/aids' policies from a Human Rights perspective.

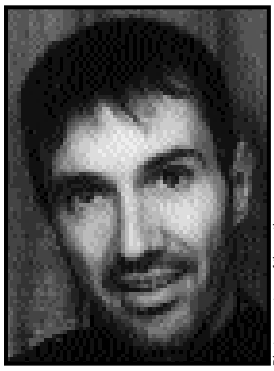


Photo : courtesy of the author

symptoms. This means creating new markets by artificially inducing 'scientific needs'. The real needs and interests of affected people are subordinated to industrial and political interests. The suffering of many becomes the gain of a few. Science depending on the pharmaceutical industry becomes the steering mechanism of an increasingly diseased public welfare system.

This had direct consequences for the way doctors treat their patients. They started to rely on ill-identified 'surrogate markers' (CD4-counts, viral load test) without sufficient knowledge of their meaning and treatment relevance. How a person feels - healthy or ill - is no longer of medical relevance, indicating need for treatment. 'Aids'-specialised physicians seemingly push drugs extensively. Many of these drugs are in experimental stages, their adverse effects as well as other clinical conditions uncritically attributed to 'hiv'. Natural medicine and posssible safe alternatives are marginalised for the treatment of what are considered 'side effects', and by themselves not even offered.

Patients resisting such risky treatments become criticised as mistrustful and uncooperative. This is putting responsible patients who want to self-determine the way they are treated at increasing risk of maltreatment and/or medical neglect. Meanwhile the physician-patient-relationship with the 'trusting' patients becomes increasingly diffuse, lacking healthy boundaries through lack of critical distance, resembling symbiotic relationships. Both sides develop clear symptoms of overstrain.

These most disturbing medical practices also known as 'common medical standards' have grave consequences on policy-making and new laws.

Unvalidated research findings and incompetent interpretations lead not only to treatment recommendations but insidiously become 'medical standards' and as such, bases for highly questionable policies and laws (mandatory testing for pregnant women leading to mandatory treatment and forcing mothers to refrain from breastfeeding their babies). On the other hand there are considerations to insidiously alter product liability laws to unbind the industry from its legal responsibility for health hazards possibly caused by its products.

Affected individuals are ill-informed about their rights as patients; those who dare to resist toxic treatments are at risk of being subjected to legal consequences (e.g. cancellation of healthcare-benefits, exclusion from participation in publicly funded protected drug programmes, suspension of custody over children); 'informed consent' is increasingly rare in medical practice now, as relevant data and unbiased information is either not presented or not available. Patients rights are determined and safe-guarded by physicians so as not interfere with 'scientific' needs. Ill guided 'political correctness' becomes the force creating legal outcomes and laws, undermining justice. Medical ethics are undermined by unsound media accusations and become a farce.

Understanding the power of communication in the age of media it is clear that the media plays the crucial role in constructing a virtual reality. Science is conveyed via flaring headlines and press conferences with opinion more regarded than fact. Study results are anticipated and prematurely released. PR strategists specialise in making any result commercially useful with computer animation filling the gap in data which cannot be produced scientifically (e.g. computer animation of 'hiv'). Proper investigation is neglected relying on third-party (industry) press releases. Reprints of biased data in the media are used as scientific references even by scientists. Independent investigative reporting becomes rare because of the growing influence industry has on media. Critical voices are lobbied against, censored and ridiculed by personalising the challenger to justify ignorance. 'Good' reporting has become the promotion of mainstream views and political correctness.

This disturbing scenario leaves the most dangerous consequences on the most vulnerable groups - patients and labelled people. They are at the mercy of the ever growing medical apparatus and of a quickly advancing high-tech medicine with priority given to questionable surrogate markers over the individual clinical condition. This results in unnecessary suffering, and even medically induced deaths. Self-determination is considered a 'risk' to personal health, while obedient behaviour and compliance to toxic treatment is regarded as 'responsible coping'. Obedient affected individuals are sponsored as 'pressure groups' to lobby for third-party interests, while critical clients are patronised and deprived of necessary services. Self-determining groups with critical approaches and dissenting views are discriminated against and excluded from decision making processes affecting the public.

All of this can take place in the dark, without the public, including policy makers, really knowing the information they are deprived of by such unethical and unprofessional practices in the fields addressed.

Today many people still know little to nothing about their own bodies and the origin of disease, i.e. of the interplay of health and disease. Disease is not experienced primarily as lack or excess i.e. as an unbalanced state, but understood as an external threat that has to be fought against. Toxic substances polluting the body often undermine the body's capacity for self-healing. The dogma of the phantom killer 'hiv' has led our bodies to become intrinsic war scenarios defined by scientists who have lost the essential understanding of the human body: as a whole integrated organism of interconnections and interplay.

These very real 'standards' are now putting us all at risk of iatrogenic - medically induced - damage, growing out of 'aids' into other fields. The same questionable tests and standards are alredy being used to suggest other equally ill-identified diseases and causes, to be treated with equally ill-researched drugs.

It is time that we claim back public health and true self-determination in medicine and create patient-bound patient rights, insisting on their applications. It is time that we radically reform 'modern' medicine.

What makes a survivor?

Photo : Joan Shenton

Clair Walton, Co-ordinator of the International Long Term Survivors Network (hiv/aids)

Moving home or generally having a good sort out allows us an opportunity to confront the possessions that we cling onto dearly "because they may come in useful". It is a human trait to clutch to security of possessions, when often in reality they fail to be of use in the future, rather instead they merely weigh us down, clutter us up and even prevent us from progressing.

Going through the experience recently of ruthlessly emptying my cupboards, drawers and wardrobe into bags for disposal, feeling a sense of satisfaction and liberation at letting go of the clothing and general household items that never did "come in useful", I realised the parallel with the dilemmas, questions and comments I face as someone who stands up as a long term survivor and questions the orthodoxy. It is worth grasping the opportunity of a good overhaul and taking the plunge to allow us to clear our thoughts and let go.

With the questionnaire for the Long Term Survivors Survey out* and the first batch ready for dispatch to those who volunteered to participate, the experience is timely and the analogy poignant, giving a time for reflection for me and my thoughts on one of the purposes of the survey: what makes a survivor? Indeed, why do I survive?

The analogy being that I found myself clinging onto other people's notions and experiences of health and hiv, possessing them as my own, simply because "they may come in useful". It is a strange thing for me to do but such is the power of the hiv/aids spell. On several occasions I have had people say to me, patronisingly or even gleefully, that they knew someone just like me, who thought the way I did, then got sick and died. They appear to be trying to warn me that I too could fall. In the past I have accepted the notion that they may be right - my current thinking may be wrong - it's a possibility along with the many permutations in life, and a challenge I take up, if and when it occurs. So, I have usually nodded acknowledging their remarks. However, I began to realise the danger to me of allowing myself to absorb and retain those notions and experiences, and I wonder if I kept them along with the old items of clothing "just in case".

Michael Ellner and Tom DiFerdinando wrote in *Unmasking Hiv* of the phenomena where people appear to all intents and purposes to have embraced an alternative approach and yet fall back in ill health. They refer to them as still being in the Aids Zone. It is a very powerful statement which caused me to question my position and help me deal with the deathmongers. I asked myself, could this happen to me? Was I confident or even cocky because I wasn't ill? Would I fall victim, become frightened and grab for the nearest combination therapies if I developed a serious illness? Was I in the Aids Zone? By not declaring that hiv doesn't exist or cause aids - rather, that I'm not convinced that the hiv test is a valid test for a virus - was I in danger? On further consideration I doubt it. My approach to health directs me down a path where treatment with toxic, experimental, insidiously marketed and highly profitable drugs would be unlikely. On investigating hiv and health I am happy to live with possibilities until I come to understand for myself and am convinced one way or another. I accept that many questions remain unanswered for me. It is an ongoing process. I believe, for me, that the confusion and the ability to live with uncertainty is a mark of strength. Part of the process for me has been to challenge the taunts of those who seem to relish warning me of my impending death. I am, though, a little confused as to the message being transmitted to me. If they are trying to warn me, do they think it had never occurred to me? Do they think I have escaped the persistent and destructive message of hiv/aids for the last fifteen or so years? Do they really believe the people they refer to just got sick and died? What about other factors? I wonder if those who make such remarks understand the damage they cause when they relentlessly push the inevitability of illness and death? Do they really think they have produced the evidence of their beliefs by pointing to others who have died with the same label? Do they really deny the individual, believing we can be put into simple categories? I wonder how people, who hardly know me, think they know me, let alone compare me to someone with different histories, philosophies, etc., whom they probably didn't really know either? Who knows the many factors that play a part on an individual's health? It is the uniqueness, the individ-

uality of each and everyone one of us that so often gets forgotten or dismissed. So as for "someone just like you" I would say there ain't nobody just like me, actually!

I became aware of the need to recognise my individuality and quest to retain it around the paradigm of hiv/aids four years ago when I attended a conference in Cape Town, South Africa organised by The Global Network of People Living With Hiv/Aids. It was an incredible experience to witness firsthand the gathering of people from all over the world sharing experiences. What struck me as odd, but I have since come to see it as the norm, was the way the session on long term survival was pushed out of the main programme. It's a subject that rarely gets addressed. Whilst I may have been in the company of several hundred people, for many, the only common factor that we shared was a positive test result. It dawned on me at that conference that whatever had or was going to happen to them wasn't necessarily going to happen to me. It was in Cape Town that I consciously took my life back and began the retreat from being an hiv clone.

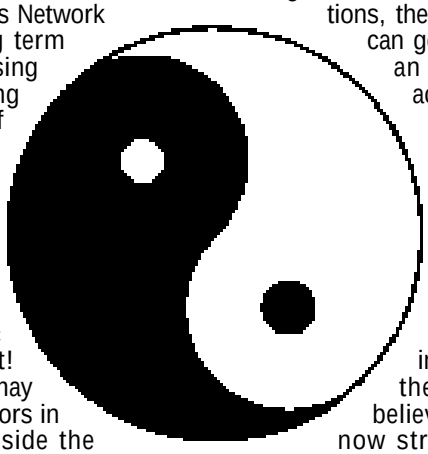
International Community Collaborative Long Term Survivor Survey

So how does that bode for the survey? It would be interesting to find common factors, but who knows? In coordinating the Long Term Survivors Network, I have been strengthened by the many letters that have arrived from people all over the world. Many comments keep recurring; many remain well, many don't accept the science as it stands and many have seen so many of their friends die from what they believe to be the drugs. When talking about themselves, many refer to a sense of humour and some talk of a spirituality. In addition, it seems that there is often a battle with those around who continue to push the narrow orthodoxy, creating a sense of frustration as views and experiences are dismissed.

In setting up the Long Term Survivors Network and gathering the information on long term survival, I have been challenged on using the term *survivor*. The argument being that if the hiv test is not an indication of future ill health then we haven't survived, as we had nothing to survive. I would dispute that, for we have survived an assault on the very basic human spirit; ostracism from society, poisoning of the mind by fear, attempts to control our sexual and reproductive needs, as well as pressure to take toxic and experimental drugs. No mean feat! The point is, it's a possibility that we may not be survivors of hiv but we are survivors in life. We should not forget that alongside the questions around hiv and the dilemmas and decisions we make, we are dealing with other things that life throws at any of us. As the years go by, I hope I will be able to shrug off the term as the evidence of living with a positive test result unravels. Time is the key. As more of us question the science, understand the dangers and rely on ourselves, we may find a way through this mess.

There is a saying that Nelson Mandela used: "Our deepest fear is not that we are inadequate. Our deepest fear is that we are powerful beyond measure. It is our light not our darkness, that most frightens us". Maybe strength, a sense of individuality and responsibility to ourselves, rejecting victim status, are the hallmarks of the survivor = qualities not generally accepted within societies where victim status is a necessary dynamic. Maybe the problem, as viewed by others, with the survivor who rejects orthodoxy is that she or he refuses to play the game; and in doing so is dismissed as mad. But then maybe there is some mileage in the words of the singer Seal when he sang "We're never going to survive unless we get a little crazy".

Back on the subject of analogies, I find motorcycling also covers aspects of survival and understanding of life. One of the first survival techniques I was taught as a novice rider was to assume that everyone on the road was a potential danger and there can be circumstances beyond our control. With motorcycling you have no choice but to take responsibility. The car waiting to pull out at the side road may not have seen you and you could end up dead or severely mutilated. Breaking on ice one January morning, shortly after qualifying, I came off my bike and slid into the path of an articulated lorry. Many who have experienced a similar death-defying situation may recognise the way the senses go into slow motion; every detail is crystal clear and there is a strange lack of fear. I foolishly mistook the weather that cold sunny winter morning and came off lightly as the lorry stopped before it crushed me. It taught me a valuable lesson on road safety but it didn't stop me from taking to the road again for more adventures. I was just wiser to the conditions. You try to become wise to the circumstances, you take care, and you accept the consequences. Always being aware that sometimes, even with the all the precautions, the knowledge and experience, something can go wrong. Motorcycling, like life, can be an exhilarating and at times dangerous activity, but above all you delight in the pleasure you can get out of it.



Taking responsibility for ourselves, whatever the decisions we make, we bear the consequences. But the great joy is you more easily accept when you have made a mistake and rejoice in the right choice. There is a sense of satisfaction, a sense of achievement. As Stephen Rogers in his article in this issue on *Coming Off Combos* took the decision to come off the drugs he believed were harming him, he says he is now stronger in his intuition. For him, he believes it paid off. It is a very powerful position to be in.

The sense of satisfaction when we let go, uncluttering the drawers crammed with those things that never did come in useful, is worth it. I know my strengths, I know my foibles, I accept the choices I make are mine. I accept what comes and will rejoice when my intuition rebounds.

*****If you have had a positive test result for at least seven years and have not taken anti-hiv pharmaceutical drugs and would like to participate in the survey, contact Clair at Continuum for the questionnaire which is now available.

Totalitarian science and media politics

Martin J. Walker

Photo : Nigel Luckhurst

"Newspeak was the official language ... The purpose of Newspeak was not only to provide a medium of expression for the world-view and mental habits ... but to make all other modes of thought impossible. It was intended that when Newspeak had been adopted once and for all and Oldspeak forgotten, a heretical thought should be literally unthinkable." *Nineteen Eighty-Four*, George Orwell.

The struggle to change the way in which we perceive AIDS related illnesses and to create a debate about the nature and reality of HIV, has flared for over ten years. The thinking of the dissidents is discursive and developing while the views of orthodoxy are censorious, closed and ever more deeply mired. Despite small victories by dissidents, raising an alternative voice in this field of science is like trying to talk in a polar blizzard. Subjected to a constant bombardment of scientific fact, even the most libertarian of us are likely to be bullied into the torpor of consensus.

The consensus created around AIDS and HIV, their diagnosis and treatment is a *virtual* consensus, the struggle against it essentially a post-modern struggle; involving at its heart an informational cold war. For the dissident, the enemy is disguised and dispersed, there is no palace of single principle which might be sacked. The fact that it is a battle based in the mind, in culture and in texts, might at first appear surprising when we consider that it is at base an argument over physical illness, over people dying or not dying. However, even the nature of this physical illness, is post-modern rather than modern; covert and multi-centred, rather than evident and causally obvious. According to the orthodox view, the physical body is attacked on a meta level, via the immune system, a kind of body-wide web. And their could be no more post modern phenomena than the virus itself, which cannot be isolated and physically manifest and which, according to orthodoxy is able to constantly reconstruct itself and assume multiple forms that fit the personal, social and historical character of its hosts.

Being aware of these complexities, it comes as no surprise to realise that what is essentially a political conflict - to do with the way society is structured - around the meaning and reality of 'HIV' is an uncommonly difficult one. A well developed conflict, such as this, principally between professional medics, medical scientists and mainly positive tested dissidents is inevitably staged in many arenas. But in each of these arenas, science, media or medicine, it has been a David and Goliath battle, a Premier League team against a village green side. Not because the dissidents are less skilled, less intelligent or even less committed but always because we have less power. This imbalance of forces is now commonplace in battles around medical science; a small number of affected individuals take on a multinational drug company; gulf war veterans take on the State, the chemical and pharmaceutical companies; sheep dip affected farmers take on the agri-chemical industry.

To call Joan Shenton a journalist would be to belittle her commitment and reduce her life to a style of presentation. She is more accurately described as a campaigning journalist, a dissident writer and film maker. She began work in the media as a consumer journalist and was gradually drawn to investigating medical treatments and the pharmaceutical industry.

After a number of notable television programmes about

medicine, in 1986 she came into contact with the arguments surrounding 'HIV and AIDS'. Working with Jad Adams and Michael Verney-Elliott she embarked upon what was to become a series of films which unfolded the dissent position of 'HIV' diagnosis and AIDS related illnesses. She has been a committed AIDS dissident from that time. Now over ten years later, despite her many awards and her commitment to truth she has become a media pariah. A campaigning writer and film maker in a world of consensual apparatchiks.

The first dissident film about AIDS made by Shenton and her independent production company Meditel, was *AIDS The Unheard Voices*. Directed by Jad Adams, it mapped out the landscape of American groups who espoused dissenting hypotheses about AIDS. In 1987, when this programme was broadcast, it provoked no adverse reaction. This year, however, was the year that AZT was granted its license, the four or five preceding years of AIDS 'discovery' and hegemony were populated by only a handful of scientists whose power in the field had not been clearly established. The orthodox hegemony around HIV and the treatment of AIDS was to be painstakingly erected over the next five years.

In 1989, Meditel began work on *The Aids Catch*, a film which explained the scientific views of Professor Peter Duesberg, a renowned retrovirologist who was then becoming established as one of the leading AIDS dissident scientists in America. The thesis of the film, that 'HIV' was not the cause of 'AIDS' and that 'AIDS' was not a sexually transmitted disease, set a clear agenda for dissent. When it was shown on Channel 4 the film impacted violently with the view painstakingly shredded into the consensual consciousness by Britain's leading medical research scientists like Robin Weiss, Richard Tedder and Jonathan Weber - all of whom, by that time had a commercial as well as a scientific interest in the development of 'HIV' antibody testing kits.

A number of vested interests complained about the film to the Broadcasting Complaints Commission, The Wellcome Foundation complained that the film was *unfair to AZT*, Positively Women and the Terrence Higgins Trust, then close to Wellcome, had their complaint presented by Duncan Campbell. The decision of the BCC went partially against Meditel and on nine of twelve counts, they were found by the august jurists - by a stroke of peculiar English usage - to be unfair in their treatment of the subject of AIDS.

The next two programmes attacked the very heart of the consensual view of 'HIV and AIDS'. *AZT Cause for Concern* which articulated dissident fears about the dangers of Wellcome's first AIDS drug, won a BMA award in 1992. The film was desperately attacked by the Wellcome Foundation.

Finally in 1996, Joan Shenton produced *AIDS and Africa*, which tried to take a measured look behind the hype of pharmaceutical companies and the fiscal demands of developing countries, and realistically assess scientific claims that the projected heterosexual plague which had not materialised in Europe or America was now decimating Africa.

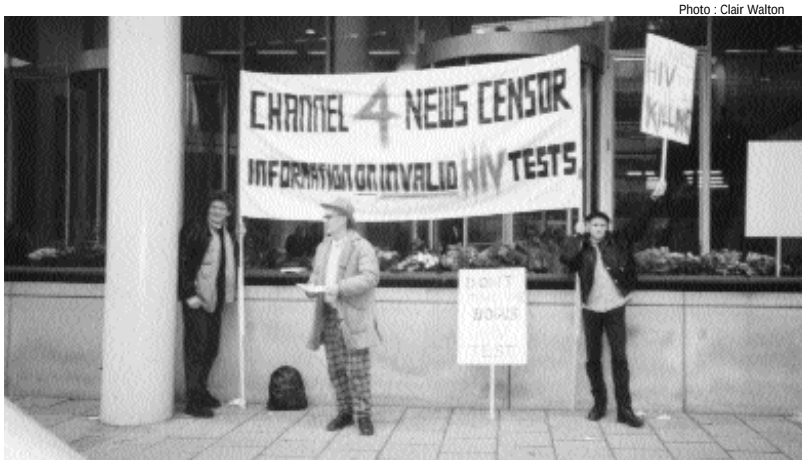
AIDS and Africa turned out to be Meditel's graveyard. In the assault on the film, all the diverse hegemonic groups welded themselves into one cabal. Says Shenton,

> Aids and Africa *earned enormous criticism from the ODA, Linda Chalker and company. The aftermath was vicious, I had calls from the Foreign and Commonwealth office, in which civil servants screamed down the phone at me.*

After *AIDS and Africa* Joan Shenton was frozen out of the media. Although together with Huw Christie, editor of *Continuum* she had begun work on a programme about the fallibility of testing kits and was to receive development money at intervals from Channel 4 over the next three years for this film, it became increasingly clear that the views which she and Meditel represented were too volatile, too close to the bone, for scientific orthodoxy to allow them into the information market place.

Determined to keep the dissenting view in the public consciousness, Shenton took a year off filmmaking to write the book *Positively False*. In her mind and the minds of her publishers, the book was linked to the development money which she had received from Channel 4 for the possible film on testing kits. In 1998, the book came out to a public silence.

Photo : Clair Walton



The demonstration outside the ITN building on Gray's Inn Road, London on December 1st was a light hearted affair to draw attention to the withdrawal of Joan Shenton's film item.

During the three years that Meditel had been receiving development money for the programme on testing kits, David Lloyd the commissioning editor at Channel 4, who had always supported Meditel, had gradually turned away from the dissident perspective. Rather than see the testing kit programme as a context of personal stories and a way of questioning the whole concept of a Human Immunodeficiency Virus, Lloyd chose to take an entirely scientistic approach to Shenton's qualitative case histories.

> *We were told that our sample was too small to make any impact. Despite the fact that our tests threw up a series of anomalous results. Because the sample was so small David Lloyd did not want to screen the programme. He was also talking to Richard Horton [editor of The Lancet] at this time and gradually coming to the conclusion that we were wrong and that the orthodoxy was right.*

Despite his diminishing sympathy for the dissident view, in August 1998, Lloyd expressed the determination to commission a *testing kits film* for World Aids day in December that year. Christie worked with Shenton on outlines for the programme which were then discussed with David Lloyd. In September, however, Lloyd succumbed to unspoken pressures and suddenly ditched

the film, telling Meditel that Channel 4 had run over budget for the year.

Having conceded the battle to ditch Shenton's film, David Lloyd approached the editor of Channel 4 News suggesting that Meditel be given space on the principal evening news programme to pursue the dissident argument. As David Lloyd explained it to Joan Shenton her*authored* news item on World Aids would be followed the next day with an item putting the orthodox view, both pieces would then be followed that evening by a late night discussion.

For her short news piece*, Shenton focused on the public statement made by Eleni Eleopulos, Val Turner, Gordon Stewart, Etienne de Harven and Stephan Lanka, at

the 1998 Geneva World Aids Conference. For the first time a group of internationally renowned scientists, officially a part of the World Aids Conference, stated that 'HIV' had never been satisfactorally isolated and that tests were unreliable.

Despite the apparent agreement about the *three piece* presentation, it quickly became apparent to Joan Shenton and Huw Christie, that the editor of Channel 4 News, Jim Gray, was not sympathetic to Shenton's authored piece. He tried to persuade them to do a straightforward science news item; the idea of a rebuttal the next day, followed by a studio discussion was gradually eroded and was now put forward as a news item followed by a short discussion in the news studio. Joan Shenton continued working on the film. The script had been developed and discussed with two different producers going through three revisions and the film was being made, until two weeks before World AIDS day.

We were on the fourth draft of the script before Gray suddenly pulled the rug from beneath our feet. We were told that the editor had serious problems with the piece we were working on. We were called in to see him and he said that he had had a 'tectonic shift' and suggested that he was feeling 'very wobbly'' I had told him that anyone ringing round to get people to appear on the discussion would get `a flea in their ear'. I had tried to warn him of the various arguments which were involved and what might happen when he spoke to some of the opposition; 'Oh we're used to that', he said. Despite this, the second producer, a man who always seemed unhappy to be working with us, began ringing round to get other opinions on our film. Orthodox scientists must have been shown the script as well as a number of news department journalists who disagreed with our views.

As quickly as it had been offered, the news item and the serious late night discussion unravelled in an unseemly dishonest dispute, and the apparent independence of the news journalists disappeared. Shenton was accused of showing bias, of taking sides and of `sleight of hand'. It was said that what she had called a serious science story was of no real importance, she was accused by Gray of using the News programme to 'settle old scores'.

Up to the last edit, Shenton and Christie remained optimistic about the film being shown. They appealed to David Lloyd, but by then, the best he was able to negotiate was for Gray to use bits from the film in a composite 'balanced' news item. Shenton defended the integrity of her film to the last and through Meditel's lawyers invoked the infringement of moral rights under the Copyright Act, refusing to let Channel 4 disembowel it and use it for their own consensual purposes.

What hurt Shenton more than anything else in this sorry saga of censorship was the unaccountable and undemocratic way that the editor of Channel 4 News behaved. Neither Shenton nor Christie were told what arguments had been put forward against their film. Unable to address the criticisms, or debate the issues, left them impotent.

These contemporary editors are not brave, they are ruled by accountants. They are not used to sticking their necks out. They are not used to journalists who have an independence of mind, it is, after all, in the very nature of good journalism to dissent. They are apparently bright graduates with no imagination.

THE CONSTRUCTION AND MANIPULATION OF CONSENSUS

These news editors are unresolved about how to deal with ***different*** *views of the news. In the field of AIDS, they have settled for consensus science, it's the pits and its all we have now. What they don't want is campaigning journalism on the news, they want to give the public 'balance' not tools by which they might change things.*

The demonstration outside the ITN new building on Gray's Inn Road on December 1st was a light hearted affair, organised by *Continuum*, to draw attention to the withdrawal of Joan Shenton's film item. The demonstrators milled about in the freezing cold handing out leaflets to media workers entering and exiting the block-wide glass building. Inevitably a rearguard action, the picket was more what the French would call a *manifestation* than an attempt to stop people entering the building. It was wholly improbable that it would materially change anything, or convince the news hardened apparatchicks, going in and out of the building, that the truth about 'HIV' was being suppressed.

In the post industrial world science has metamorphosed into totalitarian politics. The apparent facts of science increasingly shape every aspect of our social and cultural life, without ever being tested by social models of accountability and democracy. Science, like all other previously undemocratic governing forces creates dissent. Those who are at odds with, but unaccountably subjected to, industrial science have become involved in a new 'class struggle' and in turn are subjected to the new censorship, surveillance, political exile and poverty of opposition which are the hallmarks of totalitarian systems. The disenfranchised fringe in contemporary society is composed not just of the poor and those who hold no stake but also those who rage against the authority of a corrupted industrial science.

Whereas the mass societies in the first part of the twentieth century, induced much of human kind to act as one physical entity, consensus in post-industrial society is manifest by invisible hegemonies of the powerful. These new hegemonies demand no uniforms nor do they ask for us to march in step; they are not made real by May Day parades or compounded by little red books. Consensus in contemporary society is no longer manifest as a collective physical phenomenon and might better called a *virtual consensus*. Contemporary collective assumptions are, however, as strong, as sinister and even less democratic than their historical counterparts.

Within the game plan of today's consensus, beneath the cliques of the powerful, we are allowed to think and act as we wish *as long as we offer no physical threat to power or question the right of the powerful to construct consensus in our name*. Visions of thought control on the model of 1984 appear now to be an unnecessary nightmare. There is no need in contemporary society for the powerful to subjugate the minds of the people as long as the people allow the powerful to construct a virtual consensus.

Together with cancer, in other places Aids represents one of the strongest consensual models - in this case of illness, its cause, diagnosis and treatment - in contemporary society. Scientists have created a model and a language by which we are pressed to understand a certain set of illnesses. There is no discourse, within or without the discipline, about these models and the right of them is enforced by a constant panicking of the consensual herd.

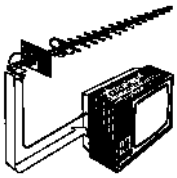
It is this virtual consensus around 'HIV and AIDS' which the media reflects. News programmes in particular constantly and authoratitively state assumptive consensus which cannot possibly reflect the diverse views which have developed amongst the affected population. The different view, the view of the 'other', is shown on television and raised on the radio, only in 'deviant' programmes. This view is always subliminally labelled as one which is going nowhere - "interesting but quite mad, a view which we are obliged to bring you because we live in a democratic society". The truth is quite the opposite, the case for 'the other' is always presented reluctantly out of a perverse sense of 'balance' because the media is not democratic.

This lack of democracy is very clear in the case of 'HIV and AIDS'. Joan Shenton is the only person in the country who has been allowed to voice dissenting views about 'AIDS' on British television. The orthodox view, on the other hand, with the lionisation of physicians and medical research workers, together with martyred gay men, and still more innocent homosexual victims, is dripped into our consciousness, in ways as disparate as major news programmes, science documentaries, Sunday morning radio appeals, documentary soaps, domestic soaps and Hollywood feature films.

Like almost everything else on television news programmes leave us bereft of control over our own lives. They report with certainty what has happened through the eyes and mouths of the most powerful groups in society. Except for some notable and inevitable exceptions the news is rarely news but a presentation of the virtual consensus decreed by the most powerful. The news is brought to us, like a meal in a restaurant; we question the way it is served only when we we find the contents distasteful. News programmes become increasingly more polished at serving us news as if we shared in its making, as if its reports were part of our common history.

In a fast disintegrating post-industrial world, power increasingly only has the media by which to shepherd us along the path of virtual consensus. But like all good prisoners, we ourselves play a significant part in making consensus work. We the public, in all our diversity, have struck a contract with our governors - realising that life is short, we refrain from criticising or disturbing consensus as long as it does not disturb us and we are left alone to be 'ourselves'.

It is as a consequence of this social contract that we all come to the jaws of consensus alone but shouting our own individual protestations. If AIDS dissidents are to terminally fracture consensus on the issue of 'HIV and AIDS' we need alternative media and its access to a wider public. We need to support our film makers, writers and dissident research workers. But as well, we need to shake off the torpor of virtual consensus and respond with physical and collective strategies.



*** You can obtain a VHS copy of the 9 min. Meditel feature for Channel 4 News by sending £5.00 for handling and your address to Meditel Productions, 4A Hollybush Place, London E2 9QX**

Colonising 'souls': a subtle mission

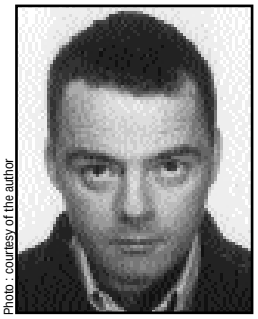


Photo : courtesy of the author

Kevin Corbett worked as a Lecturer at the Mildmay Mission Hospital AIDS hospice in East London but decided to get hired elsewhere after experiencing Mildmay's management practices. Here he critically reflects on Mildmay's new African role.

The Kampala-based Mildmay Centre was opened last August by Her Royal Highness Princess Anne. It was developed by Mildmay International, the overseas branch of the London AIDS hospice, the Mildmay Mission Hospital. This Royal inauguration recalls that of Broderip Ward by the late Princess of Wales, Princess Diana, at London's Middlesex Hospital in 1987. Both events attracted similar sanguine media coverage. For example, the phrasing of David Payne's *UK Nursing Times*' article on this Kampala venture recalls at once both the film *Out Of Africa* and the outrageous Establishment myth of Florence Nightingale's Crimean War 'heroics'[1]: 'the realisation of a British nurse's seven year dream to bring the philosophy of an East London AIDS hospice to the heart of Africa'[2]. Similar glowing and undiscerning reportage was beamed world-wide last August by CNN, BBC World and Sky News.

Virginia Berridge's history of British AIDS policy tells of individuals acting as 'AIDS missionaries', bringing 'such knowledge as existed' about the Syndrome back from the United States in the early 1980s[3]. Lawrence James's survey of the British imperial experience notes the way powerful humanitarian and evangelical lobbies had shared objectives and how missionaries actually effected the extension of imperial colonisation[4]. This article uses Payne's account of Mildmay's Kampala centre and aspects of both the above insightful and pertinent histories to critically reflect on Mildmay as a post-modern 'AIDS mission'. The aim is to explore the essence of Mildmay's caring Christian ethos unconstrained by any circulating perceptions about its 'quality of care'.

The Missionary Position

The Mildmay Mission Hospital, based in London's now fashionable Shoreditch district, was founded in 1866 by a Christian preacher, Rev. William Penneyfather from Mildmay Park, north London. Penneyfather recruited female nurses to care for poverty-stricken cholera sufferers dying in the slums of Shoreditch, also notorious for its rife prostitution and drunken lechery; one of ye olde London's original red-light districts beloved of Jack The Ripper. Incongruously, it was here in the mid-19th century the Mildmay Mission became ensconced as a Christian charity. After the Second World War it merged with the newly-formed British National Health Service (NHS) to become a small general hospital, incorporated into the medical and nurse training circuits of The London Hospital of the nearby Whitechapel district. Of significance was Mildmay's retention of its particular Christian ethos. By the late 1970s, British hospitals were combining to develop bigger catchment areas to ensure viability. The Mildmay's local catchment was too small. It closed only to re-open in the early 1980s as an independent Christian charitable hospital, on lease from the local Health Authority, specialising in caring for the young chronically sick and severely disabled[5].

The late 18th and early 19th century anti-slavery campaigns coincided with a global resurgence of Christian missions who proffered conversion as 'one of the highest forms of Christian service'[6]. The appeal of divine injunction is a powerful one for many evangelicals who may experience a 'sense of personal conversion in which they feel God's grace come alive inside them'[7], like Thomas Kendall, a British missionary in New Zealand, who claimed that the soul of a poor heathen was 'as valuable as his own was to God'[8]. Thus, the spiritual, as opposed to religious, potential or value which others recognise in you (your soul), regardless of self-perspective, may be an important characteristic of a Christian evangelical approach.

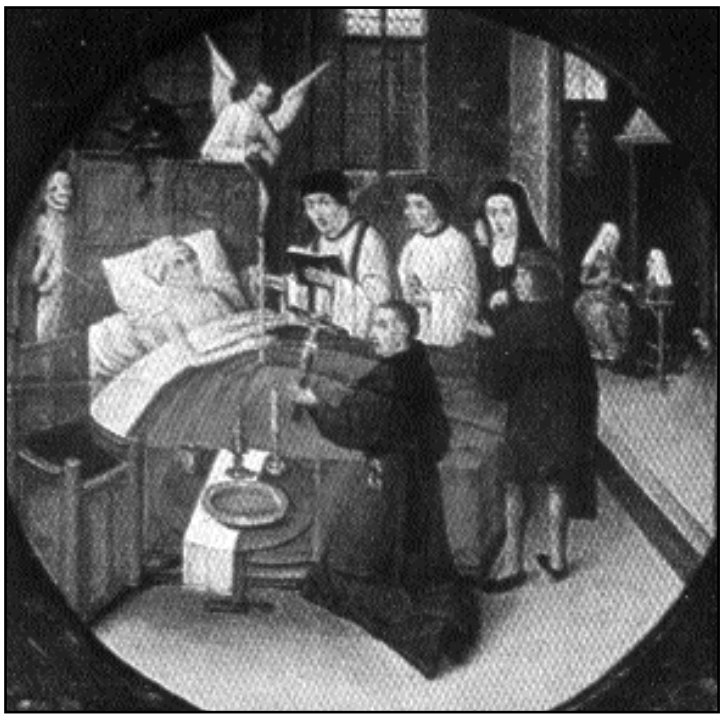
Throughout its history, the Mildmay Mission has cared for the sick premised on a Christian ethos which places God at the centre of the universe, unlike a humanist ethos whose universe centres on Man alone[9]. Mildmay's 'Christian ethos' is an 'act of faith..(that) provides the motivating force behind all our initiatives. We translate our faith into action by aiming to make a real difference to the lives of people affected by the AIDS crisis'[10]. To evangelise means to preach the Christian gospels to persons or to win over people to Christianity[11]. Mildmay does not preach 'the gospel' to patients but like most Christian organisations it hopes (or prays) more people may come to appreciate Christianity. In this sense, Mildmay embraces an evangelical approach. It is not the same as 'to win people over to' something, which implies a more active, overt role or agenda. However, it is important to consider the form evangelical practice can take, whether it be overt or covert (subtle). An overt evangelical approach exceeds the recognition of an individual's spiritual potential and is coercive. A subtle/covert evangelical approach is less obtrusive, seemingly more ethical. It recognises the spiritual value of another person, irrespective of religious affiliation, and seeks to offer spiritual support if and when the individual requests.

The Mildmay's care appears to be Christian action suffused to a greater or lesser extent by such a discernible yet subtle evangelical imperative. This is qualitatively different from the flagrant evangelising of the sick and dying, which Mildmay appears to distance itself from. Mildmay's approach purportedly enables it to "success-

fully work alongside individuals of other faiths or no faith at all because we have mutual respect for each other's professional expertise and experience"[12]. A non-medical, residential and salaried Chaplaincy Team attend the daily hospital rounds, case conferences, and function as part of a multidisciplinary team involved in pastoral and spiritual care, whilst Mildmay's Christian counsellors undertake formal patient counselling. Christian faith at Mildmay is perceived as a profession of equal status with others such as medicine; and like medicine itself, one which is fundamental to the everyday management of the unit and perceived as a powerful unifying force. My own experience was that this negatively affected the educational environment at Mildmay by attempting to prescribe a 'biblical' approach to many issues e.g. sexuality.

The Missionary Economy

When AIDS emerged in Britain as the number one hot political and social issue of the 1980s, the Mildmay Mission Hospital's Board of Trustees quickly secured resources from the local Health Authority to refurbish part of their hospital as a dedicated hospice for AIDS patients. The perception at that time was of few UK hospices wanting to care for terminal AIDS cases. A 'new' era was forged for Mildmay UK in keeping with its Christian ethos. But this bred controversy in London's Gay Community. A demonstration by gay men outside the hospital gates occurred around the time of an exposé by *Capital Gay*, a London gay community newspaper, on CARE's apparent links with the hospital. CARE is openly a Christian evangelical organisation, but one more than tinged with homophobia. After the fuss, the hospital became ever more eager to present itself as non-judgmental and gay-friendly. It successfully enlisted the late Diana, Princess of Wales, as a most Royal patron. Quietly, within London's AIDS facilities and community health services, the 'Mission' in the hospital's title was dropped, possibly considered as ideologically inappropriate for what was becoming Mildmay's new, post-modern role. The hospital became increasingly known as 'Mildmay', even though the full name 'Mildmay Mission Hospital' is writ large on the building and today is clearly visible from the main street passing the hospital entrance.



Contest between angel and devil (the dark figure left of angel) over a dying man's soul. *Tabletop*, by Hieronymus Bosch (Prado, Madrid)

Mildmay's current success may be due in part to its politically astute and socially influential Board of Trustees. The Lord McColl of Dulwich is today the Chair of the Board of Trustees. As well as being the British Conservative Party Opposition Spokesman for Health in the House of Lords, he is one of the University of London's Professors of Surgery at the prestigious Guy's Hospital. Also associated with the hospital is Baroness Cumberledge. In neo-Dickensian style, these eminent nobles and others have been known to personally serve Christmas Lunch to the Mildmay staff (experienced by this author). It may be unsurprising that in the late 1980s the hospital became the British Department of Health's (DoH) official AIDS favourite, when the government's Social Services Committee re-evaluated AIDS resourcing, citing Mildmay as the 'model' for future AIDS hospice care in the UK[13]. More recently last Spring, the Lighthouse, London's own gay-clone version of New York's Gay Men's Health Crisis, was reduced to permanently down-sizing its future inpatient activity due to cash restrictions imposed by the UK's National Health Service Commissioners. At the same time the Mildmay Mission Hospital, like a *wraith* of London Lighthouse, expanded its operational services. Unlike in the United States, where AIDS hospices have closed for lack of business, a British counterpart is not just thriving but is developing a branch in Uganda.

The operational flavour of Mildmay may be interpreted according to one's specific ideological take. For example, on Gay Sexuality. The hospital's referral algorithm lists several choices for inpatient facilities - the Adult Residential Unit, the Family Care Centre and The Conservatory (not a hothouse for exotic flora but a safe haven for the 'HIV brain impaired'). On a daily basis, gay men with HIV test-positive diagnoses are usually admitted to the Adult Residential Unit and not the Family Care Centre which is a higher grade facility in respect of its hotel services. This reveals to some that perhaps Mildmay perceives gay men as 'single' without the ensemble of the heterosexual 'family', a possible reflection of society's wider social order that affirms and bolsters the notion of the Christian (hetero-sexual) family, whilst gay men's 'families of choice'[14] remain organisationally un-affirmed; especially in the UK, which still has a lot of catching up to do compared to the US regarding the power of the gay consumer voice in the health industry.

By the mid-1990s invitations to develop Mildmay's work in Uganda, Africa, led Mildmay's UK Medical Director, Dr Veronica Moss, and its head nurse, Ruth Sims, to create Mildmay International. Sims became the high salaried CEO of this airport-sounding venture, separate from its Shoreditch-base hospital, now identified as Mildmay UK. Of the Kampala centre, Sims reveals an important aspect of the Mildmay philosophy, an example of what in postmodern missionary terms is surely post-imperial 're-colonisation': 'It's been easy to transfer the Mildmay's philosophy here, because 90% of the local people are Christian and already have a great regard for spiritual care'[15]. The Kampala operation is financed by the British Council and the UK government's Department for International Development[16] whilst London's Health Service Commissioners continue to bankroll Mildmay UK.

The wholesale export of models of health provision to Africa may involve not just the dissemination of orthodox

medical knowledges, but attempts to transplant the social, economic and cultural nexus which underpins specific conceptions and understandings of disease and illness. The latter act to sustain powerful biomedical meanings, like that of AIDS as an overwhelmingly terminal retroviral disease requiring antiretroviral therapies, in the face of local understandings like Helen Jackson's of 'SafAids', South Africa: 'Many of us working in the AIDS field in Africa do not identify with the Western AIDS establishment. We certainly have no vested interest in promulgating the desperately pessimistic view that millions of people in Africa are going to die from this epidemic'[17]*. An imperative of the post-modern missionary economy appears to be a willingness to support the transplantation of exportable values and technologies judged by the purveyors as appropriate to developing markets, the crux of an AIDS-biomedical-industrial-complex.

Missionary Practices

Under the 19th century British Empire, the evangelical imperative of the Christian conscience demanded a moral reformation and a conversion of the individual[19]. Since its emergence, the Mildmay Mission has exhibited an imperative to care for the 'unpopular sick': those stigmatised with cholera and AIDS. Although moral reformation may be a component of many forms of modern professionalised care, its post-modern form may be more subtle. For example, at Mildmay UK the management apparently seems uncomfortable at officially endorsing or actively promoting the availability of British gay community papers like *Boyz* and *The Pink Paper* in the open ward areas, unlike the more liberal practices of its openly gay sister-organisation the Lighthouse; it seems Lighthouse's Christian sister might still be in the closet, despite a majority of its inpatients almost certainly being gay men, however the statistical cookies are baked to crumble. Both care institutions may represent the limit of British medical tolerance of gay sexuality, begrudging and cold at best.

Inpatients at Mildmay UK would go on evening leave to the once notorious London Apprentice, the infamous has-been gay bar next door to Mildmay UK, for an hour or two, or a bit more...in the morning Ward Round, news of unofficial overnight 'stop outs' may be greeted by blank looks. Medical censure over alcohol use and admonitions over self-discharge never quite give way to recognising the significance and value of inpatients' cultural context. Mildmay's presence as a major London AIDS gay care provider at gay community events like London's annual Gay Pride occurs only via committed staff who support such events out of respect for the hospital's work and its clients. Mildmay has personnel hiring practices some may find extraordinary. Bankrolled mainly by the British health service, the Mildmay will appoint to Senior Management vacancies only those who are 'practising Christians'. Many such a manager openly displays the fish insignia on his or her lapels or car windows, marking them as a 'fisher of men' (*Matthew 4:19*). Job applicants' religious affiliations are questioned; sensitivities over spiritual matters and sexuality are also discussed at job interview.

These issues may call into question the nature, efficacy and appropriateness of counselling proffered gay men within such an environment, as well as act to deter some prospective job applicants. Such practices may conversely be construed as open, honest, and within the remit of a Christian independent charity operating in the UK 'labour market', again dependent on ideological perspective.

If the Christian ethos of Mildmay is informed by at least some element of evangelical imperative, the issue of proselytising the sick and dying is an important one. Mildmay UK dissociates itself from those who proselytise as implied by its Mission Statement. Mildmay asserts its ability to work with those of no faith, saying it 'respects the rights and beliefs of each individual'[20]. Mildmay UK's chaplains give spiritual care to all, including those of no set religion who yet may profess faith in some sort of Christian God. Following on from the earlier discussion of an evangelical approach, others may recognise your 'spiritual' worth, despite self-perceptions. This signifies a boundary for spiritual 'fishing' by any wannabe 'fisher of men' (*Matthew 4:19*). You, or your 'soul', may be perceived as having a specific currency value in as much as others perceive a Christian god to whom you have, or your soul has, such a value. Popular talk, called 'figures of speech', about souls embodies ideas about the soul's perceived 'currency' or value, its possible theft or even its domination. For example: [the soul] the spiritual or immaterial part of man held to survive after death: sell one's soul for - the making of any sacrifice to get; [the soul] the intellectual part of man, vital principle and mental powers: cannot call his soul his own - being dominated by another[21]. Like much of contemporary palliative medical care, Mildmay's spiritual emphasis may represent a postmodern enactment of the *Ars Moriendi (Art of Dying)*, a widespread mediaeval literature whose purpose was partly the assistance of those considered to be at the point of death. It often depicted a contest between angels and demons over the fate of men's 'souls'.

Other British out-Christian AIDS facilities and personnel are less careful than Mildmay about laundering their attitudinal wares in public. For example, ACET (Aids Care Education and Training) is led by Dr. Patrick Dixon and is an overtly evangelical organisation, not linked to Mildmay. ACET produces what some castigate as fear-based 'sex education' and Dixon himself openly blames AIDS on sexual promiscuity. Dr Rob George, a Palliative Care AIDS Consultant of London's Camden & Islington Health Authority, which funds many gay-utilised AIDS facilities in the capital, was formerly a Mildmay Trustee. He was featured in a 1991 British tabloid exposé by the *Mail On Sunday*[22] of the apparent cult-like practices of certain Christian NHS doctors. George was quoted relating how difficult it was to separate one's beliefs from professional practice. A phrase one may hear spoken, 'I care for the sinner and not the sin', may be on the lips of British Christians in AIDS care, whether actually spoken or not. It is a self-righteous gloss on the power dynamic between professional and patient within which the covert need or intent to evangelise and proselytise might lie well hidden, unseen, almost like a 'virus'.

Missionary 'Re-Genesis'

According to James, the Christian missions of the 19th century British Empire were not only perceived as redeeming souls but also as regenerating whole races. He quotes an 1819 account of the Cape Colony where the Moravian missionaries 'converted the degraded Hottentot into an active moral member of society'[23]. Post-modern 'regeneration' may take several forms. The first is apparent in Payne's article on the Kampala Mildmay centre. It is the peculiar 'regeneration' brought about by the very real post-modern economics of illness: 'already the centre has clinched a £250,000 contract from Kenya to train health care workers'[24]. This centre 'is also planning to offer courses, on a free basis initially, to give potential customers, such as African health ministries, an idea of the training on offer'[25]. The centre's contract with the Ugandan

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*Jackson's comments followed the cover article of last December's *New African* monthly. Its Deputy Editor, Baffour Ankomah, published questions on both the specificity of the patented HIV test-kits as well as the estimates of 'African AIDS' from the UN-bankrolled 'family planning evangelists'. His article asked 'Are 26 million Africans dying of AIDS ?'[18].

government's Health Ministry is for ten years: 'Until then, income generation is the key'[26].

The second is where 'regeneration' assumes a biomedical spin, via missionary intervention, as expensive hard-to-get pharmaceuticals become increasingly more desirable and sought after, thus potentially restricting the resources for indigenous therapeutic options. In the Kampala's Mildmay centre, biomedical solutions for AIDS based on its presumed retroviral causation appear to dominate even though its Medical Director privately acknowledged in 1995 to this author the multifactorial aetiology of AIDS[27]. For example, AIDS treatments are described by Payne *only* in connection with antiretroviral therapies: 'combination therapy is a luxury out of reach of most ordinary East Africans and can cost up to £250 a month, although the centre is negotiating with the relevant drug companies to get cut-price deals for certain treatments'[28]. This is a sort of post-modern 'discount pharmacy store' for those not on welfare because there is none: the poor and needy. The centre will also be running what Payne quotes Sims as calling a 'Robin Hood' clinic for private patients[29]. Robin Hood was an English Medieval forest outlaw who stole from the rich to give to the poor. One can only imagine what Sims is implying here.

The third form of regeneration may use specific values transplanted from the 'developed' world. For example, part of Payne's description of Mildmay's Kampala centre may read as insulting to some by apparently assuming indolence on behalf of the local population, as well as from its apparent promotion of what common sense tells us must be already widespread cultural and social practices, like cooking and growing crops; otherwise surely wouldn't people have already starved? But according to Payne, these are now called 'life skills' by Mildmay. For example: 'As well as counselling, the centre will also offer nutritional advice, physiotherapy and occupational therapy.Patients will also be able to develop 'life skills', such as cookery and growing crops, mindful of the fact that they will need to earn a living to support themselves independently in the community'[30]. This resembles teaching granny 'life skills' i.e. to suck eggs. What is missing in this account is any demonstration of cultural appropriateness, given Mildmay's assertion of such about its own services on its Homepage, accessible on the world-wide web. Furthermore, as Sims describes local Ugandan AIDS services as offering 'excellent counselling', how can Mildmay then say its own counselling in Kampala does not duplicate 'anything already on offer'?[31]. As per many British AIDS services, even with the two sister-facilities of Mildmay and Lighthouse themselves, there is duplication everywhere. Hence recent disfunding by Britain's Health Service resource-police, the Health Commissioners.

James tells of British missionaries preaching the Gospel during British imperial rule whilst bringing congregations into contact with the values of the West. Assuming the British Empire is really dead, Mildmay's postmodern re-genesis resemble a post-imperial colonisation by financial, biomedical, cultural values, vested interests and élites. For example, whilst potential African markets for pharmaceuticals are clearly being organised and prepared, British professional values are potentially being transplanted wholesale into the very 'heart of Africa' which may have the undesired effect of superseding local ones. As Ruth Sims, herself a Fellow of the prestigious British Royal College of Nursing, says: 'At present, nurses here don't have any status at all. An average nurse's salary is £20 a month. We want to train them as clinical nurse specialists, to develop a Mildmay nursing service.'[32] Without decrying any need to increase local salaries, develop requisite training or to assume negative intent, Payne's article is profoundly disturbing given that it was written for a nursing audience. It proposes the development of professional roles, guided by British 'expert' assessments in Kampala of what constitutes 'status' and 'specialised knowledge'. This is crafted by Mildmay, almost like a British brand name stuck onto a 'locally-reared' product which the Ugandan Health Ministry is buying, effacing the indigenous status of existing caring practices, the latter most likely embodying their own specialisms. One outcome may be the professionalisation of caring practice using transplanted models of dubious local efficacy, all to the possible detriment of existing knowledge and practice.

Lastly, James describes how in the hey-day of the British Empire, the missions were encouraged to donate money through Bibles and other Christian literature which outlined the wretchedness and depravity of 'the heathen'. 'From the Pacific Islands and Africa, came stories of tribal warfare, cannibalism, domestic slavery and thinly veiled details of sexual promiscuity. There were in Central Africa vices which cannot be explained or named for shame'[33]. For some Christians, the archetypical gay man may still need to resemble a modern day 'heathen' about whom stories circulate of wretchedness, depravity and 'thinly veiled details of sexual promiscuity'. Yet Mildmay UK's work with the gay client group has enabled its successful growth and postmodern expansion into the 'heart of Africa', just as Penneyfather's work with cholera in the 19th century underwrote his Mildmay Mission's genesis in the 'very heart' of London's notorious East End. His successors' postmodern 'mission' may be questionable, yet in reality Mildmay is today bankrolled by the same British AIDS establishment that has shut some of the London Lighthouse facilities. Now, isn't Mildmay more so than ever the Christian missionary-wraith of London Lighthouse - its ambitious and expanding out-Christian wraith, alongside the out-gay, but visibly shrinking Lighthouse? And apparently more successful too, in the wider global AIDS economy, which endlessly seeks newer markets burnished by its post-modern ideologies. This is the essence of that which London's Health Service Commissioners are buying. Make of it what you will.

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21. Ibid note 11. p.1095.
22. Jones, B., Walker, I., Quinn, J. (1991) A Very Peculiar Practice? *Mail on Sunday* pp.8 - 10 & 18
23. Ibid note 4 p.188.
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25. Ibid note 2 p.15.
26. Ibid note 2 p.15.
27. Personal Communication. Dr. Veronica Moss, Medical Director Mildmay Mission Hospital, London.
28. Ibid note 2 p.15.
29. Ibid note 2 p.15.
30. Ibid note 2 p.14-15.
31. Ibid note 2 p.14.
32. Ibid note 2 p.15.
33. Ibid note 4 p.190.

The Political Taxonomy of 'HIV': Selling a Signifier without a Signified

Photo : Eric Flynn

Alex Russell

"What's in a name? The latest name for the AIDS virus is in trouble before the christening is over. It is understandable that Gallo should now be unwilling to use the recommended name for any but generic purposes." *Nature*, 1st May, 1986, Opinion, p2.

"AIDS Virus Has New Name - Perhaps. The name 'human immunodeficiency virus' has been recommended for the AIDS virus, but some prominent dissent raises questions about its acceptance." *Science*, 9th May, 1986, News & Comment, p 699.

"A thing is what it is not because of its place in the ideal classification system but because of its place in real history. The order of concretely existing things is from now on determined not by ideal essences outside them but by the historical forces buried within them." Gary Gutting, *Michel Foucault's Archaeology of Scientific Reason*, Cambridge Univ. Press, 1989.

The taxonomic classification of 'HIV' (22-23 May, 1986) was ostensibly a strategic invention to present a nomenclature that would unify a diversely identified putative 'retrovirus': human T-cell lymphotropic virus type III ('HTLV-III'), immunodeficiency-associated virus ('IDAV'), aids-associated retrovirus ('ARV') and lymphadenopathy-associated virus ('LAV'). The not so hidden agenda behind this politically expedient move was to enforce the 'belief' that an alleged 'human retrovirus' caused 'immunodeficiency'.

Thus the manufacturing of 'HIV' hegemonic (misinformed) consent reinforced a 'retroviral' *episteme* for 'aids' causation. However, 13 years on 'HIV' has stll not proved to be a human immuno-deficiency virus. If the function of a name is to designate its individuality, then clearly 'HIV' was a baptism by mistaken identity. The moment of fictional baptism was reported in *Science* (Harold Varmus *et al*., 9 May, 1986), in which eleven of the thirteen members of a subcommittee - ("empowered by the International Committee on the Taxonomy of Viruses") - nominated 'HIV':

> *We are writing to propose that the AIDS retroviruses be officially designated as the human immunodeficiency viruses, to be known in abbreviated form as HIV...The name is readily distinguished from all existing names for this group of viruses and has been chosen without regard to priority of discovery. The name is sufficiently distinct from the names of other retroviruses to imply an independent virus species...We hope that this proposal will be adopted rapidly by the research community working with the viruses.*

The letter was followed by

> *EDITOR'S NOTE: Myron Essex and Robert C. Gallo, who are also members of the Human Retrovirus Subcommittee, did not sign the above letter.*

The same letter was also published in *Nature* (1st May,1986) followed by a cautious Editor's note:

> *An earlier version of this letter asked that journals publishing it should make use of the name HIV a condition for the publication of research articles. Nevertheless, Nature will continue its present practice of allowing its contributors to use whatever nomenclature seems to them appropriate..."*

Science also rejected the use of the name 'HIV' as a "condition" for the publication of articles and deleted the request from the published letter. The original letter from the nomenclature committee asked:

> *that the editors of all journals that print this letter insist that published papers conform to these rules.*

Harold Varmus, Chairman, Human Retrovirus Subcommittee, told *Science* (9 May, 1986):

> *We're not a policing outfit. We can only strongly recommend that researchers use the name and that journals ask their authors to use it.*

While the international sub-committee wanted all journals and scientific papers to refer to 'HTLV-III' as 'HIV', Gallo, who sat on the sub-committee, disagreed by refusing to sign the letter announcing the new name, and refused to call the virtual virus 'HIV' (*New Scientist*, 15 May, 1986). Gallo wanted the new name to be "human retrovirus" ('HRV'): the power of naming gives one kudos and control over the name. Most committee members felt that 'HRV' was too "nonspecific". Joseph Palca ('Controversy over AIDS virus extends to name', *Nature*, News,1 May, 1986) reported that the name 'HIV' did not win hegemonic consent:

> *But HIV never had unanimous support from Varmus's subcommittee. Nearly half of the members prefered the current compound name, HTLV-III/LAV. Others, including Gallo, Essex and Temin preferred human retrovirus (HRV)...Steve Gillis of Immunex Corporation at Seattle, Washington, who is familiar with controversies over new names from his own experience with lymphokines, questions whether a name that is not supported by Gallo can win general support. In addition to Gallo and Essex, a prominent AIDS researcher who asked not to be identified indicated that he would not use the new name.*

Following the Gallo/Heckler paradigm by press conference announcement ("the probable cause of aids has been found") of April 23, 1984, *The New York Times* ('A Viral Competition over AIDS', April 26, 1984) was quick to spot the power-

politics of naming referring to the old dispute between 'LAV' and 'HTLV-III':

> *In the world of science, as among primitive societies, to be the namer of an object is to own it.*

While being the proud 'owner' of 'HTLV-III', opportunist Gallo did not rule out the possibility of switching to 'HIV' and soon fell into line:

> *It's not that I hate the name. If it is accepted widely I would gravitate toward it. (Science, 9th May, 1986).*

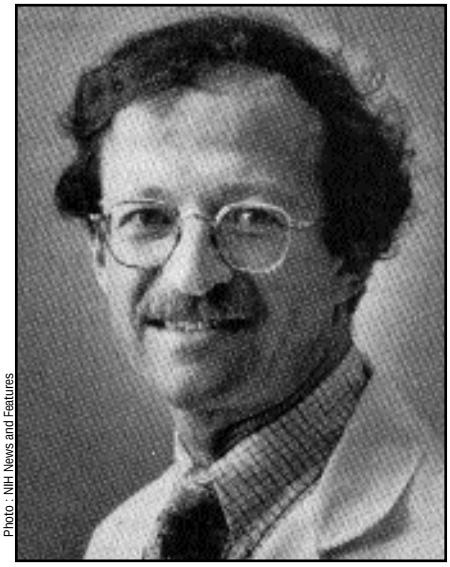

Photo : NIH News and Features

"We're not a policing outfit. We can only strongly recommend that researchers use the name

Max Essex objected to the name 'HIV' because he thought that it revealed "little or nothing about the nature of the virus and may even be confusing". (*Science*, 9 May, 1986). Essex and Gallo also objected to the name 'HIV' because 'HTLV-III' and 'LAV' had been widely used both in the primary scientific literature and in the popular press:

> *The terms are so thoroughly engrained in the literature that it may be impossible to change them in the minds of people who use them,* Essex explained. (*Science*, 9 May, 1986).

Pressure built. F. Brown, President, International Committee on Taxonomy of Viruses, wrote to *Nature* (20th June, 1986):

> *At a meeting on 22 and 23 May 1986 the Executive Committee of the International Committee on Taxonomy of Viruses (ICTV) endorsed the name human immunodeficiency virus recently proposed by a large majority of the members of a study group of ICTV headed by Harold Varmus (Letters, 9 May, p.697) as appropriate for retrovirus isolates implicated as causing the acquired immune deficiency syndrome (AIDS). The new name describes the host and a major biological property of the virus from isolates of human T cell lymphotropic virus types I and II...the committee recommends the use of the name human immunodeficiency virus as the vernacular name to replace HTLV-III and LAV.*

Contrary to F. Brown's claim, the "new name" could not describe "the host and a major biological property of the virus...". There was no isolated evidence then (as now) that this *amorphous stuff* was a putative 'retrovirus' that caused 'immunodeficiency'. The acronym 'HIV' is meaningless. The Executive Committee of the International Committee on the Taxonomy of Viruses should be charged under an appropriate jurisdiction for ratifying a fraudulent nomenclature.

There is no 'gold standard' definition of 'HIV', as Eleopulos *et al.* state:

> *There is no agreement on the precise taxonomic classification of HIV. Initially, HIV was reported as an Oncoviral type-C particle, then a type-D particle, and then as a member of a different Subfamily, a Lentivirus...*
>
> ('Has Gallo proven the role of HIV in AIDS?', Eleni Eleopulos *et al., Emergency Medicine*, 1993).

Harry Rubin, Professor of Molecular Biology at Berkeley, observed that to many, the name 'HIV' itself becomes the 'proof' of 'HIV'!:

> *One of the things I want to point out is the tricky business of naming a virus. Naming something HIV, Human Immunodeficiency Virus, Avian Leukosis Virus, Avian Myelocytosis Virus - all of those names fix in the minds of those who use them, or work with them, that this is the proof. It's like Noah naming the animals, a way of controlling them. It's really more of a political than a scientific problem.*

Lacanian cultural theorist, Slavoj Zizek pinpoints the idiocy behind the tautological belief that a 'name' of an 'object' is what 'it is' because 'it' says 'it is':

> *Here we encounter the dogmatic stupidity proper to a signifier as such, the stupidity which assumes the shape of a tautology: a name refers to an object because this object is called that...* (*The Sublime Object of Ideology*, Verso, 1989).

Meditel's 'AIDS'-analyst Michael Verney-Elliott dismisses 'human retroviruses':

> *I propose there are no human retroviruses..'HIV' is not Human, it has never been proven to be the cause of Immunodeficiency, and is not a Virus, but a misinterpreted artefact of human and simian cell cultures. Therefore the acronym 'HIV' is wrong on all counts."* (*'SIV' and Poliovaccination - A Shot In The Foot?*, unpublished, 1999).

Virologist and political activist, Dr. Stefan Lanka has long argued that 'HIV' is non-viral material:

> *I found that when they are speaking about HIV they are not speaking about a virus. They are speaking about cellular characteristics and activities of cells under very special conditions...I realized that the whole group of viruses to which HIV is said to belong, the retroviruses, in fact do not exist at all."* (*Zenger's*, December, 1998).

What has been taken for 'HIV' is *mimesis*: the construction of an object according to verisimilitude, rather than truth: 'mock-virus', 'virus-like particles', *etc*. Philosopher, Jaques Derrida's strategy for achieving the suspension of elusive acronyms such as 'HIV' is the device of placing words 'under erasure' , signified by crossing them through - thus invalidating their putative ~~meaning~~ and warning the reader not to accept them at face value. This textual strategy will help to emphasise that the correspondence between the *signifier* (~~HIV~~) and the *signified-stuff* (non-viral material, microvesicles, *etc*.) is spurious and arbitrary. Critical Theorist, Mark Cousins on the problematic of naming:

> *Who has the authority to name? The question of naming is deeply embedded in questions of authorisation. The name is an externally imposed form of bureaucratic registration. What is at stake is not the object but the name of the object...What is in the name is not there. To call upon a name is to fail because by definition, nothing is there. The name is that which is there in the absence of the object. There is nothing behind the name...The name is the last survivor."* (*'In the Name of the Object'*, Mark Cousins, 6th November, 1998).

As there is nothing behind the name ~~HIV~~ why do ~~retrovirologists~~ still hunt for the impossible object of desire - ~~HIV~~? They desire the *signifier* ('HIV') because the *signified* (~~HIV~~) does not exist. ~~Retrovirologists~~' insane scopic drive to penetrate ~~HIV~~ is just an objectification of a void; their 'scopic-drive' to unveil ~~HIV~~ becomes the impossible infinite quest to recover a

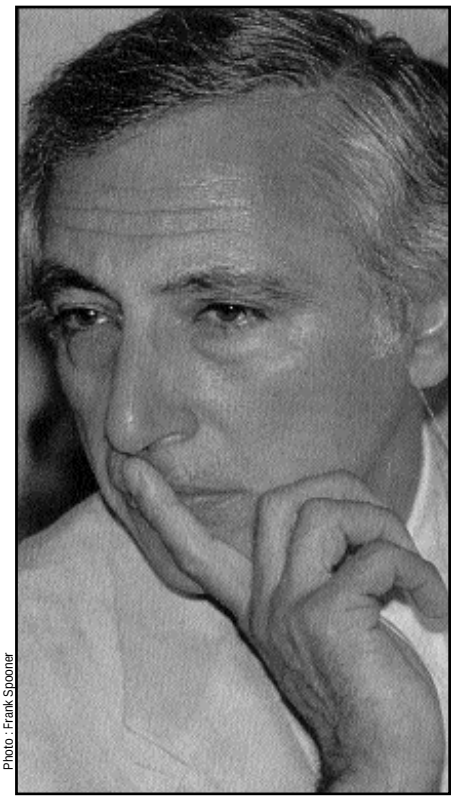

Photo - Frank Spooner

"It's not that I hate the name. If it is accepted

lost object of desire. The ~~HIV~~ paradigm embodies a 'theory of desire': it 'promises' without ever quite 'delivering'. Thus it is the absence of ~~HIV~~ that sustains the drive. According to Slavoj Zizek, ~~HIV~~ exemplifies psychoanalyst Jacques Lacan's '*object petit* a' (the object-cause of desire): "an object that is, in a way, posited by desire itself". Lacan stated that the '*objet* a' is not a Real object, but the "presence of a hollow, a void, which can be occupied...by any object". The desire to unveil the (illusory) 'HIV' (the '*petit objet* a') under the gaze of the electronmicroscope inevitably throws up a distortion of 'objective reality' because the ~~retrovirologists~~ gaze has inserted his/her *desired* (distorted) interpretation of the image *over* the imaged *signified-stuff*. Zizek's thesis on the economy of desire epitomises the 'retrovirologists' psychotic desire to penetrate the phantom ~~HIV~~:

> *The paradox of desire is that it posits retroactively its own cause, i.e., the object a is an object that can be perceived only by a gaze 'distorted' by desire, an object that does not exist for an 'objective' gaze. In other words, the object a is always, by definition, perceived in a distorted way, because outside this distortion, 'in itself', it does not exist, since it is nothing but the embodiment, the materialization of this very distortion, of this surplus of confusion and perturbation introduced by desire into so-called 'objective reality'. The object a is objectively nothing, though, viewed from a certain perspective, it assumes the shape of 'something'...Desire 'takes off' when 'something' (its object-cause) embodies, gives positive existence to its 'nothing', to its void...*
> ('How Real is Reality?': *Looking Awry*, MIT Press, 1991).

The 'HIV' *signifier* "perfectly exemplifies the way fantasy space functions as an empty surface, as a kind of screen for the projection of desires" (Zizek). Lacan stated that "what makes man desire, what is the cause of their desire...is this '*objet* a'...a phantom...which fascinates them". ~~HIV~~ is a phantom that can assume an infinite number of ~~mutable strains~~ to meet the ~~HIV~~ fantasists' ('hiv-researchers') infinite desires. The 150,000 plus papers written 'In The Name Of HIV' represent a 'scopic-drive' group-fantasy concerning the ontological and metaphysical manoeuvres of kitsch kamikaze ~~HIV~~ kinetics.

Thus the papers written 'In The Name of HIV' merely reveal the arbitrariness and distance between the *signifier* ('HIV') and the *signified-stuff* (non-'HIV') which becomes more and more dislocated and dissolved the more they try to penetrate the *signified stuff* until all that is left is the *spurious signifier*. The drive to *see* the *stuff* turns out to be just a drive to see the name: with the failure of the object ~~HIV~~ to be present - all they have left is the 'name'; and there is nothing 'in' the 'name'. Yet hundres of thousands have been sacrificed 'In The Name of HIV'. The name 'HIV' (as a curse) becomes a sacrificial effigy to which the 'diagnosed' are offered: just like those who are sacrificed to the 'Whicker Man'. Names *can* kill. The taxonomic construction of ~~HIV~~ is the most sadistic-hex-hoax since the invention of 'GOD'. Those Acting In The Name Of ~~HIV~~ have initiated man-made mass death. We must erase the names 'HIV' and 'GOD' before these names erase us. The names 'HIV' and 'GOD' existed *only* in order to be annihilated. Psychoanalyst and author, Julia Kristeva observes the name betrays the Thing-in-itself:

> *...the belief in conveyability ('mother is nameable, God is nameable') leads to a strongly individualized discourse...But in that very practice we end up with the perfect betrayal of the unique Thing-in-itself (the Res Divina). Why is the nomination a betrayal? Because if all the fashions of naming it are allowable, the verbal reality, the Thing postulated in itself, becomes dissolved in the thousand and one ways of naming it...*

In 1980 Gallo's ~~HL23V~~ was 'decommissioned', 'declassified', 'unnamed' and was agreed to be 'non-existent' - it is now time for the *sacrifical-signifier* ~~HIV~~ to be 'decommissioned', 'declassified', 'unnamed' because the stigmatised *signified-stuff* is non-existent. What will be the devastating consequences of unnaming ~~HIV~~?

The HIV/AIDS dispute moves to Harlem

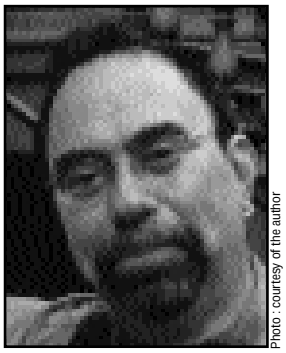

Photo : courtesy of the author

Rev. Dr. Michael Ellner

The key to stopping the corporate medical genocide called AIDS is to recognize that it's not only people at risk whose lives are being threatened.

Anyone who walks into a doctor's office is subject to the dangers of conventional medicine and science.

If we hope to end this broader crisis of which AIDS is a small part, we must first bust the trust in the unwarranted authority and virtual expertise of doctors, medical researchers and public health officials.

Over the last five months I had three trust busting opportunities at three very different but interconnected health forums. These alternative forums, sponsored by the Rev. Al Sharpton and organized by Curtis Cost, a health activist, writer and National Action Network Scholar's Committee member, focused on burning health issues among people in Harlem in New York City.

Any time the US government declares a war, be it a war on cancer, a war on unemployment or a war on drugs, the one thing you can be sure of is that the biggest threat to your health is friendly fire and collateral damage. Affected people in African American communities understand that the war on drugs is a war on people who use drugs; they know that the war on poverty is a war on people living in poverty. So it was no stretch for the people at these Harlem forums to see that the war on AIDS is a war on the people at risk for AIDS - something that most gay men either don't see or choose not to see.

The first forum (19 Sept. 98) challenged the safety and efficacy of vaccines, prescription drugs and conventional approaches to strokes, heart disease and other disproportionate health threats in the African American community. I was invited to speak about "HIV/AIDS". I showed how "infectious AIDS" is used to disguise the biologically destructive impact of social, political and economic injustice, and how the politically expedient reframing of starvation in Africa as a sexually transmitted disease is used to justify sexual terrorism and pharmaceutical genocide in America.

I helped to organize the second forum (19 Dec 98). A forum that was dedicated to the "HIV/AIDS" controversy. Many mainstream AIDS organizations and experts were invited to comment on the presentations and defend the official explanation but, alas, none were willing to participate.

As you can imagine there was a great deal of community pressure put on Rev. Al Sharpton to cancel this event. Thank God, Rev. Al Sharpton had the courage and conviction to sponsor the forum, agreeing with Curtis Cost that this information urgently needs to be made available to African Americans, even though he (Sharpton) didn't personally agree with all of the information being presented.

Likewise, Jack Felder (Chairman of the National Action Network's Scholars' Committee) gave his blessings and support for this direct challenge to his own views on HIV/AIDS. Felder, a beloved and respected member of the African American community is a biologist with biowarfare training and the man who first postulated that 'HIV' was created in a government lab. Felder was the only speaker who believed in HIV and infectious AIDS and gave a passionate talk defending this view. Thankfully, like Sharpton, Felder also believes access to all information is necessary for making informed decisions, even if you disagree with it.

Tom DiFerdinando, HBCS, Roberto A. Giraldo, MD, Christine Maggiore, Barnett J. Weiss, CSW, Orville Nelson, Keidi Obi Awadu, Lynn Gannet, Rev. Dr. Philip Valentine, Rob Johnston and I gave attendees a comprehensive understanding of who is actually developing AIDS "indicator diseases" and why, taking on HIV, HIV-testing, infectious AIDS, latex condoms, sexual terrorism and deadly AIDS treatments.

Photo : Mitch Jacobson

Rev. Al Sharpton, left, calling for a investigation into police brutality over a violent shooting in Manhattan, Feb. '99

You can purchase a six hour video copy (VHS) of these historic and lively presentations from HEAL for US$42 for international orders (includes postage and handling). Send orders to HEAL, P.O. Box 1103, Old Chelsea Station, New York, NY 10113).

The third forum (16 Jan 99) was on institutional child abuse in African American communities. It was designed to warn and educate parents about the systematic efforts of government to break up families in Harlem using accusations of child abuse/neglect as the excuse. As a substantial number of cases involve community hospitals and doctors taking children away from parents who object to the doctor's treatment "recomendations", Lynn Gannett and I were invited to speak out against the poisoning of pregnant women and children. Not only were we able to warn people about the horrors of so called "HIV-testing" and treatments, we were also able to educate the many activists and health care professionals presenting their own examples of medical fascism who were unaware of the HIV/AZT controversy.

I have noticed that African Americans are escaping the AIDS Zone far faster than gay men. I believe it is because African Americans haven't ignored the history of abuses to their community. If the dissident movement is to help gay men escape from the Zone and save themselves we must first move beyond viewing AIDS as nothing more than a scientific error, and take a cold hard look at the system that is killing all of us!

Salvation will never be found in the hands of doctors, scientists and pharmaceutical companies. That is not their function.

Photo - Joan Shenton

Looking back on the Oxidative Stress theory of Aids

Eleni Papadopulos-Eleopulos

Department of Medical Physics, Royal Perth Hospital, Perth, Western

The whole purpose of a scientific theory is to explain the mechanism behind observations and make predictions. If a theory cannot explain the observations for which it was put forward, or if its predictions are not fulfiled, then it should be abandoned. In this regard, despite the lapse of 18 years, there is still no proof as to the cause(s) of AIDS. Of course, there are theories but the biggest obstacle in overcoming the problem of AIDS, and proving its cause, is that one of these theories, the HIV theory, has been uncritically accepted since 1984. However, of all the theories, the HIV is the least likely.

The observations the HIV theory was proposed to explain were threefold. The high frequency of a malignancy, Kaposi's sarcoma (KS), a few opportunistic infections (OI), principally *pneumocystis carinii pneumonia*, and a decrease in a specific cell type, T4 lymphocytes, in gay men, IV drug users and haemophiliacs. It was accepted that no single infectious agent could possibly be the direct cause of the multiple diseases seen in AIDS patients. So, it was proposed that the "hallmark" of HIV infection was the destruction of T4 cells by HIV which inevitably led to the appearance of KS and the OI. The proposition that decrease in T4 cells was the hallmark of HIV/AIDS is difficult to comprehend. At the time when the HIV theory of AIDS was put forward:

(a) there was no evidence that retroviruses kill cells, to the contrary;

(b) many factors to which patients belonging to the AIDS risk groups are exposed are immunosuppressive. This fact was known to some of the best known HIV experts. In 1985 Montagnier wrote: "This syndrome [the AIDS diseases] occurs in a minority of infected persons, who generally have in common a past of antigenic stimulation and of immune depression before LAV [HIV] infection".[1] In the same year Weiss, Ludlam and their associates wrote (concerning patients with haemophilia): "Our finding...supports our previous conclusion that the abnormal T-lymphocyte subsets are a result of the intravenous infusion of Factor VIII concentrates *per se*, not HTLV-III infection".[2] One year later researchers from CDC: "...factor concentrate [Factor VIII] itself may be immunosuppressive even when produced from a population of donors not at risk for AIDS" [3] ;

(c) evidence also existed that many factors including infections, and trivial ones, such as exposure to the sun or radiation in solaria lead to decreased T4 cells. Although some of the T4 decreases were long lasting, the patients did not develop KS and OI;[4] a significant proportion of the "AIDS" patients, including patients with KS and OI infections, had normal numbers of T4 cells.[4] In other words, T4 decrease (immune deficiency) is neither necessary nor sufficient for the development of KS and OI. Thus the proposition that KS and the OI are the result of T4 decrease and that the T4 decrease detected in the patients belonging to the AIDS risk groups was caused by HIV infection was totally inconsistent with the data available even before the hypothesis was put forward.

For some time now, all HIV/AIDS experts, including Robert Gallo, accept that HIV has no direct or indirect role in KS.[5-7]

FAILED PREDICTIONS

The HIV theory predicted that HIV was sexually transmitted and therefore AIDS would spread throughout the heterosexual population. Obviously this has not happened. The prediction by proponents of the HIV theory that a vaccine would be developed by 1986 also has not been fulfilled. In 1984 Montagnier said that the only way to prove HIV is the cause of AIDS is to have an animal model.[8] Although no effort has been spared, no model of a retrovirus causing AIDS has been forthcoming. Indeed, the only animal model that bears any resemblance to human AIDS fully supports a non-infectious *modus operandi*.[9]

WHAT LED A PHYSICIST TO STUDY AIDS

At the outbreak of AIDS, Gallo had already spent a decade in attempts to prove that the cause of some cancers was a retrovirus. This led him to put forward the retroviral theory of AIDS. From an equally biased position I put my non-infectious theory. Although trained as a nuclear physicist, with the exception of a few years, I have worked in the medical field in the Department of Medical Physics of the Royal Perth Hospital, the largest teaching hospital in Western Australia. Among its many activities it was involved in treating cancer by radiation and pioneered hyperthermia for the same purpose.

It was known that both radiation and radio-sensitisers were oxidising agents, and apart from hyperbaric oxygen the chemical radiosensitiser included compounds containing the -NO2 group, that is, nitro-compounds. To understand the interaction between the agents used to treat cancer and cancer tissue, I first needed to determine what makes a cell cancerous. I decided the best way to approach this was to attempt to fully understand the normal cell. This included the understanding of the mechanism by which sperm induced the division of the ova. In doing so I developed my own theory of biological functioning. A short version was first presented at a meeting in Colorado in 1979 and was published in Speculation in *Science and Technology* in 1980. A more detailed version was published in 1982 in the *Journal of Theoretical Biology*, after it was first rejected by *Nature*, under the title "A Mitotic Theory". Although the title suggests that it deals only with cellular division and cancer, the theory, as one of the reviewers pointed out, also proposed a "relationship between modifications in the redox state of the actin-myosin system and other key biological processes (e.g. transport, muscle function, metabolism...). Most importantly in this article, there is a clear integration of older and present data as well as "classical" and "contemporary" concepts.

The theory claimed that the cellular redox level and its oscillations, that is, the cyclic variation between oxidation and reduction, plays a pivotal role in both normal and abnormal cellular function and structure. Diseases such as cancer, cardiovascular, clotting abnormalities and ageing, for example are the result of perturbation of the cellular redox level and its oscillations.

Thus, by the time AIDS was diagnosed I was aware of the biological and pathological effects induced by many agents (semen, nitrites, recreational drugs, Factor VIII, infectious agents and the drugs used to eradicate them) to which the patients belonging to the AIDS risk groups were exposed.

More importantly all these agents showed a common property: they were oxidising agents. This led me to put forward the non-infectious theory of AIDS which claimed that the primary risk factors for AIDS were the oxidising agents to which the individuals were exposed. While the manuscript discussing this theory (in which neither HTLV-I nor Montagnier's retrovirus were mentioned) was in the hands of a few colleagues for evaluation, Gallo claimed to have proven that HTLV-III was the cause of AIDS. I was advised to re-write the manuscript to take account of these claims. The revised manuscript, which was twice rejected by *Nature* and initially by *Medical Hypotheses*, was later accepted by the latter journal.

PREDICTION OF THE OXIDATIVE STRESS THEORY OF AIDS

The predictions of my theory included:

(1) AIDS would remain restricted to the risk groups. This has been the case.

(2) The only sexual act leading to AIDS or a positive antibody test is a very high frequency of receptive anal intercourse in either sex. One of the first to publish supporting evidence of this was Gallo and his associates. In a study published in 1984 he wrote: "of eight different sex acts, seropositivity correlated only with receptive anal intercourse...and was inversely correlated with insertive anal intercourse.[10] In 1986 Gallo wrote: "Data from this and previous studies have shown that receptive rectal intercourse, for example, is an important risk factor for HTLV-III [HIV] infection. Yet, at the time of entry into this project, nearly half of the participants still practised this technique. We found no evidence that other forms of sexual activity contributed to the risk".[11] Thus Gallo was one of the first to publish evidence which contradicted his own assertion that HIV/AIDS is bi-directionally sexually transmitted.

In 1985 Montagnier and his colleagues reported that the wife of a haemophilia man who, in addition to other sexual acts, practised anal intercourse was found to have a positive antibody test and low numbers of T4 cells. "During 10 months of follow-up his wife remained clinically well, discontinued exposure to semen, and then lost the LAV antibody, and regained a normal number of T-helper cells" (T4 cells).[12]

The best and largest study, the Multicenter AIDS Cohort Study of 4995 gay men, which commenced in 1984 and is still ongoing, also confirmed this in 1987. "Receptive anal intercourse accounted for nearly all new HIV infections among the homosexual men enrolled in this study, and the hazards of this practice need to be emphasised in community educational projects".[13]

In a review of most, if not all, epidemiological studies conducted in gay men published in 1994, the authors concluded: "it can be said that the cited reports yield convincing evidence that (1) unprotected ano-genital receptive intercourse poses the highest risk for the sexual acquisition of HIV-1 infection; (2) ano-genital insertive intercourse poses the highest risk for the sexual transmission of HIV-1 infection; (3) there is mounting epidemiologic evidence for a small risk attached to oro-genital receptive sex, biologic plausibility, credible case reports and some studies show a modest risk, detectable only with powerful designs; (4) sexual practices involving the rectum and the presence of (ulcerative) STD facilitate the acquisition of HIV-1; (5) no or no consistent risk for the acquisition of HIV-1 infection has been reported regarding other sexual practices such as ano-genital insertive intercourse

and oro-anal sex...(8) the association of substance use with HIV infection is probably the result of interaction, because substance use increases the likelihood of practising ano-genital receptive intercourse".[14]

Unquestionably, to date, the best designed and executed study in heterosexuals was conducted by Nancy Padian and her associates. In a paper entitled "Male-to-Female Transmission of Human Immunodeficiency Virus" published in 1987 wrote:

"The total number of exposures to the index case (sexual contacts with ejaculation) and the specific practice of anal intercourse, also with the infected partner, were associated with transmission".[15]

The results from their long prospective study of couples, of whom only one partner of either sex was antibody positive, were published in 1997 in a paper entitled *Heterosexual Transmission of Human Immunodeficiency Virus (HIV) in Northern California; Results from a Ten-Year Study*.

"Prospective results.
We followed 175 HIV-discordant couples over time, for a total of approximately 282 couple-years of follow-up...At last follow-up, couples were much more likely to be abstinent or to use condoms consistently, and were much less likely to practice anal intercourse ($p < 0.0005$ for all). Nevertheless, only 75% reported consistent condom use in the 6 months prior to their final follow-up visit...no seroconversions occurred among exposed partners".[16]

Thus, a positive antibody test and AIDS, like pregnancy, can be sexually acquired but not sexually transmitted. The difference is, that while pregnancy can be acquired by a single sexual intercourse, for AIDS to appear a very high frequency of receptive intercourse over a long period is absolutely necessary. AIDS is more like cervical cancer. The effect is not the result of the act itself, but its high frequency. But, as with pregnancy and cervical cancer, other factors may mitigate against the development of AIDS.

(3) Both antibody positive and antibody negative drug users will develop AIDS and that not only individuals who use dirty needles but also those who use clean needles or even non-parenteral drugs will develop positive antibody tests.

According to an interview published in the June 1986 issue of *AIDS ALERT* with Susan Neshin, Medical Director of Asbury Park (NJ) Drug Treatment Center, for clinicians to differentiate between AIDS and the health problems typically experienced by intravenous drug users, "First clinicians should interview NDUs to determine if their symptoms are related to drug abuse or AIDS. You have to talk to them and get them to tell you if their symptoms are drug-related. They can have weight loss, diarrhoea, and night sweating, but they could be having that on an ongoing basis from bad dope, withdrawal, or just poor health in general. It's very common for drug addicts to have inguinal lymphadenopathy, and maybe a few cervical or axillary nodes that are kind of shoddy. If you see oral candidiasis in an NDU, that's a real tip off". A few months later researchers from the USA wrote, "a real T- helper lymphopenia [that is, T4 cell decrease] is only consistent with and not diagnostic of AIDS; other diseases and some treatment regimens also can express a T-helper lymphopenia, such as hospitalised IV drug abusers".[17]

One year later, in an article published in the *British Medical Journal*, one reads, "Intravenous drug abusers appear to be at special risk of acquiring tuberculosis, and a high rate of infection in this group was reported well before AIDS began".[18]

In a 1994 paper published in the *Scientific American*, two researchers who studied drug abuse wrote, "Many manifestations of AIDS in drug users who inject are quite different from those in homosexual and bisexual men who do not use drugs in this manner; in drug users who inject and in their sexual partners HIV infection is associated with substantially increased morbidity and mortality from bacterial infections. In the US much of the resurgence of tuberculosis is occurring among HIV-infected users who live in crowded conditions without access to good medical care. The CDC definition of AIDS has been periodically updated to incorporate these findings".[19]

In 1994, researchers from Switzerland reported their findings from a prospective study designed "to examine differences in the incidence and spectrum of diseases comprising 314 HIV-seronegative NDU, 217 HIV-seropositive NDU, and 10 NDU with admissions registered in either group (from a total of 1011 admissions)". Narcotic drug users (NDU) were enrolled in the study if "they were hospitalised for a minimum of 24 hrs, and also presented with at least one of the following characteristics: history of either parenteral drug use or a corresponding oral substitutive medication (mainly methadone); or actual intoxication and miosis [pinpoint pupils] responding to naloxone; or opiate or cocaine metabolites in a urine sample. Individuals with exclusive oral drug use other than opiates were not included". "HIV- seropositive NDU were more frequently admitted for infectious complications or various non-infectious medical complications (including as most frequent cases, 38 admissions for ill-defined episodes, 11 for repeated seizures, nine for acute pancreatitis, and six for adverse medical drug reaction). Moreover, they also tended to have a higher admission incidence density for intoxication, whereas there was no difference in admissions for suicide tentative or withdrawal reaction". However, individuals from both groups, seropositive and seronegative were admitted for "infectious complications", including non-opportunistic pneumonia, purulent bronchitis, tuberculosis, soft tissue infection, osteoarticular infection, endocarditis, primary bacteremia and disseminated candidiasis. More importantly, of a total of 541 admissions of seropositive individuals, 187 (35%) were individuals who had an ORAL mode of drug "application" and 9 (0.5%) inhalation.[20]

That both intravenous and oral drug users develop positive "HIV" antibody tests was shown as far back as 1988 when Sterk reported that a higher percentage of prostitutes who use oral drugs (84%), than IV (46%), test positive.[21]

In another study published in 1993, researchers from New York City tested 1246 seronegative drug users. "Nine had at least one CD4 cell count of <300 cells/ml or a CD4<20%" and 21 subjects "had one CD4 cell count between 300 and 500 cells/ul". They also reported that "CD4 cell counts of <500 cells/ul were, however, associated with subsequent HIV seroconversion...The relative risk for seroconversion among subjects with one or more CD4 count <500 cells/ul, compared with HIV-negative subjects with all counts >500 cells/ul was 4.53"...consistent with an Italian study showing IDU's with CD4 counts <1,000/ul were more likely to seroconvert"[22]. (The authors of the latter reported a "low number of T4 cells was the highest risk factor for HIV infection" (relative risk=8.5)[23]. In other words, in drug users, a decrease in T4 cells instead of following seroconversion is a predictor for

seroconversion, a finding completely at odds with the HIV theory of AIDS.

(4) In Africa there was neither a new disease AIDS nor a new virus HIV. When *Reappraisal of AIDS: Is the oxidation caused by the risk factors the primary cause?* as finally published was written in 1984/85, Africa was not considered an important issue. Thus, Africa is only briefly mentioned. Following the 1986 Paris AIDS conference, AIDS in Africa became the defining example of heterosexual transmission. This is the reason that my paper was initially rejected by *Medical Hypotheses*. The March 1987 letter of resubmission was accompanied by a 12 page document entitled "AIDS in Africa and its heterosexual transmission". This included the following summary:

"SUMMARY:
a. The operational definition of AIDS in Africa is different from the rest of the World. In Africa there is neither direct or indirect data which proves beyond any scientific doubt the existence of a new disease, AIDS, which affects both men and women equally and of its postulated causative virus, HTLV-III/LAV assumed to be sexually transmitted.

b. In Africa immune deficiency, opportunistic infections and KS exist and have existed for a long time in both men and women. However the pathogens could be other than HTLV-III/LAV, for e.g. poverty, infections other than HTLV-III/LAV and the drugs used for their treatment, copper, recreational drugs (if not opiates other traditional drugs), anally or orally deposited sperm itself via homosexual, bisexual or heterosexual practices.

The data from Africa used to prove heterosexual transmission will not stand up to even superficial scientific analysis".

The detail of the text included:

"IMMUNOLOGY
In 1, Piot *et al.,* [*Lancet* 1984,2:65] found that 7 out of 12 controls had low T4 /T8 ratio, 5 of which were due to a decreased T4. They state "Tuberculosis, protein caloric malnutrition and various parasitic diseases can all be associated with depression of cellular immunity".

"...Among healthy Africans resident in a non-AIDS area, the number of helper and suppressor lymphocytes were the same in HTLV-III/LAV seropositive and seronegative subjects..." (Bigger, *Lancet* 1986, 1, 79).

"Parasitic diseases and malnutrition are two possible causes of immunodepression in Africa. A wide range of prevalent protozoal and helminthic infestations have been reported to induce immunodeficiency" (Clumeck, *JAMA*, 1985, 254, 2599).

"Mild sunstroke induces immunosuppression including T4/T8 inversion" (Walker, *Lancet*, 1983, 2, 344).

"Normal volunteers (hospital and university staff) underwent a 12 half-hour exposure to a commercially available solarium on consecutive days excluding Saturday and Sunday, to acquire a suntan. Tests of immune function were carried out before, on completion and 2 weeks after exposure. A number of abnormalities were found in the exposed subjects including significant decrease in T 4 and T4/T8 which persisted 2 weeks after exposure". (Hersey, *Lancet*, 1983, 1, 545).

SEROLOGY
Very high levels of HTLV-III/LAV seropositivity has been reported from Africa.

"...25% of a sample of hospital workers in Zaire were seropositive in 1984" (Frazer, *Med. J. Aust.* 1986, 145, 525).

"65% of Ugandan children were found to have been positive in 1972" (Gallo *et al., Ann. Int. Med.* 1985, 103, 679).

"15.5% of blood donors were found to be positive at Kigali in Rwanda in 1984" (Clumeck, *JAMA*, 1985, 254, 2599).

"41 out of 410 (10%) of healthy medical personnel from Mulago Hospital Kampala were positive for HTLV-III/LAV. 5 out of 30 (17%) of controls outside the hospital were positive. 4 out of 10 (40%) of control patients deemed sexually immature were also found positive" (Serwadda, *Lancet*, 1985, 2, 849).

"Of a total of 274 patients at the Makala Tuberculosis Sanatorium in Kinshasa, half of the suspected pulmonary cases (total 56); one third of the confirmed pulmonary cases (160) and two thirds of the remaining 15 who were confirmed to have extrapulmonary disease tested positive both in the ELISA and Western blot." (Mann, Paris Conference).

"Forty out of 368 (11%) children admitted to Mama Yemo Hospital in Kinshasa, Zaire were positive by ELISA and 39 out of the 40, also by Western Blot. Clinically seropositivity was associated with the diagnosis of malnutrition and pneumonia" (Davachi, Paris Conference).

"21% of the staff at the Zambian Consolidated Copper Mines, and 14% of males and 44% of females at the mine hospital were found positive. Other people tested who had no connection with the mines were negative." (Buchanan, *Lancet*, 1986, 1, 155)

The diversity of these reports leads to the conclusion that, either copper mining, tuberculosis, malnutrition and pneumonia have as their aetiological factor HTLV-III/LAV or the tests are non-specific. If the tests are specific, because 10-30%. of infected cases develop AIDS within 3 years (Bigger, *Lancet*, 1986, 1, 79) then 1.5-4.6% of the Rwanda population (certainly of its blood donors) and 3.5-7.5% of the Zaireans (certainly of the medical staff at the hospital where the tests were done in 1984) should be either dead or dying by the middle of this year, not to mention prostitutes, Ugandan children, TB patients and workers in regions with copper mining. Obviously this is not the case. Even Quinn Mann, Curren and Piot admit that in developing countries, "...serodiagnosis is complicated by the need for confirmatory testing because of the presence of possible cross-reacting antibodies" (IV). [Quinn *et al., Science* 1986, 234:955]

The final section examined the evidence for heterosexual transmission of AIDS in Africa and concluded that "we are left with a sexually transmitted disease which:

(a) Has continental preferences
(b) Has racial preferences
(c) Has sexual preferences. The same bisexual men can get infected by an African woman but not by a confirmed homosexual AIDS patient with whom he practices repeatedly exclusive active intercourse".

That even today in Africa there is no such thing as a new disease AIDS, and that a positive antibody test does not prove HIV infection, it suffices to mention that: according to an editorial in the July 11th 1998 *Lancet*, the developing world "bears more than 90% of the global burden of HIV infection" and "Tuberculosis (TB) is the leading cause of death worldwide among people with HIV"; no less an authority in AIDS in Africa than de Cock admits that TB has been present in Africa in endemic proportions long before the AIDS era[24]; no less an authority on HIV/AIDS than Essex has proved that in Africa a positive antibody test does not prove HIV infection.[25]

(5) The theory also predicted that decrease in T4 cells is not the hallmark of either HIV infection or the clinical syndrome, that is, the decrease in T4 cells is not HIV specific and is neither necessary nor sufficient for the syndrome to appear, that is, the clinical syndrome is not the result of immune deficiency. In fact it was postulated that the decrease in T4 cells may not be due to their destruction by HIV or any other agent but could result from (i) the extreme sensitivity of T cells to oxidative stress; (ii) T4 cells possessing a lower negative charge than T8 cells could be the first to be destroyed by persistent oxidative stress; (iii) to be sequestrated in diseased peripheral tissues; (iv) decreased binding of the T4 antibody as a result of changes in their surface, that is, due to "down regulation" of the CD4 receptor. To illustrate that at present this is accepted even by HIV/AIDS experts it suffices to quote two papers published last year and one more recently:

"This article discusses the importance of alterations in the CD4+ and CD8+ cell migration in regulating blood lymphocyte levels and questions the extent of virus-mediated CD4+ cell destruction";[26] "Along with other recent analyses and experimental developments these considerations also suggest a need to re-evaluate current concepts about HIV pathogenesis, including the concept that a systemic depletion of CD4+ T cells is the hallmark of the disease";[27] "CD4+ T-cell lymphopenia is due to both shortened survival time and a failure to increase the production of circulating CD4+ T-cells.[28]

(6) A most important prediction was that the tissues of AIDS patients and those at risk would be oxidised, in general, and in particular they would have low sulphydryl (-SH) group levels. In recent years there have been hundreds of papers confirming this prediction. The first was published by German researchers who, for reason(s) not stated, undertook experiments to determine the level of reduced thiols (-SH) in the blood of "HIV" infected individuals. They found that: "Blood plasma samples from HIV-1 infected persons contain elevated glutamate concentrations up to 6-fold the normal level and relatively low concentrations of acid-soluble thiol (i.e. decreased cysteine concentrations). The intracellular glutathione concentration in peripheral blood-mononuclear cells (PBMC) and monocytes from HIV antibody-positive persons are also significantly decreased".[29]

Last year a book published with Luc Montagnier as principal editor further confirms the involvement of oxidative stress in AIDS.[30]

(7) The 10th of July 1986 letter of re-submission to *Nature* was accompanied by a response to the reasons given by the Journal for rejection. The response ended with the following: "If my paper does nothing other than draw attention to the oxidative nature of the risk factors and its biological importance, then it offers what is so far the only hope of treatment which will arrest and reverse the otherwise invariable fatal course of the disease. In my opinion this alone would more than justify its publication".

Indeed the most important practical prediction of the theory was that AIDS can be prevented and treated by stopping exposure to the oxidising risk factors and by using "currently available therapeutic [antioxidants in general and SH-containing, in particular] substances". The best confirmation of this comes from researchers at Stanford University, USA. In 1997 discussing their results they wrote: "In essence, we have shown that GSH levels are lower in subjects with CD4 T cell counts below 200/ml (CD4 <200) than in subjects at earlier stages of HIV disease; that among subjects with CD4 <200, lower levels of GSB (a FACS measure of GSH in CD4 T cells) predict decreased survival; and that the probability of surviving 2-3 years increases dramatically as GSB levels approach normal range. In addition, we have presented preliminary evidence suggesting that oral administration of NAC, which supplies the cysteine required to replenish GSH, may be associated with improved survival of subjects with very low GSH levels" (GSH-reduced glutathione).[31]

Last year they stated: "We have shown that GSH depletion is associated with impaired survival; the greater the depletion, the worse the prospects for survival...By replenishing GSH, NAC or other agents we may be able to modulate such adverse effects of GSH depletion"[30]. However, although the authors are most probably aware of our work (the publications of the Perth group were sent to them a few years ago and are indexed in the Medlines under oxidative stress), for some unknown reason, they state: "HIV-infected individuals would be better served if we could identify the mechanism that underlines the GSH depletion and intervene, if possible, to prevent its occurrence". The best advice they can give in this regard is: "it may be prudent for those individuals to avoid excessive exposure to UV irradiation and unnecessary use of drugs that can deplete GSH - e.g., alcohol and prescription or over-the-counter formulations containing acetominophen [paracetamol]".

(6) Perhaps the boldest claims and predictions were made regarding the existence of HIV. I wrote HIV, "has never been isolated from fresh AIDS tissues". Furthermore, HIV "has never been isolated as an independent stable particle". That is, HIV had not been isolated from either fresh tissues or culture, which means that its existence had not been proven and this situation has not changed up to the present day. At least Montagnier in his 1997 interview to Djamel Tahi admitted that he had not isolated HIV and in his view neither had Gallo.[32] I presented evidence that the observed phenomena (particles, reverse transcriptase, antibody/antigen reactions) which were said to prove the existence of HIV were not specific to a specific retrovirus nor even to retroviruses in general. Unlike Gallo, Montagnier when interviewed by Djamel Tahi, eventually reluctantly admitted that these phenomena were not retrovirus specific.

I cited examples of evidence which, taken together, led to the conclusion that oxidising agents were causing not only AIDS but also gave rise to the phenomena which were interpreted by the Montagnier and Gallo school as indicating the presence of HIV.

As far back as 1986 Montagnier knew that the phenomena could not be obtained unless the cultures were stimulated, although he did not know that the stimulants were oxidising agents.[33] In 1991 Anthony Fauci proved that the "HIV" phenomena could be inhibited by antioxidants.[34]

CONCLUSION

It is over twenty years since I conceived the redox theory of cellular function and nearly as long since its specific application to the problem of AIDS appeared in *Medical Hypotheses*. I look back over this time with very mixed feelings. Naturally I am proud that as a scientific theory every prediction concerning AIDS has materialised. However, I am saddened that there are forces at work which have consistently prevented purposeful but friendly debate. To me and my group the problematic nature of the HIV theory was apparent from the very beginning. It is now my fervent hope that, as the HIV theory continues to fail the many patients who are diagnosed with antibodies to "HIV" and AIDS, the time is rapidly approaching when scientists and physicians will be eager to examine our contribution.

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LOSING IT

It was while we were walking down one of those long hospital corridors that the young Kenyan medical researcher paused, looked behind him, and whispered "Nine of them lost it." I had asked about the 'HIV positive' prostitutes in the long-running Nairobi study who, I'd been told, had lost HIV (or sero-reverted) - not that anyone had particularly wanted to trumpet this rather perplexing anomaly. "They can't understand it" said my companion.

That was in 1993 when "being HIV positive" meant you had it for life and your life wouldn't last much longer anyway. But why shouldn't the antibody profile of those prostitutes (who were often severely malnourished intravenous drug users), change after ten years of regular health checks and good care offered them by the Nairobi Study?

Other people around the world have been "losing it" too, and none of the orthodox AIDS scientists seem in too much of a hurry to try to understand it.

Tom (not his real name), living in London, thought he was HIV positive for 6 years. He also thought he was going to die for six years, until some further tests showed that not only was his latest blood sample negative, but so was the initial one that had been stored away in a freezer. He is suing a London teaching hospital for compensation.

Peter Nicholls was positive on three different test kits in a research project of ours, and then negative at two London teaching hospitals two months later.

A group of Miami lawyers have 80 cases of "false positive"diagnoses on their books, with one of their clients awarded $600,000 in compensation a couple of years ago.

Most of these examples of disappearing HIV relate to the commonly used ELISA and Western blot antibody tests. But now viral load tests, that check for evidence in the DNA of what are promoted as HIV related proteins, are getting in on the act.

The *Wall Street Journal* announced this week that HIV positive patients on triple therapy combination cocktails (costing $15,000 per person per year) are being allowed prolonged "drug vacations". Researchers at the University of Alabama say that a cocktail break can keep a patient's viral load in check and undetectable - more so than if they were on the ghastly 40 tablet a day regime.

And just today I read in the *Pink Paper* that a 12 year-old boy, a pregnant 40-year old woman and a 20 year old man were given a viral load test which told them they "had it" but then they "lost it" again because the tests were wrong.

These are not simply cases of laboratory error. They confirm the arguments put forward for over a decade now from the Perth Group of scientists and the Berne Study Group - namely that "HIV tests" do not identify a lethal infectious sexually transmitted virus, but instead identify raised proteins or genetic fragments in the blood which they say are specific to HIV. How they can say this when HIV has never even been isolated, as the Perth Group have long pointed out. Furthermore, these supposed HIV-specific proteins can emerge in any one of us if our bodies a specifically stressed.

It is absolutely no joke to be told you are going to die and later to be told you had a "wrong" test result. Where are the lawyers? Why hasn't the Government insisted on a national recall of all those who have tested positive? They do it with faulty cars. Why not with a faulty test based on a faulty virus-AIDS hypothesis?

With so many blatant contradictions, how much longer can the AIDS barons hold onto their argument? Sooner or later they are going to have to "lose it" too.

Reappraisal of Aids - Is the Oxidation Induced by the Risk Factors the Primary Cause?

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Abstract - The emergence of AIDS as a recognizable disease, its epidemiology, the clinical and laboratory data and the way in which they have been interpreted to deduce the currently acceptable hypothesis of its aetiology and mechanism of transmission are critically examined. There is no compelling reason for preferring the viral hypothesis of AIDS to one based on the activity of oxidising agents. In fact, the latter is to be preferred, since unlike the viral hypothesis it leads to possible methods of prevention and treatment using currently available therapeutic substances.

Introduction

Acquired Immune Deficiency Syndrome (AIDS) was first recognised in 1981 and by late 1985 more than 14 000 people had been diagnosed with the disease in the United States alone. The patients belong almost exclusively to a number of high-risk groups. Homosexual or bisexual males constitute the largest group, followed by intravenous drug abusers, Haitians and haemophiliacs. The main clinical signs of the disease are lymphadenopathy, opportunistic infections and malignancies especially lymphomas and Kaposi's Sarcoma (KS). The patients also have a pronounced depression of cellular immunity. There is an absolute lymphopenia and reversal of the usual ratio of phenotypic T-helper (OKT_4^+) to T-suppressor (OKT_8^+) cells whereby the latter come to dominate among circulating lymphocytes. The circulating lymphocytes have decreased capacity to form rosettes with red blood cells, respond poorly to mitogenic stimulation, have decreased natural killer cell activity and other functional abnormalities.

To account for the immunological abnormalities, especially the decrease in T4 cells believed to be unique to this disease, Françoise Barré-Sinoussi, Jean-Claude Chermann and Luc Montagnier at the Pasteur Institute in Paris and the group led by Robert Gallo at the National Cancer Institute in America proposed that AIDS may be caused by infection of the T4 cells with a virus from the family of human T-cell leukemia (lymphotropic) retroviruses (HTLV). These include two major subgroups of human retroviruses called human T-cell leukemia-lymphoma retroviruses HTLV-I and HTLV-II. The supposed AIDS virus is called LAV (Lymphadenopathy Associated Virus) by the Pasteur group and HTLV-III (Human T-cell Leukemia (lymphotropic) Virus type III) by the Americans.

Because the viral envelope, which is required for infectivity, is very fragile and tends to come off when the virus buds from the infected T-cells, a direct infected T4-cell-to-non-infected T4-cell contact is assumed to be required for the spread of the retrovirus[1]. The main immunological reason for postulating that a retrovirus of the HTLV family may be the aetiological agent of AIDS was the finding that these viruses are immunosuppressive in mitogenically stimulated cell cultures (see below). The epidemiology of AIDS was also interpreted as supporting the viral hypothesis. There is abundant evidence that immunological changes in the AIDS patients and the development of KS and opportunistic infections are related to the number of homosexual partners and frequent receptive anal intercourse. According to the American Group, "This finding suggests that HTLV-III is sexually transmitted and that the rectal mucosa may be unusually vulnerable to passage of this lymphocytotoxic agent"[2]. The Carribean area, especially Haiti, and Africa, have been suggested as possible sources of' the AIDS virus. The main reason for this suggestion is the supposed high incidence of sera reactive for HTLV in Africa and AIDS in Haitians eimigrating to the United States. There are a number of findings which suggest causes other than HTLV-III/LAV:

(i) In diseases which are known to have causes other than HTLV infections, the immunological abnormalities are similar to those seen in AIDS. These include Evan's, Gardner's and Behcet's syndromes, macroglobulinemia, tuberculosis, malaria, diabetes, aplastic anaemia, and thalassaemia[3,4,5,6,7,8,9,10,11]. Immunological abnormalities including inversion of the T4/T8 ratio can be induced by other viral and non-viral agents such as Epstein-Barr virus, chemotherapeutic agents, prednisone and adrenalin[7,12,13,14,15]

(ii) Areas with high seropositivity for HTLV infection appear to be free of AIDS. About 25% of the population in Southern Japan appears to have antibodies against the virus compared to about 5% in Haiti and 1% in the United States, yet so far only 14 AIDS cases have been reported from Japan

(iii) The epidemiological finding that AIDS development

in homosexual men is directly related to the number of homosexual partners and frequency of receptive anal intercourse can be equally well or even better accounted for if sperm is considered an etiological factor.

(iv) The high incidence of immunological and clinical abnormailities found in the AIDS risk-groups, is also found in at least two other groups: aged individuals and patients treated with immunosuppressive agents for organ transplantation.

The possibility arises that the immunosuppressive agents used in organ transplantation, some parameter(s) associated with ageing and the risk factors in AIDS share a common property by which they induce similar effects. Evidence will be presented that: All the above agents are oxidizing agents and by their oxidative nature induce malignancies, immunosuppression and increased susceptibility to infection. In AIDS viral infection including HTLV-III/LAV, if it exists, is the result of the disease not its aetiology, although once present can further aggravate the disease.

Aids-like Symptoms in Other Subjects

The aged individual, like the homosexual male, has a significantly higher probability than a young heterosexual of developing opportunistic infection. Even the seropositivity for HTLVIII/LAV in apparently healthy individuals increase with age[17] . It is widely known that with age there is a marked decline in immune function and a marked increase in all cancers including KS. The increase in oxidative stress with age and its relationship to cancer development is also well known[18]. Less well known is the evidence that the decline in cellular immunity is mainly due to lymphopenia and the alteration in cell function as a result of oxidative stress[19]. *In vivo* (animals) age-associated cancers, decline in immune function and even death can be postponed by treating the animals with antioxidants[20]. Similarly *in vitro*, antioxidants enhance the immune response of both young and old cells, the effect being 10 times greater in old cells[21, 22].

A striking resemblance seems to exist between organ transplant patients who are treated with radiation, chemotherapy or a combination of the two and the AIDS patients in terms of their increased susceptibility to opportunistic infection and the development of KS and immunosuppression [23,39] . The *in vivo* and *in vitro* effects on the immune system of these agents is similar to that seen in AIDS[24]. In the organ transplant patient there is a lack of helper cells and an inverted T4/T8 ratio which persists beyond one year post-transplantation independently of graft-versus-host disease status. The lymphocyte is also abnormal for more than one year after transplantation[25]. All the agents with which organ transplant patients are treated are either alkylating or oxidizing agents[26]. Their effects can be prevented by the use of reducing agents. Even KS has been observed to regress when immunosuppression therapy is reduced or stopped[23].

Aids in Homosexuals

The diseases fitting the AIDS definition appeared in homosexuals before 1981 when their symptoms started to be reported in the medical literature under the inclusive term of AIDS[27]. The dramatic increase of their incidence after 1981 is generally believed to be due to infection of these groups with HTLV-III/LAV and to its transmission by sexual contact. However, other factors often associated with homosexual practice such as anal deposition of sperm and nitrites could produce the clinical and immunological abnormalities seen in these patients.

According to Gallo *et al*, "The epidemiology of this syndrome - that is, the increasing incidence and clustering of cases, particularly in New York and California suggest the involvement of a transmissible agent."[28] . However around the time of the first AIDS report two important changes took place in homosexuals' lifestyle in these areas: increase in promiscuity and exposure to drugs, especially nitrites[29,30]. Although nitrites came into use in the United States in the late 1960's their use became widespread around 1975. It is of great interest that the latency for appearance of KS in patients treated with immunosuppressive agents for organ transplantation appears to be the same as that between homosexual. exposure to nitrites and appearance of AIDS. Of interest also is the fact that these drugs were first manufactured in California and then transported to New York, the two areas with the highest incidence of AIDS[23]. These drugs are immunosuppressive, mitogenic and carcinogenic[31,32]. Nitrites are oxidizing agents and by this property they play a significant role in many biological functions[33.34,35]. For example anaerobic bacteria use nitrites in place of oxygen as the terminal electron acceptor for growth and respiration[36,37,38]

It has been shown in a number of studies and should be emphasised that, unlike all sexually transmitted diseases, where both partners are equally susceptible to the disease, in homosexual males immunosuppression appears in the anal sperm.recipients but not in the exclusive sperm donors.[39] The risk factors in AIDS development are the number of homosexual partners and frequency of receptive anal intercourse[2]. Furthermore many of the AIDS ceases diagnosed in women may have resulted from the practice of anal intercourse by heterosexual couples [39,40,41]. More importantly, carefully designed ainimal experiments leave no doubt that sperm is a strong immunosuppressive agent [41,42,431,44] Sperm is one of the best known mitotic agents and like all other mitogens is an oxidizing agent, its electrophilicity being a prerequisite for fertilisational[45]. During spermatogenesis two main processes take place in the testes: morphogenesis of the maturing gamete whose chromatin becomes progressively condensed and replacement of the somatic histories with prolamines by the oxidation of the sulphydryl groups (SH) to disulphide (SS). Although maturation starts in the testes, spermatozoa released from the seminiferous epithelium are not fully mature from a functional standpoint and must complete their maturation by the oxidaition of the SH groups to SS during the passage through the epididymis. The amount of cysteine residues present as SH in the spermatozoa from the caput, corpus and cauda epididymis and vas deferens being 50, 15, 5, and 3% respectively[46,47,48,49]. Of pivotal significance to the present discussion is the finding of Hurtenback that mature sperm is much more effective in producing immunosuppression than immature sperm[43] . Since the significant difference between sperm derived from the semineferous tubules and mature ejaculated sperm is its degree of oxidation, it is highly probable that this property determines its immunosuppressive effects. This is reinforced by the finding that sperm from older animals, whose tissues are known to be more oxidized, is more effective in inducing immunosuppression[43]. For the same reason, the homosexual male's sperm may be even more immunosuppressive than that of healthy heterosexuals. The fact that sperm does not seem to produce immunosuppression during vaginal sexual intercourse can be accounted for by it critical structural difference between the epithelium of the rectum and vagina[39,50]. The vagina is lined by thick stratified squamous epithelium which makes ulceration and penetration of the semen into the vascular lamina unlikely. In contrast the semen in the rectum is separated from blood vessels and lymphatics by a single layer of cells which is easily penetrated and ulcerated during anal intercourse. In addition to lymphoma and KS the homosexuals have two other malignancies, cancer of the tongue and rectum[51]. The increased incidence of these two cancers like carcinoma of the cervix in women,

may be related to periods of high local concentration of sperm.

Gonorrhoea, syphilis, hepatitis B, herpes and amoebiasis are much more common among homosexual males than among heterosexuals. They also have a number of bowel infections which cause persistent and recurrent diarrhoea[30,51]. Many of the agents used for the treatment of these conditions are oxidizing agent, mitogenic and immunosuppressive[52,53,54]. Furthermore, viruses, like all other cells, require SH for division and growth[45] , which they obtain from the host, thus oxidizing its tissues. Because oxidation of the host's immune system leads to immunosuppression, the possibility that all viruses are immunosuppressive to a greater or lesser degree is very likely. Two viruses, cytomegalovirus and Epstein-Bar virus although present among homosexual men, seem to be universal in AIDS patients as a result of reactivation of latent viruses[23,51]. Both viruses produce clinical and immunological abnormalities similar to those seen in AIDS patients. Fever, rash. lymphadenopathy and enhanced susceptibility to other infections are common manifestations of infection with these viruses[51]. These viruses induce immunosuppression *in vitro* and *in vivo*, including abnormalities in the T4/T8 ratio both in humans and animals[15,30,51,55]. Both viruses have been isolated from many sites, including KS, from almost all AIDS patients[30,51]. Unlike the above viruses, HTLV-III/LAV has never been isolated in fresh AIDS tissues. Nor is there any evidence that it produces in humans the clinical and immunological abnormalities attributed to it. Yet HTLV-III/LAV and neither the above viruses nor any other factor(s) is considered as the aetiological factor of AIDS.

HTLV-III/LAV Infection

Gallo and his group state "The cytopathic activity *in vitro*, the repeated isolation from patients with AIDS and people at risk, and results of the seroepidemiological studies are all consistent with HTLV-III being the aetiological agent of AIDS"[56]. It is proposed to examine the epidemiological and seroepidemiological evidence as well, as the isolation of the virus in some detail.

Many researchers have predicted that AIDS, like other sexually transmitted diseases, will spread by any type of sexual intercourse and more and more cases will appear among heterosexuals. So far this has not happened. According to Harold Jaffe, head of epidemiological studies of AIDS at CDC, as quoted in a *Science* editorial, the epidemiological pattern of the disease has undergone "remarkable little changes". Unlike many other viral diseases, AIDS cannot be spread even by prolonged close exposure to AIDS patients. According to the Acting Assistant Secretary for Health James 0. Mason, "This is a very difficult disease to catch"[57].

An antibody molecule like that of all other proteins is determined by the linear ordering of amino acids in the polypeptide chain and by its three dimensional structure. The prevailing opinion is that the linear chain is determined by gene transcription. However evidence exists that both DNA and gene structure and function are regulated by the state of condensation-decondensation (contraction-relaxation) of the chromatin, which in turn depends on the cellular redox and its oscillation[45,58]. The bonds which play an essential role in the three-dimensional configuration of the molecule are the SS bonds. According to Karush ". . . . the disulfide links of the antibody molecule play an essential role in the acquisition of immunological specificity and by virtue of their covalent nature, provide for the stabilization of the particular structure underlying the specific activity of the molecule"[59]. Furthermore the pattern of pairing of sulfhydryl groups to form disulfides is not an invariant property of the linear chain but depends on extrinsic factors including the redox[59,60]. In other words protein synthesis and specificity in general and antibody synthesis and specificity in particular is redox dependent. If this is so, then any agents which will induce the same redox changes as a virus, could induce the synthesis of viral antibodies and antigens in the absence of the virus.

Viruses including RNA tumour viruses share antigenic determinants with normal host cell components, a phenomenon known as molecular mimicry[61]. The same phenomenon may exist in the case of the HTLV-III/LAV virus. The most prominent and persistently detected antigen in AIDS tests is a protein of a molecular weight of 41.000 (P41), which is appoximately the molecular weight of polymerized actin, a protein found in all cells including bacteria[62]. A protein of the same molecular weight, isolated from a number of viruses, has been shown to be actin and to be a major constituent of many viruses including RNA tumour viruses[63] . It is of interest to note that the polvmerised form of actin increases with oxidation[64,65]. Of interest is also the fact that mitogenic stimulation of normal cells with ConA, leads to the expression of oncoviral antigens without virus particle synthesis[66]

The presence of "natural" antibodies in the sera of physiologically healthy animals, directed against a "variety of antigens has been well established and documented"[67]. Antibodies against the oncoviral proteins are widespread in non-infected human sera and vary with age[68,69]. Furthermore substances as diverse as normal components of the serum, extracts of bacteria and non-protein molecules such as glycogen are important factors in determining whether a given human serum registers positive for oncovirus infection. Snyder *et al* discussing their work on human oncoviral antibodies concludes: "The results are consistent with the idea that the antibodies in question are elicited as a result of exposure to many natural substances possessing widely cross-reacting antigens and are not a result of widespread infection of man with replication-competent oncoviruses"[68]. Barbacid *et al* state: "This finding not only demonstrates that the antibodies were directed against cellular rather than the virus-coded antigenic determinants but also exclude the possibility that this immune response was elicited as a consequence of oncovirus exposure"[69].

There are two blood tests routinely used for AIDS detection, ELISA and Western blot neither of which detects the virus itself. Although the latter test is more accurate, both give persistent false positive results. "The false positive problem has led to harrowing decisions about what to tell patients whose samples appear positive, although manufacturers stress that the current tests are not intended for use in diagnosis"[70] . It is significant that the false positive results increase with age and "stickyness" of the serum, and the "stickyness" (viscosity) is redox dependent and increases with oxidation[71,72] . The outcome of the tests seems also to depend on who is performing them. Thus one group found 7/10 sera positive for viral antibodies, whilst another group testing the same sera found none[73] . Most importantly Biggar *et al* found that the probability of having a positive ELISA for HTLV-I, HTLV-II and HTLV-III/LAV increases with age, poverty, immune complexes concentration and especially with malaria and other parasitic diseases. They conclude, "If the human retrovirus reactivity observed in ELISA tests is frequently non-specific among Africans the causes of the non-specificity need to be clarified in order to determine how they might effect the seroepidemiology of retroviruses in areas other than Africa . . ."[17] . The only sensible conclusion is therefore that seropositivity does not mean virus positivity. However Gallo and his collaborators are of a different opinion and state: ". . . we should proceed with blood-bank antibody tests.."[56]. They base their opinion on the fact that HTLV-III/LAV can be isolated from the peripheral blood of >80% of people with serum antibodies to the virus. Although this is true, it is impor-

tant to note that all the isolations are done *in vitro* (see below), after some unusual and drastic manipulation of the lymphocytes obtained from the patients.

The initial reaction to the retrovirus hypothesis was one of scepticism. However after the publications of the 1984 papers (*Science* 4 May) the theory became almost universally accepted. In these papers, *in vitro* experimental evidence for the detection and isolation of HTLVIII/LAV is documented. But in a paper subsequently published in the same journal in the same year (*Science* 7 December) the Americans, by using the Southern blot hybridization technique which can detect as little as one copy of viral DNA per cell, obtained negative results on fresh peripheral lymphocytes, lymph nodes, KS, bone marrow and spleen from AIDS patients and AIDS related complex (ARC). They conclude: "Thus the lymph node enlargement commonly found in ARC and AIDS patients cannot be due directly to the proliferation of HTLV-III infected cells as occurs with HTLV-I in adult T-cell leukemia. Whether the lymphocyte proliferation in lymph nodes occurs in response to infection with HTLV-III or another agent, or both, is not known. Similarly, the absence of detectable HTLV-III sequences in Kaposi's sarcoma tissue of AIDS patients suggest that this tumor is not directly induced by infec tion of each tumor cell with HTLV-III. Furthermore the observation that HTLV-III sequences are found rarely, if at all, in peripheral blood mononuclear cells, bone marrow and spleen provides the first direct evidence that these tissues are not heavily or widely infected with HTLV-III in either AIDS of ARC".

In an article published this year by the French group it is stated: "It is unlikely however, that AIDS is the result of a direct progressive destruction of T4 cells by the virus for at least two reasons . . ."[74] . Thus the originators of the viral theory of AIDS agree that there is no direct evidence to support their theory. What then about the claims of repeated isolation of HTLV from AIDS patients? All the experiments for detection, characterization, continuous production and isolation of HTLV-III/LAV are done on *in vitro* cultures. Furthermore the cultures are not solely with T-celis from AIDS patients, but cocultures with highly selected neoplastic T-cell lines [75]. It must be emphasised that unlike other viruses HTLV-III/LAV has never been isolated as an independent stable particle. By isolation of the virus, in fact, is meant transient detection in the cell culture of: viral antigens, viral antibodies, the enzyme reverse transcriptase (RT) and of virus like particles budding from the cellular membrane into the extracellular space. In the vast majority of cases isolation is synonymous with RT detection. However apart from RT these cultures have almost any other enzyme implicated in DNA synthesis and "it has not been excluded that viral reverse transcriptases are cellular enzymes . . . ."[76] . The viral specificity of RT is believed to be given by the template primer it uses [76]. For HTLV-III/LAV isolation the French and the Americans use either $(dT)_{12\text{-}18}.(A)_n$ or $(dT)_{15}.(A)_n$ as template primer [75,17] . But, in earlier papers Gallo and his collaborators present evidence that "DNA polymerase *y*, a component of normal cells...." prefers exactly the same template as the one used for HTLV-II/LAV isolation[78,79] . It is also significant that the kind of template a polymerase uses and its activity depends on the culture conditions and probably on the state of cellular development i.e. the activity of the enzyme depends on the normality or subnormality of the cells[79,80].

In rare cases by isolation is meant finding of virus-like particles either T-cells *in vitro* or cells other than T in fresh AIDS tissue [81,82]. These particles are not only hard to detect but at least in some cases may be normal organelles not HTLV-III/LAV viruses[83]. Furthermore, particle aggregation and budding have been proposed to be determined by actin-myosin interaction[84,85]. It is of interest to note that actin-myosin interaction, particle aggregation and budding can be all induced by oxidizing agents[84,85,86]. Most importantly *in vitro* cultures with normal cells, virus-free, ". . . can be induced to produce particles which resemble RNA tumour viruses in every physical and chemical respect"[76]. Aaronson *et al*. discussing their particular experiments can find only two explanations for this apparently universal phenomenon: "The first was a chronic, low-level virus infection in the original primary embryo culture which could not be detected by the methods available. Under this hypothesis the virus could have persisted in a carrier state because there always were a few infected cells in the population . . . The second explanation was that virus began spontaneously in previously virus-free cells during the course of establishment of the cell lines. These findings provide strong support for the second model"[87]. Although the retroviruses can arise spontaneously in virus-free cell cultures, the rate of appearance can be increased a million fold by the use of radiation chemical mitogens or infection of the culture with other viruses[88]. Weiss et al. in a paper entitled *Induction of Avian Tumor Viruses in Normal Cells by Physical and Chemical Carcinogens* conclude: "The mechanism of induction is unknown. It is attractive to imagine that the endogenous viral genome exists as an integral part of the host cell chromosome, but there is little evidence for this assumption..... We call them RNA tumor viruses in a taxonomic rather than an etiological sense..... One can plausibly argue that the depression of natural endogenous viruses is the result, not the cause of neoplastic changes.." [89]. At present the French believe that the AIDS virus does not belong to the "Superfamily" of leukemia viruses but is in fact a member of the lentivirus family of retroviruses as exemplified by visna virus[90]. As far as the present discussion is concerned, this makes no difference. Induction of the visna virus as well as other viruses also requires *in vitro* activation[91,92]. Of pivotal significance to the present discussion is the fact that the isolation and cytopathic effect of HTLV-III/LAV can be obtained and observed only in cells activated with various mitogenic agents such as ConA, PHA and irradiation. Notwithstanding heroic measures such as pooling of AIDS sera, manipulation of culture conditions and selection of cell lines are necessary to isolate a virus[75]. After all these conditions are satisfied "...only a small proportion of these cells is infected by the virus . . . at the peak of virus replication only 5-10 per cent of the cells express viral antigen . . . Furthermore only 10-20 per cent of clones derived from the CEM T4 cell line are susceptible to LAV infection even though they all express the T4 molecule on their surface"[74]. Meanwhile, the non-stimulated AIDS co-cultures behave like normal cell cultures in respect to HTLV-III/ LAV infection, that is, there is no infection[93]. On the other hand HTLV-III/LAV has been isolated from mitogenically stimulated co-cultures from cells lacking both HTLVIII/LAV DNA and RNA[94]. In a paper published this year in which Gallo is a co-author, it is stated, "In the present study T4 cells from normal donors that were infected with HTLV-III *in vitro*, after stimulation with PHA followed the same pattern of secretion of IL-2 (day 1), production of HTLV-III and cell death", that is the same pattern as PHA-stimulated cells from AIDS donors[93]. Whereas the same infected cells.....did not produce IL-2 or express virus without immunological activation" (PHA stimulation). Since this is the case, even assuming that HTLV-III/LAV exists *in vivo* and is transmitted from a sick individual to a normal one, the normal person would never become ill unless he is exposed to high concentrations of mitogenic agents. In other words HTLV-III/LAV by itself cannot produce ill effects while the mitogenic agents would produce the immunological and clinical abnormalities associated with AIDS irrespective of HTLV-III/LAV infection. It is important to note that in the above-mentioned paper evidence is presented that PHA produces immunological abnormalities

in normal non-infected cell cultures, including T4 loss. ConA is also immunosuppressive both *in vivo* and *in vitro*[95]

Equally important is the fact that when normal T and B lymphocytes are stimulated either *in vivo* or *in vitro* with ConA they display viral antigens on their surfaces [66]. The situation is as follows: There are two agents A (HTLV-III/LAV) and B (sperm, nitrites, opiates, Factor VIII), however only B is pathogenic on its own. Yet A is considered as the primary causative agent. This becomes even less probable if one realises that the methods for the detection of A are non-specific. Because AIDS patients are also exposed to mitogenic agents, activation of different viruses can be expected. Thus unlike the HTLV-III/LAV-infected T4-cells hypothesis, these mitogenic agents could account for both the viral activation and the AIDS related malignancies. Furthermore the mitogenic agents, being oxidizing agents, can also account for the cellular immunosuppression observed in these patients. The lymphocytes have a relatively high negative charge[96]. Their functions, including response to mitogens, rosette formation, suppressor/helper activity and natural killer cell activity depend on this negative charge. Oxidation leads to suppression of the above activities[96,97,98,99]. As has been pointed out earlier, the absolute lymphopenia, preferential decrease in T4-cell numbers and the inversion of the T4/T8 ratio is not specific to AIDS but is widespread and exists in many diseases without retrovirus infection. In AIDS these abnormalities in T-cell numbers could be real or apparent and result from (i) The extremely high sensitivity of T cells to oxidative stress[19]. (ii) T4-cells having a lower negative charge than the T8-cells[99] could be the first to be destroyed by persistent oxidative stress. (iii) The T4 cells could be preferentially sequestrated in diseased peripheral tissues. (iv) The binding of antibodies to the cell surface depends on the environmental redox state and the relative charge between the cell (negative) and antibody (positive), surface antigen and binding of antibodies decreasing with cellular oxidation[100,101,102] . Modification of the environmental conditions leads to changes in the T4/T8 ratio in a given population of lymphocytes[103,104].

AIDS in Non-Homosexuals

According to Gallo and his group "...epidemiological studies carried out chiefly by the Centers for Disease Control in Atlanta, Georgia, particularly those pertaining to transmission of the disease by filtered Factor VIII in blood transfusion cases strongly implicated a viral agent" as the aetiological factor of AIDS[56]. It seems logical and has been already stated by Gordon that, "This finding is, however, also compatible with the possibility that Factor VIII induces immunosuppression without the intervention of an infectious agent"[105]. The evidence available in the literature supports this latter interpretation. Seventy percent of haemophiliacs have been reported as being seropositive for HTLV-III infection as compared to about 45% of a randomly selected homosexual group from an area of high AIDS incidence [57] . But only 0.06% of haemophiliacs develop the disease [106]. Like in all other AIDS patients, the virus in these groups has been isolated only *in vitro*[107]. Factor VIII has been found to be immunosuppressive both *in vitro* and *in vivo*, the T4/T8 ratio being inversely correlated with the quantity of Factor VIII concentrate administered. The *in vivo* studies led the authors to conclude: ". . . It is difficult to explain all of the observed immunological differences between patients with severe hemophilia A and those with haemophilia B purely by the transmission of an infectious agent.."[108]. Evidence exists that all clotting factors are oxidizing agents, the strongest being Factor VIII. Factor VIII is a high molecular weight glycoprotein complex, whose subunits are linked by a large number of SS bonds. The SS bonds are required for agglutination activity. Antioxidants induce a dose related activity decrease of all coagulation factors including Factor VIII and IX[109,110]. There are reports which claim that the virus and thus the disease is transmitted via blood/blood products other than clotting factor concentrates. The first and best known appear to be that of a prematurely born infant who died at 17 months from recurrent infection and the 18 cases reported to the CDC by August 1983[111-112]. The authors of the first report, although concluding that the infant developed AIDS as a result of HTLV-III/LAV infection transmitted by multiple blood administration, do not exclude the possibility that he was born with a primary immunodeficiency disorder. More importantly, all blood was irradiated with 3OGy before administration. Radiation is known to produce both immunosuppression and activation of proviruses. The 18 cases reported to the CDC and classified as transfusion-associated AIDS via HTLV-III/LAV were diagnosed during approximately a 12 month period when over 3 million Americans received transfusions. Two of the patients most probably had received radiation, chemotherapy or both. These 18 patients were older than other groups with AIDS (40% were over 60 years of age). Fifteen of these patients (83%) received transfusion in association with surgery. Surgery may be immunosuppressive[113] and is known to be associated with infections other than HTLV-III/LAV, the risk increasing with age. More importantly Grady *et al*[114] have shown that an inverse relationship exists between the percentage of T4 cells and the number of units transfused. The above authors conclude: "Accordingly we suggest that studies which purport to show a relationship between the transfusion of blood/blood products and AIDS be viewed with caution". What is now reported as AIDS in a very small proportion of haemophiliacs receiving coagulation therapy and recipients of transfused blood is only manifested as opportunistic infection. Cases appearing before 1981 would not have been identified as AIDS. Since tissues of AIDS patients in general are likely to be abnormally highly oxidized, clotting and blood factors from these patients can be expected to contain more SS bonds and there fore be even more immunosuppressive. Heating the agglutination factors to inactivate a supposed AIDS virus will, in fact, break at least part of the SS bonds and thus decrease both their immunosuppressive activity and therapeutic effectiveness.

Immunological and clinical abnormalities similar to those seen in AIDS have been reported in drug abusers as far back as 1973[115,116,117]. The immunological abnormalities include: absolute lymphopenia, decreased concentration of Igm and IgG antibodies and false-positive serological tests in as many as 40% of drug users. The clinical abnormalities include: lymphadenopathy ranging from benign hyperplasia to malignant lymphoma, other malignancies, fever, night sweats, chills, weight loss and increased susceptibility to infection. Opiates, like nitrites, are oxidizing agents. They produce their effects by binding to the membrane SH. Their effects can be prevented and reversed by reducing agents. The effectiveness of the reducing agents is directiv related to their negative redox potential, Eo[118].

According to Gallo the HTLV-III/LAV and thus AIDS originated in Africa[56]. He bases his hypothesis on: (i) The isolation from the lymphocytes of the African Green Monkey of a retrovirus closely related to HTLV-III/LAV[119]. (ii) The reported high seropositivity for HTLV infection in Africans[56]. (iii) The finding of HTLV-III/LAV. antibodies in sera collected from Africans before the recognition of AIDS[7I]. (iv) The diagnosis of AIDS in Haitians via which the HTLV-III/LAV is supposed to have been transmitted from Africa to America. The virus was isolated *in vitro* cell co-cultures and the monkeys were healthy and free of AIDS. Although some authors claim high seropositivity for HTLV infection in Africans, others find only negative results. Thus Weiss *et al* did not find antibodies to HTLV-I

in 1225 sera from donors of different African countries nor did Karpas *et al* in sera from Israeli Falashas in which others have reported a 37% positivity[73,120]. The prevalence of antibodies against the HTLV-III/LAV virus has been reported to vary from 6-50% in different African countries. Yet relatively few AIDS cases have been reported from this continent[17] . It is important to note that the test for HTLV-III/LAV antibodies in Africans are non-specific and that the reported AIDS cases from this continent seem to correspond geographically to these regions where anal intercourse is a common practice among heterosexual couples[17,121]. Equally important is the fact that African sera tend to be "sticky", which means that antibody tests can give relatively high levels of false positives and some investigators contend that this problem increases with age of the serum[71]. As far as the Haitian connection is concerned, "This speculation is based on no data..."[51] Furthermore recent evidence became available which shows that "risk factors are present among most patients with AIDS in Haiti"[122].

Conclusion

There are good reasons to doubt that HTLVIII/LAV can be regarded as the exclusive single variable in the pathogenesis of AIDS. There is therefore a spectrum of possibilities. Either it plays no role at all, is of minor significance or it contributes significantly but not exclusively to the disease. Be that as it may the one major significant variable is the concurrent exposure of the patients to oxidizing agents including sperm, nitrites, opiates and Factor VIII. If this is true the prevention, and possibly even cure, may be achieved with the use of appropriate antioxidants.

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Dietetic advice for immunodeficiency

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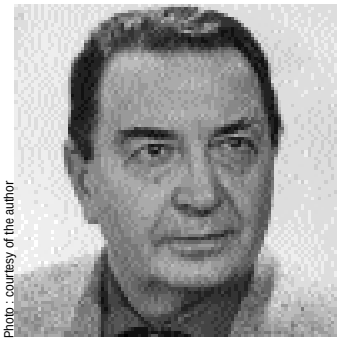

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Dr. Siro Passi graduated in biochemistry from the University of Rome in 1969. He is head of the Cell Aging Center of the IDI Research Institute (Rome). Over the past two decades he has investigated *in vivo* natural defence mechanisms of living cells against reactive oxygen and nitrogen species and other toxic radicals, and has published many papers on oxidative stress and its consequences in different pathologies. On the basis of his studies of patients diagnosed HIV positive and/or with AIDS in the early '90s, he asserted that HIV phenomena are the outcome of oxidative stress, not *vice versa*. In 1995 he published with Prof. Ferdinando Ippolitono, a 'heretic' book, *AIDS - new frontier,* ed. G. Lombardo, Rome.

Chiara De Luca graduated in Biology in 1985, and Pathology in 1989. Her research has included oxidative stress in animal and plant models, inhibition of aflatoxin induced tumor development and studies on the role of lipoperoxidation in cutaneous aging. At the Cell Aging Center, she works on the role of antioxidants and polyunsaturated fatty acids in blood and tissues, and oxidative mechanisms in the induction and development of infectious, pigmentary and neoplastic pathologies. Since 1991 she has collaborated with the National Institute for Nutrition, on the prevention of mycotoxin contamination of the main components of the national diet, the determination of additives in special foods and total diets, the study of antioxidants in food and the benefits of antioxidant supplementation by the use of 'functional foods'.

Diet, by definition, is not only the food in regular use, but also a prescribed course of food designed for the treatment and prevention of diseases. Physicians of antiquity, first of all Hippocrates in Greece and Rhases in Iran, taught: "If a diet can cure, prescribe no other remedy".

With the growth of scientific knowledge, dietetics has become an applied science, and today there is an increased understanding of the role of nutritional factors in degenerative diseases, prolonged illness, acute injury, and complicated surgical and medical procedures, which are all frequently accompanied by malnutrition. The immunological disorders associated with malnutrition were named "Nutritionally Acquired Immune Deficiency Syndrome" (NAIDS), much before the trumpeting appearance of HIV. Nutrition must be considered a fundamental intervention in the early and ongoing treatment of immunodeficiency; in particular, micronutrients represent important cofactors for the optimal functioning of the immune system and are able to enhance disease resistance in humans and animals. As a consequence, a plethora of commercial dietary products and practices purporting to enhance well being or reduce weight is in vogue, mainly in advanced countries. In addition, several companies have manufactured vitamin E, b-carotene, selenium, vitamin C, superoxide dismutase capsules, Chinese herbs, multivitamin tablets, and many other microelements as a panacea for all diseases. This is surely a multi-million dollar business, but many claims are unlikely to be true. And physicians and people should be alert since some of these diets and nutrients may induce toxicity states or nutrient deficiency in individuals adhering to them. Before getting on to the subject, we take the liberty of introducing some general considerations on nutrition.

Nutrition: general considerations (1-5)

All natural foods, the composition of which is very complex, yield nutrients that, on digestion, are generally classified into proteins, lipids or fats, carbohydrates, vitamins and mineral elements. These provide the body with the compounds necessary for the production of energy in the form of work and heat, and for growth, repair and reproduction of every living cell. Carbohydrates, lipids and proteins are considered macronutrients, and are interchangeable sources of energy: lipids yield up to 9 kcal/g, protein and carbohydrates up to 4 kcal/g. Vitamins and mineral elements are considered as micronutrients.

MACRONUTRIENTS

Proteins.

Human proteins are very large molecules which represent an essential structural part of cells and are built up from the 20 "standard" amino acids, listed in Table 1, and divided into essential and non-essential amino acids. The variety of ways in which they combine can provide millions of different proteins, which are "species-specific" in that their structures differ from one species to another.

Table 1. Essential and non-essential aminoacids in humans.

Essential	Non- essential
Histidine	Alanine
Leucine	Cysteine
Isoleucine	Glycine
Lysine	Proline
Methionine	Serine
Phenylalanine	Tyrosine
Threonine	Glutamine
Valine	Asparagine
Tryptophan	Aspartic acid
Arginine*	Glutamic acid

Only 10 amino acids have been shown to be "essential ", i.e. indispensable nutrients for humans and must be obtained from diet; the remaining ones can be synthesized by common intermediates, mainly deriving from the breakdown products of the metabolism of essential aminoacids.
*Even though mammals synthesize arginine by the urea cycle, the aminoacid is considered as essential, since it is required in a higher amount than can be produced by this route, mainly during normal childhood development.

Since different proteins contain different amounts of the essential amino acids, a balanced protein diet must contain different protein sources, which complement each other to supply the right proportion of all the essential amino acids. For example, milk proteins contain them in the proper proportion for a correct human nutrition; bean proteins, in contrast to wheat proteins, are rich in lysine, but are lacking in methionine. Any excess amino acids in the diet, beyond the effective needs of the body, are metabolized and burnt as a source of energy, which is largely more expensive than that deriving from fats or carbohydrates. In any case, as a general guide, it is recommended that the protein intake should be equivalent to 11-14% of the total calories in the diet.

Lipids or fats.

Lipids, partly deriving from diet, and partly from surplus carbohydrates in the food, provide the main reserve of energy. The term "lipids" includes both molecules that contain fatty acids (Table 2) - examples being triglycerides and phospholipids - and molecules such as cholesterol and steroid hormones displaying hydrocarbon ring structures. Recently, the terms "n-3 and n-6 polyunsaturated fatty acids – PUFA ", in contrast with saturated fatty acids, have become very familiar to the general public. They have been associated with the concept of "healthy fat", and oils such as "evening primrose oil" or "fish oil", have been promoted by wide advertising. It is important to underline that there are no pure "saturated" or "polyunsaturated" sources of dietary fats. In fact, most food triglycerides or phospholipids contain a mixture of saturated, monounsaturated and polyunsaturated fatty acids. Thus, for example, polyunsaturated corn oil contains approximately 20 % saturated fatty acids, and saturated lard has approximately equal levels of saturated and monounsaturated fatty acids.

Table 2. Natural fatty acids occurring in common foods, as triglycerides or phospholipids.

Common name	Main sources
Palmitic acid (C16:0)	Palm oil, butter, cheese and other animal fats and oils
Stearic acid (C18:0)	Tallow, butter, cheese, and other animal fats and oils
Oleic acid (C18:1 n-9)	Olive and hazel oils
Linoleic acid (C18:2 n-6)	Many seeds oils
a-linolenic acid (C18:3 n-3)	Linseed and rapeseed oils
g-linolenic acid (C18:3 n-6)	Borago and evening primrose oils
di-homo-g-linolenic acid (C20:3 n-6)	Human milk
Arachidonic acid (C20:4 n-6)	Animal membranes (phospholipids)
Eicosapentaenoic acid (C20:5 n-3)	Fish oils
Docosahexaenoic acid (C22:6 n-3)	Fish oils, nervous system (phospholipids)

Linoleic acid and a-linolenic acid are thought to be essential in the human diet and are known as essential fatty acids (EFA). Our cells are unable to synthesize them, and therefore they must be obtained mainly by food of vegetable origin. EFA, in the organism, can both supply energy by means of their oxidation and undergo biochemical transformations by means of desaturase and elongase enzymes to produce n-6 or n-3 polyunsaturated fatty acids (PUFA) with a higher number of double bonds, such as C20:3 n-6, C20:4 n-6, C20:5 n-3, C22:6 n-3, etc.
From a physio-pathological point of view, it has been suggested that:
n-6 PUFA may play an aetiological role in heart diseases, and cancer cells thrive on them;
n-3 PUFA may reduce the risk of both cancer and cardiovascular diseases;
monounsaturated fatty acids may help against cardiovascular diseases;
saturated fatty acids may be partly responsible for the degenerative changes in the arteries, sometimes resulting in coronary thrombosis;
trans-unsaturated fatty acids, i.e. unsaturated fatty acids with double bond in trans position, artificially generated during the process of hydrogenation of PUFA, and found in packaged snacks, may be involved in cardiovascular diseases and breast cancer.

Carbohydrates

Carbohydrates provide most of the energy (up to 90%) in almost all human diets; in any case, a well-balanced diet normally contains enough carbohydrates to provide 55-65% of total calories. The main carbohydrate in most natural foodstuff is starch that, during digestion and metabolism, is finally converted into glucose. This is carried by the blood to tissues, where it is either oxidized at once or converted to fat, since the body has a very limited capability for storing it as glycogen in muscles and liver.

MICRONUTRIENTS: vitamins and mineral elements (Table 3)

Vitamins.

Vitamins are classified as fat soluble (A, D, E and K) or water soluble (B group and C). The former ones are mainly derived from animal or vegetable fats; the vitamin B group from whole grain cereals, and vitamin C from fresh fruits and green vegetables.

Mineral elements.

The main mineral elements occurring in the body at concentration >0.005% are calcium, phosphorus, and potassium. Other elements such as iron, magnesium, sodium, zinc, iodine, copper, selenium, fluorine, cobalt, chromium occur in much lower concentrations (< 0.005 %).

Elements such as gold and silver found in the body do not appear to play a recognized metabolic role, while other elements such as barium and strontium are only suspected of being essential.

Table 3. The principal micronutrients.

THE PRINCIPAL MICRONUTRIENTS (VITAMINS & MINERALS)

Micronutrients	Main natural sources (µg /100 g)	Main Functions	Recommended dietary allowances (RDA) for healthy adults (19-50 yr.), males or females	
		FAT SOLUBLE VITAMINS	**MALES**	**FEMALES**
Vitamin A (Retinol)	Cow and pigs livers 5,000-10,000 Cod liver oil 15,000-20,000 Shark liver oil 600,000-10,000.000 Egg yolk 300-450 Parmesan cheese 300-350 Milk 30-50	Photoreceptor mechanism of retina; integrity of epithelia; glycoprotein synthesis…. antioxidant?	1,000 µg	800 µg
b-carotene	Carrots 5,000-12,000 Fennel 4,000-5,000 Broccoli, cabbages 1,900-5,000 Apricots 1,000 4,000	Provitamin A scavenger of singlet oxygen suggested antioxidant *in vivo*….	See vitamin A 6 µg b-carotene=1 retinol equivalent (RE)	
Lycopene	Fresh ripe Tomatoes 1,800-2,500	Scavenger of singlet oxygen; Suggested antioxidant *in vivo*	Non set	
Vitamin D	UV irradiation of the skin Cod liver oil 250-750 Tuna liver oil 5,000-10,000 Egg yolk 4-10	Calcium and phosphorus absorption; Resorption mineralisation and collagen maturation of bone….	10-5 µg 1 IU vitamin D = 0.025 ng cholecalcipherol	10-5 µg
Vitamin E (d-RRR-a tocopherol)	Wheat germ oil 150,000-500,000 Cereal germs 12,000-14,000 Soya bean oil 120,000-160,000 Olive oil 10,000-20,000 Peanut oil 14,000-30,000 Egg yolk 1,000-1,500	Chain breaking antioxidant *in vivo*….	10 mg (USA) 4 mg (UK)) 1 mg d-RRR a tocopherol =1.49IU=1.49 mg synthetic d, 1-a tocopherol acetate	8 mg (USA) 3 mg (UK)
Vitamin K (group)	Spinach leaves 500-600 Cabbages 350-400 Carrots 0,80-100 Broccoli 120-140 Lettuce 180-200 Pork liver 400-800	Normal blood coagulation; formation of coagulation factors (prothrombin, *etc.*)….	70-80 mg	60-65mg
		WATER SOLUBLE VITAMINS		
Vitamin C	Citrus fruits 40,000-60,000 Spinach leaves 70,000-90,000 Potatoes 10,000-30,000 Cabbages 30,000-1,000 Broccoli 100,000-120,000	Collagen formation, vascular function ; wound healing; antioxidant i*n vivo*….	60 mg (USA)) 40 mg (UK	60 mg (USA) 40 mg (UK)

Thiamine (vit B1)	Dried yeast 2,500-10,000 Whole grains 300-500 Beef meat 500-5,000 Pork meat 300-1,000 Legumes 350-400 Egg yolk 300-500	Carbohydrate metabolism; nerve cell function; myocardial function….	1.2 mg	0.9 mg
Riboflavin (vit B2)	Dried yeast 3,000-5,000 Cheese 300-700 Milk 150-170 Beef, pork meat 100-400 Cows liver, pork liver 1,700-3,200 Cereal germ 500-4,000 Wheat flour 100-200	Energy and protein metabolism(precursor of FMN and FAD); integrity of mucous membrane	1.6 mg	1.3 mg
Niacin (nicotinic acid, nicotinamide)	Dried yeast 50,000-60,000 Whole grain cereals 1,500-5,000 Wheat flour 4,800-5,500 Legumes 2,300-5,000 Pork, beef meats and liver 5,000-12,000 Fish (cool, salmon, tinca) 2,000-10,000	Oxidation-reduction reactions (precursor of NAD(P)H; Carbohydrate metabolism…	18 mg	14 mg 1 mg niacin = 1 niacin equivalent (1NE) =60 mg dietary tryptofan (this aminoacid is able to synthesize endogenous niacin)
Pyridoxine (vit B6 group)	Dried yeast 4,000-10,000 Cereals 300-600 Wheat flour 400-700 Liver 1000-2500 Beef, pork meat 300-700 Egg yolk 170-200 Vegetables 100-500	Pyridoxal phosphate is involved in several reactions: transamination, decarboxylation, deamination, tryptophan metabolism, porphyrin and heme biosynthesis, linoleic acid metabolism….	2.0 mg	1.6 mg
Biotin (vit H)	Yeast 90 Vegetables 10-20 Milk 2-5 Cheese 1,5-2 Egg yolk 15-20 Cereals products 4-12 Meat (beef, pork, sheep, chicken) 3-10 Fish 0,2-3	Aminoacid and fatty acid metabolism; carboxylation and decarboxylation of oxoloacetic acid….	150-300 mg	
Folic acid (vit Bc)	Cows liver, pork liver 30-150 Beef, pork meat 10-50 Egg yolk 60-100 Legumes 35-130 Fennels 90-100 Spinach, asparagus 90-120 Cheese 10-30 Cereals 15-30	Maturation of erythrocytes; synthesis of purines and pyrimidines; metabolism of some aminoacids….	200 mg	180 mg

Vitamin B12 (cobamins)	Beef, pork liver 30-60 Beef, pork kidney 10-30 Cow milk 1-4 Fish (Tuna) 4-5	Maturation of erythrocytes; DNA synthesis; neural function….	2.0 mg	2.0 mg
		MINERALS		
Sodium	Wide distribution in foods.	Acid-base balance; blood pH; osmotic pressure; muscle contractility; nerve sodium pump; transcription….	575-3,500 mg	
Potassium	Wide distribution, mainly in milk and fruits (bananas, prunes, raisins).	Muscle activity; nerve transcription; intracellular acid-base balance….	3,100 mg	3,100 mg
Calcium	Milk, cheese, meat, fruit, fish, cereals, vegetables, legumes.	Bone and tooth formation; blood coagulation; neuromus-colar irritability; muscle contractility….	1,200-800 mg	1,200-800 mg
Phosphorus	Milk, cheese, meat, fish cereals, legumes.	Bone and tooth formation; acid-base balance; DNA and RNA synthesis; energy production;	1,200-800 mg	1,200-800 mg
Magnesium	Green leaves, cereals, fish.	Bone and tooth formation; nerve contraction; muscle contractility enzyme activation….	350 mg	280 mg
Iron	Wide distribution, mails is not meats, liver etc	Hemoglobin, myoglobin, catalase, mitochondria….	10 mg (USA) 8.7 mg (UK)	10 mg (USA) 14.8 mg (UK)
Zinc	Wide distribution, mainly in vegetables.	Component of enzymes (Cu,Zu-SOD) and insulin; skin integrity, wound healing, growth….	15 mg (USA) 9.5 mg (UK)	15 mg (USA) 7.0 mg (UK)
Cobalt	Green leafy vegetables.	Component of vitamin B12.	Not set	
Copper	Meats, oysters, legumes, whole grain cereals.	Cu,Zn-SOD; caeruloplasmin; hemopoiesis; bone formation;	2-3 mg (USA) 1-2 mg (UK)	
Selenium	Meats, fish, garlic.	Component of glutathione peroxidase; thyroid function; Detoxication of carcinogens?	50-200 mg (USA) 75 µg (UK)	60µg (UK)
Chromium	Brewer's yeast.	Part of glucose tolerance factor;	200µg	
Fluorine	Mineral water, fish, egg, tea.	Tooth formation;	1.5-4µg	
Iodine	Seafood, iodine salt.	Thyroxine and triiodothyroxine formation; Energy control mecha-nisms….	150µg	
		OTHER IMPORTANT NUTRIENTS		
Ubiquinone (CoQ10)	Heart and liver of cow, pork, sheep etc., fish	Antioxidant (mainly in its reduced form)	Not set	
Flavonoids	Most fruits and vegetables	Antioxidant *in vivo*?, directly cytotoxic to cancer cells ? anti-angiogenetic agents?	Not set	

Phitic acid	Many grains	Bind transitional metals, decrease iron absorption;	Not set
Genistein	Soybeans	Anti-angiogenetic agent;	Not set
Catechins (polyphenols)	Green tea, black tea, many berries	Antioxidant "in vivo"? directly cytotoxic to cancer cells ?	Not set
Resveratrol	Red wine, grape juice	Antioxidant "in vivo"? reduce the incidence of skin tumors in mice by approximately 88 %….	Not set
Allyl sulfides	Garlic, onions	Stimulation of enzymes able to detoxify carcinogens;	Not set
Isothiocyanates	Mustard, radishes	Induce protective enzymes;	Not set
Fibre	Grains, vegetables	Increases speed of movement of faeces through colon; dilutes carcinogenic drugs and delays their formation;	20-30 g (USA) 12-14g (UK) The UK RDA refers to total "non starch carbohydrate polymers"

A diet for immunodeficiency and, in particular, for diagnosed HIV seropositive (HIV+) and AIDS patients.

It is important to emphasise that it is a nonsense to believe that a single diet may be useful for all patients. In general, macro and micronutrients mentioned under "general considerations" are essential for humans, and their metabolism follows the same pathways, but the response is individual. A relationship has been shown to exist between the quality and quantity of digested nutrients and the nutritional state and the immunocompetence of an individual. There can be various "degrees" of immunodeficiency, each of which can display peculiar nutritional requirements. Therefore, we'll confine ourselves to giving dietetic advice that, in any case, can be modified during treating immunodeficiency. In our laboratory, such advice is monitored quarterly by blood analyses (plasma, lymphocytes, erythrocytes) of factors we have called "cell health indicators", i.e., albumin, free and esterified cholesterol, phospholipids and their fatty acid pattern, vitamin E, vitamin A, b-carotene, lycopene, vitamin C, uric acid, ubiquinol/ubiquinone and reduced glutathione/oxidized glutatione redox couples, total thiols, selenium, iron, copper, lipoperoxidation levels, superoxide dismutase, glutathione peroxidase, catalase, etc.[6-9]. These analyses, in addition to haemochrome, CD4+, and CD8+, represent the basis of our 12-year experimental observations on patients diagnosed with AIDS, pointing out that a severe oxidative stress occurs in the blood of patients diagnosed HIV positive (HIV+) in comparison with healthy age and sex matched controls, and increases significantly with the degree of immunodeficiency: AIDS > symptomatic HIV+ > asymptomatic HIV+ > controls.

The observed oxidative stress is characterized either by the depletion of:

- **lipophilic antioxidants [vitamin E (vit E), ubiquinol ($CoQ_{10}H_2$), ubiquinone(CoQ_{10}), vitamin A (vit A), and b-carotene],**
- **hydrophilic antioxidants [reduced glutathione (GSH), ascorbate, and urate],**
- **selenium (Se),**
- **phospholipids (PL) and cholesterol esters (CE), and their polyunsaturated fatty acid (PUFA) patterns,**

or by an increase of:

- **by-products of polyunsaturated fatty acid and protein oxidation,**

or by:

- **a critical imbalance of enzymatic antioxidants (superoxide dismutase and glutathione peroxidase).**

In particular, the deficiency of ubiquinol, vitamin E, reduced glutathione, phospholipids, cholesterol, and polyunsaturated fatty acids represents an early marker of the condition. It is worth mentioning that deficiency of antioxidants produces oxidative stress. When this is severe, it is able to damage cellular macromolecules, in particular, DNA; proteins, and unsaturated lipids (Table 4), and their functions, which are maintained and mediated by critical redox systems, thus contributing to the physio-pathology of many diseases (Fig.1).

Table 4

Molecule	**Type of damage**
DNA	Changes in adenine, guanine, cytosine, and thymine bases Breakage of DNA backbone in single or double strand breaks of the double helix Attack on the deoxyribose
Unsaturated lipids	Oxidation of PUFA (lipoperoxidation) and damage to membrane proteins
Proteins	Breakage of proteins Oxidation of thiol and amino residues of aminoacids Cross-linking of different protein molecules by aminoacid radicals

Table 4. Molecules damaged by a sustained oxidative stress and type of damage. An oxidative stress can be defined as any unbalance between antioxidant defences and generation of reactive oxygen and nitrogen species (ROS, RNS), and other reactive radicals (R). It follows that an

oxidative stress can be induced in biological systems by the depletion of antioxidants and/or an overload of reactive oxidant species, so that the antioxidant pool becomes insufficient [8-11].

Figure 1

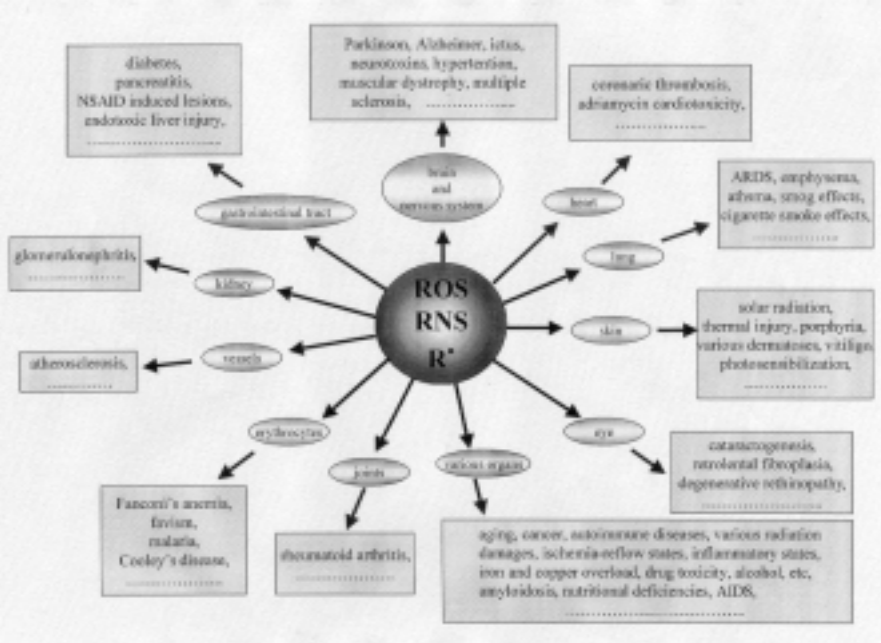

Fig.1. Possible involvement of oxidative stress in numerous diseases. This does not mean that reactive oxidant species are the main cause of the above diseases. Certainly it cannot be denied that their production accompanies most, and perhaps all, human diseases, and that, in several cases, they may play a significant role in the onset of the diseases and /or contribute significantly to their progression.

The first necessary measure is to take regard of the reinstatement of those molecules, the levels of which are reduced when compared to normal, and this is possible by the opportune combination of diet and integrators.

It is enlightening that many years ago, long before the antibiotic era, there were fierce quarrels between scientists aiming to discover a drug active against Koch tubercle bacillus and scientists who, conscious that environmental factors such as poverty, deficient diet and poor housing can play an aetiological role in the incidence and spread of tubercolosis, maintained that it would be better to empower the body's defences, by reducing the influence of environmental factors. The suggestions of the latter prevailed mainly in Northern European countries. Bed rest, plentiful diet, sunlight, fresh air, adequate hygienic measures, and isolation of the patients became the regime of choice. These rational and preventive treatments led to the inversion of the spread of the disease in those countries, some decades before the discovery of streptomycin by S. A. Waksman in 1944.

What to do?

Table 3 can be considered as a useful guide for the physiological intake of micronutrients from the diet. Micronutrients does not mean nutrients of less importance as compared to macronutrients: antioxidant defences, for example, rely mainly on some vitamins and minerals from the diet. However, it is often better to utilize one or more micronutrients in the form of pills or tablets, the prerequisite being that they must be taken from natural sources and assimilated in proper amounts. An apt example is given by vitamin E (vit E). Dietary vit E occurs in a variety of forms, such as a, b, d, and g-tocopherols differing in the number of methyl groups on the chromanol ring and having a phytyl tail. The biological activities of the four homologues, as determined by a rat resorption test[12], vary from 100% for a-tocopherol (d-RRR-a-tocopherol), to 57% for b-tocopherol, (d-RRR-b-tocopherol), 31% for g-tocopherol (d-RRR-g-tocopherol), to 1.4% for d-tocopherol (d-RRR-d-tocopherol). In addition to natural homologues, synthetic vit E (d, l-a-tocopherol or all-rac a-tocopherol), which is widely used as a supplement, contains eight different isomers (SSR,SSS,SRS,SRR, RSS, RRS, RRR, RSR), of which only approximately 12% is d-RRR-a-tocopherol (Fig.2). Its stereosisomers are less biologically active (21-90 %), the biological activities of the 2-S forms being lower than the 2-R forms[13].

In any case, despite the different biological activities of homologues and stereoisomers of a-tocopherol, there is biodiscrimination, which allows a-tocopherol to predominate in blood and tissues. Dietary or synthetic forms of vit E are absorbed from the intestinal lumen in the presence of biliary and pancreatic secretions, which are necessary for micelle formation. It has been observed that the different forms do not compete with each other during absorption and secretion in chylomicrons. In other words they are absorbed with equal affinity, and, during chylomicron catabolism, are similarly present in all of lipoproteins, an aliquot being delivered to peripheral tissues, and the remainder to liver under the form of chylomicron remnants. **In contrast to the intestine, the liver discriminates among the various forms of tocopherols.** In fact the hepatic tocopherol transfer protein preferentially selects and transfers d-RRR-a-tocopherol to VLDL (very low density lipoproteins) during their assembly. Following VLDL secretion into the plasma, a-tocopherol can be distributed to other lipoproteins and tissues. Excess a-tocopherol and other forms of vit E are likely excreted in the bile.

From this wide-ranging discourse on vit E and its homologues, it is possible to assert that the best way to face the real requirements of the vitamin is to administer, by any route, suitable amounts of d-RRR-a-tocopherol or of its stable derivative d-RRR-a-tocopheryl acetate.

But, let us go on with our dietetic advice.

Proteins.

60-80 g daily from different sources such as red meats, fish, whole milk, eggs, whole cereals legumes, etc. These sources must be preferentially fresh and varied. It is important to monitor quarterly patients' plasma levels of albumin, a protein containing high levels of thiols (0.3-0.5 mM) and able to scavenge a wide range of reactive species and radicals, that can damage it. Contrary to several oxidized molecules, the damaged albumin is not dangerous for the cells: it is simply removed from circulation and replaced, so that it is considered as a very important “sacrificial antioxidant”.

Carbohydrates.

RDA for carbohydrates is not well defined. It is normally asserted that carbohydrates, of which approximately 90% are polysaccarides and only 10% mono and disaccarides, must provide 55-65% total body calories. In any case, at least 180g glucose/day, whatever the metabolic origin of glucose, are indispensable to satisfy the energetic requirements of both brain (140 g/day) and erythrocytes (40 g/day). Among carbohydrates, of great importance is the role of fibers, i.e. the sum of undigestible carbohydrates, such as pentosans, pectins,

cellulose, emicellulose, lignine, etc. The daily consumption of fibers should be in the order of 15-20g, and derived from foods rich in fibers such as cereals, legumes, vegetables, and fruit, more than from concentrated fibers.

Lipids.

The lipid metabolism is significantly impaired in AIDS patients: phospholipids, cholesterol esters (and therefore total cholesterol), high polyunsaturated fatty acid patterns (C20:3 n-6, C20:4 n-6, C22:6 n-3, etc.) of phospholipids and cholesterol esters are significantly reduced, while saturated fatty acid patterns (C14:0, C16:0, C18:0) of the same lipid fractions are significantly increased, as compared to healthy control values (8-9). The imbalance in fatty acid patterns of n-6 and n-3 series is probably dependent on insufficient D-6, D-5, and D-4 desaturase activities[6-9], which require, for their normal physiological activities, optimal levels of vit E, ubiquinol/ubiquinone, and selenium[8-9]. Brenner[14], in studying the factors which influence the activity of the first of these enzymes, i.e. D-6 desaturase, demonstrated that its activity is inhibited by various causes such as ageing, reactive oxidant species, lipoperoxidation, prolonged fasting, diabetes, hypoproteic diet, alcohol, stress due to excessive release of catecholamines, thyroxine, radiations, etc. This means that a normal intake of essential fatty acids (C18:2 n-6 and C18:3 n-3) may not guarantee for their functional utilization.

From a quantitative point of view, the daily lipidic intake of fatty acids (mainly in the form of triglycerides) should be in the order of 25-30% of the total calories in the diet. Saturated fatty acids should not exceed 10%, *trans*-monounsaturated fatty acids 2%, monounsaturated fatty acids 10%, essential fatty acids and poly-unsaturated fatty acids 6-8%, with a ratio n-6/n-3 of 6-10/1. Also extremely important is the nutritional intake of cholesterol, and phospholipids. The former is present, mainly in free form, in cheese, milk, offal (liver, heart, kidney of beef or pork), meat, fish etc, and its daily intake should not exceed 400-500 mg. It is claimed that an elevated intake of cholesterol lowers its endogenous biosynthesis, but this homeostatic mechanism is often inefficient in many diseases. As for phospholipids, that deliver to the body not only essential fatty acids, but also fundamental molecules, such as choline, serine, and inositol, their daily intake should be in the order of 4-6g. The sources of phospholipids ought to be red meats, offal, raw vegetables, legumes, etc.

Micronutrients.

A large aliquot of vitamins and minerals is supplied by fruit and vegetables, the remainder deriving from the same sources that provide macronutrients. For example, red meats and liver from several animals, in addition to proteins, cholesterol and PUFA, are very rich in bio-available iron, contrary to spinach and egg yolk, which also contain high levels of iron. Among micronutrients, antioxidants play an important role in immunodeficiency[8,9,15-24]. The purpose of the immune system is to destroy invading organisms and damaged cells, bringing about recovery. For this purpose it generates powerful substances such as cytokines and reactive oxygen species (ROS), the excessive or non-physiological production of which can be associated with mortality and morbidity after infections, and with inflammatory diseases. ROS enhance the biosynthesis of interleukin-1, interleukin-6, interleukin-8, TNF-a etc., in response to inflammatory stimuli, by activating nuclear transcription factor, NT-kB. These cytokines are able to stimulate ROS formation, that would contribute to the depletion of GSH and other antioxidants, which, directly and indirectly ought to protect the host against the damaging combined effects of ROS and cytokines. The nature and the extent of the antioxidant defences are influenced by their dietary intake or by the intake of their precursors. In particular, we have emphasized that the deficiency of lipophilic and hydrophilic antioxidants coupled to an imbalance of enzymatic antioxidant activities, affects the blood, and, consequently, tissues, of HIV+diagnosed patients, and increases significantly if the condition progresses[6-9].

Antioxidant therapies have been proposed for patients diagnosed HIV+ or with AIDS, and several clinical trials have been carried out with GSH pro-drugs (N-acetyl cysteine, glutathione esters, and oxothiazolidine-4-carboxylate) or vit C or vit E or ubiquinone or lipoic acid, etc. but, to our knowledge, without evident clinical benefits[25-33]. As a matter of fact, the proposed antioxidant therapies have been nothing but antioxidant mono-therapies. They follow the dictates of literature, where it is generally reported that enzymatic and non-enzymatic antioxidants form a dynamic integral pool, in which the deficiency of one or more constituents can be compensated by the increased amounts of one or more molecules of the same pool, in order to maintain a homeostatic protective system against oxidative damage towards susceptible cell components. This may happen with a mild degree of deficiency, but not with the severe depletions and imbalances that may be observed in individuals diagnosed HIV+. It is a nonsense to 'fight AIDS' on the basis of results from experimental and highly questionable *in vitro* measurements, showing that an antioxidant is capable of inhibiting TNF-a synthesis or NF-kB activation and, consequently, HIV replication. Granted, for the sake of argument, that the administration of GSH pro-drugs leads to its increased intracellular levels, how is it possible to believe that such increase may re-balance the significant deficiencies of $CoQ_{10}H_2$, CoQ_{10}, vit E, vit A, vit C, PL, CE, PUFA, the imbalance of enzymatic antioxidants, etc.? The same is true same for vit E, or CoQ_{10}, or vit C, or lipoic acid, etc.

In our opinion, in order to re-balance the cell redox status, it is necessary to administer the deficient antioxidants by appropriate vegetables and fruit plus external supplements. Appropriate vegetables and fruit, i.e. oranges, kiwi, carrots, red grapes, apples, tomatoes, broccoli, cabbages etc. have to supply vit C, b-carotene (the precursor of vit A), lycopene, flavonoids - all antioxidants that, when administered in the form of tablets or capsules, i.e. without their natural entourage to buffer and protect them, may show pro-oxidant activities. As external supplements we intend d-RRR-a-tocopherol, ubiquinone, precursors of GSH and glutathione peroxidase, vitamin PP, the uptake of which from foods can be insufficient or not easy. In this connection, in our Cell Aging Center we have patented and produced a multinutrient preparation - IMMUGEN - recommended for the prevention and treatment of oxidative stress in all its manifestations. Each gelatine capsule (or tablet) contains:

ubiquinone, 12.5 mg; RRR-a- tocopheryl acetate, 12.5 mg; l-methionine, 50.0 mg; selenium (as selenium aspartate), 12.5 mg; soybean phospholipid complex, 147.0 mg. The phospholipid complex contains: phosphatidyl choline, 23%; phosphatidyl ethanolamine, 20%; phospatidyl inositol, 14%; phosphatidic acid, 8%; other phospholipids, 8%; glicolipids, 15%; carbohydrates, 8%; neutral lipids, 3%.

Mode of action of IMMUGEN

Reduced and **oxidized ubiquinones** ($CoQ_{10}H_2$ and CoQ_{10} - UBI -) are ubiquitous and essential for life, meaning they exist in all body cells and support cellular energy production by helping generate adenosine triphosphate (ATP). Once UBI body levels become more than 25-30% deficient, many diseases may begin, including immunodeficiency, cancer, cardiovascular diseases, etc.

It is well known that CoQ_{10}, in addition to its function as an electron and proton carrier in mitochondria, acts as a powerful antioxidant in its reduced form ubiquinol ($CoQ_{10}H_2$), by preventing both the initiation and the propagation steps of lipoperoxidation in biological membranes[34-35]. Furthermore, it is able to sustain efficiently the chain breaking antioxidant capacity of Vit E, by regenerating it from a-tocopheryl radical[36],

which otherwise would need the cooperation of hydrophilic antioxidants such as Vit C and/or GSH. Therefore, as $CoQ_{10}H_2$ is essential to maintain Vit E status and function, decrease of $CoQ_{10}H_2$ in turn contributes to further exacerbate the depletion of Vit E. It is worth mentioning that $CoQ_{10}H_2$ is the only known lipophilic antioxidant that mammalian cells can sinthesize *de novo* and for which there are enzymic NAD(P)H dependent mechanisms able to (re)generate it from CoQ_{10}[37-38]. A derangement of these reductive mechanisms, due to an over production of pro-oxidant reactive species, coupled to a reduced CoQ_{10} biosynthesis, represents an important fingerprint of immunodeficiency and its progression.

RRR-a-tocopheryl acetate is a stable form of natural vit E, a chain breaking antioxidant that works in sinergy with CoQ_{10}/$CoQ_{10}H_2$ to prevent oxidative damage to lipid membranes and plasma phospholipids. In its antioxidant role, vit E becomes oxidized; thereafter it can be regenerated particularly by $CoQ_{10}H_2$. A recent study[39] suggests that high serum levels of vit E in individuals diagnmosed HIV+ is associated with a decrease in risk of progression to AIDS and mortality, while low serum concentrations have been correlated with higher degree of lipoperoxidation[40], decreased plasma PUFA[22], and increased p24 antigenemia[22]. Vit E supplementation during murine AIDS, which may be functionally similar to human AIDS modulates cytokine release and helps to ameliorate the disorders during the disease, suggesting vit E's usefulness in the treatment of AIDS in humans[40]. Dietary oxidative stress due to either vit E or selenium deficiency allows a normally benign virus (amyocarditic coxackievirus B3) to convert to virulence and cause heart damage in mice. The conversion to virulence is due, according to Beck and Levander[41], to a nucleotide sequence change in the genome of the benign virus, which then resembles the nucleotide sequence of virulent strains.

L-methionine, an essential amino acid, supplies both the methyl group essential for the biosynthesis of phospatidyil choline, the main membrane phospholipid, and (?) methyl transferase activity, and the sulphur atom necessary for the biosynthesis of reduced glutathione (GSH), which is the reducing molecule of glutathione peroxidase, an enzyme which also requires selenium (Se) for its antioxidant activity. Apart from polyamines, which are strong chelators of transitional metals, among the final catabolites of methionine other sulphurated molecules must also be considered, such as taurine and sulphates, which, together with GSH, are extremely valid endogenous detoxifying agents. A recent study has shown that methionine, threonine, valine and lysine are rate limiting for whole body protein synthesis in AIDS patients, suggesting that there are selective aminoacids requirements in these individuals[42].

Selenoproteins discovered in mammalian cells may account for the important role of Se not only in the body's antioxidant defence, but also in thyroid hormone function, cellular immunity, formation of sperm, and functioning of the prostate gland. According to Cowgil a pattern does exist between the geographical distribution of Se and AIDS mortality, such that an inverse relationship persists between Se amount in the soil of an area and AIDS mortality in the same area[43].

Phospolipids, together with vit E, CoQ_{10} and $CoQ_{10}H_2$ are essential constituents of cellular membranes, from which the immune response draws its origin.

Suggested treatment to prevent immunodeficiency progression in diagnosed HIV+ patients.

We recommend 3-4 capsules daily of IMMUGEN (or similar micronutrients) plus 50 mg of vitamin PP (the precursor of NAD(P)H) during main meals as external supplements, plus a varied diet in the home with a high biological value (Table 5). In addition we suggest food to avoid or, at least, to reduce drastically. It is evident that other supplements may be absolutely necessary, for example folate and/or vitamin B12 in the case of anemia, or vitamin B6 in psychological distress, etc.

Might the same combined treatment produce beneficial effects, for example by reducing the risks of opportunistic diseases, in diagnosed symptomatic HIV+ and AIDS patients (CD4+: < 200; 180-10 cells mm^3)? The answer is undoubtedly positive in those individuals showing no serious problems of malabsorption and whose blood levels of "health cell indicators", though significantly reduced before treatment as compared to healthy controls, increase significantly after 1-2 months of treatment. When, on the contrary, oxidative stress combined with medication and recreational drug abuses, and emotional distress, have irreversibly undermined the body, leading to a downward spiral of malabsorption, weight loss, wasting, diarrhea, anorexia, body image disturbance etc., it is clear that our oral combined treatment becomes insufficient: the AIDS establishment, mercenary scientific journals and mass media can, with impunity, toast death.

Table 5. Dietetic advice for diagnosed HIV+ (and AIDS) patients.

Breakfast
Whole milk (200-300ml) or yogurts (100-150 ml); cereals (25-50 g), porridge or whole meal biscuits; soy bean lecithin (1.2 spoons); jam or honey (as sweetener); coffee or tea (optional).

Midmorning or midafternoon
Tea, biscuits, and/or fruit juice.

Lunch or dinner

Pasta or rice, or soup.	100-150 g, daily
Bread	200-300 g of whole bread or enriched bread, daily.
Red meat	150-200 g of rare/medium steaks from beef or pork (visible fat must be removed), 2-3 times a week.
Offal	100-150 g of liver or heart or kidney from beef or pork, 1-2 times a week.
White meat	200-250 g of chicken or lamb or rabbit, etc., 1-2 times a week.
Fish	150-250 g of fresh fish (cod or salmon or herring or trout, etc.), 2 times a week.
Egg	3-4 whole eggs a week.
Vegetables	150-200 g daily of fresh vegetables (broccoli , lettuce, spinach, Brussels sprouts, potatoes, etc.)
Legumes	100-150 g of legumes (different types of beans, lentils, etc.), 1-2 times a week.
Fruit	300-400 g daily of fresh seasonal fruit (oranges, kiwi, black grapes, apricots,

	prunes, banana, etc.). Also dry fruits (nuts, almonds, raisins, dates, etc.) are indicated for their high content in poly unsaturated fatty acids and potassium).
Cheese	40-50 g of parmisan cheese or of non-excessively fat cheese, 3-4 times a week.
Oil	olive oil (10-30 g) for prolonged cooking, non-peroxidized corn or soybean or sunflower oils for raw sauces.

In boiling vegetables, prolonged heating at high temperatures should be avoided, and the amount of water should be kept to a minimum and already hot, otherwise much of ascorbic acids and other vitamins and minerals will be destroyed or dissolved away.

Don't worry about red meats and offal: it is true they contain remarkable amounts of cholesterol (mainly free cholesterol) and iron, but cholesterol excess is the last thing an immunodeficient person need fear, because of its low plasma concentrations. As for iron and its role in pro-oxidative stress, we have ascertained that the plasma levels of ferritin and NTBI in people diagnosed HIV+ and AIDS patients are in the normal ranges (91 ± 14 ng/mL of plasma for ferritin, and 0 µg/dL for NTBI).

Table 6. Foods to avoid or reduce drastically.

Animal fat and dairy products such as butter, short ening, ordinary margarine, coconut oil, lard, cream, and food containing these ingredients, i.e., salami, sausages, wurstels, cakes, pastries, biscuits etc;
fried foods, in particular from fast foods or fish and chips shops;
strong spices;
highly seasoned and tinned food;
alcoholic beverages.

Abstract

Following many years of research in vivo on HIV+ and AIDS patients and on the basis of their effective blood deficiencies of micronutrients, ascertained by unequivocal analytical techniques, the authors' dietary recommendations are:

a varied diet in the home with a high biological value, which ensures an excellent intake of proteins, polyunsaturated fatty acids under the form of phospholipids and triglycerides, cholesterol, vitamins and minerals;

a cocktail of natural antioxidants and their precursors such as d-RRR-a-tocopherol, ubiquinone, selenium, precursors of GSH , to assume, as supplements, during meals.

These combined treatments, allowing a re-balancing of cell redox status, membrane lipid constituents, and possible caloric and protein deficiencies, may have a beneficial therapeutic value to prevent the progression of immunodeficiency. This is possible mainly in less compromised patients, in whom the oxidative damage to cells has not yet reached a critical threshold of no return, and can still be successfully fought. Certainly it is much healthier than the extremely toxic DNA chain terminators, anti-proteases, antibiotics, antifungal agents and similar dangerous molecules, fideistically prescribed daily by the members of the orthodox AIDS establishment, and capable of inducing a physical decline even in healthy individuals.

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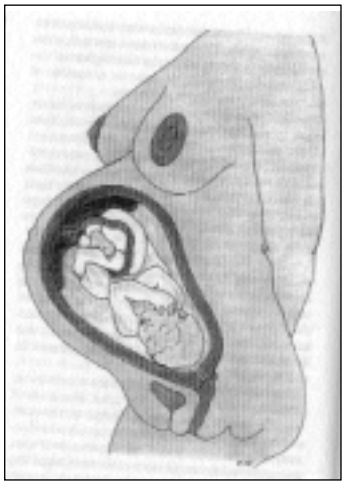
Urine Therapy: New Possibilities for an Ancient Therapy

Molly Ratcliffe

The second world conference on Urine Therapy will be held in Germany from 13th to 16th May 1999.

The conference hopes to create a deeper understanding of the dynamics of Urine Therapy (UT), to promote its use amongst doctors, health practitioners and the general public, and to exchange knowledge and experience between UT professionals. The conference is organised on the basis of a holistic paradigm within which mechanistic hypotheses and energetic explanations will be discussed and respected. Some integral areas to be covered are UT and:

- cancer treatment
- Hiv/Aids
- homeopathic doses
- injections of urine
- treatment for allergies
- external/cosmetic use
- analysis/diagnosis
- use with allopathic medicine
- diet/fasting
- Ayurvedic medicine/yoga
- scientific research
- spirituality



Urine therapy before we are born? A foetus floats in amniotic fluid which consists mainly of urine. The foetus drinks some of this fluid every day, and urinates it out again: a cycle which helps build up the body and internal organs.

Traditionally called Amaroli in India, UT has been practised in all civilisations. Roman author Plinius Secundus discussed its use in the treatment of wounds, bites, burns, infections and skin diseases. In ancient Rome urine was a valuable commodity utilised in the textile industry and taxes were levied on the collection of it. The saying "Money doesn't stink" refers to the profitability of this tax! Druids used urine as part of ritual activities. Five thousand year old Hindu texts relate use of urine as a spiritual and medicinal practice, advising on the rejuvenating effects, especially in combination with yoga and meditation. Taoist and Buddhist texts refer to UT: contemporary monks drink the urine of high Lamas in certain circumstances, as purity of body and mind are seen as one within Eastern traditions.

In India the use of urine has continued, particularly among those following a spiritual path. UT hospitals exist where anyone can go to learn and be guided through appropriate applications, diet, fasting and massaging with urine etc. In the West urine continues to have value to industry, notably cosmetics manufacture. Urea, the main constituent of urine besides water, is known to moisturise and revitalise the skin. Many skin and hair products contain urea, extracted from horse urine or from sewage plants.

Western interest in UT was rejuvenated in the '70s by the publication of *The Waters of Life* by J.W. Armstrong describing his inspiring experiences. Having healed himself of TB by fasting on urine he went on to treat others suffering from a range of conditions as diverse as kidney failure, psoriasis and cancer.

As the conference will demonstrate, UT is practised in an amazing variety of ways today, utilised as a whole substance or as extracts, alone or in conjunction with other therapeutic approaches. A simple and effective method is to drink the first urine of the day (mid-flow) starting with a small amount and gradually increasing it, as detoxification processes are most successful when allowed to happen slowly. Rubbing urine into the skin is also recommended, allowing it to dry in the open air.

Some theories describing why or how UT works are that it promotes detoxification of the blood by stimulating the kidneys, facilitates the re-use of vitamins, minerals and hormones that would otherwise be lost, and provides a 'homeopathic' dose of what the body requires to stimulate healing reactions. Scientific research into urine and its constituents is steadily growing.

Highlights of the conference will include a presentation by Dr Ryoichi Nakao MD of the Japanese Medical Association on immune-stimulant and ant-cancer effects; Dr Nila Sanghi MD, an Indian natural doctor, on UT and infectious diseases; Dr John Wynhausen USA, a chiropractor who has published scientific articles on UT and its relevance in the treatment of modern diseases; and Tara Aich, Australia, who healed herself of cancer using UT and is involved in the spiritual aspects of this therapy. There will be an afternoon devoted to the application of UT with people given a Hiv/Aids diagnosis, with presentations from, among others, Martin Lara who works extensively with people in New York given a Hiv/Aids diagnosis; Mark Griffiths, France, specialised in the holistic use of UT with chronic disease patterns; and Victoria Seme, Tanzania, who runs an educational course on UT and health.

At the conference there will be lectures each day with a very full programme and panel discussions in the evenings. The last day is a public programme with workshops, talks by key speakers and the opportunity to have consultations with many of the Urine Therapists. The first three days are mainly for professionals while open to anyone who wants to deepen their knowledge of UT.

If you would like more information on the conference call:
London 0171 2677098
To receive a conference programme or registration details contact:
Coen van der Kroon,
Kinkerstraat 82-C,
1053EA Amsterdam,
The Netherlands.
tel: 0031 20 683 5510
fax: 0031 20 683 5510
email: cvdk@knoware.nl

Further reading on Urine Therapy:

Continuum Vol.3 No.4
Continuum Vol.3 No.2
The Golden Fountain: A complete guide to Urine Therapy by Coen van der Kroon. Amethyst Books 1996

Seriously seeking sulphur

SULPHUR TAMES OXYGEN AND CONVERTS IT FROM FOE TO FRIEND

Its importance in the formation of proteoglykans and cysteine-containing antioxidants

A. Hässig, H. Kremer, W-X Liang,
C. Bommeli, K. Stampfli

The energy supply in multicellular organisms occurs by ATP formation, synthesised by oxidative phosphorylation in mitochondria.

These originally aerobic bacteria developed to energy clusters within the cells of multicellular organisms. For animal mobility the required energy for the muscular and nerve system is thus provided by multiplying the minimal ATP formation in anaerobic multicellular organisms by fermentation of carbohydrates [1] .

THE MECHANISMS OF OXYGEN TRANSPORT FROM LUNG TO MITOCHONDRIA

A system is required for the dislocation of oxygen in the air from the lungs into the approximately 10^{14} cells of the human body. This distribution takes place by gradually increasing the surface of diffusion and, concomitantly shortening of the distance of diffusion.

The first phase regards the lung. The daily ventilation volume amounts to about 10,000 litres of air. The respiratory surface of the lung with approximately 300 millions alveoles, represent an epithelial surface of about 140 m^2.

The second phase concerns the blood vessel system with its ca 5 million erythrocytes per µl blood. The total surface of erythrocytes sums up to roughly 3800 m^2.

The third phase corresponds to the perfusion through the phospholipid double membranes of the approximately 1014 cells of the organism. This surface is gigantic: up to date its size has not yet been evaluated exactly.

The fourth phase takes place in mitochondria as the intracellular organelles in which ATP formation occurs.

The transport of oxygen from the lung into the blood stream occurs by diffusion. The respiratory epithelium benefits from an antioxidant protection against air pollution, i.e. by the “epithelial lining fluid” (ELF), a layer of secretary products. Its protective action is mainly based on a high content of the sulphated compound glutathione (GSH) The GSH level of ELF is as high as 1 50-250 It mol, but less than 5 IA mol in blood plasma [2].

Oxygen transport through erythrocytes is assured by ATP energy generated by glycolysis. In this process haemoglobin is oxygenized. Oxygenized haemoglobin becomes reduced by NADH to 0_2 transportable haemoglobin. NADPH reduces the glutathione contained in erythrocytes, which protects enzymes within the core of cells, at the haemoglobin molecule and at the erythrocyte membrane from oxidation [3].

Oxygen transfer through the phospholipid double membrane of cells is activated with the' help of proteins embedded in lipid membranes within the frame of essential fatty acids in cis-configuration. Here too, the SH-content of cysteine containing proteins is crucial for the transfer of oxygen through membranes [4].

In mitochondria iron-sulphur centres play a decisive role in ATP formation. Here too, cysteine-containing peptides such as GSH play a vital role in redox mechanisms[3].

In summary, we may retain that a sufficient supply of oxygen in in multicellular organisms depends on a sufficient supply of redox-active sulphur compounds. Sulphur converts oxygen from foe into friend. Oxygen and sulphur stay side by side in the periodic system. Their electrons circle in the same orbit, and therefore, are easily exchangeable.

HOW DOES A NUTRITIONAL DEFICIENCY OF SULPHUR DEVELOP?

Seawater contains 8.85 x 10^2 mg/litre sulphur, while human blood comprises 1928 (1648-2314) g/litre sulphur[5,6]. This indicates that the, marine fauna is amply provided with sulphur. In contrast, this is not the case for animals living on land. Even Na-cations and Cl-anions, both essential for animal life, have vanished from most inland fresh water as, in millions of years, rain sluiced back these easily soluble electrolytes to the sea. Therefore, plant eating animals developed an appetite for salt as plants contain only little or no NaCi-electrolytes. On the other hand, as plants are rich in K-ions, animals did not develop a thirst for K. Because of a sulphate deficiency in fresh water, animals living on/in it from the very beginning on lacked sulphur, and this is often never fully compensated [7].

WHAT ARE THE PATHOGENETIC EFFECTS OF A DEFICIENCY OF SULPHUR?

Sulphur, in a sulphate profile, is an integrated part in proteoglykans of the extracellular matrix. A sulphur deficiency weakens the formation of chondroitin sulphate, dermatan sulphate, keratan sulphate, heparan sulphate and heparin. By contrast, Hyaluronic acid, as a non-sulfated GAG polymer, is not affected. In the pathogenesis of arteriosclerosis an insufficient protection of the endothelium, provided by heparan sulphate and heparin plays a

crucial role. If the latter are present, cationic areas on the endothelial surface, where anionic lipoproteins may be deposited as fatty streaks, do not develop [8].

In a preceding publication we concluded that AIDS is associated with an increasing oxidative shift, off the homeostatic equilibrium. This shift is mainly due to an increasing deficiency of glutathione[9]. The oxidative shift appears to rely on a persistent catabolic metabolic exchange connected with a ongoing weakening of cellular immune reactions, which is characteristic for inflammatory autoimmune reactions. The working team of DR6GE showed that the situation in AIDS and the decrease in muscular proteins in cancer patients and the elderly can be considered as comparable[10]. They also showed that with an intracellular lack of glutathione lymphocytes become weakened in their immunological 'efficiency' This is also valid for epithelia of the mucous membranes in inflammatory bowel disease.

A deficiency of glutathione has to be considered as an indirect lack of cysteine. The main function of cysteine consists in the formation and stabilization of protein structures by irreversible S=S-bridges among cysteine molecules of the polypeptide chains. The redox functions of cystein where then transferred to the tripeptide glutathione, (consisting of glycin/cystein/glutaminic acid), the latter being synthesised intracellularly by these three amino acids. As there is sufficient glycine and glutamat in the intracellular space the extent of influx of cysteine affects the range of intracellular biosynthesis of reduced glutathione (GSH). On the other hand GSH serves as a reservoir and transportation vehicle of cysteine in the exracellular space. The major part of glutathione is synthesized in the liver[11]. Cysteine is the only non- essential sulphur containing aminoacid. Methionine, the second sulphur containing amino acid is part of the essential amino acids. In the liver, methionine is transformed into cysteine.

Phospholipid double membranes in cells are the structures most susceptible to an inhibition of oxygen transfer. This is probably due to a cumulation of two deficiency states, i.e. a deficiency of essential fatty acids in CIS-configuration (omega-6-linolic acid, omega-3-linolenic acid) as well as a deficiency of cysteine-containing proteins. Essential fatty acids are weakly basic. They bind oxygen, which they transfer to the weakly acid sulfhydril groups of cysteine-containing proteins. There, a so-called pi-cloud of electrons is formed, which can transmit energy in both directions. Therefore, it is not sufficient to just correct a cysteine/ glutathione deficiency; a deficiency of essential fatty acids has also to be corrected at the same time[4].

HOW CAN A NUTRITIONAL DEFICIENCY OF SULPHUR BE BALANCED?

Sulphur supply in nutrition is provided by sulfates and proteins containing cysteine. Sulfates effect the suffatation of proteoglycans. Cysteine in form of reduced glutathione controls an efficient redox passage of oxygen through protein molecules embedded in phospholipid membranes.

For a sufficient supply of sulfate to be secured, table salt is replaced by sea salt. It is also advisable to drink mineral water containing more sulfate than 1 g/liter. The regular intake of sulfated GAGS, such as chondroitinsulfate and agar is recommended.

A sufficient supply of glutathione can be obtained by cysteine- and methionine-containing protein mixtures, which can be obtained by an intake of low fat curd. Johanna Budwig's "Muesli" made from low fat curd and linseed oil is suitable to replace one meal per day[12,13]. In addition, native whey products are appropriate in order to maintain a sufficient glutathione level[14].

In order to remedy the glutathione deficiency in acute situation, a *N*-acetylcysteine supply proved effective. In Switzerland, this drug is available under the trade name Fluimucil®[11].

Presently, a long term administration of acetylcysteine is limited to the treatment of chronic lung diseases. In view of the increasing knowledge about the outstanding importance of glutathione as a generally effective antioxidans it is assumed that in the near future this drug will be commonly used.

Herzenberg's team recently showed that that the transition from a Thl profile of CD4 helper cells to a Th2 profile goes along with a decrease of glutathione in antigen-presenting cells (macrophages, dendritic cells, B cells). A successful nutritional sulphur therapy can thus best be proven by the reappearance of a positive skin reaction to microbial antigens, e.g. tuberculin.

SUMMARY

Oxygen transport from lungs to cell mitochondria requires a system for micro-distribution of air oxygen from lungs into the roughly 1014 cells of a human organism. Micro-distribution takes place by a gradual increase of the surface of diffusion together with a relevant shortening of the distance of diffusion.

Redox-active compounds of sulphur always play a role in the transfer of oxygen from lungs into the blood vessel system, from there into phospholipid double membranes of cells and, finally, into mitochondria. Phospholipid membranes of cells are very susceptible to an inhibition of oxygen transfer. This is usually caused by a cumulation of two conditions of. deficiency, i.e. a deficiency of essential fatty acids in CIS-configuration (omega-6 linolic acid, Omega-3 linolenic acid) and a deficiency of proteins containing cysteine.

Seawater contains plenty of sulfate. Considering the deficiency of sulphate in fresh water, a latent deficiency of sulphate exists in terrestrial mammals, especially also in humans. This results in a weakened formation of sulphated proteoglycans,which play a protective role in pathogenesis of arteriosclerosis. Also, a nutritional deficiency of sulphur leads to a weakening of cellular immune reactions caused by a deficiency of glutathione.

A nutritional deficiency. of sulphate can be overcome by replacing table salt by sea salt, by drinking sulphated mineral water and by a regular intake of sulphated GAGs such as chondroitin sulphate and agar. A combined deficiency of essential fatty acids and proteins containing cysteine can be cured by replacing one meal with a Muesli, it consisting of linseed oil and low fat curd as recommended by Johanna Budwig. In acute situations, in order to remedy a decrease of glutathione, the administration of acetylcysteine is mosty appropriate.

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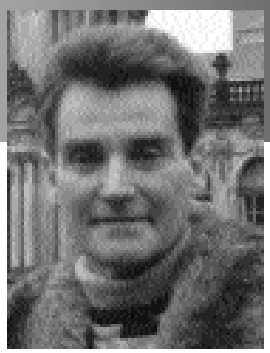
‘Virtual Viral Load’ Tests



Seeing is believing - it’s time to call their bluff!

“…infectious units, after all, are the only clinically relevant criteria for a viral pathogen.” Peter Duesberg and Harvey Bialy (Nature, 375, 1995, p. 197)

Michael Verney-Elliott

Mediaeval theologians were obsessed with how many angels danced on the head of a pin. Virtual virology is a more recent phenomenon which persuades non-critical virologists that huge quantities of ‘HIV’ particles exist in the blood of people deemed ‘HIV positive’, and cause the thirty or so diseases currently supposed to make up the syndrome known as ‘AIDS’.

Today, the curious mixture of virtual virology and theology which passes for orthodox ‘AIDS’ research is obsessed with how many demonic ‘infectious units’ are found in a cubic millilitre of blood. This obsession gave rise to the ‘virtual viral load’ test. The fact that the demons, just like the angels of old, can never be seen worries no-one, and ‘AIDS’ science depends more on gnosis than empirical observation. Paul Valery reminds us “What has been believed by all, always and everywhere, has every likelihood of being untrue.”

As Peter Duesberg pointed out in his ground-breaking paper (*Cancer Research* 1.3.87), *Retroviruses as Pathogens and Carcinogens: Expectations and Reality*, one of many reasons why ‘HIV’ could not be the cause of ‘AIDS’ is that such a virus is never ‘found’ in sufficient quantity to have any pathogenic significance in those supposedly infected. Typically, viruses which cause disease are found at very high titre at the time the disease is active, but this just did not seem to be the case with ‘HIV’, either in those people said to be incubating ‘AIDS’ for ten years or those with the full-blown condition. By contrast, supposed ‘HIV’, if detectable at all, is only ever ‘found’ in minute trace quantities, and even then only by stretching laboratory culture techniques to their limit. This is one of the chief characteristics of a persistent, harmless passenger virus. The currently accepted evidence for the presence of active ‘HIV’ depends on surrogate markers, ‘signals’, non-specific antibodies *etc*., and what Jon Cohen calls “...HIV RNA’s - a proxy for the amount of free virus ...”.(*Science,* 13.1.95, p.179) Thus the ‘HIV’ viral titres are deemed to be present by inference rather than direct observation as is usually the case with other disease causing microbes. As Lady Bracknell might have said: “A proxy? Viruses should be seen, not inferred!”

Duesberg’s point about the scarcity of detectable virus in the blood of PWA’s may have infuriated the orthodox ‘AIDS’ establishment, but until 1995 they were unable to argue with him. This was when they decided to switch from sloppy science to sharp practice. In 1995, David Ho and Xiping Wei published separate papers in the same issue of *Nature* (373, pp. 123 *et seq*. and 117 *et seq*.) claiming that far from being the indolent virus supposed during the previous 11 years of ‘AIDS’ research, ‘HIV’ was hyperactive, and soon after infection, high titres of virus were circulating continuously in the peripheral blood of ‘HIV’ positive individuals. Although these high titres had never been seen before by any other ‘AIDS’ researchers, by amplifying ‘viral RNA’ using PCR and using the resulting DNA’s as a “proxy”, the two papers claimed that the corresponding ‘viral RNAs’ represented the amount of cell-free virus in the blood. No-one spotted the absurdity that if there were that much virus present in the blood you would not need to amplify it by PCR in order to detect it. To claim to have found so much cell-free virus by using sequence amplification is as ludicrous as ‘finding’ a previously invisible inflatable elephant with a bicycle pump. However, the scientific community uncritically accepted this purely hypothetical gung-Ho theory of ‘HIV’ dynamics as conclusive evidence for it being the cause of ‘AIDS’, to the extent of making these papers the basis for the so-called ‘viral load tests’ currently used, and the prescription of ‘anti-viral drugs’ like protease inhibitors and AZT. Both papers have been thoroughly debunked by Duesberg and Bialy (*Nature*, 375, 1995, p.197), and Paul Philpott and Christine Johnson (*Reappraising AIDS*, Vol.4, Otober 1996), and more recently by Roederer *et al.* (*Nature Med.* 4, 145, 1997), and Hellerstein *et al.* (*Nature Med.* 5, 33, 1999), as well as in articles in *Continuum*.

Prof. Etienne de Harven, a distinguished expert in electron microscopy, has written two articles in *Continuum* (*Vol. 5, No 2, Winter 97; Vol. 5, No.3, Spring 98*) describing the standard method he developed in the 1960’s for visual detection and morphological identification, in the fresh plasma of leukemic mice, of “RNA tumour viruses”, as retroviruses were known prior to the discovery of ‘immunodeficiency viruses’. The procedure can be carried out quite simply in any lab equipped with facilities for centrifugation, micro filtration and electron microscopy (EM) as follows:

A blood sample suspected of containing a pathogenically significant quantity of cell-free retroviruses is centrifuged to spin out the red and white blood cells, leaving just the plasma, the basic fluid in which the cells float. The fresh plasma is then diluted 1/1 with cold heparinised Ringer’s solution.

Heparin is an anticoagulant, added to thin the plasma and render it more suitable to pass successively through two millipore filters of diminishing size, first using 0.6 then 0.22 micrometer pore size diameter filters. These filter out any debris larger than the size of the viral particles being sought. The last filter used will be slightly larger than the 100-120nm

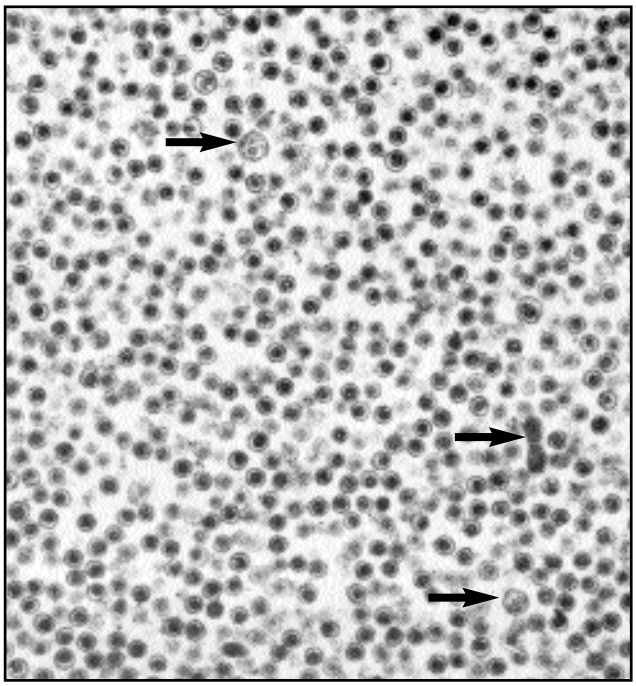


Figure 1. Electronmicrograph of densely packed particles with retroviral morphology identified as the Friend murine (mouse) leukaemia virus.
Pathologie-Biologie, Vol. 13, pp. 125-134

diameter of a retrovirus. The final filtrate is then spun in a centrifuge at 30,000 g for two hours. This has the effect of concentrating any virus in the plasma into a tiny pellet which can be recovered from the bottom of the test tube. The pellet is then fixed, embedded in an epoxy resin block and shaved into ultra thin slices which can be mounted on copper grids and examined under EM.

A perfect illustration of de Harven's purification technique is seen in Fig.1. This electron micrograph by de Harven was published in 1965, (*Pathologie-Biologie*, Vol.13, pp. 125-134) and shows densely packed particles with retroviral morphology identified as the Friend murine (mouse) leukaemia virus. The densely packed particles, identical in shape and size, were pelleted down from fresh plasma using the method described. The magnification is 19,500 x and it can be seen that there is very little extraneous material contaminating the final pelleted isolate, indicated by three arrows. The Friend virus is classified morphologically as a Type C oncovirus, one of a small group of retroviruses which encode a cancer-causing gene in their RNA. The ultra thin slice through the pellet clearly shows the dense core in bisected virions, as round black dots.

As Dr. de Harven explains in his second *Continuum* article, even by the late 'sixties there was a growing tendency to abandon the use of EM, on the pretext that it was cumbersome and time-consuming, in favour of the purification and identification of possible viruses using other means, chiefly the use of the sucrose density gradient without EM, allied with indirect surrogate markers. Already, the virologists were starting to cut corners. Moreover, after 1970, when the race was on to find human retroviruses which cause cancer, there was a very good reason why clear, EM visualisation of such human oncoviruses was abandoned. The simple truth was that they were unable, then as now, to find high titres of cell-free retroviruses in fresh human blood or plasma.

It is worth stressing at this stage that in the entire 15 years of 'HIV'/'AIDS' research, no micrograph has ever been published purporting to show purified, densely packed 'HIV' particles, recovered from the fresh plasma of 'HIV positive' subjects. Indeed, no such picture exists of any so-called human retrovirus, not even HTLV-I, the alleged cause of adult

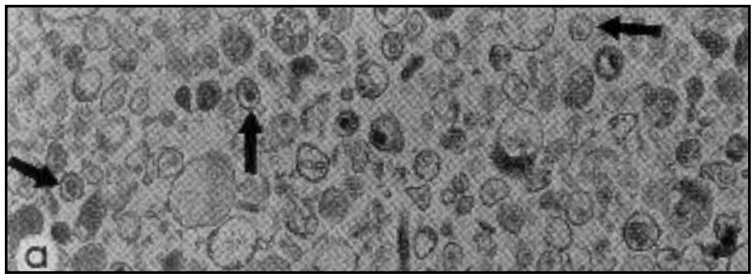


Figure 2. "Purified HIV-1 preparations are contaminated by cellular vesicles. Purified vesicles from H9 cells (a)..".
Gluschankof, P. *et al*. *Cell membrane vesicles are a major contaminant of gradient-enriched human immunodeficiency virus type-1 preparations.* ***Virology***, 1997; 230:125-133

T-cell leukaemia. That is not to say that micrographs of alleged 'HIV' have not been published, but they invariably came from cell cultures grown sometimes for weeks, in the total absence of an immune system (it is worth remembering that 'HIV infection' is most aften diagnosed on the detection of antibodies supposedly specific to 'HIV'),and involving co-culturing with known cancerous cell-lines such as H9 or CEM, and stimulated with mitogens, hydrocortisone and other chemical activators - the standard laboratory methods of reactivating latent viruses.

There is no better way to show the degeneration into sloppy imprecision in science characterised by the 'AIDS' war than to compare de Harven's micrograph with Fig. 2, a micrograph published in 1997 of material banded at 1.16.gm/ml in a sucrose density gradient. Prior to its publication, by Gluschankof *et al.* (*Virology*, 230, pp 125-133, 1997), it was claimed that material banding at this level represented pure retrovirus. However, this study, and another in the same issue by Bess *et al.*, finally came clean and admitted that all sorts of debris and extraneous matter banded at the retroviral density in the sucrose medium, principally cellular microvescicles, something that de Harven had observed even in the 1960's.

Whereas de Harven has to use three arrows to identify impurities in Fig.1, Gluschankof *et al* by total contrast have to use three arrows to identify three 'viral' dots, which may or may not be retroviruses, in their culture-derived rubbish tip in Fig. 2. This comparison strikingly illustrates the precision and superiority of de Harven's method of purification to currently used methods.

Undoubtedly, sedimentation in sucrose density gradients has its uses, particularly in confirming viral identity. Viruses have specific buoyant densities, and it is indeed known that purified retroviruses form a distinct sedimented band at 1.16 gm/ml, but it is a major error to suppose that all material contained in the gross supernatant from a cell culture which bands at that level is pure retrovirus, as Fig.2 makes clear. Moreover, in plasma samples containing more than one variety of active virus, as in PWA's with several, concurrently active viral infections, distinguishing them by their morphology under EM may be difficult, so subsequent buoyant density tests may be needed. Even the use of surrogate markers may be legitimate, but only when numerous laboratories have established that a large quantity of virus particles, of identical shape and size, are invariably present in diseased tissues and the virus has been proved beyond any doubt to be the cause of the disease. Then, and only then, can markers or proxies be trusted to indicate viraemia. However,

'HIV' fails all these tests.

If Ho and Wei are correct, it must be possible to pellet down fresh plasma from a person or persons who have had a recent 'high viral load' test result and clearly see tightly packed identical viral particles using EM, in a quantity consistent with the amount of virus indicated by the 'viral load' test. The application of the de Harven methodology will clearly demonstrate the presence or absence of actual rather than virtual particles, and do away with bogus mathematical models, inappropriate use of PCR, proxies, surrogates and all the other trappings of modern scientific obfuscation. If the virus particles cannot be seen, then they are just not there, whatever the test may claim. If it is claimed that there are indeed 'HIV' particles in the plasma, but too few to form a pellet, then there is obviously not enough virus in the sample to be pathogenically significant. Had 'AIDS' researchers been able to photograph high titres of cell-free 'HIV' in fresh plasma using the de Harven method during the last fifteen years, undoubtedly they would have done so and published their results, even if only to silence critics like Peter Duesberg. There are no such micrographs in the entire 'AIDS' literature.

When assessing how much virus - viable, enveloped, infectious virion units - should be visible from the amount of

" 'HIV' RNA's" determined by a currently used 'viral load test', important scientific evidence shows that the 'proxy' viral RNA's represent very few actual potentially infectious particles. As Duesberg and Bialy state in the heavily censored version of their 'viral load theory' critique published in *Nature* (*ibid*):

> *The senior researcher [George Shaw] of the Wei et al paper has previously claimed that the method they used* ***overestimates by at least 60,000 times*** *the real titre of infectious HIV [Piatak et al, Science, 259, pp 1749-1754, 1993].* ***100,000/60,000 is 1.7 infectious HIV's per ml*** *... Further, Ho and a different group of collaborators have just shown [Cao, et al New Eng. J. Med 332, pp 201-208, 1995] that more than* ***10,000*** *'plasma virions', detected by the* ***branched-DNA amplification*** *assay used in their Nature paper, correspond to* ***less than one (!) infectious virus per ml*** *. And infectious units, after all, are the only clinically relevant criteria for a viral pathogen. [my emphasis]*

A transcript of a public question and answer session at the 1998 World AIDS Conference in Geneva shows the following exchange between Huw Christie and David Ho:

> *Huw: .....If people have a viral load of 200,000 per millilitre, it should be possible, shouldn't it, to demonstrate particles, viraemia? Why is it necessary to use a technique which is designed for amplification of numbers?*
>
> *Ho: This indeed has been supported by other forms of assays, including assays that do not amplify the target that you're trying to measure. For example, using the* ***branched chain DNA*** *technology the same type of results have been generated, and compared head to head and published in numerous scientific papers.*

David Ho is curiously silent about the findings of the paper he co-wrote with Cao *et al* cited above by Duesberg and Bialy.

Thus it may be seen that the 'viral load test' at best translates into a barely, if at all, detectable level of virus-like particles which can have little relevance in 'AIDS' pathogenicity; at worst it is a specious argument to pump asymptomatic people full of expensive drugs which may cause more harm than good in the long run.

CALLING THEIR BLUFF - £1000 challenge

So confident am I that no such EM evidence can be produced by adhering strictly to the de Harven methodology, I am prepared to offer the sum of £1000 to the first person to submit just such a micrograph, prepared under stringent laboratory conditions. These are:

1. Only plasma centrifuged from fresh whole blood may be used in the experiment. No material derived from cultured cells will be considered, to rule out 'viral particles' which may be merely cultural artefacts.

2. The donor blood/plasma must be taken from a person/persons with a recent 'high-viral load' test result, and evidence for the date and result of the test (the number of 'HIV'- RNA's alleged) must be submitted, obviously with the name of the person/persons deleted to preserve donor confidentiality.

3. The donor must not be in receipt of protease inhibitors, AZT or any antiviral drugs.

4. Only cold heparinised Ringer's solution may be used to dilute the plasma 1/1 (i.e. 50%).

5. The diluted plasma shall be first filtered by aspiration-filtration, through a 0.6 millipore membrane. The resulting filtrate #1 will then be filtered again, this time using a 0.22 millipore membrane and filtrate #2 will be submitted to ultracentrifugation.

6. Centrifugation at 30,000 g for two hours will be used to prepare a pellet, likely to be extremely small. This pellet will be fixed with glutaraldehyde and osmium, then carefully detached and embedded in epoxy resins following routine EM procedures

7. The electronmicrograph shall be at least 19,500 x magnification, and must resemble that published in Fig.1 of this article for particle size and shape, but with one notable and important variation. 'HIV' has been deemed to be a lentivirus, possessing a dense core of truncated conical shape. An ultrathin slice of randomly packed lentiviruses must inevitably show a number of particles bisected to show this core lengthwise, as well as end-on, with a resultant apparent mixture of round and 'rod-shaped' dense cores. Any micrograph which does not clearly show this feature will be deemed not to represent the lentivirus 'HIV'.

8. This challenge is open to any qualified scientists, or microbiology students/lab technicians with the necessary lab skills and facilities to carry out the work.

Photos of the required electronmicrograph(s) plus full details of the methodology, along with brief details of the senders' qualifications, must be sent, preferably with proof of date of postage, to me c/o the *Continuum* office at the address in the magazine. The first submission received which fulfils the above requirements according to qualified scientific scrutineers will be presented with £1000, in cash or by cheque, whichever is desired. There is no time limit, and the offer will remain open indefinitely.

Although not qualifying for the £1000, reports of failure to detect significant quantities of virus in the fresh plasma of 'HIV' positive donors, under the above conditions, would be most welcome, and considered for publication in *Continuum.* Medical and scientific journals are notoriously reluctant to publish reports which disprove a currently held paradigm, thereby preserving their role as the upholders of orthodoxy. Modern science doesn't seem to be about debate any more. However, I should be very interested to hear from anyone who has tried to establish a visual record of the viremia predicted by a 'high viral load' test result - and failed. Hitherto, the 'AIDS Dissidents' have had to restrict themselves to picking holes and spotting paradoxa in the orthodox 'AIDS' literature. Surely it cannot be beyond the wit and resources of people like the Reappraising AIDS group in California to carry out this experiment. Many distinguished scientists in that group, possessed of more than enough expertise, could easily carry out the lab work, if they could get access to a lab and the relevant donor plasma samples. Instead of commenting on the orthodoxy's work, why can't dissident scientists do some of their own? As de Harven says, when he wanted to do just this in his lab in Toronto in the mid '80's, his students threatened a walk-out. Short of barricading ourselves in a hijacked

lab, can any reader come up with another way to kick virological ass?

Modern microbiologists and virologists have developed, and continue to develop, a bewildering array of techniques to aid them in pursuit of their disciplines. However, the increasing sophistication of the technology carries with it a proportionally increased need for scrutiny and analysis of their lab results. Modern culture techniques, involving mitogenic stimulation, other chemical additives, co-culturing with known cancerous cell-lines, the use of sucrose density gradients - all these valuable modern tools of science can easily produce results open to misinterpretation, accidental or deliberate. Add to this the pressure from financial interests typified by pharmaceutical companies seeking quick results to order, and pressure on labs to secure grant funding etc. and it is not difficult to see how a few 'virus-like particles', inevitably dredged up in cell cultures, can be parlayed into a massive viraemia by using 'proxies' and mathematical prestidigitation.

The uncritical acceptance of the gung-Ho 'viral load' theory has led to some patently risible studies. The latest absurdity comes from Farzadegan *et al.* in *The Lancet* (7.11.98), who carried out a long-term study based on blood samples taken from 650 male and female injecting drug users principally African Americans, using three different methods of measuring 'viral load'. The results of their trial claim to show that the women progress to 'AIDS' at the same rate as men but with only half the amount of 'viral load'. In other words, 'HIV' is supposedly twice as pathogenic in females as males - yet another pathogenic first for 'HIV'. At no stage do they mention the possibility that the harmful effects of the continuous use of illicit drugs far more logically explains the seeming equality of progression to AIDS in both sexes, irrespective of apparent differences in HIV kinetics between the sexes based on ambiguous 'viral load' tests. Unless their data are confirmed by similar studies of 'HIV positive' African, Asian and European males and females who are not IDU's, what does their study prove? Chillingly, the paper suggests that as the virus appears to be doubly pathogenic in women, they should be urgently considered for early drug cocktail therapy as soon as diagnosed.

In the final analysis, the only way to establish a true, *in vivo* viral titre in peripheral blood is by recovery of virus from a measured quantity of fresh, suspect plasma, and seeing the packed particles in a micrograph. Seeing, in this instance at least, is believing. As de Harven has explained (*ibid*), an aliquot of the unfixed viral pellet may be resuspended in Ringer's solution and used for titration by the precise, traditional method. Virus counting under EM may be tedious, but would, of course, reinforce the observations made. If few or no viral particles can be seen in the above conditions, then certain questions must be asked:

1. If not whole infectious viral particles, what is the 'viral load' test measuring?
2. What are the 'proxy' RNA's representing?
3. After administration of protease inhibitor drugs, and alleged decrease in 'proxy' RNA's, what has in fact been inhibited?
4. If little or no infectious virus is found in plasma of supposed viremic people, how did the haemophiliacs become infected by their plasma-derived clotting factors?

If, as I predict, no pathogenically significant amounts of virus can be visualised after pelleting down fresh plasma of donors previously deemed to be highly viremic by a 'viral load test', then perhaps we may be on the way to getting a re-examination of the whole concept of 'viral loads'; David Ho will have his Man of the Year award rescinded; the action of protease inhibitors can be reassessed in terms of a realistic risk-benefit ratio; and we can finally say "A pox on all your proxies!"

Acknowledgements: I should like to thank Dr. Etienne de Harven for his invaluable help in correcting and clarifying the technical aspects of the electron microscopy, and Alex Russell for diligent research, and Peter Duesberg for his usual kindness and common sense.

Hidden Dangers in Cosmetics

Matthew Probert

Buyer beware!

Have you ever wondered what goes into bubble bath? One day, whilst lying in the bath with nothing in prticular to do I started pondering over what bubble bath is. I decided to read the label. The label described the bubble bath as "Bath will gently cleanse your skin, helping to leave it feeling soft and smooth". Sounds good! I went on to read the ingredients; Aqua, Sodium Laureth Sulfate, Cocamide DEA, Sodium Chloride, Parfum, Glycol Stearate, Tetrasodium EDTA, Citric Acid, Formaldehyde, Polyquaternium-7, Methylparaben, Propylparaben, Sodium Hydroxide. Quite a cocktail of chemicals. And then my warning sensors clicked on, below the ingredients was a boldly printed warning advising to "Avoid getting into eyes." If this substance is so great for the skin, why should it be so harmful to the eyes? I thought I'd investigate.

Apart from Aqua (by which they mean water), the next most prolific ingredient is sodium laureth sulphate, although the manufacturer of this particular brand insists on using the American spelling. Sodium laureth sulphate is a surfactant. That is a substance that can reduce the surface tension of a liquid and thus allow it to foam or penetrate solids. It is also an industrial grade detergent, or degreaser. Like all detergents sodium laureth sulphate attacks grease, thereby helping to clean the skin. However, the human skin is a complex organ and contains glands which deliberately secret grease or oil onto the skin to help keep it waterproof, supple and, to quote, "soft and smooth". sodium laureth sulphate strips the natural oil from the skin leaving it feeling rough and dry. That's not all sodium laureth sulphate does. sodium laureth sulphate is a powerful detergent, garages use it to clean engine oil from their floors, it is also very corrosive. Perhaps that is why my bubble bath advises me to "avoid getting into eyes", well maybe. Or perhaps its because sodium laureth sulphate attacks the formation of essential proteins in the eyes leading to cataracts in adults and preventing children's eyes from forming properly. Further investigation reveals that sodium laureth sulphate is so harmful to the skin that it is used in medical laboratories to damage the skin before healing agents can be tested!

Buyer beware!

Having decided in future to stick to bath salts, I read the ingredients on my bath salts. No sodium laureth sulphate, but instead they contained something called sodium lauryl sulphate. Sodium lauryl sulphate is sodium laureth sulphate chemically combined with ethylene oxide to form larger molecules. Why on earth should anyone be concerned about the size of the molecules? Well, one reason is because small molecules, such as those of sodium laureth sulphate can pass through the skin into the body where they enter the blood stream and build up in the internal organs - especially the brain and kidneys. Bearing in mind what sodium laureth sulphate does to the comparatively tough skin, I hate to think what it can do to the gentle internal organs.

Research in America at the Georgia University medical centre indicates that sodium laureth sulphate and sodium lauryl sulphate can both react with other chemicals found in cosmetics to form nitrosamines and 1,4 dioxine, which are both known carcinogens. For this reason the American Food and Drug Agency classifies both sodium laureth sulphate and sodium lauryl sulphate as drugs when used in cosmetics.

Buyer beware!

But it is not just in bubble bath that one finds chemicals harmful to the skin. They are also in toothpaste, shampoo, shaving creme and cleansers. In trying to find products which do not contain these harmful chemicals I visited supermarkets, chemists and health food shops. Surprisingly almost all cleansers include either sodium laureth sulphate or sodium lauryl sulphate, including the own brands of a well known health food shop and a certain wannabe ecologically friendly high street store. However, it is possible to find alternatives, you just need to check the ingredients label carefully. It is worth trying an alternative if you suffer from eczema, as I do, rather than simply washing in something which strips the natural oils from your skin and then using vegetable oil in the form of glycerine to moisturise it, or thinking that it is caused by some other pathological disorder.

Queer

Photo : courtesy of the author

Jessica Baines

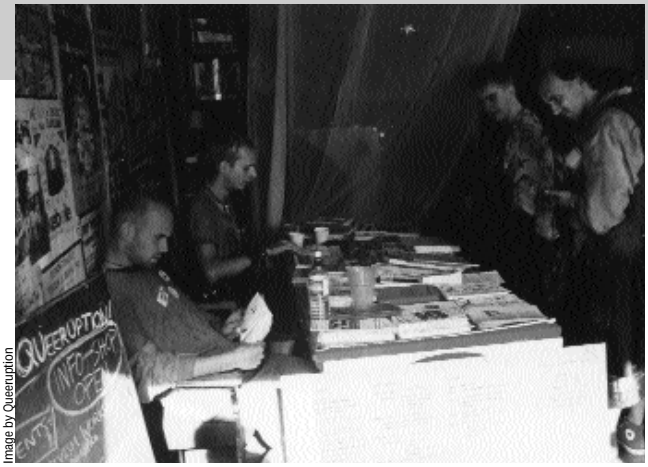


Image by Queeruption

Queeruption was a 3 day queercore festival promising “Action, Art & Anarchy” at The 121 Centre in Brixton, London at the end of September.

For those not familiar with the term queercore, the organisers’ statement on the publicity flyer gives a good introduction: “We believe that there is more to being queer than what is offered to us at the moment, and want to create a radical alternative to the commercial and apolitical gay scene. The festival is open to all, and is about us all taking initiative, creating and participating, instead of just consuming a lifestyle sold to us.” Queercore probably shares some genealogy with late ’80s and early ’90s activist groups such as ACT UP, Fight Clause 28, Lesbian Avengers and OutRage. Queercore also associates itself with aspects of anarchism (more around lifestyle and culture than 19th century class theory), drawing particular inspiration from the DIY cultures and anti-authoritarianism of early punk, the squatting movement and 1990’s eco-warriors.

So why invite someone from *Continuum* to speak at Queeruption? A particular trait of many anarchists is an absolute mistrust of all 'official' information. At times this engenders some rather convoluted conspiracy theories, but more relevantly here, it potentially encourages not only a questioning of all received 'wisdom', but also an openness towards (and desire for) dissenting information. I say only potentially because this attitude has often been somewhat selective, leaving many mainstream and reactionary belief systems unquestioned. To be fair though, I’m sure there are many reasons for this. Aside from complacency, personal prejudice and information overload, there has always been a question of priorities; when one is planning to destroy world capitalism, many other issues unless obviously linked to that aim, may seem periphery.

Many of these ‘other issues’ are on the Queercore agenda however. Therefore it would seem that a gathering of anti-authoritarian queers who for the most part consider themselves totally disenfranchised from mainstream gay 'culture' would be at the very least an interesting arena in which to have a discussion about AIDS dissidence.

However as what defines Queercore is more a collective of possibilities than a group of people with a homogenised political history or vision, the discussions, at the organisational stage, about the context in which *Continuum* might be represented became quite intense. Some people in the group felt that a speaker from *Continuum* should be ‘balanced’ with another speaker who ‘believed’ in ‘HIV’ and considered the current drugs to be helpful. This 'democratic' stricture came out of a genuine concern that if people who had been diagnosed ‘HIV+’ heard what *Continuum* had to say *vis-à-vis* the possible non-existence of the virus and not only ineffectualness but also harmful effects of the drugs prescribed to treat ‘it’, they may, to put it crudely, stop taking their drugs altogether - and die. Yet as anti censorship queers open to providing space for dissident theories, there was in some sense an obligation, now it had been raised, to provide space for someone from *Continuum* to speak. I found the notion of this kind of oppositional positioning problematic. Firstly, I was concerned that it would set up a polarised dynamic of two ‘experts’, and inhibit the kind of free ranging informative session I was hoping for. Secondly, I felt politically uncomfortable with it - when a series of ideas are as severely censored by both the mainstream and gay media, as those expressed in the pages of *Continuum*, then surely a 'balance' would be to invite someone from *Continuum* to speak unchecked. However, it was decided to go ahead with the two speakers.

During these meetings I was struck by many things; in particular the lack of critique of not only the orthodox theories about AIDS and HIV, but also of the whole AIDS ‘service’ industry and its incumbent host of ‘professionals’. This seemed like a bit of a hangover from the reformist politics of ACT UP, whereupon fundamental ideologies are not challenged, only who gets how much (treatments, benefits, ‘rights’ etc.) The durability of this legacy is I’m sure in part due to the fearful mystique that continues to surround the image and apparent reality of ‘HIV’ and ‘AIDS’. This mystique often seems to induce paralysis of critical perception in some of the most, otherwise, rebellious minds. The other factor possibly worth mentioning

Image by Queeruption

"We want to create a radical alternative to the commercial and apolitical gay

was the misconception I encountered *vis-à-vis Continuum*'s position on science and Western medicine. There appeared to be a view (gained how, I'm not sure) that AIDS dissidents were anti-science and orthodox Western medicine *per se*, assuming AIDS dissidence to be yet another New Age vagary.

When Huw Christie did come to speak (the other speaker didn't show) it was to an increasingly packed and interested gathering. He started by introducing the main ideas expressed in *Continuum* and it went from there with people asking questions and sharing their own experiences. Many of the people present were in some way critical of the AIDS industries (both pharmaceutical and social - linked as they are), through their experience as a user of those 'services', or as a health worker or through knowing either of those. The criticism most voiced was the fact that no matter what centre you go to, there is deemed to be only one course of action - to take 'the drugs' ('alternative therapies only ever being available in addition to, not instead of). As the workshop progressed several people expressed outrage that the AIDS dissidents' perspective was so marginalised they had never even heard of it.

There was in fact a lot of discussion about the integrity of the pharmaceutical industry and medical profession, with much openness toward the new information being presented. Various participants who had 'tested' as 'HIV' spoke of how they attempted to manage their health. There was a strong awareness about the toxicity of the prescribed drugs with much evidence of people seeking alternative ways to recover their bodies - from herbs to spirituality.

However, despite this level of consciousness around the prescribed drugs, it appeared that quite a few people did on some level believe in their ability (however otherwise damaging), to sedate the 'virus' and would be prepared (or felt they had no choice) to use them as a 'last resort'.

What was a new concept to many people was the notion that the systems of testing and 'measuring' were possibly in themselves suspect. Not only was the subject of the 'HIV antibody' test itself broached (with discussion of the nebulous nature of it and all the possible factors that would produce a positive result) but also there ensued a discussion about the method and practice of counting T-cells. What prompted this particularly was one woman's story about her ongoing struggle to restore her health "without the drugs" and how she felt that her health had deteriorated so much, that this was no longer possible. Part of her measure of health was based on the information she received about her T-cell count.

At this stage various participants expressed an interest in what Huw's 'HIV status' was and sequentially his own health care practice, to which he responded with some basic information about antioxidants, referring people to the magazine. The atmosphere in the room was beginning to feel increasingly saturated with new and possibly to some, rather unwieldy information, to the extent that to embark upon a discussion about oxidation may have been risking overload.

Of course underlying all the twists and turns that the discussion took was the issue of the non-existence of the 'HIV virus'. As aforementioned, this perspective was entirely unfamiliar to a lot of those present. Throughout the meeting Huw had covered quite a bit of ground, explaining about accepted scientific practice in regard to isolating viruses and the concurrent slackness that seems to exist in relation to the 'isolation' of 'HIV', as well as discussing who the main players were in terms of 'discovery', research and funding. Some participants felt that they were 'unqualified' to question scientific theory. Others challenged with various prevalent 'facts', to which Huw gave repeatedly thought-provoking responses. Other people simply wanted more information.

Due partly to running out of time and perhaps the need for some of the information to be assimilated, there wasn't much debate about the implications of the non-existence of 'HIV'. What did briefly come up however was the issue of transmission. I think the question went something like this: 'So if you're saying there's no virus, that means it can't be caught, which means I can share needles and have sex without a condom'. Obviously this question held huge potential for discussion, I think particularly in the context of a queercore gathering - not just in terms of this thing called 'safe sex' but also about the use (and culture) of recreational drugs and their impact on the body's defensive system. However like the subject of anti-oxidants, it felt as though there was already more Than enough information to be considering in what felt like a fairly short space of time.

At the end of the workshop, many of the participants expressed how thought-provoking they had found it. Invariably there's always more to be said and not enough time, however in terms of what was possible, the willingness of those present to engage with a not only 'alternative', but also challenging - and whilst shifting - still unpopular, perspective, was an inspiration.

As regards my initial fears about censorial strictures, ultimately, I felt that the discussion would probably have been just as open had the other speaker turned up!

Unprotected

Photo : Joan Shenton

Celia Farber

Rather than 'fearing the HIV virus', there are gay men who actually eroticize 'it', and their stories are seeping through to the mainstream. This is madness, to be sure, but it also says a lot about the power of human lust and rage.

These are strange times, to say the least. Just when criminalization of the sexual practices of the HIV-positive heats up, a movement that prides itself on conscious unsafe sex blooms. Even stranger, it gets depicted in the gay media (where so many innocent people have been impaled on charges of undermining Safe Sex propaganda) as a new form of self-expression. On the February cover of the mainstream AIDS magazine *POZ*, a nude man is sensually draped over a horse. The issue of *POZ* is devoted to a craze known as barebacking that has been bubbling underground for several years.

Barebackers are gay men, some HIV-positive and some negative, who have "raw" sex, condomless sex, because they have decided that it is worth the risk - a calculation no Safe Sex educator ever imagined possible. Some do it because they are already HIV-positive and don't believe the hype about "reinfection"(the idea that different strains of HIV can compound the illness); others are negative and stick to other men who are negative, but the most talked about camp are the ones who have no interest whatsoever in avoiding HIV - quite the contrary - they want to be infected.

"The debate is stuck between two hyperpolarized camps," Michael Scarce writes in *POZ*, "with antibarebackers screaming, 'dangerous sex friends,' while barebackers counter with 'Condom Nazis.' Meanwhile, a new sexual subculture has emerged, organized around the no-condoms creed."

Barebacking, Scarce points out, is no mere debauched, drunken, unsafe sex. Here's the kernel of PR genius - its conscious unsafe sex. Its enlightened and empowered and has its own clubs, parties, language, Web sites and handkerchiefs. The idea is to "..unapologetically revel in the pleasure of doing it raw," and barebacking is further defined as "both the premeditation and eroticization of unprotected anal sex."

In the most hardcore circles, it goes even further. Here,HIV-infected semen is itself eroticized, and the ultimate erotic bond is for one man lo infect another - consciously. Barebacking, Scarce explains, is equated with breeding, and infection with impregnation - some men even going so far as to select the man who will "father" their HIV infection.

The barebackers themselves "speak" quite freely on the Internet, but it is impossible to quantify a movement that often involves anonymous acts. No movement should be judged by its extremes, except maybe this one where the extremes tell such a fascinating story. The barebacker magnet site is called "xtremesex" and here, against a solid black backdrop, all the presumptions of the holy AIDS war are reversed. Here you can click on "bugbrothers," "giftgivers," (those who eroticize the act of transmitting HIV) or "bugchasers," (those who try to get infected.) Or you can click on the floating white spots: "Pozcum, the fuck of death."

Start there, I figure, and with a click I embark on my voyeuristic journey. I entered this realm with what I soon realized was a romanticized view of barebacking. I wanted to think of it as a perhaps mad but perhaps also twistedly heroic act of defiance in the face of Orwellian doctrines threatening to destroy the texture of human sexuality - that kind of thing. And maybe it is all that but its also just ballistic fucking.

One barebacker, who calls himself Joey on the Web site, gives a richly detailed account of a barebacking party. The story reads like something out of a post-GMHC dystopia. You may ask whether the accounts on the site are true, and I can't answer that. (My attempts to interview some of the men who had posted their stories online were unsuccessful.) I think so. But more to the point, they are "true" to the fantasy, and it is the fantasy itself that is important.

This is Joey's story: The host of the party addresses the 20 nude guests and recites the rules of the game: "Try to engage in anal sex primarily. Make sure to get your cum inside as many men as possible. And, related to that, get as many different guys' cum in your ass as you can. Remember, no questions and no telling. Make each one like it's the one. And the number one most important stipulation is no condoms!"

"There are 20 men here not counting me. I know that 12 of you are neg and eight are poz. Anybody who takes at least 12 loads this weekend is guaranteed at least one of those loads was charged."

Hearing that, Joey's skin goes "tingly." The orgy begins, and the "poz" men are the most desired. One man tells Joey, post-coltally, that he's "... pretty obvious in being neg; try not to give it away. Everyone here wants poz cum."

Joey's peak of excitement comes when he looks behind him and sees what may be lesions on the man currently servicing him. "Cool!" he thinks. "This guy's got AIDS."

Thirty-six hours later, he is proud to find out that he'd taken 15 loads and seven of them were from poz men."

Twelve days later, he was thrilled to receive his test results and find that he had sero-converted. He was HIV-positive. He had succeeded.

In another account, a "giftgiver" describes the sensation as follows: "He was clean, healthy, disease-free, HIV-negative. I knew I had the power and the obligation and the privilege to change that. After that night, he would never be completely healthy again. I was going to take that from him, and yet that power gave me a rush I'd never known."

At this end of the spectrum, body fluids are fetishized as if from a vantage point of extreme thirst, which I suppose you could say 15 years of becondomed sex has created.

The personal ads on the Web from all around the world speak of wanting not only raw sex, but also as much seminal fluid as humanly possible, as fast as possible and with the

kind of abandon that characterized the gay '70's. "Bottom accepting all loads," reads one of the ads. "I have become addicted to cum," reads another.

I want to tread carefully here with what I mention as I am quoting from an X-rated site, but I also want you to get the idea. In this forbidden world, the messages of Safe Sex have imploded as the stuff of terror and control has morphed into the stuff of desire and abandon.. "No hang up whatsoever on sharing any type of toxic manfluid," reads one, and another, titled "Fluid Exchange," laconically states, "HIV unknown/unconcerned."

There is a sense of anger, of sex with a vengeance, of a total psychic split or counterrevolution. But it seems to be as much about oblivion as about communion; many ads cite poppers, "meth-slamming" and "chem-happy" as preferences, and this combined with the purely hedonistic sex makes this site seem like perhaps the only place on earth where AIDS never happened.

I walked down Broadway in New York where I live, thinking about all this, snow swirling through the air. The late, great activist Michael Callen, inventor of Safe Sex, sublime AIDS intelligence and friend, would have understood it in a heartbeat, and I wish, as I so often do, he were here so we could talk. Despite the fact that Michael had invented -- amidst tremendous acrimony - Safe Sex, years before HIV was "discovered," he was also one of the few who could speak honestly about what sex was for gay men and about what had been lost in the realm of the "Safe." He was always angry over the way that Safe Sex propaganda was projected -- not as a necessary drag, which he saw it as, but as a glorious innovation. "Safe Sex is not hot sex," he would say, "and let's stop patronizing gay men by pretending it is."

Now I read on the "xtremesex" Web site: "Safer sex is not hot sex. It's pretend sex. The need for the intimacy of actual skin to skin contact is primal. Condoms are not just a question of sensitivity, they are a barrier to physical, emotional and spiritual communion."

Through knowing Michael, I grew to understand that gay sexuality, before AIDS, had a kind of velocity and urgency that I could probably never comprehend, and also that the way we all talk about it in the age of AIDS is wrong, deluded, watered down --- as if sex could be standardized.

Michael and I used to have long talks about what sex might really be, about the current that passes between people (which I thought of as electrical, as did he). Metaphorically speaking, rubber seemed like such a silencer, such a censorious material, such a very sad way for sexuality to be summed up at the end of the century.

I worried a lot about the loss of intimacy, about the consequences of such drastic sexual dictates, about the long-term effects of fear when what is feared is human contact itself, now forever pathologized by the notion of bodily contamination.

"You must write about this," Michael would say. "You will have your head handed to you, but you must do it."

I never did. When he died in 1993, I lost the thread and internalized the notion that such talk is bourgeois nonsense when people are dying.

But I still don't know why people are dying. If you are convinced that the putative retrovirus HIV has been proven to cause the array of complications known as AIDS, then all of this is simple: Preventing AIDS amounts to preventing HIV; curing AIDS amounts to obliterating HIV.

But for many of us, there is a question mark - in fact it's all a question mark. Where does the spiral of death really begin in this cycle of drugs, sex, terror and toxic medications? HIV dominates the minds, hearts and souls of millions of people -- whether it is a matter of avoiding it, surviving it or, as in this most recent development, acquiring it. Safe or bareback, HIV still reigns supreme. In fact, its hold on the gay male psyche has never been more potent than amongst barebackers, who in eroticizing the virus and making a sadomasochistic ritual out of its transmission have raised the level of HIV occultism to worship.

For now, I'm too busy being dumbstruck and fascinated to truly pass judgment. To think of all those endless condom ads, the endless sermonizing, the paralysis of both science and journalism in the face of any idea that was thought to promote "unsafe behavior." To think of poor Peter Duesberg (the dissident virologist who first questioned HIV as the cause of AIDS) being drummed out of science for the imaginary crime of promoting unsafe sex. To think of all the years, all the millions, all the dances and walks and runs and ribbons, and everywhere, like the emblem of the future utopia: the condom. It was the one thing you simply did not question, unless you were mad, a monster, a subversive, perhaps a terrorist, or maybe an AIDS dissident.

And then it happens - people start to abandon condoms - and it has less than nothing to do with the "dangerous" dissident movement and everything to do with basic human lust and rage. Of course *POZ* has the barebackers draped glamorously on horses, smiling. They recognize that there is no stopping this, and the publisher, Sean Strub, even wrote in his editorial that this has been going on all along but has been barely talked about until recently. I for one found the candor of *POZ* refreshing.

The boilerplate text on barebacking reads that it is the false promise of protease inhibitors that has made it inevitable because now gay men think that AIDS is a chronic manageable disease, not a deadly one to be avoided at all costs. But that doesn't speak to the deeper reason - the yearning for contact, which eventually may prove more powerful than the fear of death.

What is most interesting about this new phenomenon is that it breaks the holiest of AIDS pledges - to live in fear forever. Barebacking is like the ideological equivalent of trying to climb across the Berlin wall, pre-1989, when guards were ordered to shoot. People did that, too, and yes, it was suicide, but it was also the inevitable outcome of a long-repressed freedom. You can no longer control a person who doesn't fear death.

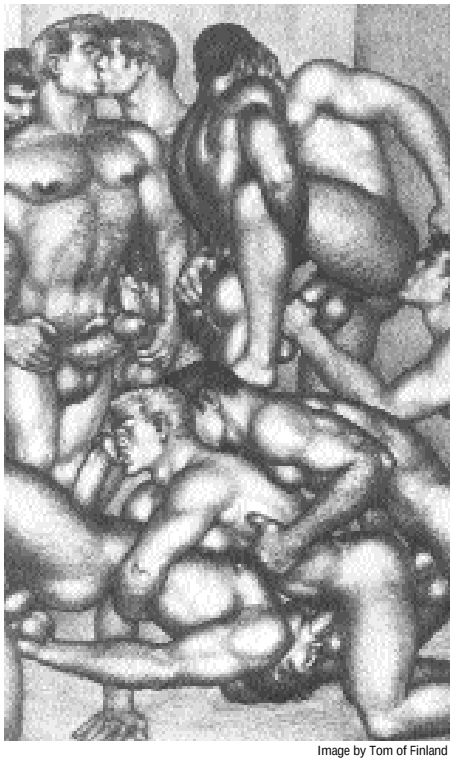


Image by Tom of Finland

Need I bother with the obvious - that barebacking on one level seems mad? I'm far more interested in what makes it strangely rational and heartbreakingly human. But before I get all misty-eyed, before I contribute to yet another kitschification of gay sexuality of which I know little or nothing, let me just call a spade a spade: Barebacking is simply sex. It is a powerful reminder that sex is not a kitchen that can be cleaned up and child-proofed - that sex is not safe. The only thing that can be guaranteed once a pendulum swings so fast and so far as the Safe Sex pendulum did is that it will eventually swing back, not to the middle, but first all the way to the other end.

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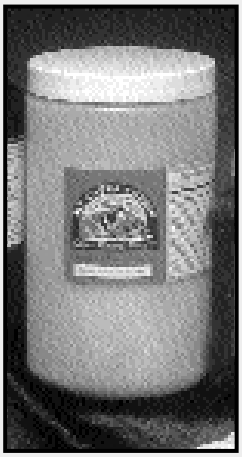

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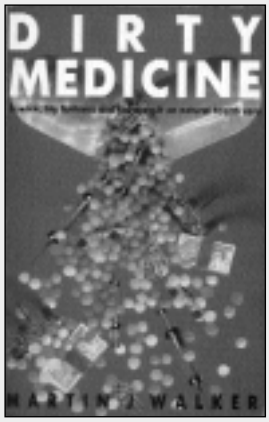

Since its first publication in 1993, Dirty Medicine by Martin J. Walker has been published in a second edition and has sold in total 7,000 copies. It has come to be regarded in some quarters as a reference source and handbook of research and writing method on pharmaceutical companies and the contemporary battle between allopathic and alternative and complementary medicine. Publishing the first two editions of the book has been costly for Slingshot Publications, the author's company. Now that the book is out of print, Slingshot is unable to publish a third edition and is looking for either a backer to finance a reprint and then distribute the book, or a publishing company to republish it. Anyone interested should contact Martin J. Walker at Slingshot Publications, BM Box 8314, London WC1N 3XX, UK.

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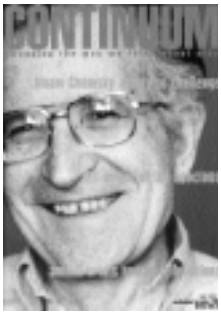

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Why CONTINUUM?

CONTINUUM, the *CONTINUUM magazine*, the other projects of the organisation and its international network were born out of the necessity for integrity, justice and healing around the death prognosis promoted throughout the AIDS-era.

The orthodox view on AIDS holds that it is caused by a retrovirus known as hiv that is transmitted through the exchange of body fluids. Once infected, a person will remain well for a time, though infectious to others, before going on to develop AIDS and dying. There is still no 'cure', just drug therapies said to slow the progress of the disease, and T-cell and 'viral load' counts to 'measure health'.

Fourteen years after the proposal of an hiv as the "probable cause of AIDS", toxic medication is still marketed and huge sums of money are spent on research with little verifiable hope for the future. Powerful pharmaceutical corporations have grown ever larger, capable in some ways of superseding the 'richest' nations on Earth. These corporations have substantial financial interests in controlling disease management, diagnostic tests and so-called terminal illnesses.

Naive patients - mostly homosexuals, drug ab/users, black people, US Latinos, haemophiliacs, babies and the destitute - have become guinea pigs condemned to die young after being labelled with hiv. In contrast, the questioning of the hiv/AIDS-hypothesis through the images and voices of resistance of many analysts worldwide - including scientists, Nobel Laureates, medical doctors, researchers and health activists - has been generally disregarded by the mass media.

***CONTINUUM* magazine began as a newsletter encouraging those effected to become responsible and to participate consciously in their own healing process. An important function of the work is to generate and disseminate alternative information on AIDS and immunity, establishing networks with those dedicated to the analysis of scientific research and holistic models of health.**

Assumptions run so deep among the medical establishment that only the unproved viral hypothesis has been promoted or funded in AIDS. Immunological investigations have confirmed more than 60 conditions can trigger a positive 'hiv-antibody' test result. There is no scientific documentation proving the existence of hiv as a unique, exogenous retrovirus, much less one capable of precipitating some 29 diseases and death.

Among *CONTINUUM* readers are a good number of long-term diagnosed individuals not taking anti-retroviral drugs. Many are doing well after more than 13 years of being labelled with hiv. We work towards enabling alternative and immune enhancing studies that will help enable people maintain or regain their health.

***CONTINUUM* magazine is a unique forum for those in the scientific and health communities challenging the AIDS orthodoxy. CONTINUUM is a voluntary organisation dedicated to providing information we believe necessary for the fuller understanding of hiv/AIDS, immunity and health. We aim to encourage those whose lives have in some way been touched by the hiv-hypothesis to seek scientific proofs that an hiv has been isolated and exists, and that it causes AIDS. The organisation relies on subscriptions and donations to maintain its work. Your support in any way is greatly appreciated.**