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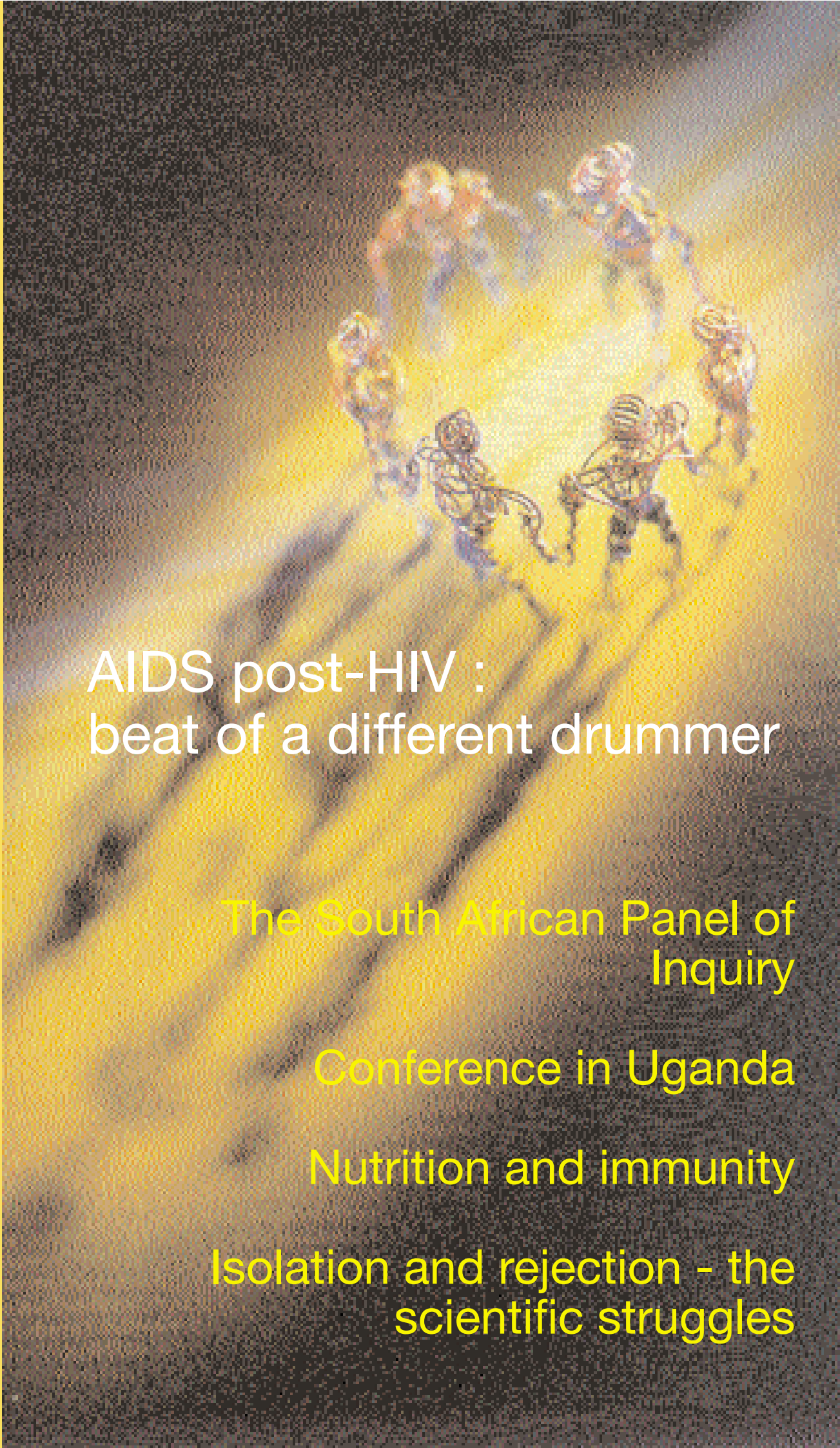

AIDS post-HIV : beat of a different drummer

The South African Panel of Inquiry

Conference in Uganda

Nutrition and immunity

Isolation and rejection - the scientific struggles

CONTINUUM

towards a healthier body politic

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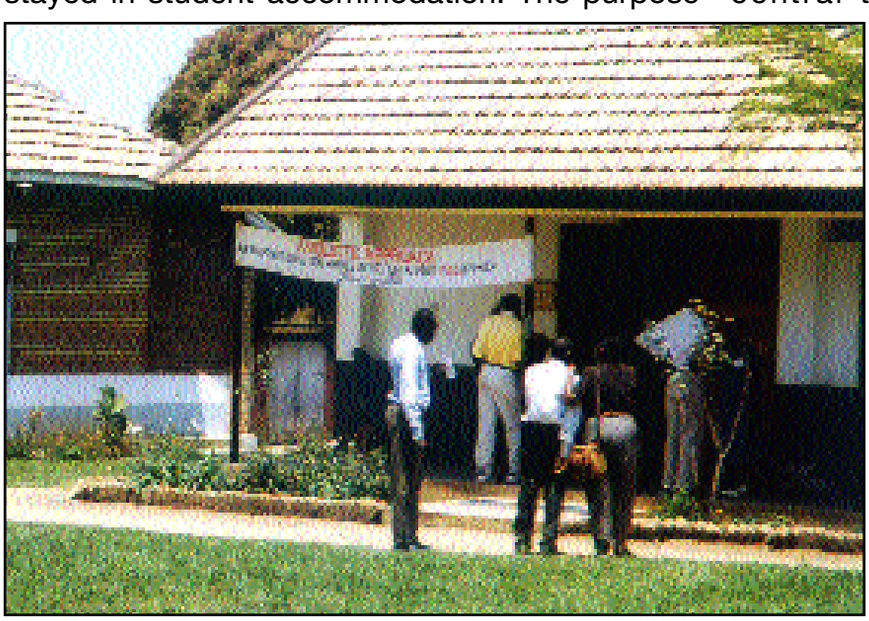
A holistic approach: An international conference on the fight against AIDS in Africa

Rosalind Harrison was a co-organiser of the recent conference in Nkozi, Uganda. Here she reflects on some aspects of this significant event.

Rosalind Harrison is an ophthalmologist in Burton-on-Trent, Staffordshire, England. She was born in Brisbane, Australia and studied medicine at the University of Queensland and the London School of Hygiene and Tropical Medicine.
She is co-author of the book *AIDS, Racism and Africa* and addressed the UN Human Rights Commission on AIDS in Africa in 1997.

There have been not one but two international AIDS conferences in Africa this year. The first, in Durban in July, was sponsored by international pharmaceutical companies to the tune of millions of dollars and was attended by 12,000 delegates. The second conference was a much less lavish affair. It took place in late August at a small rural university at Nkozi, Uganda, in beautiful countryside on the shores of Lake Victoria. There was no sponsorship; the forty delegates paid all their own expenses and stayed in student accommodation. The purpose of the conference was to bring together academics, health workers and activists from different continents and disciplines to consider AIDS in Africa from a broad perspective. From Uganda, South Africa, the United States, the United Kingdom, Kenya and Nigeria there were professors of anthropological history, primary care and family medicine, and the political science of human nutrition. There were lecturers in political economy, primary health care, ethics, and sociology, health care professionals from Uganda, Nigeria and the United Kingdom. And there were AIDS activists from Africa and the United Kingdom who had come to question the central tenets of AIDS science after their personal lives, families and communities had been affected by HIV diagnoses.



It would seem that no meeting of those who question any aspect of AIDS science is too small to escape the attention of the all pervasive AIDS establishment. Although representatives of the Ugandan Government and the Ugandan AIDS Commission had been invited to open and attend the conference, pressure was applied to cancel the conference at the last minute. Fortunately the rights to free speech and academic freedom were not breached. Instead a compromise of change of title of the conference from "Making sense: An international conference on alternative views on the origins and causes of AIDS in Africa" to "A holistic approach: An international conference on the fight against AIDS in Africa" was agreed and

the content of the conference proceeded as planned.

Papers were presented that discussed the stigmatisation of Africa as the origin for and centre of the AIDS epidemic and the racist stereotyping of African sexual behaviour. Powerful critiques were presented of the fear and suspicion generated by AIDS and the promotion of condomisation, and the destructive effects this was having on African culture and community values. The caveats of HIV testing technologies, the causes of immune deficiency and the diagnosis of AIDS were presented and discussed in detail, as were the proposals for the prevention of vertical transmission of HIV from mother to child. Delegates spoke of their experiences of HIV diagnoses for themselves or family members, and there were presentations and discussions on issues of human rights, the ethics of testing and treatment, and the risks of criminalisation of HIV transmission. The conference was given a detailed account of the debate in South Africa and the proceedings of President Mbeki's AIDS panel. In a plenary session at the end of the conference delegates drew up proposals for inclusion in a conference statement (see below).

Concurrently with the conference at the Uganda Martyrs University, a meeting was organised by Makerere University and the French Embassy at the Sheraton Hotel in Kampala to which Luc Montaigner, the French scientist attributed with co-discovery of HIV, was the invited guest. The Ugandan press reported that he was visiting Uganda to work with local scientists to find "'co-factors' that make HIV infection as well as progression to AIDS faster in Africa then in Europe or America". His contribution to the fight against AIDS was to say that kissing could transmit AIDS. Had he attended the conference at the Uganda Martyrs University he could have learned that poverty, with the inevitable consequences of poor diet, housing, sanitation, and health care, is a major cause of immune deficiency without any need for HIV as a co-factor, with solutions that are too obvious to mention.

Writing in a personal capacity, although I have been following the medical and scientific activities around AIDS in Africa for many years, I was still shocked to hear and see at first hand the manner of implementation of AIDS science in Africa. In the West no patient can be diagnosed with AIDS on clinical grounds or with a single HIV screening test without confirmatory tests, and a doctor give an HIV positive test result without providing counselling would

be liable to disciplinary procedures, litigation, or removal from the medical register. In the resource poor setting of health services in Africa such practices are an unaffordable luxury, yet providers of health care in Africa who question whether they may be doing more harm than good are under intense pressure from external donors to deliver substandard care. Anyone who doubts this should consider for a moment the scorn and abuse meted out to President Mbeki. He has sought clarification over questions of science, and western AIDS scientists have treated him with contempt. When he has stated, in the clearest possible terms, that South Africa has many pressing health needs and does not have the resources to monitor patients given

antiretroviral drugs even if the drugs could be afforded, he has been accused of insanity. If the democratically elected president of one of the most powerful countries in Africa is treated in this way, God help a lonely African doctor.

For saying this, I, and I believe all the other delegates, did not leave the conference with any feelings of despondency, but quite the opposite. The resistance to the madness of AIDS science in Africa is strong and growing. There is a saying that someone can have more money than sense. At the International AIDS Conference in Nkozi we did not have the money, but we did have the sense.

Statement

from the First International Holistic AIDS Conference,
Uganda Martyrs University, Nkozi, Uganda
29 August - 1 September 2000,
involving delegates from Uganda, Kenya, South Africa, Nigeria, Irish Republic, United Kingdom, Australia and United States of America.

Origins

It is generally accepted by the scientific community that HIV originated in Africa. We reject this view, for which the evidence is most insubstantial, as a racist perversion of the scientific process.

Causes

It is claimed that Human Immunodeficiency Virus (HIV) causes AIDS. Up to now however HIV has not been isolated in pure form from any patient who has tested HIV antibody positive. There are, however, many known causes of immune deficiency in Africa, as in other parts of the world. These include malnutrition, malaria, tuberculosis and other chronic bacterial and parasitic diseases. Economic underdevelopment, political instability and wars in many African countries have given rise to social and family breakdown, poverty, unemployment, and substandard overcrowded and unsanitary housing. In addition, there is inappropriate use of legal drugs and abuse of illegal drugs, as well as an increase in sexually transmitted diseases and medically unsupervised abortions. All of these may contribute to the development of immune deficiency. We also do not rule out the possibility that vaccines may have given rise to new diseases or in other ways have adversely affected peoples health.

Tests

Without the isolation and purification of HIV there can be no gold standard for HIV tests. Thus the HIV testing technologies and algorithms have not been demonstrated to be consistent and information about this can be found even in manufacturer's data sheets. A review of the scientific literature shows that there are over 70 diseases or biological conditions that may give false-positive HIV antibody-test results. Many of these, for example tuberculosis and malaria, are endemic in Africa.

Diagnosis of AIDS varies across the world; in parts of Africa a single HIV antibody screening test may be all that is carried out; in Western countries several confirmatory tests are undertaken prior to patient diagnosis. In some parts of Africa, an AIDS diagnosis is given using the Bangui case definition without testing for HIV antibodies which creates AIDS diagnoses which often may not correlate with the results of HIV testing. Thus a person can be "HIV-positive" in one country and "HIV-negative" in another, and the same can apply to a diagnosis of AIDS.

Prevention

Prevention of immune deficiency must address its many causes in Africa. Appropriate measures would include cancellation of crippling debt repayments, establishment of equitable economic relationships with wealthy countries, improvement in nutrition, development of social and medical infrastructure with emphasis on provision of clean water and sanitation, containment of environmental pollution and control of major epidemic diseases such as malaria and tuberculosis. The work of health departments and AIDS related non-governmental organizations needs to be refocused appropriately to take this into account. Proposals to reduce mother to child transmission, namely the administration of antiretroviral drugs to pregnant women and their infants and the substitution of formula milk for breast milk should be reconsidered in view of overwhelming evidence that bottle feeding in poor countries causes death and antiretroviral drugs have toxic effects. Exclusive breastfeeding should be encouraged.

Treatment and research

The treatment emphasis for AIDS must be shifted from the provision of expensive and toxic antiretroviral drugs to tried and tested interventions. There is a need to encourage and promote much greater research in this area which should include tests/trials of traditional remedies like African

non-toxic herbs. Current research on developing a vaccine for HIV must be refocused and reviewed in the light of the questions and doubts about the isolation of HIV.

Health education

Health education must include information that testing HIV antibody-positive may not mean a death sentence for any individual. All HIV health promotion activity should be re-evaluated in respect of other pressing health needs. This does not mean that health education about the transmission or treatment of sexually transmitted diseases should be neglected, as, aside from any controversies over HIV transmission, there are many well understood diseases such as syphilis and gonorrhea that can cause death or serious disability. Contraceptive information should also be widely disseminated to reduce unwanted pregnancies.

Ethical, legal, human rights and women's issues

A positive HIV test result can impact negatively upon people's physical, psychological and social wellbeing and can lead to hopelessness, despair and even suicide. Patients have the right to withhold their consent to testing for HIV antibodies and to be treated for presenting symptoms and diseases. Where people choose to undergo HIV testing appropriate pre- and post-test counselling must be provided at all testing facilities. All should be done to avoid the stigmatization of and discrimination against AIDS/HIV patients. In some instances women have been particularly victimized as HIV carriers; they, alongside other vulnerable people, need to be empowered. It should be emphasized that the problem of AIDS and sex within this context can negatively affect our understanding of ourselves, our identity and all our human relationships. In this respect, the universal promotion of condomisation as a solution to HIV/AIDS has tended to undermine trust between people within their intimate relationships. There is growing concern about the erosion of care and respect for one another and the importance attached to the community. These values have been so prominent in many African societies and need to be restored and promoted.

Recommendations

In view of what has been said above we recommend that:

1. Our countries should ensure that there is adequate provision of health, educational and social care resources. AIDS should be discussed and addressed in conjunction with the issues of human welfare, need and development.

2. We should promote awareness of the consequences for health of economic inequality and political oppression. We call upon those with economic and political power in the African states to resist pressure to accept policies/products which are detrimental to their people and to likewise empower their state regulatory agencies.

3. HIV testing should be suspended. If testing for HIV is undertaken there should be full information about the non-specificity of the tests and pre- and post-test counselling should be provided.

4. Without incontrovertible evidence of their benefit, policies of antiretroviral treatment for pregnant women and their infants and the substitution of formula for breast milk should not be implemented.

5. African scientists should be encouraged to carry out their own research. An institution dedicated to health research in its widest context should be created in Africa.

6. There should be vigorous education and awareness campaigns about human values such as shared responsibility and respect for life and persons. AIDS/HIV should not be used to undermine the cultural values and practices of people, especially those related to human sexuality.

7. The media in Africa should investigate thoroughly and report responsibly on all issues around AIDS/HIV without relying on medico-pharmaceutical press releases or reports from Western countries.

Life cycle: no handicap

Johan Verhoven tested 'HIV-antibody' positive several years ago. In Johannesburg he told Huw Christie some of his experiences, including a remarkable bicycle journey into the tropics.

Huw: Johan could you take me back to how you became knowlegeable, how you came to experience H.I.V/ A.I.D.S?

Johan: You mean personally or wider?

Huw: Personally would be nice, and wider as well.

Johan: Okay, how I came to experience it, in 1993 that's seven years ago I applied for a certain position and one of the requirements was that one had to take an Elisa test. So I went to a testing centre in Pretoria and took the test and the test came back positive. In the beginning I was very worried about it, I went through the normal trauma that people go through, but then as time went by I realised that there was really nothing wrong with me and I was as healthy as I had ever been. And that set me thinking because time went by and, you know, one hears all these doom predictions of you die within such and such short time frame and that just didn't happen. I experienced absolutely no change to my physical health. Now, at that time I was working in a clinic at a Catholic mission station near Pretoria which was in the heart of a very densely populated slum area. And there was all this hysteria building up about such and such a percentage of people are H.I.V positive, and we are in the middle of an epidemic and so, but, I looked what was happening at the clinic and most of the people who they said were supposedly suffering from A.I.D.S in fact had T.B. and a variety of other treatable diseases, and most of them who went for ordinary treatment like T.B treatment or whatever, recovered, actually regained their health. On the other hand I also had the experience that several people I knew were taking A.Z.T. and drugs like that and they did start to show the classical symptoms of what is considered to be A.I.D.S, you know, they lost weight and they had diarrhoea and so on. That set me thinking and that's how I started to... I decided to find out for myself, according to my own judgment, what is true and what is false. And that basically is how it started.

Huw: How did you do that? How did you find out?

Johan: Well, it was very difficult in South Africa at that stage because there was only one side of the argument that was being presented. But, I was in a book shop in Pretoria and I stumbled across a book by Neville Hodgkinson. The book was called "A.I.D.S, the Failure of Contemporary Science" and I just started to read through the book and it just basically confirmed everything that was my personal experience. That was the first contact I had had with an alternative viewpoint. And from there I just began to read more and more, everything I could find, and yeah, that's how it started.

Huw: And once you started to read these other things did you discuss them with other people and what happened?

Johan: I discussed it with friends of mine who were in the medical world and so on who were doctors and all of them were quite hostile, of course. I discussed it with several of the people I had contact with and they were a bit more open. But the thing in South Africa at the moment is that you have a huge network of N.G.O's in the health sector, of private clinics and so on, who depend directly for their livelihood on the funding they get for A.I.D.S programmes and for the work

"I got on the mountain bike and I cycled from Johannesburg to Malawi which is half way up central Africa. It's a distance of about three thousand kilometres through tropical Central Africa. I think it proved a point."

they do with A.I.D.S, so most of them would not be very open to any alternative view point. But amongst the general public I found that, people would say 'Yes, all these predictions are not coming true. We don't see vast numbers of people dying.' And people are starting to question and starting to wonder what is really happening.

Huw: Have you ever had a doctor or somebody really try to persuade you that you really should be taking medication and T-cell counts and this sort of thing?

Johan: Oh yes, oh yes I have. In fact I have several close friends who are doctors and they try to persuade me the whole time. At one stage they were even giving people T.B medicine prophylactically and that kind of

thing and they started to say to me 'Well once your T-cell count reaches a certain level then you have to start taking tuberculosis medicine prophylactically and maybe try and get yourself onto a trial.' They exerted enormous pressure but I always resisted.

Huw: You resisted the drugs, do you do T-cell counts and viral load counts?

Johan: No, not at all, and I wouldn't think of doing it. I should just say to you, Huw, that I've seen people who do T-cell counts and viral loads, and the T-cell counts go up and down, and the viral load goes up and down, but with them when it starts to go down they enter into such a frenzy and such a depression, you know, and such a negative state of mind that I think that basically feeds upon itself. I've been reading up a fair amount about phsyco-neuro-immunology as well and it's proven scientifically that your mental state directly affects your T-cell count, so when it starts to go down for whatever reason, and you get worried about that because you think the virus is starting to kill you and you go into depression and it's logical that the T-cell count will drop further, and I've seen this happening in people. That's why I wouldn't even think of submitting myself to that.

Huw: I know just what you mean. Just a couple of last questions, can you take me back to your first big cycle journey that you did recently?

Johan: Yes, I decided, after this whole diagnosis came about, I took up cycling as a sport. I thought, let me do something I enjoy and that's healthy. I started to go on cycling journeys. I cycled from Jo'burgh to Durban, I cycled from Jo'burgh to Moputu and then at one stage, this was now six years after this positive Elisa test, I wanted to prove to my friends who were Doctors, exactly that group I was talking about, that there really is nothing wrong with me, so I got on the mountain bike and I I cycled from Johannesburg to Malawi which is half way up central Africa. I ended up in the Capital city called Lulongwe. It's a distance of about three thousand kilometres through tropical Central Africa. I think it proved a point.

Huw: And do you have any more journeys planned?

Johan: Yes I have. For this year, in fact, I plan to cycle from here at least as far as Nairobi and if I can make it as far as Cairo.

Huw: How long do you think that will take you?

Johan: From here to Cairo should take I estimate about five months. If I don't run out of money by the time I get to Nairobi I'll continue to Cairo. But I also think it does prove a point. It shows people that, in spite of having gone through this what they think should be a fatal disease, I'm in better health then people half my age, I'm in better health then I've ever been in my life before in spite of never having taken medication.

HIV diagnosis and the potential of a holistic healing process

Reflections following a qualitative research study on the therapeutic effect of Tai Chi

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Carolyn Howell practises independently as a Transpersonal Counsellor & Psychotherapist (UKCP reg.) and Tai chi Teacher (TCUGB reg.) She teaches Tai chi at the Immune Development Trust for people living with HIV, AIDS, Cancers, MS or Lupus. She would be happy to hear from any doctors who are interested in exploring the 'mindbody' concept and in conducting further research. Tel: London 020 7359 1439

HIV and AIDS affect all of us who are living in the world today. Whether we have to live with the dreaded label of 'HIV-positive', or we know and love someone who has died from AIDS-related symptoms, or are reminded by reports of growing numbers afflicted and the controversy that accompanies research and treatment.

Due to the imposed assumption of 'inevitable and premature death' that accompanies diagnosis, the condition naturally arouses fear, anger or denial. It is believed that drug combination therapy allays symptoms but research suggests it is toxic with mid-to-long-term use. Treatment regimes operate at enormous financial cost to health services, and due to the physical effects of high and frequent doses, may cause substantial anxiety and restriction in quality of life to the recipients. Not to minimise the preciousness of living longer that drug research seeks to allow, the controversy surrounding the condition seems to be demanding a deeper enquiry into what meaning may lie within the challenge presented by the condition - that includes mental and spiritual wellbeing, in the context of both personal and social life.

Medical science has reached extraordinary levels of specialisation and skill in the tangible arena of the physical world. But we know that we are more than what can be seen, weighed or measured. "Organs give way to tissues, tissues to cells, cells to molecules, and on to atoms, protons, electrons, quarks and finally - nothing... The real' heart is not this tough bundle of twitching muscles that beats 3 billion times before it expires but the organising power that pulls it together, that creates a thing out of nothingness. (Chopra, 1991, 91-92) Meditation allows us to experience this nothingness' which 'contains all and out of which everything comes.' Whether we call it 'soul' or 'Spirit' or 'pure awareness', it is what connects us to all Life in and around and beyond, and it allows all possibilities.
The evidence of neuropeptides has shown that our cells act in intelligent cohesion with our mind, that the nervous system, the immune

system and the endocrine system function as a psychosomatic network. (Capra, 1996) There is growing evidence in support of the concept of the physical body as a complex network of interwoven energy fields. The energetic network representing the physical/cellular framework is organised and nourished by 'subtle' energetic systems which may be powerfully affected by our emotions and level of spiritual balance as well as by nutritional and environmental factors. (Gerber, 1996)


Picture: Si Chi Ko

Traditional medicine eg. Shamanic, Ayurvedic, Taoist, Tibetan Buddhist - notably sharing as background a spiritual tradition - regard disease as a situation of imbalance within the 'whole' person (the interaction of spiritual, mental/emotional and physical levels), or of the person's relationship to his/her environment. In fact the two aspects are seen as inseparable. The emphasis in treatment is on 'restoring balance'; assisting to generate a spontaneous shift in awareness that supports the natural healing processes of the body towards ‘wholeness’.

What characterises 'balance' and how do we define 'wholeness' from the human perspective? I think I can safely say that we long to feel a sense of vitality, selfesteem, safe to be and express who we are, loving and beloved, and that our life is potentially joyful, creative and meaningful. If we consider ourselves as evolving beings, we all share this underlying desire or vision. Illness may therefore contain a message about what may be preventing us from being 'whole' that we have been unaware of till now (no guilt, judgement or blame). Of course the intricate web of circumstances that contributes to any situation does not allow us to define every possible factor (we have to accept the mystery of what we don't know). But there may be definable factors (eg. toxic factors in food or envirom-nent or lifestyle, or mental beliefs in response to personal or social circumstances) that stand out, whether specific to be discovered by each person on their own unique journey, or collectively among all who share the condition. In this way we may discover the social limitations that we as society define as our reality and transcend these into more liberated states of self-expression and wellbeing.

Dossey, doctor and author, speaks of the thousands of personal stories he has heard. "As a result of all this listening, one fact about illness has come to impress me more than any other: the perceived meaning and emotions contained in these tales are utterly crucial to their outcomes... Genuine healing is frequently unexpected and radical, and often depends not on what we do but how we choose to be." (Dossey, 1991, 13-24) Numerous authors cite examples of remarkable recovery from life-threatening conditions when additionally working with aspects such as creative imagery, self-expression, biofeedback, relaxation, stress reduction, or a belief in the ability of the mind to heal. The actual process remains mysterious but the essential characteristic is a spontaneous shift in awareness that allows the possibility of an unexpected outcome. (Achterburg, 1985; Borysenko, 1988; Bays, 1999; Chopra, 1990; Cousins, 198 1; Hirschberg, 1997; Le Shan, 1984; Schneider, 1989; Siegel, 1986)

Can we thus proceed to explore the 'HIV condition' from this perspective? What seems to characterise the condition is a predisposition to a critical vulnerability or 'imbalance' in immune functioning. On a psycho-social level, may this imply that there was a sense of powerlessness or futility within the 'whole' organism about asserting Self in an environment perceived as hostile and in which he/she feels they have no control? T-cells are born in the bone marrow, energised for action in the thymus and then 'wait' for action in lymphatic tissue. Research has shown that accumulative stress (mental or physical) impairs the functioning of the thymus and the T-cells, as well as decreasing the numbers of these cells.

It may be relevant to note here that the thymus gland, according to Eastern spiritual teachings, is the physical counterpoint of the heart chakra. This chakra is traditionally associated with both self-love as well as the expression of love towards others, joy and courage. It is interesting that in infancy the thymus is the central stimulator or regulator of immune response, is at its largest during puberty, then gradually shrinks as we grow older and the functional part becomes replaced by fatty tissue. Why is this so, and does it have to be inevitable? From a psycho-spiritual perspective I wonder if this has anything to do with the balanced functioning between heart/emotions and mind? As we mature do we become more entrenched in attitudes/habits/opinions at the expense of openness and spontaneous self-expression

Research has shown that under chronic stress the thymus will shrink in a few days and function poorly, but that it can improve when conditions of stress to the organism are reduced. Achterburg found in her extensive research into working with imagery in illness that "the immune system was synonymous with the patient's own self-concept.
When it was imaged as strong and pure, it overcame disease." (Achterburg, 1985, 191)

Surely we should explore whether there are common factors that contributed to an accumulation of stress experienced by people in their lives prior to receiving the HIV diagnosis? I undertook a small qualitative research study in 1998/9 (Howell, 1999) that strongly indicated it is worth looking into further. The aim of the study was to investigate from a Transpersonal perspective, the effect of Tai chi on participants' perception of their health and wellbeing, with reference to their psychological state prior to diagnosis and the challenges posed by living with the HIV condition. ('Transpersonal' essentially implies moving through our fixed concept of Self that is conditioned by the past, into a realm of possibility that is inspired by something greater than ourselves.)

I I people (9 men and 2 women), aged between 29-57, with an HIV-positive diagnosis took part, attending weekly Tai chi classes at the Immune Development Trust over approximately 8 months. The length of living with an HIV diagnosis ranged between 2 to 15 years. 5 people were additionally living with an AIDS diagnosis. All the men stated homosexual preference, the women heterosexual. Participants were self-selected, and in the main actively pursuing a health strategy which included other holistic therapies. Drug combination therapy prevented accurate conclusions regarding the effect of Tai chi on physical symptoms (9 participants were receiving drug treatment). Notably, one participant who has never received drug treatment, had been living with an HIV diagnosis for 1O years. She has become very sensitive to working with her health and said it is generally excellent. (She still attends the Tai chi
class and has experienced subtle but profound changes in self-expression, awareness and creativity.)

Classes involved learning chi kung (exercises integrating mental focus, breathing and movement), guided relaxation lasting approximately 1O minutes, gradually going into the Tai chi Long Yang Form (a set sequence of slow movement), and occasional discussion of philosophy and symbolism of the Form as it related to daily life. Data for the purposes of the study was obtained by means of in-depth individual interviews, anonymously returned questionnaires and a focus group.

In Chinese culture chi kung and tai chi have long been regarded as a method of preserving optimum health, in restoring the balanced flow of energy throughout the system - between mind, body and spirit, and of the organism in relation to its environment. Influenced by the philosophy of Taoism, it assumes an underlying unity connecting all life based on the holistic premise that the microcosm follows the same natural laws as the macrocosm; that energy (chi) from the smallest frequency of vibration to the most vast in the cosmos, connects every living thing. Research to date has shown that the practice of chi kung and tai chi do benefit physical functioning and general wellbeing.

The findings of this study indicated that in the years prior to diagnosis participants were immersed in a lifestyle/mental attitude that would stress the immune system. This manifested mainly as overwork or hectic lifestyle, being in relationships that were detrimental to their self-esteem, or indulging in risky behaviour to the body (not specified, but for example, not eating well, overuse of recreational drugs/alcohol, risky sexual activity.) The causes of stress were attributed to a fragile sense of

selfworth; feeling powerless against familial/ societal expectations, or a sense of having to struggle with these to ensure acceptance and recognition; depending on outside approval for their self-identity; tension from experiencing prejudice against homosexuality or in the women's case, feeling they had to care for others before themselves. The HIV diagnosis further intensified these feelings of stress and isolation.


Picture: Si Chi Ko

These findings immediately make me wonder how significantly common they might have been to all people living with an HIV diagnosis: gay people growing up with prejudice and thus experiencing doubts concerning their self-worth; intravenous drug users who for reasons of personal suffering may have chosen to 'opt out' in favour of the relief supplied by drugs, and thus excluded from society; anyone of low self-worth who may feel they don't fit into a society driven by competitive material values; and on the extreme end of the spectrum, people of Africa/Asia/South America living with poverty and malnutrition, their sense of cultural identity erased by racism and colonialism, or living in countries characterised by the violence and corruption of political and spiritual fragmentation.

For participants of the study, living and coming to terms with the diagnosis of HIV effected significant changes, namely taking action to remove themselves from stressful activities or relationships, acknowledging themselves and their own needs more, taking time to enjoy life, and exploring new avenues especially holistic and spiritual. Factors that accelerated or assisted these changes were mainly choosing to live, having to deal with illness, and the use of holistic/complementary therapies. Every single person felt strongly that they could affect their own healing and expressed clarity on what they felt their personal healing path entailed, mainly: living a healthy/balanced/peaceful lifestyle, listening to their body more - instead of trying to control it, paying attention to their own needs, acknowledging and expressing their feelings, and exploring their spirituality.

All the participants felt that tai chi would be a beneficial therapy to offer to people with an HIV diagnosis. The main reasons being that it helped to maintain wellbeing, reduce stress, increase awareness, focus on the real issues of life, that it was a way of helping yourself, and was enjoyable, centreing, and energising and calming at the same time. Findings suggested that tai chi did effect greater insight, attunement and integration on all levels of being. People felt that the imagery and symbolism helped them relate tai chi to world/life/spiritual aspects; that it helped to broaden the mind and see things in a different way, to come into the body and focus; and that the natural images conveyed a sense of calm and inner peace. Additional benefits incurred in the learning process were patience and acceptance of things as they are in the moment.

No findings in this study were conclusive, as it was limited in scope and size; by the fact that there was no controlled monitoring; and that several factors may have influenced the outcome, such as: unstable health, the simultaneous use of other holistic therapies, drug combination therapy and its side-effects, work and lifestyle, the practice of meditation, and that long-term benefits of tai chi only emerge over time with regular practice.

However, the main benefits reported by participants did accord with the healing tradition of tai chi and research studies involving tai chi, namely a sense of calm, focus, well-being and renewed energy. The main issues characterising participants' self-identity' prior to diagnosis corresponded with several themes emerging from previous studies. For example, the themes of powerlessness (Myss & Shealey, 1987) and

rejection and isolation (Kubler-Ross, 1987). In 1983, in a study in San Francisco, a psychotherapist, Dr J M Leiphart, for I Y2years undertook "extensive psychotherapy with 26 men diagnosed with either AIDS or pre-AIDS conditions. In each one he found an unresolved 'emotional emergency' relating to survival and safety, usually dating from early childhood. Each man held within himself that his survival was always in jeopardy. Blocking rage, holding back anger, and avoiding confrontation by adopting a 'Mr Likable' nice guy coping personality was the common defence mechanism used by these men." (Serinus, 1988, 77)

The healing process as it was perceived by participants also corresponded with characteristics of long-term survivors of HIV/AIDS-diagnoses drawn from various studies (Castro, 1996), and accounts of profound change in lifestyle and self acknowledgement reported by long-term survivors themselves. (Melton, 1988; Griffiths, 1997; Smith, 1996; Nassaney, 1990; Markoff Assistent, 1991) Chopra mentions that a survey of long-term AIDS survivors showed that all of them have made this kind of 'take charge' decision over their disease and lifestyle. (Chopra, 1990, 2-)8)

The general findings of this study in relation to tai chi suggest that other holistic exercise such as yoga and the use of complementary medicine, which take into consideration body, emotions, mind and spirit may similarly assist a person through the process of change, in being receptive to their own healing power and participating on their own healing path.

There is a Chinese proverb, 'the methods used by one man may be faulty; the methods used by two men may be better.' Through this article I would like to appeal to the generosity of pharmaceutical companies and other funding bodies to allow interdisciplinary collaboration in research and treatment: that the skills of orthodox and complementary join forces, that in addition, the perspective of science, sociology, philosophy, ecology and the arts all have a part to play in generating a world and society that promotes creativity and wellbeing for the individual, the community and the ecosystem. Let us tap into 'the mind we all share beneath the superficial layer of our individual minds. This shared mind creates our shared world.'

Further information

The full detailed study is available for reading at the Immune Development Trust (Tel: 020 7704 1555), the Centre for Counselling & Psychotherapy (Tel: 020 266 3006), or from Carolyn Howell.

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S. African President Mbeki's letter to President Clinton and Prime Minister Blair

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April 3, 2000

I am honoured to convey to you the compliments of our government as well as my own, and to inform you about some work we are doing to respond to the HIV-AIDS epidemic. As you are aware, international organisations such as UNAIDS have been reporting that Sub-Saharan Africa accounts for two-thirds of the world incidence of HIV-AIDS. These reports indicate that our own country is among the worst affected.
Responding to these reports, in 1998, our government decided radically to step up its own efforts to combat AIDS, this fight having, up to this point, been left largely to our Ministry and Department of Health.

Among other things, we set up a Ministerial Task Force against HIV-AIDS chaired by the Deputy President of the Republic, which position I was privileged to occupy at the time.
Our current Deputy President, the Hon. Jacob Zuma, now leads this Task Force.
We also established Partnerships against AIDS, with many major sectors of our society including the youth, women, business, labour unions and the religious communities.
We have now also established a National AIDS Council, again chaired by the Deputy President and bringing together the government and civil society.
An important part of the campaign that we are conducting seeks to encourage safe sex and the use of condoms.
At the same time, as an essential part of our campaign against HIV/AIDS, we are working to ensure that we focus properly and urgently on the elimination of poverty among the millions of our people.
Similarly, we are doing everything we can, within our very limited possibilities, to provide the necessary medicaments and care to deal with what are described as 'opportunistic diseases' that attach to acquired immune deficiency.
As a government and a people, we are trying to organize ourselves to ensure that we take care of the children affected and orphaned to AIDS. We work also to ensure that no section of our society, whether public or private discriminates against people suffering from HIV-AIDS.

In our current budget, we have included a dedicated fund to finance our activities against HIV-AIDS. This is in addition to funds that the central government departments as well as the provincial and local administrations will spend on this campaign.
We have also contributed to our Medical Research Council such funds as we can, for the development of an AIDS vaccine.
Demands are being made within the country for the public health system to provide anti-retroviral drugs for various indications, including mother-to-child transmission. We are discussing this matter, among others with our statutory licensing authority for medicines and drugs, the Medicines Control Council (MCC).

Toward the end of last year, speaking in our national parliament, I said that I had asked our Minister of Health to look into various controversies taking place among scientists on HIV/AIDS and the toxicity of a particular anti-retroviral drug.
In response to this, among other things, the Minister is working to put together an international panel of scientists to discuss all these issues in as transparent a setting as possible.

As you know, AIDS in the United States and other developed Western countries has remained largely confined to a section of the male homosexual population.
For example, the cumulative heterosexual contact, US percentage for AIDS cases among adults/adolescents, through June 1999 is given as 10 percent. (HIV-AIDS Surveillance Report: Midyear edition. Vol 11, No 1, 1999. US Department of Health and Human Services).The cumulative absolute total for this age group is reported as being 702,748. US AIDS deaths for the period January 1996 to June 1997 were stated by the US CDC as amounting to 32,750. (Trends in the HIV and AIDS Epidemic: 1998. CDC).

On May 13, 1999, a SAFA-AFP report datelined Paris stated that 1998 UNAIDS and WHO reports

had said that AIDS was responsible for one death in five in Africa, or about two million people.
It quoted a Dr. Awa Coll Seck of UNAIDS as saying that there are 23 million carriers in Africa of HIV.
This SAFA-AFP report quotes Dr. Coll Seck as saying: 'In Southern Africa, the prevalence of the (HIV) infection has increased so much in five years that this region could, if the epidemic continues to spread at this rate, see its life expectancy decline to 47 by 2005.'
(Interestingly, the five years to which Dr. Coll Seck refers coincide closely with the period since our liberation from apartheid, white minority rule in 1994).
The report went on to say that almost 1,500 people are infected in South Africa every day and that, at that point, the equivalent of 3.8 million people in our country carried the virus.
Again as you are aware, whereas in the West HIV-AIDS is said to be largely homosexually transmitted, it is reported that in Africa, including our country, it is transmitted heterosexually.
Accordingly, as Africans, we have to deal with this uniquely African catastrophe that:

• contrary to the West, HIV/AIDS in Africa is heterosexually transmitted;
• contrary to the West, where relatively few people have died from AIDS, itself a matter of serious concern, millions are said to have died in Africa; and,
• contrary to the West, where AIDS deaths are declining, even greater numbers of Africans are destined to die.

It is obvious that whatever lessons we have to and may draw from the West about the grave issue of HIV-AIDS, a simple superimposition of Western experience on African reality would be absurd and illogical.
Such proceeding would constitute a criminal betrayal of our responsibility to our own people. It was for this reason that I spoke as I did in our parliament, in the manner in which I have indicated.
I am convinced that our urgent task is to respond to the specific threat that faces us as Africans. We will not eschew this obligation in favour of the comfort of the recitation of a catechism that may very well be a correct response to the specific manifestation of AIDS in the West.
We will not, ourselves, condemn our own people to death by giving up the search for specific and targeted responses to the specifically African incidence of HIV/AIDS.

I make these comments because our search for these specific and targeted responses is being stridently condemned by some in our country and the rest of the world as constituting a criminal abandonment of the fight against HIV-AIDS.
Some elements of this orchestrated campaign of condemnation worry me very deeply.
It is suggested, for instance, that there are some scientists who are 'dangerous and discredited' with whom nobody, including ourselves, should communicate or interact.

In an earlier period in human history, these would be heretics that would be burnt at the stake!
Not long ago, in our own country, people were killed, tortured, imprisoned and prohibited from being quoted in private and in public because the established authority believed that their views were dangerous and discredited. We are now being asked to do precisely the same thing that the racist apartheid tyranny we opposed did, because, it is said, there exists a scientific view that is supported by the majority, against which dissent is prohibited.
The scientists we are supposed to put into scientific quarantine include Nobel Prize Winners, Members of Academies of Science and Emeritus Professors of various disciplines of medicine!
Scientists, in the name of science, are demanding that we should cooperate with them to freeze scientific discourse on HIV-AIDS at the specific point this discourse had reached in the West in 1984.
People who otherwise would fight very hard to defend the critically important rights of freedom of thought and speech occupy, with regard to the HIV-AIDS issue, the frontline in the campaign of intellectual intimidation and terrorism which argues that the only freedom we have is to agree with what they decree to be established scientific truths.
Some agitate for these extraordinary propositions with a religious fervour born by a degree of fanaticism, which is truly frightening.

The day may not be far off when we will, once again, see books burnt and their authors immolated by fire by those who believe that they have a duty to conduct a holy crusade against the infidels.
It is most strange that all of us seem ready to serve the cause of the fanatics by deciding to stand and wait.
It may be that these comments are extravagant. If they are, it is because in the very recent past, we had to fix our own eyes on the very face of tyranny.

I am greatly encouraged that all of us, as Africans, can count on your unwavering support in the common fight to save our continent and its peoples from death from AIDS.
Please accept, Your Excellency, the assurance of my response.

THABO MBEKI

Folly or Grace?

Joan Shenton reports on the first meeting of the South African Presidential Panel of Inquiry into HIV/AIDS.

Some of the Panel settle down to begin the discusssions, at the Sheraton Hotel, Pretoria

"Perhaps I should have allowed the wise men to speak because I am a fool. Because indeed when eminent scientists said 'you have spoken out of turn' it was difficult not to think that indeed one was a fool. But I am no longer so sure about that, given that so many eminent people responded to the invitation of a fool to come to this important meeting."

Words spoken by President Thabo Mbeki as he welcomed those who had accepted his invitation to join his Expert Panel of Inquiry into AIDS (Pretoria June 6th & 7th, 2000). In his quest for a re-examination of the orthodox position on AIDS in Africa and his concern about the toxicity of the AIDS drug AZT, Mbeki had been accused of giving legitimacy to discredited scientists. Today he chose to quote from Padraic H. Pearse's poem "The Fool". In it the Irish poet ponders on whether to think the unthinkable, say the unsayable, and dream the undreamable is folly or grace.

Never having been to South Africa before, this was my second visit in one month. Only three weeks earlier, Huw Christie, editor of Continuum magazine and I had travelled to Johannesburg at the invitation of South African science journalist Anita Allen. Allen had been involved in the early planning of the panel and was now creating a network of journalists who could help highlight the issues surrounding Mbeki's initiative.

Thanks to Allen's endeavours, and with the help the ANC's head of communications Smuts Ngonyama, we were granted an interview on film with the President in a private reception room in Pretoria's Union Buildings. The interview was broadcast on M-Net's flagship weekly current affairs programme Carte Blanche, to 44 countries across Africa.

Here we were again to cover the Expert Panel proceedings.

This second trip was made possible thanks to the generosity of Deane Collie, director of the US based International Coalition for Medical Justice, donations from Tom di Ferdinando and Michael Ellner at HEAL New York also from Professor Gordon Stewart and help from Dr Roberto Giraldo, President of the Group for the Scientific Reappraisal of AIDS.

It was the first time I had seen hardline representatives of the AIDS orthodoxy like Luc Montagnier, Helen Gayle of the Centres for Disease control, William Magkoba President of the South African Medical Research Council, sitting side by side in the audience with many of the scientists who have been attacking the virus AIDS hypothesis for over a decade - these

included Peter Duesberg, Gordon Stewart, Harvey Bialy, David Rasnick, Roberto Giraldo, Joseph Sonnabend, Christian Fiala, Manu Kothari, Sam Mhlongo, Klaus Koehnlein and Etienne de Harven.

Political will had at last made it possible for the many question marks surrounding HIV as the cause of AIDS to be presented before members of the AIDS orthodoxy in a public forum. Over the past decade the general pattern has been for the orthodox scientists to avoid any direct confrontation and to dismiss the doubters as flat earthers.

So great had been the opposition to the panel both in South Africa and in the international press that Health Minister Manto Shabalala Msimang in her opening address felt compelled to praise the courage of those present "for having retained good and clear focus in spite of some of the criticism that the convening of this panel had provoked in some quarters."

Mbeki's opening speech was brief but he was keen to make one central point. Why was the pattern AIDS in Africa so different from AIDS in the USA and Europe? In 1985 the South African Medical Journal had reported that in Western countries the high risk groups for AIDS were homosexual and bisexual males, intravenous drug addicts and recipients of blood transfusions. Of these risk groups, said the article, South Africa only had the homosexual group in common, and HIV was therefore considered not to be endemic in South Africa. This was in 1985, but said the President, over the next six years something changed. A high rate of heterosexual transmission was reported. "Something changed very rapidly in a short period of time. Why? Being a fool I couldn't answer this... As scientists you must be able to respond."

This was the challenge. And here was the world's press, gathered at the Sheraton in Pretoria. The proceedings of the panel were not open to the press, but once the Reuters, CNN, BBC, and SABC journalists had got their sound bites, a handful of journalists stayed on, throughout the two days to gather information first hand when the panelists broke for coffee or lunch. Celia Farber had arrived from New York with her film crew, I was filming with Huw Christie for Meditel and gathering information for ICMJ, Huw was also gathering material for Continuum and the new reclaimthebrain website set up by Rob Drescher; Vivienne Vermaak a South African independent producer was there with her crew and journalists from several South Africa's dailies came and went.

The setting was beautiful. We waited for news from the panellists on the Sheraton Hotel terrace overlooking the huge expanse of trees, lawn and formal gardens leading up to the Union Buildings in the distance. The sun shone and there was a great feeling of hope, expectation and relief that at last things could be hammered out.

But it soon emerged that there wasn't going to be much hammering. The dissident scientists were in a minority and the orthodox scientists were doing their best to avoid answering any knotty questions.

The first person we caught on camera in his lunch break was Dr Roberto Giraldo, President of the Group for the Scientific Reappraisal of HIV/AIDS. "What I think is going to be very difficult is to come to some definitive agreement. The only thing that we can agree at the end is that we don't agree! We are starting to explain that the whole issue of HIV has to be reappraised from the very beginning and we are trying to explain to them that the whole of the research around HIV/AIDS is full of bias."

At lunch time, we spotted Professor Luc Montagnier who had just arrived. Huw Christie had been keen to make contact with him after publishing an interview with him conducted by Djamel Tahi in Continuum magazine, which had focused on questions surrounding viral isolation and the identification of HIV. First Christie asked Montagnier what he thought scientists could contribute to this panel? Was it not already clear what health policy surrounding AIDS should be? Montagnier replied,

"We know about the origin of HIV/AIDS. The causal agent is HIV but it's impossible for a country which has more than 10% HIV infected individuals to use the treatments that have been used in the Western world. It is too expensive. We have to propose - not some alternatives but some adaptation - to this kind of treatment. We also have to propose new ways of prevention, besides education information. Maybe we have to look for co-factors of transmission. So research is also involved. And research should be done not only in the North, it should also be done right here.

The interview moved on to the subject of viral isolation. Christie was keen to find out if Montagnier, when working on isolating HIV (then called LAV), had thought it necessary to start with a purified sample of virus. "No. Not at all", said Montagnier. "The virus can be reproduced by a single DNA molecule which contains all the information. The gene was extracted from molecular cloning of HIV DNA...then put into bacteria." Was the first genome taken from purified virus reiterated Christie? "It was not made from purified virus." replied Montagnier. "But it does not matter

because once it is cloned it is pure".

Montagnier later confirmed that cross-reactivity between HIV and other proteins can occur. This is important in the African context, as proteins in blood samples from patients with diseases that are endemic in Africa like malaria, TB, Sleeping Sickness and leprosy (as well as from women who are pregnant) can cross-react with HIV, thus creating mistakenly identified HIV antibody positive cases.

Prof. Luc Montagner - “It [the HIV genome] was not made from purified virus.”

The first day of the panel meeting ended with a reception given by the Deputy President Jacob Zuma. The press was allowed to attend and it was very interesting to meet the delegates in an informal setting. Some of the edged away nervously, recognising us as "dissident" journalists, but on the whole it was a jolly occasion. I was able to meet the panel's facilitator-in-chief, Dr Stephen Owen, from Canada. Professor of law and public policy at the University of Victoria, he was chosen because of his international reputation as an authority on conflict resolution and he seemed to be grasping the nettle with equanimity.

On the top terrace, in order to move to move away from the sounds of the ornamental waterfall and a Sunday morning jazz band below, we interviewed Anthony Brink - advocate, AIDS dissident and outspoken critic of the use of the so-called antiviral AIDS drug AZT. He is currently handling two cases of alleged damage from AZT.
"I have to be very careful to keep my ethical responsibilities and duties in sharp relief. My own hat is the hat of an AIDS activist, so to speak, agitating against this drug. On the other hand my other hat is this. I'm an advocate representing the interests of a client - a wronged plaintiff and my duty in this litigation is not to serve the public good as I perceive it, no matter how strong my conviction is. My duty is simply to get as much compensation as possible [for my client].

What was his position on AZT?

"AZT is an extremely poisonous substance without any countervailing therapeutic value to be claimed for it which might justify it - because chemotherapy is very poisonous but it's said that it's got some therapeutic value. But AZT cannot have the therapeutic value because the pharmacokinetics just don't pan out. So what was it that had brought Brink all the way from Pietermaritzburg to support the presidential panel?

He said it was a pure accident of history that one September evening in 1996 he had come across the AIDS dissident debate. He then read around the subject voraciously and realised that no one seemed to be able to do anything about it. "I was seized by this irresistible moral and political imperative to act. To do something. I just couldn't turn away. It was like turning away from somebody drowning. Like walking away from the scene of a murder".

Huw then asked German oncologist Dr Klaus Koenlein to tell him what was being said on day two in the panel discussion. Dr Koehnlein told him that the discussion had been focusing on AZT and the damage that had been done to patients on high doses. It was President Mbeki's concern about the toxicity of AZT that had led to his invitation, said Koehnlein. As a doctor he had seen a lot of patients dying in the late eighties and early nineties who had been on the high doses of AZT. The bone marrow damage was too great and doctors had not been aware of the problems because they were expecting their patients to die, so were not very surprised when they did so.

Koehnlein continued, "AZT is a cell killing substance, and we wouldn't use it in oncology because we know about the bone marrow suppression so we would stop [the treatment] in order to give the bone marrow time for recovery. But in AIDS patients the situation is different. They get it as a lifelong treatment and nobody can survive this. So we reached consensus here yesterday that we killed people with AZT. It's just a question of how many we killed - five, fifty or five hundred thousand. That's an open question."

Koehlein believes that the drop in AIDS deaths from the mid nineties which, was attributed to the success of antiviral drug therapies, was actually

the result of the reduced doses of AZT, from 1,500 mgs in the eighties to 700 mgs in the early nineties and then 300 mg as part of the more recent drug 'cocktails'.

As the Sunday wore on, faces began to look worn as well, and the initial sense of expectancy began to fade. Could there possibly be a satisfactory outcome to this panel of scientists from opposite ends of the spectrum? Would the minority of dissident scientists be dismissed as eccentric? Was it possible to hope for an outcome that would allow the President's initiative to conclude with grace?

Reporters and film crews gathered once again on the terrace, waiting to set up for the closing press conference.

The Health Minister, took the microphone saying, that this was "the first time a group of such eminent scientists' views had met in one room to deliberate, exchange views and assist in a very robust discussion." She mentioned "refining abilities to differ in a very constructive way" and how she was pleased at the panel's response "to continue searching for answers to some of the questions that have been raised". A task force was to be set up. She said the meeting had gone extremely well. "I certainly have learned a lot, but now I am convinced that there's a lot to do."

South African and international media attended the opening and closing press conferences

It was Dr Owen's turn. He took up the point about further work to be done, "While they [the panel members] still remain deeply divided on many aspects of the science" he said, "they committed themselves to continue working together to design (as the Minister has mentioned) through this task force a series of further research projects to better illuminate - to further illuminate - the differences and the broader challenge of dealing with HIV/AIDS. Owen later said, "There remains the divergent points of view of the relationship, if any, of HIV to AIDS".

At this point in the proceedings I asked for confirmation of what Dr Koehnlein and others had told us about the panel discussions on AZT's toxicity. "Was consensus reached that AZT at doses at or above 1,200 mg a day has been responsible for the deaths of people who took it?"

There was a moment's silence and then the microphone was handed to Dr Khotso Mokhele, President of South Africa's National Research Foundation. He did not answer my question but explained that there was to be a Government Green Paper posing a list of questions and that the panel would be participating in a six week internet debate. He said that there are "a series of experiments that can be done, a series of experiments that ought no to be too costly, that ought not to take a long time, which may deal with the issue of what medical people call the aetiology of AIDS - what causes AIDS." Mokhele then announced that Helen Gayle of the US Centres for Disease Control, had offered Duesberg and Bialy funds to do research in South Africa in collaboration with William Magkoba, President of South Africa's Medical Research Council. These experiments were to "assist in the resolution of the linkage of HIV to AIDS."

It was highly significant that the panel was officially announcing a period of research into the cause of AIDS. This in the year 2000 when the international scientific establishment and the world's press have stated since 1983 that HIV is the cause of AIDS.

With the proceedings over and as evening fell, we were able to interview a selection of panel members one by one on the terrace.

Professor Sam Mhlongo South Africa's head of Family Medicine and Primary Care was pleased. He said, "I think for the first time - and I'm going to use "orthodox" in inverted commas and "dissident" in inverted commas - the two views have come together. All because President Mbeki created this chance which has never been created anywhere in the world. So from that point of view I think it was useful. So that the other side - the "orthodox" view could not name-call the so-called "dissidents" because that has been the tendency. It was not possible to do that in these four walls here. They had to listen to us and we listened to them. But we've been listening to them since 1982. So for the first time they had a chance to listen to us."

Mhlongo had made a presentation as a primary

health care physician and had said there was a need to look at what is making black Africans so sick. "No one has convinced me that HIV is making them sick - Acquired Immune Deficiency - because of 70 different conditions that make them sick. We need to look at those and other environmental issues."

How did he feel now at the end of it all?

New York journalist Celia Farber interviews Prof. Sam Mhlongo

"I am as confident as I was when I left South Africa in 1963 that one day we will defeat apartheid. I feel AIDS - and I'm not talking about HIV - AIDS will be defeated in Africa just as much as serious infectious diseases were defeated in Europe."

Dr Andrew Herxheimer then slipped into Sam Mhlongo's seat whilst Mholngo reminded us that he had been Herxheimer's pharmacology student at London University!

Herxheimer is a world authority on drug toxicity. He has played a part in drawing up the WHO's essential drugs list for developing countries and he is a member of the Cochrane Foundation, an international organisation that provides systematic reviews of drug therapies.
He was pleased with the panel proceedings. "I think it's been an extraordinary two days, because it started with a real cacophony of views cutting across each other - people being quite emotional and cross with each other - and then on the second day there was really a big change.That is the people who hold the orthodox view about HIV and AIDS, they discussed in one group what their priorities were, and the group that does not feel at all sure about the cause of AIDS were in another group and they discussed what their priorities were. then the two groups came together and that turned out to be a common agenda, a common starting point for the internet discussion that's going on for the next six weeks.

So at that point everybody felt that their concerns had been aired - had been heard - by the other people. So I think it's a very successful meeting which is going to produce something very valuable. It has never been there before.

I asked Herxheimer his view about the use of AZT, and high dose AZT, in the early days of AIDS. "I think zidovudine [AZT] was never really evaluated properly and that its efficacy has never been proved, but it's toxicity certainly is important. And I think it has killed a lot of people. Especially at the high doses. I personally think it not worth using alone or in combination at all."

Etienne de Harven is well known for his concern about the isolation of HIV. His view is that the traditional procedures for virus isolation have not been adhered to. These involve centrifuging cellular particles that might include virus particles, banding them at 1.16 gms per ml and then taking an electronmicroscopy foto. This was never done initially, and when it was tried more recently all that was identified according to Dr de Harven was cellular debris.

How significant had he found the fact that a series of experiments were to be done to look into the aetiology of AIDS? "First it should have been done 17 years ago. But the fact that at a major conference like this one attended by about two thirds orthodox AIDS researchers and one third non orthodox - that these questions can be presented very calmly without causing any smoke or explosion is extremely significant in itself."

Roberto Giraldo, a specialist in infectious diseases and also head of the 500 strong Group for the Scientific Reappraisal of HIV/AIDS which publishes the journal Reappraising AIDS, looked happy at the end of it all. He had thought it was going to be very difficult but said, "I have to confess that the outcome was very nice. The people who believe that HIV is the cause of AIDS, they are starting to have a little bit of respect for us. How do I come to that conclusion? Because for instance it is going to be very difficult for them to ignore us for ever."

"I will never finish thanking President Thabo Mbeki and his government for having taken this decision and for having the courage to put all of this together for the first time in history. I know many people have been trying to explain these issues for years and years but we have been having all kinds of censorship in the scientific community in many countries. The media has been treating us very badly. So I think this opportunity is going to be very good for us, and I

insist not only for us. It's going to be very good for the cause of the people. Because what we are fighting here is the people's cause."

It was Peter Duesberg's turn next. He was drinking a cup of coffee and munching on a biscuit. He thought it was a victory that the conference happened at all, "But I don't think we can count on much more at this point. But that's progress."

What did he think was the most significant step forward?

"That a head of state independent of the US Government and thus independent of the AIDS establishment is calling the virus-AIDS hypothesis into question. That makes us a little more respectable and a little less un-correct [author's emphasis] than we used to be. We could be

Prof. Peter Duesberg is interviewed by a South African news crew.

trashed easily because we are completely dependent on the US Government and its long arm but now at least we have some independent support so we could not be totally ignored any longer - for the time being. They will find ways of getting us back where we were."

What did Duesberg think of the way President Mbeki had been strongly criticised about his decision to hold the panel of inquiry? "Well he sounds as though he is a scientist. He is confident in his convictions. He is asking question. That's the hallmark of a good scientist - that he is asking questions and he is standing by his convictions. These two criteria make up a scientist. One alone is not enough. We have a lot of them standing by their convictions and quite a few asking questions but they don't do one nor the other."

Duesberg said he was going to map out some experiments together with William Magkoba (MRC); and Helene Gayle (CDC) and Harvey Bialy. He gave an example, "Some of them are very easy. We are going to take some diagnosed AIDS patients - diagnosed by the Bangui definition which does not call for an HIV test and test whether they are positive. If some of them are negative, that is not very good for the virus hypothesis. And the Bangui definition doesn't even test them. It's very straightforward - very simple and very doable. And if they're negative I wouldn't treat them with AZT and I wouldn't test them for antibodies in the future and many other things can be deduced from that."

A staunch critic of the current AIDS orthodoxy, Professor Gordon Stewart, has long maintained that the estimates for the spread of AIDS, based on an erroneous infectious hypothesis, have been grossly inflated. His lifestyle/risk associated predictions for AIDS in the UK based on intravenous drug use, recreational drug use, fast track drug assisted sex, multiple sexually transmitted diseases and certain clinical risk groups like haemophiliacs, turned out to be spot on, but no one would publish his articles at the time.

Here in Pretoria Stewart felt there had been a "coming together for the first time" and that common ground had been found. "This could be terribly important for the humanitarian aspects of the problem. It doesn't necessarily solve some of the scientific and intellectual differences."

How did he feel about being invited here by President Mbeki and what did he think of the President's initiative? "First of all I'm honoured. He's been criticised by the hardliners here - criticised and disparaged I'm sorry to say by the mainline medical press in Britain, by some of the responsible newspapers or shall we say irresponsible newspapers now, because although they've got a big name they don't live up to it. And ignored by the various television channels." Stewart felt that television coverage had been "quite inadequate in relation to the scale of the enterprise and to the imaginative aspects of the initiative."

Christian Fiala is an Austrian doctor and writer ("Dirty Tricks: How the WHO gets its AIDS figures" New African, April 1998). What were his thoughts at the end of the panel meetings?

"Usually in the past it was supposed that developing countries were to learn from industrialised countries and I would say this is a very good example that in fact nowadays on many occasions it's the other way round. Europe and the United States can learn a lot from South Africa, from African people, in the way of discussing openly open questions in the field of science. So a discussion that couldn't have

taken place over the last ten to fifteen years in Europe and the United States could take place in this country."

Fiala said that today perhaps for the first time there was official recognition that there are open questions about AIDS. He criticised science by majority reminding us that it was only very recently that the Pope "officially accepted that the world was round. And this is a very nice example of where you get if you accept science by majority."

I asked Fiala how he felt about the criticism of Mbeki. "President Mbeki is apparently a very strong personality who doesn't take a decision easily. From everything I have learned, it appears

l - r Senior SA Gov't represenative with Dr Christian Fiala (Germany), Dr Roberto Giraldo (USA)

that he took quite some months to inform himself about the subject and then he decided that he should get even more information."

Fiala was pleased "That finally we are back to a pure scientific discussion of what should have taken place 15 years ago". He said it hadn't always been a very polite discussion, "There's a lot at stake. There's a lot of political powerplay still involved, but at least there is some discussion going on."

It was as the light was beginning to fade that Dr William Magkoba agreed to speak to us. He has been an outspoken critic of President Mbeki's continuing flirtation with dissident AIDS theories, as South Africa's Sunday Independent put it (18 March, 2000). The same article quotes Magkoba as saying, "It's a national scandal... Somebody here has to decide that the dissident group is wrong or right, and the only way you make this decision is if the dissidents have ever provided a theory or hypothesis that is testable. The answer is no."

But this evening Magkoba look relaxed and content. He said he felt excited and optimistic, "I think we have reached a decision that nobody expected us to reach. I think a lot of people were predicting gloom and doom and I think we have acquitted ourselves very well, responsibly, and have tried to face the challenges that were posed by the President in this matter."

Magkoba then mentioned his MRC collaborative studies idea put to Peter Duesberg and some of his team "in order to illuminate the dark shadows that surround this very same issue and I have to explain it to a lot people why I made this decision. I am confident that the theory that HIV causes AIDS is correct and I think if I am confident of that, I should have no fear to explore any other issues that challenge that theory. But I do hope that the experiments that we would be able to do would illuminate something that I can also be proud to learn from and something that also Peter Duesberg can learn from. And I think it's by learning from each other, by collaborative work, rather than by ignoring or silencing each other that we are likely to bring a broader perspective around this issue."

And then the light faded and everyone went off to have dinner.

But whirring in my mind were the words President Mbeki had spoken to me a month earlier in his interview. Words that explained his motivation in convening the panel and which may lead to the real truth about AIDS emerging from South Africa one day soon.

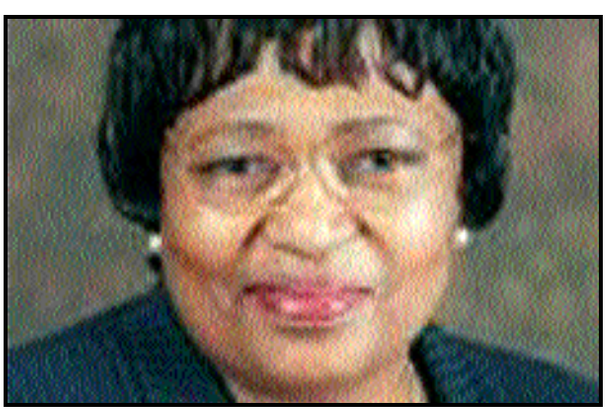
"We have to respond correctly, and urgently, and you can't say respond correctly by closing your eyes and ears to any point of view, any scientific evidence that is produced. A matter that is seems to be very clear, in terms of the alternative view that is being presented, is what do you expect to happen in Africa with regard to immune systems, where people are poor, subjected to repeated infection, and all of that? Surely you would expect these immune systems would collapse, and I've no doubt that that is happening. But then to attribute such immune deficiency to a virus produces a specific response, and what we are discussing here as the South African government is that it seems incorrect to respond to this AIDS challenge, within a narrow band. If we only said there,s a virus - safe sex, use a condom, end of story, we won't stop the spread of AIDS in this country."

The second Panel Meeting

After a faltering six weeks of contributions via a closed Panel website, the scientists reconvened in Johannesburg in early July. Huw Christie was allowed in as an observer.

Amidst scientific debate and political revelations, senior members of the South African Presidential Panel of Inquiry into HIV/AIDS have called for the suspension of all HIV testing.

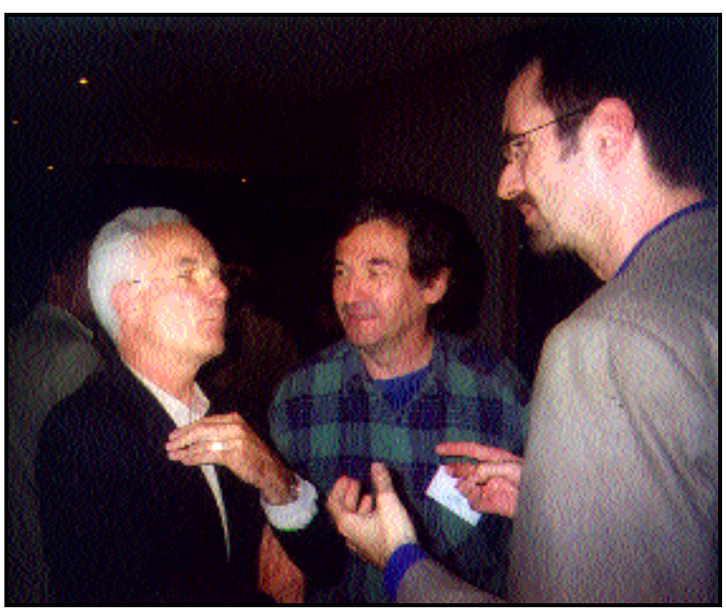
The full panel of some thirty three scientists convened for the second and final time in Johannesburg on 3rd and 4th July, at the large Crowne Court Hotel in upmarket Sandton, in the attentive presence of Minister of Health Manto Tshabalala-Msimang MD. During sometimes turbulent proceedings, Dr Valendar Turner on



South African Minister of Health Manto Tshabalala-Msimang

behalf of the Perth Group of scientists, Western Australia, Prof. Sam Mhlongo, Head of Family Medicine and Primary Care at the Medical University of Southern Africa, and Dr David Rasnick of UCLA, California, amongst others, appealed for the cessation of HIV testing. The Perth Group and Prof Mhlongo stressed that the accuracy of all HIV tests is so questionable there is no case for continuing to use them unless and until their specificity can be determined: they say there are too many common African illnesses which create 'false-positive' results on 'HIV' tests, and that no HIV test has ever been validated against the one necessary scientific 'gold standard', virus isolation. This reality is recognised by the manufacturers of such tests who typically warn, "At present there is no recognised standard for establishing the presence or absence of antibodies to HIV-1 and HIV-2 in human blood." (Axsym System, Abbott Laboratories.)

Dr Rasnick stressed that since there was no



l. - r. Panelist Prof. Peter Duesberg, observers Luis Botinas of Plural 21 (Barcelona), Michael Baumgartner of IFAS (Berne)

proof of an HIV causing AIDS, testing for it was in his view a worthless distraction. He also disputed the use of the term AIDS at all, in a continent where the presenting illnesses of people diagnosed with AIDS are all long-known conditions, usually associated with malnutrition and other consequences of poverty.

By the end of the two day session, a smaller working group on HIV-testing had been structured which will now continue through till at least Christmas to report, in President Mbeki's words, on "the reliability of and the information commu-

nicated by our current HIV tests and the improvement of our disease surveillance system." The working party led by Professor Mhlongo, and including Australian biophysicist Eleni Eleopulos and colleague Dr Valendar Turner, Dr Harvey Bialy, with Dr Helene Gayle of the US Centres for Disease Control, and Prof. William Makgobe of the South African Medical Research Council and others Panelists willing to continue working, have accepted responsibility for historic experiments to attempt to purify, or isolate, HIV, and to examine the consequential issues of the accuracy of all so-called HIV-testing methodologies. Virus isolation is the thorn in the foot of the HIV/AIDS marching machine - it has never been achieved by conventional standards. Until the mid-1970s, virus isolation used to mean separating virus particles from everything in the cell culture that is not virus, and producing an electromicrograph of the resulting purified particles. It's then not very difficult for virologists to analyse the particles' proteins and genetic material, and to test for infectivity. It's a careful process however, because all experts agree that there are abundant particles in nature and in cell cultures, that in many respects resemble viruses, but are not. Only once these steps are successfully completed can any other tests be evaluated for accuracy.

Science journalists Neville Hodgkinson from UK, former medical and science correspondent, the *Sunday Times*, London, and South African Anita Allen confer in the hotel foyer

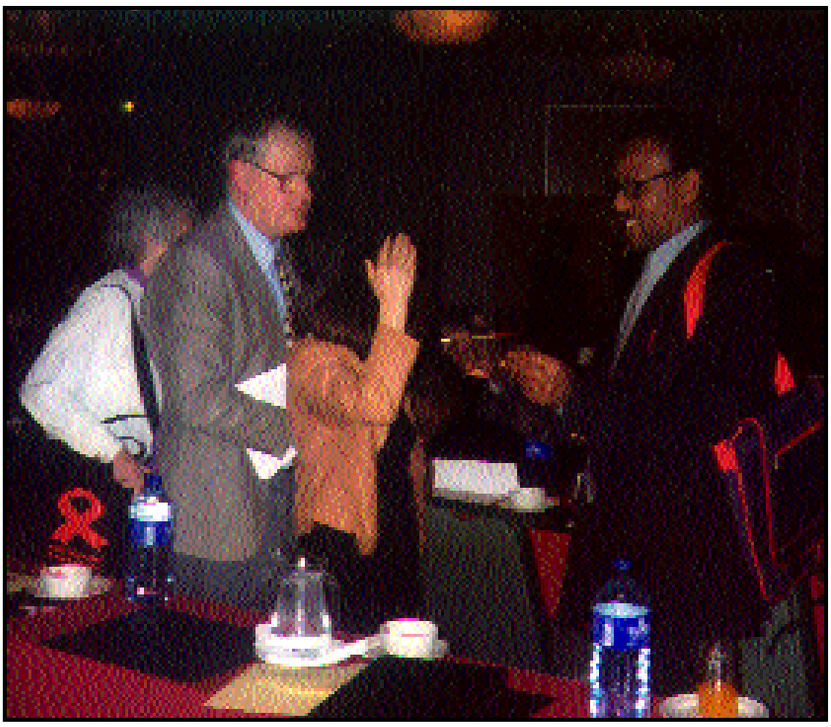
The two day meeting had begun on a sharp note. The Health Minister in her opening address noted that the 6 weeks since the first meeting in Pretoria had seen little exchange between the panelists of differing scientific and medical views via the confidential Government website established for the purpose. Noting that some scientists had nonetheless made extensive contributions, which had mostly gone unanswered, Tshabalala-Msimang commented that those who had worked tirelessly "will not be betrayed". The scientific website contributions of Eleni Eleopulos' Perth Group, of Dr Roberto Giraldo, of Prof Etienne de Harven and Prof. Gordon Stewart, and various other 'AIDS dissidents' were implied. Plans were announced to make public the contents of the web discourses in due course.

The Panel Secretariat of four civil servants, thrust into the unchartered job of co-ordinating the workings of the Panel and preparing the report for President Mbeki, was therefore faced with the necessity to stimulate debate, in a way which had not occurred so far.

The structure favoured by the Secretariat and implemented by Canadian Prof. Owen, again the Moderator, allowed for representatives of opposing views to speak for half an hour about their views and data, including on-screen visual material, around the issues set down by the Secretariat: (1) aetiology, (2) prevention (3) treatment (4) HIV testing and surveillance. Following each presentation there would be approximately half an hour allowed for two-minute comments on the presentation from other Panelists.

To begin, a young South African virologist Dr. Carolyn Williamson replaced South African Prof Hoosen Coovadia, Chairman of the Durban AIDS Conference, opening the proceedings with a standard explanation of the HIV-causes-AIDS theory, without proofs, and distinguished mostly by the puzzling claim that in AIDS "the cause is neither necessary nor sufficient" for the illness. She appeared at a loss to defend this statement against the question, "How then, is it the cause?", except to say she had been instructed to include the statement. Such are the unfathomable pressures on ambitious young South African scientists, though surely she must have misunderstood the statement.

Prof. Peter Duesberg next reiterated his condemnation of pharmaceutical 'anti-HIV' drugs, asserting that in many cases these drugs



Australian scientist Eleni Eleopulos (centre, brown jacket) avoids the camera while talking with an African Panelist. Dr Valendar Turner also of the Perth Group looks on.

themselves were responsible for illnesses diagnosed as AIDS, and critically reviewed the statistics for HIV/AIDS in Africa

Dr Roberto Giraldo, the specialist in infectious diseases from New York, covered several aspects in his presentation, including the invalidity of HIV tests, and the range of stresses that can undermine a person's immune system, such as malnutrition and toxins amongst others. He included in his suggestions for treatment the use of anti-oxidants, a point well noted by the Health Minister, and touched on the role of traditional medicine in African cultures.

Next Prof Salim Abdool-Karim, Principal AIDS researcher of South Africa's Medical Research Council , stressed his belief that the clinical picture of illness in South Africa had indeed changed in recent years.

Dr Joseph Sonnabend, an AIDS-clinician from New York, appeared satisfied with conventional AIDS drugs and clinical practice, though he was heard earlier privately resisting pressure from some senior orthodox scientists to begin his presentation with a sound endorsement of the Highly Active Anti-Retroviral Therapy (HAART) drug combinations.
Dr David Rasnick, an expert in protease inhibitor design, presented a panorama of the scientific literature from major journals discrediting these 'anti-HIV' drugs. It seemed many of the conventional scientists in the room had not seen these data before.

Later in the day, Dr Valendar Turner of the Perth Group, whose Eleni Eleopulos has done so much over the years to keep the questions in HIV/AIDS focused on scientific matters, discussed perhaps the key question, which will now be carried forward: when even Prof. Luc Montagnier, accredited as discoverer of HIV, acknowledges his team were never able to isolate 'the virus', why has the presence of such a virus been so universally accepted? He showed a slide of a Western Blot antibody test gel - the type of test believed throughout most of the world to be the best for HIV - which by the strictest criteria anywhere would be a positive for HIV, before revealing it was in fact a positive for leprosy.

Dr Helene Gayle of the Centres for Disease Control, who supervises the disbursement of billions of AIDS dollars, appeared to have little new to bring to the Panel, but managed to fill her time with slides of black text and statistics on a navy blue background, which this observer was not alone in finding difficult to decipher.

Dr Helene Gayle of the Centres for Disease Control, USA

On the second day, Prof. William Makgoba, currently head of the South African Medical Research Council, took the floor to present epidemiological data on HIV in South Africa. He was unable when repeatedly questioned to give figures for actual AIDS deaths in South Africa, instead showing graphs of projected percentages of national annual mortality that could be attributed to AIDS. He also insisted that the

Panelists Dr Klaus Koehnlein (Germany), Prof. Etienne de Harven (France) and Dr Roberto Giraldo (New York) relax after the meeting.

ELISA antibody testing methodology used in South Africa was in line with British standards, resulting in a 'false positivity' rate of 0.1%. He made no attempt to address the absence of any gold standard for 'true positivity'.

Next the Panel heard from Dr Harvey Bialy on the progress made towards designing the experiments that had been hastily foreshadowed at the press conference at conclusion of the first meeting six weeks before, which it was hoped would settle some of the areas of scientific disagreement. Shortly into his improvised presentation a loud disagreement flared up from opposite sides of the room between Prof. Peter Duesberg and Dr Helene Gayle, ostensibly over some comments about AZT, which saw Duesberg leave the conference hall, pursued by Tshabalala-Msimang who spent tense minutes persuading him to return in the interests of the many people whose lives would be influenced by the successful working of the Panel. However, thereafter Duesberg absented himself from the working group on experiments, at much the same time that Eleopulos, who had not been at the Pretoria meeting, became one of its most active members. Indications are that Duesberg continues to be willing to participate as the process moves forward.

The Panel split into working groups next, to try to deliver recommendations to the anxious Secretariat that they could use in the preparation of their report. The group on experiments confirmed its intention to "test the tests"; there was also a set of conventional recommendations produced from the working group around treatment, and that around 'co-factors'.

South African President Thabo Mbeki has become the liberal media's whipping boy for seeking advice about how applicable to South Africa the received Western wisdoms about HIV/AIDS are. Scientific journals were asserting in the mid-1980s that HIV was not endemic in South Africa. Now it is said to be everywhere you look. Mbeki has publicly asked how this can be so? What will the answers mean for policy? And why are these statistics showing AIDS in men and women almost equally? If this is 'heterosexual spread', why did it not happen in the West, where frankly most people do not use condoms? Why are there no figures for AIDS mortality in South Africa? Real data, not projected estimates? When can these figures be available? Why are the figures for HIV positivity in South Africa extrapolated from testing in ante-natal clinics with an ELISA HIV antibody test about which its manufacturer warns the principal cause of false positivity is pregnancy?
When none of the 29 illnesses grouped as AIDS is new, what evidence is there that a 'new' microbe is involved in the apparent increase of some of these illnesses?

From the answers to these questions, the Mbeki Administration seeks to understand whether there are untried approaches to the problems in its country - principally TB, which is said to account for 60% of the AIDS-projection figures - which would be affordable and effective. By Christmas, one of the biggest questions in AIDS science should have its answer, supervised by top international bodies, at the behest of a President not afraid to test convention and go the extra distance to find the truth: is there such a thing as HIV?

This article first appeared in the September issue of *New African* magazine

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Search for Solutions:
Thabo Mbeki's first interview on HIV/AIDS

In April, Joan Shenton obtained an exclusive interview for TV about HIV/AIDS with Thabo Mbeki in the Presidential Suite in Pretoria. The resulting half hour programme, *Search for Solutions: The Great AIDS Debate*, comprising the interview and retrospective documentary material, was broadcast by M-Net cable's Carte Blanche to 41 African nations on April 16th, 2000.

from Introduction

SHENTON TO CAMERA
South Africa is in the middle of an important re-evaluation about what has been described as the greatest plague the world has known - AIDS. Today there are many societies and communities around the world who profoundly challenge the idea that a virus, HIV, causes AIDS. Their voices have seldom been heard. In Pretoria, South Africa, President Thabo Mbecki is bringing together an international expert panel to allow a wider range of opinions to be heard.

PRESIDENT THABO MBEKI
We have been as it were bought up on a orthodox view. Certain things that one thought one knows - HIV equals AIDS equals death. One of the things that became clear, and which was actually rather disturbing, was the fact that there was a view which was being expressed by people whose scientific credentials you can,t question. I am not saying that they are necessarily correct, but it seems to me that there had been a determined effort to exclude their voice - to silence it.

Interview

SHENTON
Last year you were reported as saying in parliament that you were concerned about the giving of AZT to pregnant mothers. Why were you concerned?

THABO MBEKI
Well because lots of questions had been raised around the question of the toxicity of the drug - it was very serious. We have a responsibility as a government to determine matters of public

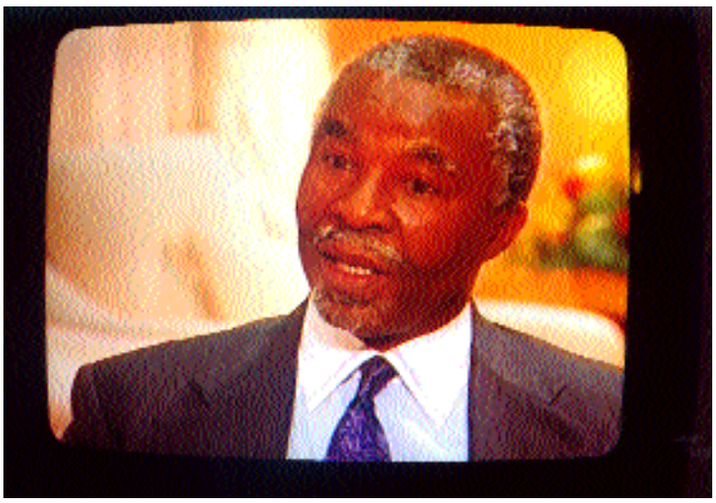
health, and therefore we can take decisions - we have to take decisions that impact directly on human beings. And it seems to me that where doubts have been raised - questions have been raised around these toxicity questions - and the efficacy of these - AZT and other drugs, that it was necessary again to go into these matters, because it wouldn,t sit easily on one,s conscience to discover that you had been warned that there could be danger and nevertheless you went ahead and said, despite the danger, let,s dispense these drugs

SHENTON
Some AIDS doctors say that the evidence is overwhelming, that HIV is the cause of AIDS and that AZT is of benefit. What is your comment on that?

THABO MBEKI
Well I say that why don't we bring all points of

view about those matters together. Let them sit around the table, discuss all of this, produce such evidence as there may be, and let,s see what the outcome of all of that discussion is, which is why this international panel that we,re talking about. They may very well be correct. But I think that if they are correct and they are convinced about their correctness, it ought to be - it would be a good thing for them to demonstrate to those who are wrong that they are wrong.

SHENTON
People say that you,re not keen on giving AZT to pregnant women - I,m personalising this of course - because its too expensive and in some ways you,re seen as penny pinching. What do you reply to that?



THABO MBEKI
Well that surely must be a consideration for anybody who decides that this drug must be given to stop these transmissions, as it,s said, from mother to child transmissions. Its extremely costly - that,s something that we have to take into account. But you see I,m saying that we also need in that context to answer questions, particular questions about the toxic effect of this drug. If you sit in a position where decisions that you take can have - would have - a serious impact on the health of other people. You can,t ignore a lot of experience around the world which says this drug has these negative effects.

SHENTON
Why have you been so outspoken recently about greed and the pharmaceutical companies?

THABO MBEKI
I think a lot of discussion needs to take place; the approach to health and treatment of people does seem indeed to be driven by profit. We - you probably would know this - we had a long wrangle with the pharmaceutical industry internationally about issues of parallel imports and so on. What we are saying is that we want to make medicines and drugs as affordable as is possible to what is basically largely in South Africa a poor population. We needed to find these medicines where they were cheapest, properly controlled, properly tested, the genuine product, no counterfeits.

SHENTON
In the press you are exalted to confine, and I quote, confine yourself to the job to which you were elected, and leave specialised subjects to the taking of the best available advice. That was today. What,s your response?

Shenton and South African film crew prepare for the interview

THABO MBEKI
Well I don,t imagine that heads of government would ever have the possibility to say, I,m not specialised in economics, therefore I can,t take economic decisions. I,m not a soldier, therefore I can,t take decisions affecting the department of defence, or I,m not an educationalist, a pedagogue, therefore I can't take decisions about education, I don't particularly see why health should be treated as an extremely specialised thing, about which the president of a country can't take health decisions. I think it would be a dereliction of duty to say well, as far as health policy is concerned we shall leave that matter to the doctors and the scientists. As far as education is concerned, we'll leave that matter to educationalists and pedagogues. I think that is absurd actually.

SHENTON
How do you feel about the reaction of some of your country's leading virologists and intellectuals to your position?

THABO MBEKI
I get the sense that, as I was saying earlier, that we,ve all of us been educated into one school of thought, and really I am not surprised at all that you would find, I'm quite sure an overwhelming majority of scientists in this field, in this culture, people would hold a particular point of view because that is all they were exposed to. This other point of view which is I think part of what is frightening, this alternative point of view, in a sense has been blacked out. It must not be heard, must not be seen. I mean that,s a demand now. Why is Thabo Mbeki talking to discredited scientists? Giving them legitimacy? Its a very worrying thing that anybody can say today - in today,s world - that there is a point of view that is prohibited. That,s banned. That they,re heretics who must be burnt at the stake. And it's all said in the name if science and health - it can't be right.

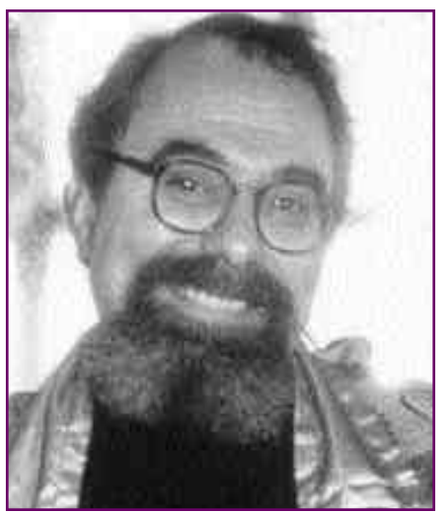
SHENTON
Now it has been said that the pharmaceutical industry is more powerful than governments. Are you actually going to go as far as taking this debate to other world leaders, like President Clinton, like Prime Minister Blair, or perhaps the Prime Minister of India who has expressed his support for an investigation into these issues as you are?

THABO MBEKI
Sure yes certainly, I do want to raise the matter with a number of political leaders around the world. At least to inform them about what we are doing, to get them to understand the truth about this issue, not what they might see on television or in some newspaper. And indeed we were very encouraged to see the Indian government getting itself involved in this issue. I think the concern around these problem questions which in a sense have been hidden, I think that concern will grow around the world. And the matter is critical because the reason we are doing all of this is to be able to respond correctly to what is reported to be a major catastrophe on the African Continent. We have to respond correctly, and urgently, and you can,t say respond correctly by closing your eyes and ears to any point of view, any scientific evidence that is produced. A matter that is seems to be very clear, in terms of the alternative view that is being presented, is what do you expect to happen in Africa with regard to immune systems, where people are poor, subjected to repeated infection, and all of that? Surely you would expect these immune systems would collapse, and I,ve no doubt that that is happening. But then to attribute such immune deficiency to a virus produces a specific response, and what we are discussing here as the South African government is that it seems incorrect to respond to this AIDS challenge, within a narrow band. If we only said there,s a virus - safe sex, use a condom, end of story, we won,t stop the spread of AIDS in this country.

VHS copies of the programme are available from meditel@compuserve. com

The Mbeki Challenge

Of Dogma and Debate - A Brief History



Michael Ellner is a driving force in challenging the murderous HIV/AIDS fraud. As the President of HEAL (Health Education AIDS Liaison-NYC), Michael is dedicated to helping people make truly informed choices and take charge of their health. He can be reached at revdocnyc@aol.com, 212-873-0780 or via mail: C/o HEAL, PO Box 1103, Old Chelsea Station, New York, NY 10113

Debate gave life to science just as Dogma took life from religion. Noticing that the AIDS Establishment would not allow anyone, regardless of their qualifications or expertise, to question the sacred truths of The First Church of HIV, Mr. Thabo Mbeki, the President of the Republic of South Africa, saw that in the field of AIDS, the line between the debate of science and the dogma of religion was being blurred. So he began to ask questions. And the answers lead to an advisory panel debate where the central question itself was broached - was it debate or dogma that was taking life?

As a result, when Mbeki stood up to open the 13th International AIDS Conference, he stood up to the International AIDS Religion itself. Knowing that he would be damned if he challenged the conventional wisdom that HIV caused AIDS and that the people of South Africa were doomed if he didn't, he followed his conscience. He boldly stated in gentle yet uncompromising terms that the primary threat to the health of millions of Africans was not HIV, but the drastic economic and social realities that they were facing. In truth, he was speaking up on behalf of many millions more around the world; millions whose health is breaking down not because of genetic flaws or viral infections, but simply because they are no longer able to meet their basic human needs.

I admire President Thabo Mbeki's courage and leadership and can only hope that the dissident movement will utilize this golden opportunity to bust the trust. The real gold though is in fact that the President opened a door for the people of the world to re-think conventional medical authority. The question is, will they do it? Will we?

AIDS Is a Symptom

Civilization is in a tailspin - everything is backwards, everything is upside down - doctors destroy health, psychiatrists destroy minds, lawyers destroy justice, the major media destroy information, governments destroy freedom and religions destroy spirituality - yet it is claimed to be healthy, just, informed, free and spiritual. We live in a social system whose community, wealth, love and life is derived from alienation, poverty, self-hate and medical murder - yet we tell ourselves that it is biologically and ecologically sustainable. Hidden in plain sight is the terrifying fact that we are either actively or passively participating in our own demise!

Consider hurdle number 1: modern medicine. I assert that over the last 100 years, Conventional Medical Science has become the largest and most powerful religion on the planet. I further assert that we have empowered doctors to help us ignore the harsh realities and (often fabricated) uncertainties of life. The sacred truths of

medicine's high priests can be and are enforced by the full force of the most powerful governments in the world because we all depend on them to lie to us. Please consider these assertions seriously!

The stakes are very high indeed. The average person takes it on faith that sex=death, poisons extend lives and doctors know best, because people have been socially hypnotized to distrust themselves and believe what they are told. Whenever something doesn't make sense or a contradiction is exposed, the average person is able to ignore the fact by slipping back into the group trance, and the HIV/AIDS programming fills in the gaps. They know something is wrong about the AIDStory, but they are simply unable to trust their ability to evaluate the evidence. And so, we form unconscious contracts to act out our pre-conditioned roles. Which is why this is so much bigger than AIDS and HIV.

With a highly respected world leader like South Africa's President Thabo Mbeki however, questioning the conventional view of HIV/AIDS could inspire the people of the world to actually take the time to examine the evidence for themselves. But stand back if they were to actually do it!

Public Health officials would instantly lose their credibility. If all those HIV-doctors and world class scientists could be so reckless and irresponsible, why should anyone believe that the other doctors and scientists are being any more scientific or trustworthy when it comes to cancer, heart disease, diabetes, arthritis, or even the flu? Why should we fund public health agencies if they can't be trusted? Conventional medical treatments and modalities would soon be held to the scientific method of validation, and about 80% of it's standard practice would be immediately discredited. Many government health officials, pharmaceutical executives and healthcare professionals would be facing massive lawsuits, not to mention criminal charges. The financial burden on the giant trans-national pharmaceutical corporations alone would threaten the economies of the world.

So, defending the dogma that HIV causes AIDS is indeed a matter of both national and international security. It is even a matter of personal security - maybe it's better not to know just how corrupt conventional medicine is; maybe it's better to close the door President Mbeki has opened.

Media-Medicine to Suppress the Symptom

I urge the HIV dissidents who haven't already done so to look seriously into this wider social and medical context in which AIDS occurs and include it's role in their analyses. Otherwise we are overlooking the key to solving the real and much deeper problem at hand.

Now let's consider the second major hurdle: the major news outlets. Taken out of context, it is impossible for the average person (or dissident) to get any sense of just how profound the President's challenge to HIV/AIDS is. The president is indirectly forcing issues that go way beyond "HIV" and that go right into the heart of the Social and Medical Church. By creating the impression that Mbeki is a dangerous fool who is wasting time and resources entertaining the crazy dissidents who question HIV, the major corporate news outlets, serving their true but unstated social function (more on this later), quickly neutralized Mbeki's very serious threat to their place of worship.

This attempt to silence the president culminated in the Durban Declaration, a statement of non-science (read "nonsense") which the major media, compared to their coverage of the dissidents, was a little too ready to widely publicize. This pathetic document was a last ditch effort designed to slap the President, disempower his advisory panel and re-establish the power of the Church. You see, the Church knows that it is on very shaky ground here. They understand that one does not have to be a medical doctor to realize that severe health risks and extreme living conditions can explain the compromised health found in South Africa over the last 20 years. Nor does one have to be a scientist to figure out that prefabricated correlations, dubious surrogate markers and sensational estimates are not scientific proofs.

Given all of that, when you consider the massive public relations and spin doctoring necessary to maintain HIV dogma, you begin to see the unconscious collusion between all of the folks who "need" HIV. This explains why so many otherwise intelligent gay men mindlessly march into the pharmaceutical ovens - they are the main targets of the high tech bone-pointing and subliminal programming to get sick and die.

The fact is that anyone who takes the time to examine the actual evidence can see that the conventional medical practice and policies concerning AIDS/HIV have never been validated by the scientific process, no matter how many doctors, scientists and public health officials

insist that it has. Their message was simple, "Ignore the evidence, trust us and everything will be okay". Could they possibly be any more anti-science than that?

The signers of the declaration are defending their choke-hold on the human psyche. They can't afford to have their expertise challenged and found incompetent and/or untrustworthy. That damn fool Mbeki could ultimately blow the lid off the most profitable hoax in history: the murderous fraud that conventional medical science is based on the scientific method! But why should any one actually bother to examine the evidence when the New York Times assures them that this foolish and untrustworthy President is a threat to public health?

Remember, ideology is power, and there is great political, social and economic utility when you can operate under the cloak of public health. By questioning the "final say" authority of the transnational cartel of public health officials, President Thabo Mbeki has created a window for humanity to save itself from the monsters they have created. But again, will they take the opportunity? And again, will we?

The Decoy Function of HIV

The Medical Industries depend on our faith in their bankrupt institutions. We must admit to ourselves that both the scientific journals and the major media have betrayed our trust. We must see the blood on their hands. We must see the fact that they are part of the AIDS/HIV Establishment, and that the AIDS/HIV Establishment is a part of them. Sensational headlines and blatant censorship have breathed life into the AIDS and other stories; acted as a protective front, an electronic condom if you will, for HIV and other fraud. This is why the AIDS Establishment is part of the AIDS problem rather than part of the AIDS solution.

Remember the "Red menace"? It's social function was to scapegoat all the social problems in our lives. Economically it justified the multi-billion dollar war industries and reinforced the manufactured belief that we need military experts, covert operations and weapons of mass destruction to protect us from the communists.

Today, the collective Red menace has been replaced by the much more individual viral menace. The "viral menace" is the prototypical scapegoat of the 21st century. Economically it justifies the multi-billion dollar Medical War Industries which reinforce, through their mystery, the manufactured belief that we need to invest in medical experts, Public Health operations and chemotherapies of mass destruction to protect us from "deadly" viruses.

The social function of the HIV/AIDS doctrine is to trivialize the role of the social, political, economic and enviromental burdens on the people at risk for AIDS, restrict sexual expression and give scientific justification to this blatant population control. We must come to terms with the fact that we still live in the time of Kings; that the bully still rules the schoolyard and that "might makes right"; that the U.S. Centers for Disease Control is a military agency which ultimately serves to reinforce U.S. control and policy in the name of public health. Only then can we highlight the many human rights abuses that are consistently masked, ignored, explained away or even justified by the generally accepted view that science and technology are God and that modern medicine is His universal religion.

If a holistic view of AIDS has taught us anything it is that we live in a world that has crossed a threshold, a world in which all living organisms are/or will be at risk of a collapse of their natural defenses. Perhaps it is easier to believe that sex=death, toxic poisons extend life and that the doctor knows best. But is it wiser?

When an Irresistible Force Meets an Immovable Myth

I believe that there are two very powerful forces at play in the HIV/AIDS drama. There is a world wide unconscious psychospiritual push for self-regulation, economic equality and social justice, and there is an elite, insane and frightened power structure anchored with "experts", desperately
scrambling to maintain all of their failed institutions so that they can, at all costs, continue to rule their trans-national social order. The recent UN convention of major world leaders that was held in New York City was the latest wide scale expression of this fact.

But as Albert Einstein pointed out, "The significant problems we face can not be solved at the same level of thinking we were at when we created them". He also pointed out that, "A fashion rules each age, without most people being able to see the tyrants that rule them".

To really make meaningful changes, we must take a more comprehensive view of what the "crisis" actually is and how this crisis evolved. One component of the problem is the claim and legal enforcement of the idea that life and

health and truth are the sole province of doctors and scientists. This in itself one of the most destructive weapons of both mass and self deception ever devised in history. It permits justification for the whole spectrum of crimes against humanity.

The fact is that we're people first - all of us. This fact is the emotional basis for the concept of democracy. By assigning the task of truth and life and health to "experts", i.e., by making experts "first" and people "second", we absolve ourselves of all manner of self, social and ecological responsibility.

This latter fact is the emotional basis for the concept of fascism. Here we create a social space within which we can justify anything - all manner of bias, prejudice and sadism because expert Y said this and expert Z said that. This is a very dangerous situation and, in fact, it is precisely this situation that produced, allowed and has perpetuated not only AIDS, but the full glory of HIV and all the other social decoys.

If the African renaissance is to blossom as "a democracy dependent upon neither foreign handouts nor United Nations peacekeepers", as stated in the eloquent words of South Africa's President, Thabo Mbeki, we all must keep in mind that "handouts" and "peacekeepers" include both ideology and psychoenslavement as powerful objects; particularly medical and scientific ideology, and their use in the global enslavement and exploitation of the world's people.

The ball is now in our court. It is up to us to help every one we know to discern between the real threats to our health like conventional medicine and the imaginary threats like "HIV".

The Real Monsters

The Glaxo Wellcomes of the world thrive on this kind of exploitation, while the other vested interests continue to maintain and profit from the very psychospiritual/sociopolitical and economic abuses that poison our air, water and land and finally our hearts, minds and souls.

They all may have the backing of the U.S. government, the UN, the WHO, IMF, the World Bank and the AMA, but make no mistake about it, they need our consent to exploit us. Which is why they have a major media in the first place. We urge you to pay attention to the role corporate news outlets such as the New York Times play in shaping the world's view about HIV and those who question HIV. It is simply a matter of public relations.

In closing, I want to note the pathway taken by the many people I know who have awakened out of their individual HIV/AIDS nightmare: each one has found their way out by educating themselves and then questioning their HIV/AIDS doctors, challenging their HIV/AIDS doctors and ultimately firing their HIV/AIDS doctors. I believe that if President Thabo Mbeki is to lead his people (and the people of the world) out of the African HIV/AIDS nightmare he too must follow a similar course. Thankfully it seems to me that that is the very course that he is taking.

Extreme social and economic conditions may be the biggest threat to the developing nations but, over all, the Church of Conventional Medical Science and the vested interests they serve is the biggest threat to the health of the world!

Will we recognize the real monsters and the real threats before it is too late?

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not in its

On 6th July 2000, just before the Durban World AIDS Conference, the international science journal *Nature* published as a *Commentary*, an HIV=AIDS manifesto dubbed the Durban Declaration led by the Pasteur Institute's Prof. Simon Wain-Hobson, and reputedly attracting 5,000 signatories. Despite numerous scientific publications questioning basic aspects of the HIV theory, the declaration asserted, "The evidence that AIDS is caused by HIV-1 or HIV-2 is clear-cut, exhaustive and unambiguous."

In June, *Nature's* executive editor Maxine Clarke had rejected a *Commentary* by AIDS researchers of the Perth Group and international colleagues, on the scientific issues around HIV/AIDS being raised by the South African Presidential Panel of Inquiry. This article follows below.

"Once a herd is established...it obtains such firm control that it is extremely difficult to do anything about it." - scientist Eleni Eleopulos

• 'One year after the acceptance of the HIV theory, Weiss, Ludlam *et al* 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.' '

• '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.' '

• 'At present there is evidence that the decrease of T4 cells in blood is not due to their destruction by HIV or any other factor. '

• 'There is no proof that AIDS is a bidirectionally sexually transmitted disease. Unlike any other sexually transmitted disease, AIDS and a positive antibody test, like pregnancy, can be sexually acquired but not sexually transmitted.'

COMMENTARY TO *NATURE*

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In a recent issue (*Nature* April 27th) Michael Cherry claimed that a paper published by our group in 1999 'appeared to be a major influence in [President] Mbeki's refusal to sanction state provision of this drug [AZT] to prevent mother-to-child transmission of HIV because we 'claimed that the drug was unacceptably toxic'. In fact the aim of our paper was not to examine the degree of AZT toxicity (its toxicity is acknowledged by everybody including Cherry himself) but to:

(i) determine if AZT, the pro-drug given to patients, is metabolised to its antiretroviral active form, triphosphorylated AZT;

(ii) determine if AZT has anti-HIV effects; evaluate the mechanism of its toxicity and suggest methods, by which its toxicity may be decreased.[1]

As stated in 'An open letter to the president of South Africa' in the same issue, it is true that the peer-review system, like the ballot box, parliamentary debate and constitutional law in politics, has been designed to sort out those ideas which have a greater chance than others of surviving intellectual scrutiny and testing through experiment', and that editors of scientific journals have no other option but to submit all the papers for reviewing by specialists in the field. However, it is also true that:

The peer-review system does not always guarantee 'democratically endorsed procedures'. If in a subject there was initially a diversity of opinions, the review system will assure a very short life for that condition, and soon the field will be closed to all but those who are in the centre. Once a herd is established, by whatever historical evolution this has come about, it obtains such firm control that it is extremely difficult to do anything about it. And even if it were appreciated that that is the situation, one just doesn't know how to interfere. Where then is the right to free speech if every journal has to send each article out to a number of people to review, and the bulk of people are with the herd? Usually with just one-third of the reviewers very negative, the paper does not get published. So there is no free speech in the sense that you cannot publish diverse viewpoints.[2]

At present there is evidence that studies with 'negative' findings, that is studies with findings at odds with what is expected, are difficult to publish. 'Negative studies suffer a substantial time lag. With some exceptions, most of this lag is generated after a trial has been completed. Typical examples in HIV disease include the use of early zidovudine monotherapy in asymptomatic patients, acyclovir, ditiocarb (Imuthiol), and oral glaniclovir prophylaxis, where positive and negative trials started at about the same time, but negative studies appeared later or are still unpublished.[3]

It is true 'the idea that there is a direct, causal relationship between infection with the human immunodeficiency virus (HIV) and the onset of AIDS', has survived the peer-review system. However, it is also true that 'intellectual scrutiny and testing through experiment' show that:

The HIV hypothesis of AIDS was put forward to account for the high frequency of some clinical and laboratory phenomena in gay men, IV drug users and haemophiliacs, none of which were new. The main clinical phenomena were Kaposi's sarcoma (KS) and Pneumocystis carinii pneumonia, the former constituting the basis for a relationship between AIDS and retroviruses. At present everybody including the CDC acknowledge that HIV plays no role, either directly or indirectly in the development of KS.[4, 5]

The laboratory phenomenon was a decrease in T4 cells, determined by the use of antibodies, in blood (Acquired Immune Deficiency). Destruction of the T4 cells by HIV was said to be the 'hallmark' of HIV infection.[6] However, one

year after the acceptance of the HIV theory, Weiss, Ludlam *et al* 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.[7] One year later researchers from CDC claimed, '...factor concentrate (Factor VIII) itself may be immunosuppressive even when produced from a population of donors not at risk of AIDS.'[8] 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.'[9] More importantly, at present there is evidence that the decrease of T4 cells in blood is not due to their destruction by HIV or any other factor. '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,'[10] 'CD4+ T-cell lymphopenia is due to both shortened survival time and a failure to increase the production of circulating CD4+ T-cells',[11] or to the down-regulation of the CD4 molecule.[12]

It was accepted that no single infectious agent could possibly be the direct cause of the multiple diseases seen in AIDS patients. It was postulated then that the destruction of T4 cells (the immune deficiency) inevitably led to the appearance of KS and the opportunistic infections. At present, evidence exists which proves that T4 decrease is neither necessary nor sufficient for the syndrome to develop. 'CD4 [T4] cell counts were not significantly associated with the risk of progression' to disease'.[13] 'Along with other recent analyses and experimental developments these conditions also suggest a need to re-evaluate current concepts about HIV pathogens including the concept that a systemic depletion of CD4 T-cells is the hallmark of the disease'.[14]

Although as the proponents of the HIV theory predicted many drugs have been developed to treat HIV infection, the beneficial clinical effects of these, if any, cannot be due to their anti-HIV effect. With no exception, all the anti-HIV drugs presently used, by design can only prevent the synthesis of HIV DNA. Once the DNA is formed they cannot prevent the transcription of the DNA into RNA. In other words the drugs can decrease HIV RNA only indirectly, by decreasing the HIV DNA. The presently available data shows that no drug, and no drug combination, including Highly Active Antiretroviral Therapy (HAART) decreases the 'viral burden', that is HIV DNA.[1, 15, 16]. In fact, HAART can lead to 'a significant increase in PBMC proviral DNA'.[17]

According to the HIV theory of AIDS, haemophiliacs acquire HIV via contaminated factor VIII. Yet CDC data show that this is not possible. Their data shows that HIV 'does not spread or maintain infectiousness outside its host. Although these unnatural concentrations of HIV can be kept alive under precisely controlled and limited laboratory conditions, CDC studies have shown that drying of even these high concentrations of HIV reduces the number of infectious viruses by 90 to 99 percent within several hours. Since the HIV concentrations used in laboratory studies are much higher than those actually found in blood or other body specimens, drying of HIV-infected human blood or other body fluids reduces the theoretical risk of environmental transmission to that which has been observed-essentially zero".[18]

The main prediction of the HIV theory of AIDS was, that although AIDS was first diagnosed in gay men, because AIDS was caused by a sexually transmitted agent, which like all other such agents, is bidirectionally transmitted, AIDS would rapidly spread throughout the heterosexual population. One of the first scientists to publish data that this could not be the case, at least in gay men, was Robert Gallo and his associates. In 1984 he wrote: 'Of eight different sex acts, seropositivity correlated only with receptive anal intercourse'.[19] 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. We found no evidence that other forms of sexual activity contributed to the risk'.[20] This was confirmed in many other studies including the Multicenter AIDS Cohort Study, (MACS) the best, largest (about 5,000 men), and longest study which commenced in 1984 and is ongoing.[21] In this, as well as other studies, it was shown that it is the frequency of passive anal passive intercourse, not the number of partners which is important in the development of a positive antibody test and AIDS.[22-24] In a 1994 review of most, if not all the epidemiological studies conducted in gay men, 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 epidemiological 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.

(6) 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'.[5] Unquestionably, to date, the best designed and executed study in heterosexuals was conducted by Nancy Padian and her associates. In 1987 they reported: 'The total number of exposures to the index case (sexual contacts with ejaculation) and the specific practice of anal intercourse' were associated with the development of a positive antibody test. The results from their long (ten years) prospective study of heterosexual couples of whom only one partner of either sex was antibody positive were published in 1997 where they reported that 'no seroconversions occurred among exposed partners'.[26] According to one of the best known HIV/AIDS experts, Jaap Goudsmit, for heterosexual 'HIV transmission' anywhere in the world, including Haiti, Africa, Thailand, 'a homosexual or anal factor seems to be required'.[24] In other words, at present there is ample evidence that sex plays an important role in the acquisition of a positive antibody test and AIDS and the practice of safe sex should form the basis for any effort in prevention. However, there is no proof that AIDS is a bidirectionally sexually transmitted disease. Unlike any other sexually transmitted disease, AIDS and a positive antibody test, 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 anal intercourse over a long period is necessary. AIDS is more like anal[27, 28] and cervical cancer.[29] The effect is not the result of the act itself but its high frequency. However, as with pregnancy, cervical and anal cancer, other factors may promote or militate against the development of AIDS and a positive antibody test.

If a hypothesis cannot account for the phenomena for which was put forward, and if its predictions are not fulfilled, then scientists have no choice but to reappraise it.

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Better late than never

In late September *Nature* finally published a communication from minority members of the South African Panel.

"We reject as outrageous [the Durban Declaration's] attempt to outlaw open discussion of alternative viewpoints, because this reveals an intolerance which has no place in any branch of science."

***Nature* 407, 286 (2000)**

The Durban Declaration is not accepted by all

Sir - In response to recent action by President Thabo Mbeki of South Africa and in advance of the International Conference on HIV/AIDS held in Durban on 9-14 July, the Durban Declaration[1] was prepared by a committee representing a consensus of "181 scientists and front line physicians".

Before publication in *Nature*, it was circulated: "To get as many names of scientists and doctors to sign on. Names of signatories will appear on the *Nature* website. If you would like to sign on, we would be delighted. Send me an e-mail confirming this. To economize space on the website, we have to name people in a single line. Many of you will say that HIV/AIDS is not your area. However, over the years you have heard enough of the arguments to understand the association. Furthermore, many of you know well infectious diseases and understand Koch's postulates. If you have colleagues in the laboratory or in the clinic who you feel would like to sign, please ask them. The more the better. However, please note that in order to be authoritative we feel it necessary to restrict the list to those with major university qualifications." This is an extract from the circular distributed on behalf of the organizing committee which included Luc Montagnier, Catherine Wilfert, David Baltimore, Sir Aaron Klug (as President of the UK Royal Society), and many other well-known names and organizations from developing countries as well as from the West.

Briefly, the authors of the declaration state that AIDS/HIV is spreading as a pandemic now affecting 34 million people, of whom 24 million are in sub-Saharan Africa. They say the disease began there as a viral infection of chimpanzees and monkeys conveyed somehow to humans, and is now spreading worldwide by heterosexual and mother-to-infant transmission. The authors consider that their evidence supporting this hypothesis is "clear-cut, exhaustive and unambiguous"; that most people with these infections will develop AIDS within 5-10 years unless treated; and that "there is no end in sight" until research based on their hypothesis leads to a vaccine to supplement safe sex, health education and other, simpler approaches to avoidance and prevention.

With no end in sight after 17 or more years of intensive research, priorities and incentives, one

might think that this consensus would be open to alternative approaches, but the authors of the declaration are emphatic that this is not needed because the evidence that HIV is the cause of AIDS has met or exceeded the "highest standards of science". By implication, any other evidence is therefore a deception, even less likely to lead to a successful vaccine, curative drug or hypothesis.

Our objection to the Durban Declaration is factual and verifiable from data published in the early 1980s[2-4]. We believe that World Health Organization (WHO) figures produced since then[5] can be interpreted to say that AIDS first appeared and spread, not in Africa but in US urban clusters of mainly white, affluent, promiscuous homosexual men and drug addicts, and then spread, on a lesser scale, in Europe and Australasia but hardly at all in Asia. Disastrous epidemics due to heterosexual transmission of HIV were confidently predicted in general populations of developed countries6 but they never happened. AIDS has diminished in incidence and severity though it is continuing in female partners of bisexual men and some other communities engaging in or subjected to behaviours which carry high risks of infections, various assaults and misuse of drugs.

In sub-Saharan Africa, AIDS was reported later[7,8], with an alarming frequency in mothers and infants not seen in the United States or Europe.

Sentinel surveillance by the WHO shows correlation between this frequency and the seroprevalence of HIV, but there are unmeasured overlaps with other major diseases and deprivations which, together with anomalies in classification, distribution, transmission and country- specific pathogenesis, and especially cross-reactions in serological tests[6-9], raise questions about the accuracy of diagnosis and approaches to control.

In the absence of satisfactory, or of any, answers from the consensus to his specific questions on this matter, President Mbeki invited us to join other experts with differing viewpoints in a panel to explore the way forward to control AIDS in Africa. Unlike the signatories to the Durban Declaration, we claim no exhaustive and unambiguous unanimity. There are differences between ourselves and with other panellists, and we are happy to acknowledge possible convergence with certain priorities favoured by the declaration's authors. But we reject as outrageous their attempt to outlaw open discussion of alternative viewpoints, because this reveals an intolerance which has no place in any branch of science. Our viewpoints could also explain the failure to prevent the spread of AIDS in high-risk populations in the West, amounting, in the United States now, to almost 700,000 registrations - an unbeaten score in the global tally of this disease.

Other signatories to this letter; full addresses available from G.T.S.

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Censorship in an issue requiring debate in AIDS research

Prof. Gordon Stewart

Prof. Etienne de Harven

In February 1999 we submitted for publication the following letter to *SCIENCE*:

RETROVIRUSES... REVISITED

In 1970 molecular biology made a U-turn when it was found that DNA could be synthesised from an RNA template by the action of a hitherto unknown enzyme which was given the name reverse transcriptase (RT). This enzymatic activity was recognised simultaneously in preparations regarded as purified Rauscher-murine leukemia viruses by D. Baltimore (1), and as purified Rous sarcoma virus by H. Temin and S. Mizutani (2). These observations provided a possible new understanding of the oncogenic properties of RNA tumor viruses, which were promptly renamed as "retroviruses". They gave an enduring impetus to the study of these viruses as hypothetical causes of some human cancers and leukemias, and led to the award of a Nobel Prize. But they also raised some serious questions which are still unanswered.

The viral samples used by Temin and Baltimore were obtained, as far as is known, from bands sedimenting in sucrose gradients at a density of 1.16 gm/ml. These samples were regarded as "pure" virus, and the RT activity was, therefore, interpreted as that of a viral enzyme. However, electron microscopy was apparently not used by the authors to control the level of purity of the viral samples and the absence of contamination by cellular debris.

Since then it was learned that material sedimenting in sucrose at the density of 1. 1 6 gm/ml is very heterogenous and contains large amounts of cell debris and microvesicles, as recently confirmed by two different groups of investigators (3, 4). Moreover, it was established that reverse transcriptase activity is found commonly in most cells, as already indicated by Scolnick et al. in 1971 (5) and reviewed by Varmus (6) in 1988. Consequently, the presence of cell debris may account for reverse transcriptase activity.

In view of these facts, we believe it becomes extremely urgent to reappraise the currently accepted assumption that reverse transcriptase activity can be used as a "marker" in surrogate tests for the presence of "retroviruses" such as the so-called Human Immunodeficiency Virus (HIV).

References
1. D. Baltimore, *Nature* 226, 1209 (1970).
2. H. M. Temin and S. Mizutani, *Nature* 226, 1211 (1970).
3. P. Gluschankof et al., *Virology* 230, 125 (1997).
4. J. W. Bess et al., *Virology* 230, 134 (1997).
5. E.M. Scolnick et al., *Nature* 229, 318-321. (1971)
6. H. Varmus, *Sci. Am.* 257, 48 (1987).

The letter was rejected by the *SCIENCE* editor who claimed: "I regret to say that we are not able to give space to a discussion of your ideas, as

we receive many more items than we can accommodate".
We submitted an almost identical letter in May to *NATURE*, which has been equally rejected with the following comment from the Editor: "...your letter did not compete very well with the many other letters that we are currently considering".
We believe that the letter is calling attention to considerable uncertainty in methods initialy used to support the "discovery" of retroviruses and in the use of the enzyme reverse transcriptase (RT) as a surrogate marker for so-called "HIV".
We also believe that the rejection of this letter by both *SCIENCE* and *NATURE* is additional evidence for the level of CENSORSHIP which is currently applied to prevent any open debate into the fundamentals of AIDS research.

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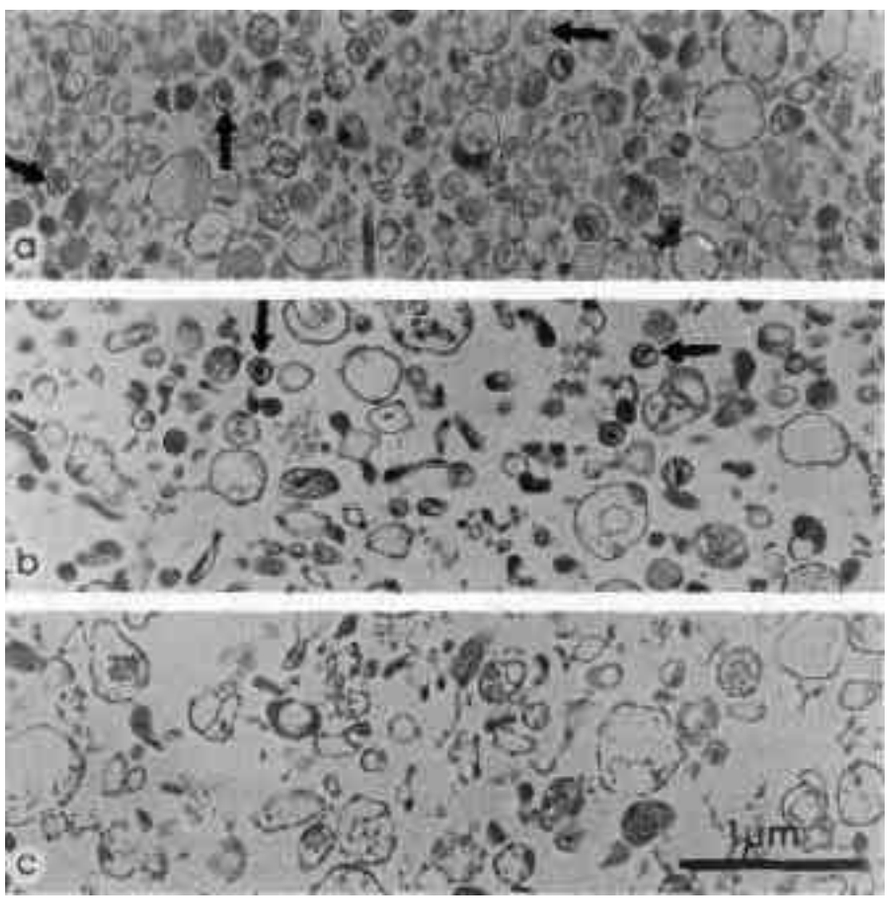

Cell membrane vesicles are a major contaminant of gradient-enriched human immunodeficiency virus type-1 preparations. Gluschankof P. *et al.* ***Virology***, 1997; 230:125-133

"Material sedimenting in sucrose..is very heterogous and contains large amounts of cell debris and microvesicles as recently confirmed by two different groups of investigators."

Nutrition studies in immunity and AIDS

Linda Lazarides is a Nutritional Health Expert, and author of the books *Principles of Nutritional Therapy*, *The Nutritional Health Bible* and *The Waterfall Diet.*

"Many factors, including candidiasis and the presence of numerous different varieties of antibodies and autoantibodies, can lead to false positives in HIV antibody tests. (The virus itself has not yet been isolated so cannot be looked for in blood samples). The antibody tests are so potentially inaccurate that sometimes laboratories will use the results of 'Risk Factor' questionnaires to make their final decision as to whether an individual is 'HIV antibody' positive or negative. After nearly 20 years of failure to isolate the virus, many of the best Aids researchers are now seriously doubting the HIV hypothesis as the real cause of acquired immune deficiency. To take this into account, I recommend that the term 'HIV-diagnosed' be substituted for 'HIV+' where it occurs below. In reading these summaries, other potential causes of immunodeficiency should then be kept in mind as parallel and equally valid hypotheses. Among these, autoimmune attack on CD4 cells as a result of excessive xenobiotic exposure and inadequate nutritional support of liver detoxification and antioxidant function is in my view especially worthy of consideration."

Successful supplementation may be best undertaken in collaboration with a qualified nutritional therapist.

Alpha-Lipoic Acid Increases Glutathione Levels

The addition of exogenous alpha-lipoic acid to a cellular medium caused a rapid increase of intracellular unbound thiols in a human T-lymphocyte cell line. The rise of cellular thiols resulted from cellular uptake and reduction of lipoic acid to dihydrolipoic acid and a rise in intracellular glutathione. Although the level of dihydrolipoic acid is 100-fold lower than glutathione, the cellular concentration of dihydrolipoic acid may be responsible for the modulation of total cellular thiol levels. Rises in glutathione correlated with the levels of intracellular dihydrolipoic acid ($p<0.01$) [Han D, Tritschler JH, Packer L. Alpha-lipoic acid increases cellular glutathione in a human T-lymphocyte Jurkat cell line. Biochem Biophys Res Commun 207(1):258-64, 1995].

Arginine and Natural Killer Cells

Arginine 30 g/d for 3 days increased the number of circulating CD56 + cells by a median of 32% ($p<0.01$) in 8 volunteers. This increase was associated with a mean rise of 91% in natural killer (NK) cell activity ($p=0.003$) and of 58% in the cell activity of their activated counterparts, lymphokine-activated-killer (LAK) cells, ($p=0.001$) in 13 volunteers. The substantial enhancement of human NK and LAK cell activity by arginine could be useful in many immunosuppressed states, such as AIDS and HIV infection, in which depressed NK cell activity is an important component of the disease process [Park KGM et al. Stimulation of lymphocyte natural cytotoxicity by L-arginine. Lancet 337:645-6, 1991].

B12 Deficiency Correlates with AIDS Severity

Fifty-nine of 191 asymptomatic HIV seropositive patients were followed for 2Ω years. Sixty-four percent had falling vitamin B12 levels. Twelve patients progressed to AIDS related complex or AIDS. Nine of these had repeat vitamin B12 levels and all had or developed falling serum B12 levels without any evidence of an HIV-related bowel disorder. All patients progressing had falling CD4 counts. The authors conclude that subnormal vitamin B12 levels are common in HIV disease and occur at early stages. Vitamin B12 levels fall in most patients over time and may help predict

those whose disease will progress the most rapidly. Vitamin B12 levels may be a surrogate marker for HIV disease progression. [Serum Vitamin B12 and Transcobalamin Levels in Early HIV Disease. Rule, S.A.J., et al, American Journal of Hematology, 1994;47:167- 171. Address: S.A.J. Rule, MB, Department of Hematology, Hammersmith Hospital, Du Cane Rd, London W12 ONN, England].

Beta Carotene and CD4 Count

Twenty-one HIV infected people, most of whom were taking AZT, were given 180 mgs per day of beta-carotene or a placebo for 4 weeks. This was followed by 4 weeks of the opposite therapy. This resulted in a significant increase in total white blood cell counts, the percent change in helper cells (CD4) and a percent change in the helper-suppressor ratio (CD4/CD8) compared to placebo. The total and B-lymphocytes increased on the beta- carotene, and fell during the placebo treatment. There was no toxicity observed at the 180 mg dosage. Dr. Gregg O. Coodley, principal author of the study, suggests that perhaps beta-carotene can help AIDS patients not succumb to opportunistic infection, or even delay the onset of full blown AIDS. "Beta-Carotene Lifts CD4 Counts: At Doses of 180 mgs, Study Found 17% Increase in HIV-Infected People," Mckeown, L.A., Medical Tribune, February 25, 1993;34(4):1 [Beta-Carotene in HIV Infection. Coodley, Gregg, et al, Journal of Acquired Immunodeficiency Syndromes, 1993;6:272-276. Address: L.A. McKeown, Medical Tribune, 257 Park Avenue South, New York, NY 10010, U.S.A./G. Coodley, M.D., Oregon Health Sciences University, L475, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098, U.S.A.]

Beta Carotene and CD4:CD8 Ratio

20 healthy male nonsmokers received either b-carotene 60 mg daily or placebo. After 9 mo., the CD4-CD8 (helper/suppressor) ratio increased, while natural killer cells, virgin T cells, memory T cells, and cytotoxic cells remained unaltered [Murata T, Tamai H, Morinobu T, et al. Effect of long-term administration of b-carotene on lymphocyte subsets in humans. Am J Clin Nutr 60:597-602, 1994].

Beta Carotene and Prevention of Progress to AIDS

10 pts. with AIDS related complex received 60 mg beta-carotene daily for 20 consecutive days per month. Asthenia and nocturnal perspiration fever disappeared in 9/10 and they regained their weight and activity levels in 6-21 months. Lymphadenopathy, however, failed to improve. 1 pt. who had Kaposiís sarcoma had a rapid recovery from opportunistic infections with a doubling of the CD4 count and no further growth of the sarcoma. Beta-carotene appeared to prevent progress to AIDS and to permit the lowering of the effective dosage of AZT [Bianchi-Santamaria A, Fedeli S, Santamaria L. Short communication: possible activity of beta-carotene in patients with the AIDS related complex. A pilot study. Med Oncol Tumor Pharmacother 9(3):151-3, 1992].

Beta Carotene and T Cell Count

64 HIV-positive pts. in the early ARC phase took beta-carotene 100,000 IU (60 mg) for 20 consecutive days/month. After 21 mo., mean T-cell counts increased 15% from 451 to 519 [Bianchi-Santamaria A et al. Possible activity of beta-carotene in patients with the IAD related complex (ARC). IXth Int Conf on AIDS PO-B28-2168, Berlin, 1993].

Beta Carotene Deficiency Due to Fat Malabsorption, Correlates with Reduced Helper Lymphocytes

This study evaluated 33 controls and 116 HIV-infected patients to assess total serum carotene concentration as indicator of fat malabsorption in correlation with diarrhea, secondary enteric infections and blood lymphocyte subsets. The total serum carotene level was abnormal in 77% of the HIV-infected patients and significantly decreased compared with the controls. The percentage of helper lymphocytes, helper count and helper:suppressor ratio in the peripheral blood correlated with total serum carotene levels in HIV-infected patients. The abnormal serum carotene levels may be due to fat malabsorption and may contribute to diarrhea in these AIDS patients. [Serum Carotene Deficiency in HIV-Infected Patients. Ullrich, Reiner, et al, AIDS, 1994;8:661-665. (Address: Reiner Ullrich M.D., Medical Clinic, Department of Gastroenterology, Klinikum Steglitz, Hindenburgdamm 30, D-12200 Berlin, Germany].

Beta Carotene Increases Natural Killer Cells

Eleven patients with AIDS received 60 mgs of beta-carotene daily for 4 months. There were increases in natural killer cells and activated lymphocytes during treatment with beta-carotene, which diminished 3 months after treatment. The authors conclude that beta-carotene can affect immune parameters in HIV-infected subjects and is nontoxic at this test dose. They encourage further long term studies with beta-carotene in AIDS. [A Preliminary Trial of Beta-Carotene in Subjects Infected With Human Immunodeficiency Virus. Garewal, Harinder S., et al, Journal of Nutrition, 1992;122:728-732. Address: Harinder S. Garewal, Departments of Internal Medicine, Family and Community Medicine, University of Arizona Health Sciences Center, Tucson, AZ 85724, U.S.A.]

Beta-Carotene Raises T Cell Count

Pts. with advanced AIDS received beta-carotene

198,000 IU (120 mg) daily. After 4 wks., half of the gp. experienced T4-cell increases, and mean T-cell counts increased from 53 to 76. After discontinuing therapy, T-cell counts returned to baseline. No serious side effects were noted [Fryburg DA et al. The immunostimulatory effects and safety of beta-carotene in patients with AIDS. VIIIth Int Conf on AIDS PoB3458, Amsterdam, 1992].

Carnitine and Immune Parameters in AIDS

20 male pts. with advanced AIDS (CDC stage IVCl) and normal serum carnitine levels but reduced levels of carnitine in peripheral blood mononuclear cells randomly received either L-carnitine 6 g daily or placebo. After 2 wks., a significant trend towards the restoration of appropriate intracellular carnitine levels was found in treated pts. and was associated with a strong improvement in lymphocyte responsiveness to mitogens. There was increased proliferation of peripheral blood mononuclear cells, and a reduction of serum levels of beta 2-microglobulin (a surrogate marker for predicting progression to AIDS in HIV-infected pts.) as well as in circulating tumor necrosis factor alpha, mostly in pts. exhibiting highly elevated levels. In addition, serum triglyceride levels were reduced [De Simone C, Famularo G, Tzantzoglou S, et al. Carnitine depletion in peripheral blood mononuclear cells from patients with AIDS: effect of oral L-carnitine. AIDS 8(5):655-60, 1994; De Simone C, Tzantzoglou S, Famularo G, et al. High dose L-carnitine improves immunologic and metabolic parameters in AIDS patients. Immunopharmacol Immunotoxicol 15(1):1-12, 1993].

Carnitine Deficiency

Twenty-nine AIDS patients, between 27 and 41 years of age and with a history of drug use, were compared to 14 healthy age-matched controls for carnitine levels. There was a marked decrease in total and free carnitine observed in 72% of the AIDS patients. Carnitine deficiency is associated with cardiac symptoms, muscle weakness, and hypometabolism or cachexia. Carnitine plays an important role in energy metabolism. [L-Carnitine Deficiency in AIDS Patients. De Simone, Claudio, et al, AIDS, 1992;6(2):203-205. Address: Professor C. De Simone, Cattedra Malattie Infettive, Dipartimento Di Medicina Sperimentale, Universita Dell'Aquila, 67100 L'Aquila, Italy]

Carnitine Protects CD4 Cells

Ten males patients with AIDS mean age of 33 who were taking zidovudine and sulfamethoxazole trimethoprin received L-carnitine intravenously at 6 g per day in normal saline over a 2-hour period each day for 5 days. L-carnitine induced a strong reduction in the apoptosis of CD4 and CD8 cells. [Effect of L-carnitine treatment in vivo on apoptosis and ceramide generation in peripheral blood lymphocytes from AIDS patients. De Simone C, Grazia C et al, Proceedings of the Association of American Physicians 109(2):146-153, March 1997].

Carotene Deficiency

In studying 84 HIV positive patients it was found that 31% of the patients were carotene deficient and an additional 40% of the population were in the lower quartile of the normal range. [Carotene Deficiency in HIV Patients. Branowitz, S.A., et al, AIDS, 1996;10(1):115. Address: S.A. Baranowitz, 2044 Ocean Avenue, Suite A7, Brooklyn, NY 11230, U.S.A.]

Coenzyme Q10 and T Lymphocytes

11 normal volunteers received 200 mg daily of CoQ10. After 2 mo., there was an increase in T4 lymphocytes and a rise in the T4/T8 ratio as well as an increase in IgG levels [Folkers K, Morita M, McRee J Jr. The activities of coenzyme Q10 and vitamin B6 for immune response. Biochem Biophys Res Commun 193:88-92, 1993].

Coenzyme Q10 and T Lymphocytes

An increase in the T4/T8 lymphocyte ratio occurred in 14 test subjects treated with coenzyme Q10 supplements. [Folkers K et al: Coenzyme Q10 increases T4/T8 ratios of lymphocytes in ordinary subjects and relevance to patients having the Aids related complex. Biochem Biophys Res Commun 175(2):786-91, 1991].

Coenzyme Q10

Coenzyme Q10 levels were found to be severely depressed in Aids patients. Supplementation with 200 mg per day produced encouraging clinical results. [Langsjoen PH et al: Treatment of patients with human immunodeficiency virus infection with coenzyme Q10. Biomed and Clin Aspects of CoQ10 6:409- 416, 1991].

Coffee and Immune Function

15 men and women aged 19-49 who were regular coffee drinkers drank 5 cups of coffee daily (225 mg caffeine) for 5 wks. followed by 5 wks. of abstinence. At the end of the coffee period, lymphocyte responses to PHA and Con A mitogens were about one-third lower than during abstinence. While total T-lymphocytes, B-cells and helper T-cells were unaffected, the proportion of suppressor T-cells increased by >30% during coffee consumption and the proportion of natural killer cells increased by 50%, and chemotaxis activity of mononuclear cells was significantly higher [Melamed I et al. Coffee and the immune system. Int J Immunol 12:129-34, 1990].

Curcumin Reduces PCR-RNA Levels

It has been shown that curcumin inhibits HIV transcription. In 3 case reports of HIV-positive,

homosexual men greater than 20 years of age, 1 gram of curcumin was given 3 times daily. Eight weeks later there was a dramatic reduction in their PCR-RNA levels. [Curcumin - A Natural Herb With Anti-HIV Activity. Jordan, Wilbert C., M.D., M.P.H., Monograph, 1996;1-3. Address: Wilbert C. Jordan, M.D., M.P.H., Department of Internal Medicine and Family Practice, Charles R. Drew University of Medicine and Science, King/Drew Medical Center, 12021 S. Wilmington Avenue, Los Angeles, CA 90059 U.S.A./(310) 668-8166 /Fax (310) 668-8169].

Cysteine Deficiency and Cellular Dysfunction

A series of clinical studies and laboratory investigations suggests that the acquired immunodeficiency syndrome (AIDS) may be the consequence of a virus-induced cysteine deficiency. HIV-infected persons at all stages of the disease were found to have decreased plasma cystine and cysteine concentrations and decreased cellular glutathione levels. In rhesus macaques, cysteine levels decrease within 1-2 wks. after infection with the closely related virus SIV (mac), and both HIV-infected persons and SIV-infected rhesus macaques have, on the average, substantially increased plasma glutamate levels which aggravate the cysteine deficiency by inhibiting the membrane transport of cystine. Individual cystine and glutamate levels are correlated with individual lymphocyte reactivity and T4+ (but not T8+) counts in both HIV-infected persons and normals. The cellular cysteine supply affects the intracellular glutathione level and IL-2-dependent T-cell proliferation as well as (inversely) the activation of the transcription factor NF-kappa-beta; thus cysteine deficiency in HIV-infected persons is possibly responsible, not only for the cellular dysfunction, but also for the overexpression of tumor necrosis factor-alpha, interleukin-2 receptor alpha-chain, and beta2-microglobulin as all the corresponding genes are associated with kappab-like enhancer sequences [Drˆge W. Cysteine and glutathione deficiency in AID patients: a rationale for the treatment with N-acetyl-cysteine. Pharmacology 46(2):61-5, 1993].

Dapsone May Exacerbate Iron Overload

In advanced stages of AIDS, body iron stores tend to be excessive. Dapsone, used for secondary prophylaxis of Pneumocystis carinii pneumonia, contains 200 mg of iron protoxalate per tablet and provides an extra 30 mg daily of elemental iron which may further inhibit immune function. Moreover, in culture and animal models, iron chelators inhibit the growth of Pneumocystis carinii [Weinberg GA. Iron overload as a mechanism for the lowered survival in aids patients receiving dapsone-iron protoxalate for secondary prophylaxis of pneumocystis carinii pneumonia. J Infect Dis 174:241, July 1996].

Emotional Depression Lowers CD4 count

This study evaluated the CD4 (helper) lymphocytes in 330 homosexual or bisexual men who had positive evidence of HIV infection. The helper cells were evaluated in 277 of these subjects, and were correlated with depressive symptoms using the Center for Epidemiologic Studies - Depression scale. At baseline, 19.7% were classified as depressed on the overall scale and 16.1% were classified as depressed on the affective scale. The rate of helper cell change was 38% greater for overall depressed subjects than for the overall nondepressed subjects, and 34% greater for affectively depressed subjects than the affectively nondepressed subjects. The authors conclude that overall depression and affective depression predicted a more rapid decline in helper cell lymphocyte counts. The authors note further study needs to determine whether treating depression can alter the course of HIV infection. [Depressive Symptoms and CD4 Lymphocyte Decline Among HIV-Infected Men. Burack, Jeffrey H., M.D., MPP, et al, JAMA, December 1, 1993;270(21):2568-2573. Address: Thomas J. Coates, Ph.D., Center For AIDS Prevention Studies, 74 New Montgomery St., Suite 600, San Francisco, CA 94105, U.S.A.]

Essential Fatty Acid Deficiency and Fatigue

18 ARC pts. were randomized with regard to AZT treatment status and received either 240 GLA, an omega-6 fatty acid, and 960 mg EPA, an omega-3 fatty acid, divided into 16 capsules daily (OmegaSynô) or placebo. After 6 mo., pts. rated themselves on a ëquality of lifeí scale. The scale was significantly higher ($p<0.0005$) for the experimental gp. vs. the placebo group; it also was significantly higher ($p<0.025$) for experimental pts. on AZT vs. placebo pts. on AZT. In both instances, the quality of life improved for experimental pts., while it worsened for placebo patients. Pts. on placebo were then switched to the experimental regimen. After 5 mo., their ave. quality of life ratings were better than at the start of the study 11 mo. earlier ($p<0.01$). The sub-gp. of pts. on AZT showed similar gains, but the results were not significant. Further data analysis suggests that the reduction of fatigue was the major factor influencing the improvement in quality of life ratings. It is hypothesized that the fatigue associated with ARC may be caused by an essential fatty acid deficiency causing reduced oxygen transfer to muscle cells [OmegaSynô as a dietary intervention in ARC patients. Unpublished study. BioSyn, 21 Tioga Way, Marblehead, MA 01945, 1989].

Folic Acid Malabsorption

In 25 AIDS patients who were given 5 mgs of folic acid, it was found that folic acid absorption

appeared to be significantly impaired, irrespective of the stage of the disease. Through laboratory investigation it is believed that the virus causes an enteropathy, which can result in the malabsorption of folic acid. The authors feel that routine folic acid supplementation may be warranted in patients with AIDS. [Folic Acid Absorption in Patients Infected with the Human Immunodeficiency Virus. Revell, P., Journal of Internal Medicine, 1991;230:227-231. Address: Dr. Paul Revell, Central Pathology Laboratory, Hartshill Rd., Stoke-On-Trent, United Kingdom]

Garlic and Natural Killer Cells

Natural killer (NK) cells, which form part of the body's immune system, are known to spontaneously destroy tumour cells, virus-infected cells, and to play a primary role in surveillance. Volunteers were given either 0.5 g/kg body weight of raw garlic daily, or 1800 mg kyolic garlic daily. Compared with controls, the NK cell performance increased in both the garlic-treated groups, by 139 per cent in the raw garlic group and by 155. 5 per cent in the kyolic garlic group. [Kandi OM et al: Garlic and the immune system in humans: its effect on natural killer cells. Fed Proc 46(3): 441, 1987].

Garlic and Opportunistic Infections

Ten HIV+ patients with severely low natural killer cell activity, abnormal helper-to-suppressor T-cell ratios (both these parameters are indicators of advanced Aids, probably with short life expectancy) and opportunistic infections such as cryptosporidial diarrhoea were given 5 grams daily for 6 weeks and then 10 grams daily for 6 weeks of an aged garlic extract. 3 patients died before the trial ended, but 7 of the 10 experienced a return to normal natural-killer cell activity by the end of the 12 weeks. Chronic diarrhoea and candidiasis also improved. [Abdullah T et al: Garlic as an antimicrobial and immune modulator in AIDS. Int Conf AIDS (Canada) 5:466 (ISBN 0-662-56670-X), 1989. Address: Tariq H. Abdullah, Akbar Clinic and Research Foundation, Panama City, Florida 32404, USA].

Garlic Extract, Diarrhoea and Body Weight

A group of Aids patients with cryptosporidium infection were given liquid allicin (garlic extract) mixed with water daily. This resulted in less diarrhoea and stabilized or increased body weight. Several patients showed negative tests for cryptosporidium parasites on follow-up. [Garlic for cryptosporidiosis? Treat Rev 22:11, 1996].

Gastric Acid Deficiency

In a gp. of 48 pts. with AIDS, the mean fasting pH of gastric juice was 5.9 compared to 2.9 in controls. Maximal acid output was 7.4 mEq/hr compared to 17.9 mEq/hr in controls. Bacteria were cultured from the gastric juice or mucosa in 13/14 pts., while the gastric juice was sterile in each of 5 controls. The serum of 8/15 pts. was positive for gastric parietal cell antibodies [Lake-Bakaar G, Quadros E, Beidas S, et al. Gastric secretory failure in patients with the acquired immunodeficiency syndrome (AIDS). Ann Intern Med 109(6):502-4, 1988].

Note from Linda Lazarides: Gastric acid is our primary defence against infectious microbes in food. Low acidity in the stomach can therefore much more easily lead to infestation with diarrhoea-causing microbes and parasites in AIDS patients than in others. They will also be more prone to other infections.

A low gastric pH is required to stimulate the rest of the digestive processes, so AIDS patients without sufficient acid may suffer from defective digestion and consequent malabsorption of important nutrients.

It is recommended that AIDS sufferers take supplements of HCl Pepsin with meals.

Glutathione Depletion and Immunodeficiency

Compared to 16 healthy controls, 20 common variable immunodeficiency pts. had significantly lower levels of both total and reduced glutathione as well as a lower ratio of reduced to total glutathione. Plasma levels of total glutathione were also decreased, while monocytes from pts. exhibited increased levels of both total and reduced glutathione. CVI pts. had significantly raised serum levels of tumor necrosis factor (TNF-alpha) and TNF-alpha concentration was strongly associated with glutathione depletion in CD4 + lymphocytes. Furthermore, the lowest levels of both total and reduced glutathione were found in a subgroup of pts. characterized by persistent immune activation in vivo, decreased numbers of CD4 + lymphocytes in peripheral blood, and splenomegaly. [Intracellular depletion of reduced glutathione may have profound implications for CD4 + lymphocyte function and the immunodeficiency in CVI. Aukrust P, Svardal AM, M Ú ller F, et al. Decreased levels of total and reduced glutathione in CD4+ lymphocytes in common variable immunodeficiency are associated with activation of the tumor necrosis factor system: possible immunopathogenic role of oxidative stress. Blood 86(4):1383-91, 1995].

Glutathione Levels and AIDS Survival

The glutathione levels in CD4 T cells from 206 HIV-positive pts. and 86 healthy controls were compared. Controls had the highest levels, while pts. with the lowest CD4 cell counts contained the lowest glutathione levels. Moreover, pt. survival was closely related to the glutathione level; in pts. with CD4 cell counts <200, those with the lowest glutathione levels also had a lower probability of surviving 2-3 yrs. All patients in the group

randomly received oral N-acetylcysteine (median 4.4 g/d; range 3.2-8 g/d) or placebo. After 8 wks., pts. could elect to take open label NAC for an additional period (median=6 mo.). NAC restored decreased whole blood glutathione levels. Pts. with very low CD4 cell counts who took NAC survived roughly twice as long as those who did not. [Herzenberg LA et al. Glutathione deficiency is associated with impaired survival in HIV disease. Proc Natl Acad Sci 94:1967-72, 1997].

High Sugar Consumption Effects on Immune Function

7 healthy adults ingested 75 gm glucose. In vitro lymphocyte transformation in response to PHA at 30 and 60 min. was significantly depressed to 79.4% and 83.3% of fasting levels, respectively. At 2 hrs., lymphocyte transformation had returned to fasting levels. Addition of physiologic doses of insulin decreased in vitro lymphocyte transformation by 40%. Results suggest that glucose ingestion may affect in vitro measures of cellular immunity by increasing serum insulin, which competes with mitogens for binding sites on lymphocytes. In addition, glucose may impair cell-mediated immunity in vivo [Bernstein J et al. Depression of lymphocyte transformation following oral glucose ingestion. Am J Clin Nutr 30:613, 1977].

Intestinal Permeability ('Leaky Gut')

This study evaluated intestinal permeability by using a lactulose- mannitol differential intestinal permeability test in healthy controls, HIV-positive patients without symptoms, and AIDS patients with and without diarrhea. The AIDS patients with diarrhea had significant alterations in intestinal permeability with increased lactulose recovery and decreased mannitol recovery, and their mean lactulose:mannitol ratio was significantly greater than the ratio in all other groups. The authors conclude that patients with AIDS and diarrhea have altered intestinal permeability. The reduced absorption of mannitol suggests there is a decreased functional absorptive surface in the intestines of AIDS patients as their disease progresses. The term intestinal permeability refers to how the lining of the intestines allows molecules to pass through by nonmediated effusion. The mannitol recovery showed an incremental decrease in the 3 HIV-positive groups, suggesting that as HIV progresses there is a loss of functional absorptive surface. Glutamine is an essential amino acid for the gut lining and has been shown to improve intestinal permeability and reverse villous atrophy in human and animal models. [Intestinal Permeability in Patients Infected With Human Immunodeficiency Virus. Tepper, Robert E., M.D., et al, American Journal of Gastroenterology, 1994;89(6):878-882. Address: Douglas Simon, M.D., Director, Division of Gastroenterology, Jacobi Hospital, Room 303B, Bronx Municipal Hospital Center, Pelham Parkway and Eastchester Rd., Bronx, NY 10461, U.S.A.]

Iron Deficiency and Cell-Mediated Immunity

When iron is deficient, cell-mediated immunity is impaired, especially when the deficiency is associated with a vitamin E deficiency [Chandra RK. Trace element regulation of immunity and infection. J Am Coll Nutr 4(1):5-16, 1985].

Iron Deficiency and Lymphocyte Levels

In 21 pts. with iron deficiency anemia, the mean number of total lymphocytes, CD3 and CD4 subsets, and B lymphocytes were decreased, as was killer cell activity. After iron treatment, some of these parameters returned to normal [Santos PC, Falcado RP. Decreased lymphocyte subsets and K-cell activity in iron-deficiency anemia. Acta Haematol 84:118-21, 1990].

Iron Metabolism Abnormalities and Oxidative Stress

AIDS progression in the advanced stage of the infection is accompanied by increasing body iron stores. Iron burden is especially heavy in the bone marrow, brain white matter, muscle and liver. Excess iron may enhance oxidative stress by impairing an already compromised immune system. The reduction and prevention of iron loading might slow the progression of the infectious complications of AIDS and possibly AIDS itself. Limiting iron intake from any route and the use of iron chelating drugs may decrease the iron burden and possibly suppress the growth of microorganisms. [Altered Iron Metabolism in HIV Infection: Mechanisms, Possible Consequences, and Proposals For Management. Boelaert, Johan, R., et al, Infectious Agents and Disease, 1996;5:36-46. Address: Dr. J.R. Boelaert, Algemeen, Ziekenhuis Sint Jan., Unit For Renal and Infectious Disease, Ruddershove 10, 8000 Brugge, Belgium].

Lead and Immune Function

Results of animal studies suggest that chronic low-level exposure to lead can greatly depress immune system function [Bendick A, Belisle EH, Strausser HR. Immune response of rats chronically fed subclinical doses of lead. Clin Exp Immunol 43:189-94, 1981; Blakey BR, Archer DL. The effect of lead acetate on the immune response in mice. Toxicol Appl Pharmacol 61:18-26, 1981; Faith RE, Luster MI, Kimmel CA. Effect of chronic developmental lead exposure on cell-mediated immune functions. Clin Exp Immunol 35:413-20, 1979; Luster MI, Faith RE, Kimmel CA. Depression of humoral immunity in rats following chronic developmental lead exposure. J Environ Pathol Toxicol 1:397-402, 1978; Neilman BA, Taddeini L, McJilton CE, Handwerger BS. Decreased T-cell function in

mice exposed to chronic low levels of lead. Clin Exp Immunol 39:746-9, 1980].

Low Methionine and High Homocysteine May Cause Oxidative Damage to CD4 Cells

Compared with controls, 21 HIV+ patients were found to have higher concentrations of reduced homocysteine (which could contribute to oxidative damage), normal total homocysteine, but lower concentrations of the amino acid methionine in plasma. There was a significant correlation between low methionine concentrations and a low CD4+ cell count. [Elevated Plasma Concentration of Reduced Homocysteine in Patients With Human Immunodeficiency Virus Infection. Muller, Fredrik, et al, American Journal of Clinical Nutrition, 1996;63:242-248. Address: F. Muller, Medical Department A and Research Institute For Internal Medicine, Rikshospitalet, N-0027 Oslo, Norway]

Magnesium and Immune Function

Magnesium deficiency produces subtle immunologic sequelae and may be affected by genetic control of blood cell magnesium concentration. Abnormal Cí activation, excess antibody production and susceptibility to allergy and to chronic fungal and vitamin infections have been reported [Galland L. Magnesium and immune function: an overview. Magnesium 7(5-6):290-9, 1988].

Malnutrition and AIDS Survival

In a study of 71 AIDS pts., both the magnitude of body weight loss and the serum albumin level were strongly associated with life-table analysis of survival. Results suggest that nutritional status may represent a major determinant of survival, and the rate of albumin decrease may define a function limiting survival of individual pts. [Chlebowski RT et al. Nutritional status, gastrointestinal dysfunction, and survival in patients with AIDS. Am J Gastroenterol 84(10):1288-93, 1989].

Malnutrition and Immune Function

Work in animals shows that variable immunodeficiencies might arise as a result of malnutrition. Studies of malnourished people provide data showing that immunodeficiency is present, especially abnormalities of mucosal antibody production consistent with primary or secondary immunodeficiency. The mechanisms are unclear and possibilities include mucosal damage, primary B-lymphocyte deficiency, abnormal antigen presentation, or T-lymphocyte dysregulation. [Morgan G. What, if any, is the effect of malnutrition on immunological competence? Lancet 349:1693-5, 1997].

Malnutrition in AIDS Should be Treated

Wasting and weight loss associated with HIV disease results from malnutrition due to decreased food intake, metabolic disturbances, and malabsorption. Rapid wt. loss is associated with non-GI secondary infections and is usually followed by subsequent wt. stability or gain; slower wt. loss is more characteristic of GI disease. All management strategies should incorporate early routine nutritional assessment and counseling [Gramlich LM, Mascioli EA. Nutrition and HIV infection. J Nutr Biochem 6:2-11, 1995].

Melatonin and Immune Function

The antioxidant substance melatonin, produced by the pineal gland the the gut, plays an important part in immune function. If the production of melatonin is experimentally inhibited, a state of immunosuppression is produced, which disappears when melatonin is restored. A role for melatonin treatment in immunodeficiency states and cancers is proposed. [Cutando A et al: Melatonin implications at the oral level. Bull Group Int Rech Sci Stomatol Odontol 1995].

Mind-Body Medicine

At a government conference on Mind-Body Interactions and Disease it was found, in a variety of studies, that stress had an effect on immune function. A study of 68 cancer patients who were treated surgically, and who received cognitive behavioral therapy of relation techniques (coping and problem-solving skills) found fewer patients who were treated with psychological intervention developed reoccurrence of melanoma or died than those not given the treatment. In a second presentation, UCLA physicians reported AIDS patients are harmed by the stresses of the loss of a loved one, often due to AIDS, and the realization of their own mortality due to the diagnosis of AIDS. A study of 800 AIDS patients found those who were pessimistic about their health after being told they were HIV-positive became sick more quickly and died earlier than patients who were more positive about their health. A subgroup of 127 AIDS patients were followed and showed that those who were both mourning the loss of a loved one and were pessimistic about their own health had a slight decrease in T cells. In a different research area, stress was noted to increase a persons susceptibility to infection with rhino viruses. This was presented at the National Institutes of Health conference. [Stress May Speed AIDS, Cancer Progression. Johnson, Roger, Medical Tribune February 10, 1994;28. Stress May Raise Viral Susceptibility. Medical Tribune, February 10, 1994;28. Address: Roger Johnson, Medical Tribune, 257 Park Ave. South, New York, NY 10010, U.S.A.]

Multinutrient Supplements Prevent Age-Related Decline in Immune Function

35 subjects aged 61-79 received supplementation

with micronutrients (vitamin A 800 retinol equivalents, thiamine 2.2 mg, riboflavin 2.6 mg, nicotinamide 30 mg, vitamin B6 3.7 mg, folate 400 mcg, vitamin B12 9 mcg, vitamin C 90 mg, vitamin D2 5 mcg, vitamin E 45 mg, calcium 162 mg, copper 1.5 mg, iodine 0.23 mg, iron 27 mg, magnesium 100 mg, and zinc 22.5 mg) or placebo. After 1 yr., in the supplemented gp., there was a significant increase in CD57 cells (natural killer cells), although T cells and T cell subsets remained constant. In the placebo gp., there was a decrease in T cells, CD4 cells and the CD4/CD8 ratio. Results suggest that supplementation delays the overall decline in immune function with increasing age [Pike J, Chandra RK. Effect of vitamin and trace element supplementation on immune indices in healthy elderly. Int J Vitam Nutr Res 65:117-21, 1995].

Multivitamins and CD4 Counts

266 apparently well-nourished HIV-positive men met the RDA for most nutrients. After 6 yrs. of follow-up, men who took a multivitamin/multimineral supplement daily developed AIDS at a rate 1/3 less than those who did not take a supplement, and supplement use was associated with a 40% lower risk of declining CD4 counts. Vitamin E and iron supplements were particularly protective. [Vitamin Supplements May Help Delay Onset of AIDS", Ince, Susan, Medical Tribune, September 9, 1993;18. Address: Susan Ince, Medical Tribune, 257 Park Ave. South, New York, NY 10010, U.S.A.]

Multivitamins and CD4 Counts

The combined intake of nutrients from foods and supplements for a gp. of 296 HIV-seropositive homosexual and bisexual men was assessed before HIV serostatus was known. The men were followed for 6 yrs.; subjects diagnosed with AIDS at baseline or during the first subsequent yr. were excluded. At baseline, higher total intake of all 11 micronutrients was associated with higher CD4 counts; this finding was significant for each of 6 individual nutrients. Also at baseline, daily multivitamin use was associated with a significantly reduced risk for low CD4 counts (hazard ratio: 0.6). The risk of AIDS was found to decrease as consumption increased for all 11 micronutrients studied. This relationship was statistically significant for riboflavin, vitamin E and iron, and approached significance for niacin, thiamine and vitamin C. Daily multivitamin use was associated with a reduced risk of AIDS (hazard ratio: 0.7) and a significantly reduced risk for low CD4 counts at baseline (hazard ratio: 0.6). However, after adjustment for baseline CD4 T-lymphocyte count, HIV symptoms, and other risk factors, no individual nutrient was significantly associated with the development of AIDS [Abrams BG, Duncan D, Hertz-Picciotto I. A prospective study of dietary intake and acquired immune deficiency syndrome in HIV-seropositive homosexual men. J Acquir Immune Defic Syndr 6(8):949-58, 1993].

Mycobacterium Avium Infection and Cheese

A recent study in the Journal of Infectious Diseases, 1994;170:362- 367 found that patients with advanced HIV with low CD4 counts were at greatest risk of developing Mycobacterium avium complex (MAC). The Mycobacterium avium complex organisms are found in milk and would be expected to thrive in the acidic environment of ageing cheese. It is plausible that consuming hard cheese could be associated with the acquisition of Mycobacterium avium complex through the gastrointestinal tract. Those who had consumed Swiss, gouda or jack cheese within the last 3 months had more than 5 times the risk of developing Mycobacterium avium complex compared with those who did not eat hard cheese. Patients who developed Mycobacterium avium complex infection were about Ω as likely to have showered every day as those who did not develop the infection. [Eating Hard Cheese Linked to AIDS-Related Complex. Laino, Charlene, Medical Tribune, September 22, 1994;14. Address: Charlene Laino, Medical Tribune, 257 Park Ave. South, New York, NY 10010, U.S.A.]

N-Acetyl Cysteine and Cachexia

Pts. most likely to benefit from administration of NAC are those with cachexia. They rapidly feel better and then regain weight. [James JS. AIDS Treatment News, Issue 88, October 6, 1989].

N-Acetyl Cysteine Increases Effectiveness of Neutrophils

In 15 HIV infected children and 17 adults N-acetylcysteine (1 and 5 mM) enhanced the antibody-dependent cellular cytotoxicity of neutrophils. [N-Acetylcysteine Enhances Antibody-Dependent Cellular Cytotoxicity in Neutrophils and Mononuclear Cells From Healthy Adults in Human Immunodeficiency Virus-Infected Patients. Roberts, Robert, L., et al, Journal of Infectious Diseases, 1995;172:1492-502. Address: Dr. Robert L. Roberts, Department of Pediatrics, UCLA Medical Center, 22-387 MDCC, Los Angeles, CA 90095, U.S.A.]

Nutrient Status and AIDS Progression

Mortality from Aids was compared with diet in 281 HIV positive individuals between 1984 and 1992. Those with the highest intake (from food and supplements) of vitamin B1 had a relative risk (RR) of dying during that period, of only 60% compared with those on the lowest intakes. For vitamin B2 the RR was 59%, for B3 57%, and for beta-carotene 60%. For vitamin B6 taken at levels more than twice the RDA the RR of death was 60%. Zinc supplementation was associated with a higher risk

of mortality at all levels. [Effects of Micronutrient Intake on Survival in Human Immunodeficiency Virus Type 1 Infection. Tang, Alice, M., et al, Amer. J. of Epidemiology, 1996;143(12):1244-1256. Address: Alice M. Tang, Ph.D. Johns Hopkins University School of Hygiene and Public Health Department of Epidemiology 615 N. Wolfe Street, Room E6007 Baltimore, MD 21205, USA. (410) 614-5256 / (410) 955-1836 FAX].

Interview with Alice Tang Published in Clinical Pearls News October 1996

I have an M.S. in biostatistics from Harvard University and a Ph.D. in infectious disease epidemiology from Johns Hopkins University. I have recently been appointed to a faculty position in the Department of Epidemiology at Johns Hopkins University, School of Hygiene and Public Health.

I became interested in the role of nutrition in HIV-1 infection approximately 5 years ago, as a graduate student at Johns Hopkins. I have done research and published in this area for the past 5 years. In our group, my colleague, Dr. Neil Graham has worked in this area for more than 7 years.

Before we began this study, we hypothesized that some of the B-group vitamins (B6 and B12, in particular) would play a role in the natural history of HIV-1 disease progression given their molecular role in the host immune system. There is considerable evidence from both human and animal studies that B-vitamin deficiencies have adverse effects on immune function. Because many of the B-complex vitamins are required for DNA synthesis, deficiencies of these nutrients will certainly affect the rapidly proliferating cell populations of the immune system. Previous epidemiological studies (in HIV-1 infection and other diseases) have reported B-group vitamin deficiencies in association with poor outcomes. The results of our study are consistent with the literature and further suggest that increased intake of these vitamins may help to improve immunological control of HIV-1. What we cannot tell from the study, however, is whether the benefits observed can be attributed to the correction of vitamin deficiencies or to further supplementation beyond already adequate levels. In addition, because intakes of the B-group vitamins were so highly intercorrelated (as they are often found in a single vitamin supplement), we were not able to tell which particular B-group vitamin(s) were associated with improved survival.

Our zinc finding was more of a surprise to us because zinc is also an essential nutrient to the cells of the immune system. In fact, zinc deficiency has been shown to have profound effects on immune response, including hypoplasia of lymphoid tissues, lowered lymphocyte counts, depressed humoral and cell-mediated immunity, impaired delayed-type hypersensitivity reactions and decreased phagocytic function of neutrophils. In HIV-1 infection, low serum zinc levels have been associated with increased immune parameters and increased risk of progression to AIDS. The results of our study, however, showed that increasing intakes of zinc was significantly associated with poor survival.

Excess zinc has been shown to have toxic effects in humans. However, intake levels in these studies were approximately 20 times the intake levels seen in our subjects. Another explanation that has been raised is the possibility that HIV forms zinc fingers which bind zinc in the replication process. In fact, HIV reverse transcriptase is a zinc metalloenzyme. So it is plausible that excess zinc may favor the virus. However, it is still quite speculative that excess oral zinc intake can influence this process. A third possibility, of course, is that this was a chance finding. It does not seem unreasonable, though, to suggest that perhaps a fine balance of zinc intake is needed during HIV-1 infection. The optimal dose of zinc is likely to be one that prevents deficiency but does not provide the virus with any excess zinc to bind. Another colleague at Hopkins is planning a clinical trial to directly address this question.

At this time, we would recommend moderately high doses of B-group vitamin supplements. In our subjects, the ranges at which we observed improved survival were:

Vitamin Supplements:
B1: 5 to 140 x RDA (median = 8 x RDA)
B2: 5 to 118 x RDA (median = 6.7 x RDA)
B6: 2 to 100 x RDA (median = 3 x RDA)
Niacin: 3.5 to 20 x RDA (median = 5 x RDA) food and supplements combined.

In a previous study, we found that the highest quartile of vitamin C intake was marginally associated with a decreased risk of progression to AIDS after adjusting for various cofactors and intake of other nutrients. However, in the present study we found no differences in survival probabilities between subjects with various levels of vitamin C intake. We have seen little evidence that high doses of vitamin C supplements are beneficial in HIV-1 infected individuals.

Nutrient Status and AIDS Progression

Progression to full-blown Aids was compared with diet in 281 HIV positive individuals between 1984 and 1990. Those with the highest intake (from food and supplements) of vitamin C had a relative risk (RR) of progressing to Aids during that period, of only 55% compared with those on the lowest intakes. For vitamin B1 the RR was 60%, and for B3 52%. A moderate (but not high) vitamin A intake was also protective, with a RR of 55%. High zinc intakes were associated with an increased risk of progression to Aids. [Tang AM et al: Dietary micronutrient intake and the risk of progression to acquired immunodeficiency syndrome (Aids) in human immunodeficiency virus type 1 (HIV-1)-infected homosexual men. Am J Epidemiol

138(11):937-51, 1993].

Nutrients, Oxidative Stress and Immune Function

This study of 95 AIDS patients showed significant differences in the RBC fatty acid composition between HIV-positive and HIV- negative individuals. Poly- and di-unsaturated fatty acids decreased and saturated fatty acids increased in the RBCs of patients who were below 400/mm3 of CD4 cells and in the plasma of patients below 50/mm3 of CD4 cells. Red blood cell short chain fatty acids correlated with CD4 cells while polyunsaturated fatty acids correlated to malondialdehyde levels. Plasma vitamin A and selenium decreased in most groups. The modifications in vitamin A and selenium may be related to their consumption subsequent to oxidative stress during HIV infection. Oxidative stress may worsen HIV infection by increasing the death rate of CD4 helper lymphocytes. [Fatty Acids and Plasma Antioxidants in HIV-Positive Patients: Correlation With Nutritional and Immunologic Status. Constans, J., et al, Clinical Biochemistry, August 1995;28:421-426. Address: Joel Constans, Service de Medecine Interne et Pathologie Vasculaire, Hopital Saint-Andre, 1 rue Jean Burguet, 33075 Bordeaux, France]

Nutritional Abnormalities and Immune Function

Nutrition abnormalities occur in approximately 70% of HIV infected homosexual males during early stages of the illness. In this study inadequate status of vitamin B6 was seen in 30%, B12 in 12%, vitamin A in 14%, and vitamin E in 18% of subjects. A large portion of those consuming the RDA levels of nutrients had inadequate nutritional status for B6 (56%), vitamin E (42%), vitamin A (27%) and vitamin B12 (25%). When individuals took higher amounts -- vitamin B6 greater than 10 times the RDA, vitamin B12 greater than 25 times the RDA, vitamin A 11 times the RDA or vitamin E 6 times the RDA -- there was little or no evidence of biochemical deficiency. The authors conclude that the same nutrient intake recommended for the general healthy population is not adequate in HIV-1 infection. [Influence of HIV-1 Infection on Vitamin Status and Requirements. Baum, M.K., et al,in Beyond Deficiency: New Views on the Function and Health Effects of Vitamins. New York Academy of Sciences, February 9-12, 1992/Abstract 15. Address: Dr. M.K. Baum, University of Miami, School of Medicine, P.O. Box 016159, Miami, Florida 33101, U.S.A.]

Nutritional Deficiencies and Immune Function

Review paper on nutritional deficiencies and effects on immune function. [Beisel WR et al: Single-nutrient effects on immunologic functions. JAMA 245(1):53-58, 1981].

Nutritional Deficiencies and Impaired Cellular Immunity

Deficiencies are associated with decreased antibody responses and impaired cellular immunity [Anderson R, Theron A. Effects of B-complex vitamins on cellular and humoral immune functions in vitro and in vivo. Int J Vitam Nutr Res 24:77-84, 1983; Chandra RK. Nutrition and immunity - Basic considerations. Part 1. Contemp Nutr 11(11), 1986].

Nutritional Deficiencies Correlate with AIDS Severity

This study evaluated 25 asymptomatic HIV-positive males mean age of 31 and 18 HIV-seropositive males. With severity of the disease there was a reduction in trace element and vitamin status. The most dramatic was seen for the carotenoids and beta-carotene. The authors conclude that the reduction in carotene and increase in free radicals may be harmful to the patient by suppressing HIV latency in infected macrophages, stimulating viral replication and decreasing cellular and cytotoxic immunity. It is noted that 50 to 60 mg of carotene in another study increased T helper and natural killer cell lymphocytes. [Vitamin, Trace Element and Peroxide Status in HIV Seropositive Patients: Asymptomatic Patients Present a Severe B-Carotene Deficiency. Sappey, C., et al, Clinica Chimica ACTA, 1994;230:35- 42. Address: C. Sappey, Laboratoire Biochemie C., CHRU and Grenoble, BP 217 X, 38043 Grenoble, Cedex, France].

Nutritional Supplementation May Protect Lymphocytes and Improve Resistance to Opportunistic Infections

Nutritional deficiencies can impair immunity and so influence susceptibility to infectious agents, including ones that are common and relatively virulent in AIDS. A variety of nutrients affect several of the immune functions that are defective in HIV-infected individuals. For example, beta-carotene increased the number of CD4 + cells; vitamin D decreased the CD4 + /CD8 + ratio; vitamin E decreased the number of CD8 + cells and increased the CD4 + /CD8 + ratio; and iron increased the number of peripheral lymphocytes in human receiving supplementation. Furthermore, nutritional deficiencies can influence GI function, while infectious diseases can influence nutrient requirements by altering the efficiency of absorption and the rate of tissue metabolism. Malnutrition, depressed serum zinc levels, and intestinal nutrient malabsorption have been found in AIDS patients. These findings suggest that dietary manipulations might diminish the immune defects in HIV infection and enhance resistance to opportunistic infections; however, dietary alterations in immune defects are generally not well quantified and may be small relative to the magnitude of the defects observed

in AIDS patients. Because conflicting or adverse effects have been reported for some nutrients, recommendations for dietary supplementation in HIV-infected pts. are premature and possibly hazardous [Moseson M et al. The potential role of nutritional factors in the induction of immunologic abnormalities in HIV-positive homosexual men. J Acquir Immune Defic Syndr 2(3):235-47, 1989].

Nutritional Supplements and Immune Function

96 independently living, healthy elderly subjects randomly received nutrient supplementation (vitamin A 400 retinol equivalents, beta-carotene 16 mg, thiamin 2.2 mg, riboflavin 1.5 mg, niacin 16 mg, vitamin B6 3 mg, folate 400 mcg, vitamin B12 12.4 mcg, vitamin C 80 mg, vitamin D 4 mcg, vitamin E 44 mg, calcium 200 mg, copper 1.4 mg, iodine 0.2 mg, iron 16 mg, selenium 20 mcg, zinc 14 mg) or placebo. After 1 yr., experimental subjects had higher numbers of certain T-cell subsets and natural killer cells, enhanced proliferation response to mitogen, increased interkeukin-2 production, and higher antibody response and natural killer cell activity [Chandra RK. Effect of vitamin and trace-element supplementation on immune responses and infection in elderly subjects. Lancet 340:1124-7, 1992].

Pesticides and Immune Function

There are many substances in pesticides, herbicides and fumigants that alter the immune system. These include organochlorine, organophosphate, carbamate, pyrethrin and arsenical pesticides as well as mitocides such as Milbex. Pesticides can stimulate, suppress or deregulate the immune system. Most can do all three, depending on factors like dose and concentration. Exposure to pesticides is now a global problem, since spraying in one area results not only in local contamination, but, depending on weather conditions and patterns, may result in contamination thousands of miles away. For example one study on the spraying for a grasshopper epidemic in Central Africa showed those particular pesticides to be in Key West, Florida five days later. They were then traced up the eastern coast of the USA following the Gulf Stream to Bermuda, and then off towards the UK.
In a study at the Environmental Health Centre, Dallas, 81% of 107 patients exposed to pesticides had depressed levels of T and B cells. Their condition improved as pesticides were cleared from their body. [Rea WJ et al: Effects of pesticides on the immune system. J Nutr Med 2:399- 410, 1991].

Saccharomyces Boulardii May be Effective Diarrhoea Treatment

30 AIDS pts. with severe, chronic diarrhea (4-8 liters of watery stool daily for at least 3 mo.) had failed to respond to 4 different anti-diarrheal medications. They received S. boulardii 3 g/d. After 48 hrs., their fecal output decreased to <1 daily. 8 days after the start of treatment, stools were fully formed [Saint-Marc T, Rossello-Prats L, Touraine JL. Efficacy of Saccharomyces boulardii in the treatment of diarrhea in AIDS. Letter. Ann Med Interne (Paris) 142(1):64-5, 1991] (in French).

Selenium and CD4 Count

In 95 patients, mean age of 36 years, who were HIV positive, researchers found serum selenium correlated with CD4 cell counts and with the p24 antigenemia. During follow-up, 34 patients died, and 47 had an AIDS-defining opportunistic infection. Death correlated with CD4 cells, p24 antigenemia, and serum selenium. Death and opportunistic infection correlated with CD4 cell counts and serum selenium. The authors note that serum selenium is related to the prognosis of HIV patients irrespective of CD4 cells. Selenium acts as an antioxidant through seleno-dependent glutathione peroxidase, which catalyzes the degradation of H202, or hydroperoxide, at the expense of reduced glutathione and may decrease the effects of oxidative stress found in HIV-positive patients. Free radicals play a role in lymphocyte activation and in HIV replication. This data suggests that a selenium supplement, which is able to increase serum selenium levels, should be evaluated in larger trials as an adjunctive therapy in AIDS. [Serum Selenium Predicts Outcome in HIV Infection. Constans, Joel, et al, Journal of Acquired Immunodeficiency Syndromes And Human Retrovirology, 1995;10(3):392. Address: Joel Constans, Service de Medecine Interne et Pathologie Vasculaire, Hopital Saint-Andre, Bordeaux, France]

Selenium and Immune Function

A group of elderly subjects experienced significant stimulation of several immune system parameters after 6 months' supplementation with selenium. [Peretz A et al: Lymphocyte response is enhanced by supplementation of elderly subjects with selenium-enriched yeast. Am J Clin Nutr 53(5):1323-8, 1991]

Selenium and Protection of Cells from Oxidative Stress

Eighteen HIV-infected controls were compared to 14 subjects receiving 100 ug of selenium per day (250 ug L-selenomethionine) and 13 patients received beta-carotene at 60 mg/day for 12 months. With selenium or beta-carotene supplementation there was no significant difference observed in SOD activity compared to baseline. Glutathione peroxidase activity increased significantly after selenium treatment, whereas there was a slight increase found after beta-carotene treatment. There was a significant increase in glutathione values at 12 months compared with baseline after the selenium and beta-carotene supplementation. Selenium supplementation may be of great interest in protecting cells against

oxidative stress. HIV-infected patients have selenium and vitamin A deficiencies compared to unaffected controls and may benefit from supplementation. [The Enzymatic Antioxidant System in Blood and Glutathione Status in Human Immunodeficiency Virus (HIV)-Infected Patients: Effects of Supplementation With Selenium or B-Carotene. Delmas-Beauvieux, Marie-Christine, M.D., et al, American Journal of Clinical Nutrition, 1996;64:101-107. Address: M-C Delmas-Beauvieux, Laboratoire Biochimie Medicale A, Universite Bordeaux II, 146 Rue Leo Saignat, 33077 Bordeaux, France]

Selenium and T Cells

With selenium deficiency, helper T cell numbers are diminished, and increase in response to supplementation [Shils M et al. Selenium deficiency and immune functions in home TPN patients. Presentation at the American Society of Clinical Nutrition, 1983].

Selenium Could Influence the Course of Immunodeficiency in a Dose-dependent Manner

Selenium inhibits reverse transcriptase activity in RNA-virus-infected animals. AIDS patients frequently have selenium deficiency with increased levels of malondialdehyde, a marker of lipid peroxidation. Selenium could influence the course of HIV-induced disease at all stages in a dose-dependent manner. Theoretic dosages range between 400 mcg/day to 8 mg/d for rapid body replenishment of selenium stores. For continuous administration, the selenium dose should not exceed 1 mg/d. Simultaneous selenium supplementation may potentiate the efficacy of AIDS vaccines and other biological or prophylactic therapies. Selenium supplementation may also reduce the toxicity of drug treatments in AIDS. [Selenium in the Maintenance and Therapy of HIV-Infected Patients. Schrauzer, Gerhard, N. and Sacher, Juliane, Chemico-Biological Interactions, 1994;91:199-205. Address: Gerhard N. Schrauzer, University of California, San Diego, Department of Chemistry and Biochemistry, 0314, La Jolla, CA 92093 U.S.A.]

Selenium Deficiency

Compared with normals, those diagnosed as HIV+ have evidence of selenium deficiency as determined by reduced glutathione peroxidase activity. [Dworkin BM et al: Selenium deficiency in the Acquired Immunodeficiency Syndrome (Aids). J Parent and Ent Nutr 10:405-407, 1986. Dworkin BM et al: Abnormalities of blood selenium and glutathione peroxidase activity in patients with Aids syndrome and Aids-related complex. Biol Trace Elem Res 15:167-177, 1988]

Selenium Deficiency

Selenium deficiency causes a heart muscle disease (congestive cardiomyopathy). Selenium deficiency is known to be common among Aids patients. Eight Aids patients examined at autopsy were all found to be abnormal, with changes related to those found in cardiomyopathy. [Dworkin BM et al: Reduced cardiac selenium content in the acquired immunodeficiency syndrome. J Parent Ent Nutr 13(6):644-7, 1989]

Selenium Deficiency

This study evaluated 12 patients with AIDS and compared them to normal controls and found low plasma and red blood selenium levels. Selenium is important in the activity of the enzyme glutathione peroxidase. In another study, 12 AIDS patients and 8 AIDS-Related- Complex (ARC) patients compared with normal controls had reduced blood selenium and glutathione peroxidase levels. Glutathione peroxidase levels were decreased by 45% in AIDS patients and 27% in ARC versus control patients. Both plasma selenium and glutathione peroxidase levels were correlated with total lymphocyte counts. Cardiac selenium levels, upon autopsy in AIDS patients, were significantly less than controls. Two of the cases autopsied had evidence of cardiomyopathy consistent with that found in Keshan's disease, a type of cardiomyopathy associated with low blood selenium levels. Inadequate selenium intake in 1 survey was found in 17% of clinically stable HIV positive outpatients compared to 71% of inpatients with AIDS. The author concludes selenium deficiency is common in HIV patients as documented by low plasma and red blood cell selenium, diminished glutathione peroxidase and low cardiac selenium levels. Selenium deficiency appears to be part of protein-calorie malnutrition common in AIDS patients. [Selenium Deficiency and HIV Infection and the Acquired Immunodeficiency Syndrome (AIDS). Dworkin, Brad M., Chemico- Biological Interactions, 1994;91:181-186. Address: Brad M. Dworkin, Section of Nutrition, The Sarah C. Upham Division of Gastroenterology, New York Medical College, Valhalla, NY 10595, U.S.A.]

Selenium Improves Energy, GI Problems, Skin Infections, Body Weight and Slows Down Loss of CD4 Cells

In a 1988 pilot study with HIV-infected pts. with ARC or AIDS, pts. showed subjective improvement and tolerated the selenium-yeast preparation very well. [Present indications are that selenium supplementation increases the energy, reduces gastrointestinal problems and skin infections, prevents weight loss, improves mood and appears to slow down the loss of CD4 cells. Gerhard N. Schrauzer, Professor Emeritus, University of California, San Diego - interviewed in Clinical Pearls News 7(4), April, 1997].

Selenium Supplementation and Immune Responses

22 healthy volunteers received 200 mcg/d of sodium selenite for 8 wks., or in vitro their peripheral blood lymphocytes were supplemented with 1 x 10 7 M selenium. In both cases, there was significant augmentation of the ability of peripheral blood lymphocytes to respond to stimulation from phytohemagglutinin or alloantigen. Selenium supplementation modulates T lymphocyte-mediated immune responses in humans that depend on signals generated by the interaction of interleukin 2 and Il2-R [Roy M et al. Supplementation with selenium and human immune cell functions. Biol Trace Elem Res 41:103-14, 1994].

Selenium Supplements Stimulate Immune Functions

Selenium affects all components of the immune system. A deficiency of selenium has been shown to lower resistance to microbial and viral infections, neutrophil function, antibody production, proliferation of T and B lymphocytes and effectiveness of T lymphocytes and natural killer cells. Supplementation with selenium has been shown to stimulate all these functions. [Kiremidjian-Schumacher L et al: Selenium and immune responses. Environ Res 42(2):277-303, 1987].

Survey of Vitamin Supplement Use

A survey of vitamin supplement use and circulating concentrations of 22 nutrients and glutathione in 64 HIV+ men and women, revealed lower mean circulating concentrations of several nutrients compared with controls. The authors conclude that the low magnesium levels may be particularly relevant to symptoms such as fatigue and that the abnormal nutrient levels may contribute to the pathogenesis of the disease. [Skurnick JH et al: Micronutrient profiles in HIV-1-infected heterosexual adults. J Acquir Immune Defic Syndr Hum Retrovirol 12(1):75-83, 1996].

Vitamin A and Beta Carotene Levels Correlate with CD4 Counts In Pregnant Immunodeficient Women

Serum vitamin A and beta- carotene concentrations were measured in 74 pregnant seropositive females and in 148 pregnant seronegative controls. Both parameters were decreased in HIV-1 infected women in the first trimester with CD4 counts lower than 200 cells/uL. B-carotene and vitamin A correlate with CD4 counts. [Serum Vitamin A and B-Carotene Levels in Pregnant Women Infected With Human Immunodeficiency Virus-1. Phuapradit, Winit, M.D., M.P.H., et al, Obstetrics and Gynecology, April, 1996;87(4):564-567. Address: Winit Phuapradit, M.D., M.P.H., Department of Obstetrics and Gynecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok 10400 Thailand].

Vitamin A Deficiency and CD4 Cells

This study evaluated vitamin A levels and helper cells among other parameters in 179 HIV positive subjects. More than 15% of the HIV positive patients had plasma vitamin A levels less than 1.05 umol/L, a level consistent with vitamin A deficiency. The vitamin A deficiency was associated with lower helper cells (CD4). In the HIV positive patients, vitamin A deficiency was associated with increased mortality. The author notes the use of vitamin A with HIV infection and AIDS should be approached with caution. It is not certain whether vitamin A will actually activate or reduce the expression of HIV-1. [Increased Mortality Associated With Vitamin A Deficiency During Human Immunodeficiency Virus Type I Infection. Semba, Richard D., M.D., M.P.H., et al, Archives of Internal Medicine, September 27, 1993;153:2149-2154. Address: Dana Center, Wilmer Institute, The Johns Hopkins Hospital, 600 N. Wolfe St., Baltimore, MD 21287, U.S.A.]

Vitamin A Deficiency and CD4 Count

104 HIV-infected adults in different stages were studied including 40% with AIDS. The vitamin A-deficient pts. had a significantly lower mean CD4 T-cell count than those with normal plasma vitamin A levels ($p<0.04$) and significantly lower CD3 T-cells bearing CD 28 surface antigen ($p<0.05$) and L-selectin ($p<0.01$). Findings suggest that vitamin A deficiency may be associated with 3 different T-cell subset abnormalities, although these abnormalities cannot be attributed solely to vitamin A deficiency [Semba RD, Park S, Royal W, Griffin DE. Vitamin A deficiency and T-cell subpopulation in HIV-infected adults. Nutr Res 16:915-23, 1996].

Vitamin A Deficiency and T Cell Abnormalities

55 vitamin A-deficient children aged 3-6 yrs. were compared to 25 controls. Vitamin A-deficient children had underlying immune abnormalities in T-cell subsets and these abnormalities were reversible with vitamin A supplementation [Semba RD, Muhilal, Ward BJ, et al. Abnormal T-cell subset proportions in vitamin-A-deficient children. Lancet 341:5- 8, 1993].

Vitamin A Deficiency

This study evaluated 60 AIDS patients and found 22% percent had low levels of retinol in their blood. There was a 241-fold greater prevalence of low retinol levels as compared to a sample of the normal U.S. population. Twenty-seven percent of those who had inadequate intakes had serum retinol levels below the normal range. These data suggest that regardless of intake patients with AIDS may be a population at risk for vitamin A deficiency. An investigation on the value of vitamin A supplementation on the clinical progression of AIDS is warranted. [Vitamin A Deficiency in Non-Vitamin-Supplemented Patients With AIDS: A Cross-Sectional Study. Karter, Dennis L., et al, The Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology, 1995;8:199-203.

Address: Dennis L. Karter, M.D., Department of Infectious Disease, St. Vincent's Hospital, Cronin 665, 153 West 11th St., New York, NY 10011, U.S.A.]

Vitamin A Reduces Death From Diarrhoea in Children

This was a randomized, placebo-controlled trial of vitamin A supplementation carried out in 118 offspring of HIV-infected women in Durban South Africa. The infants received a supplement of 50,000 I.U. of vitamin A at 1 and 3 months of age; 100,000 I.U. at 6 and 9 months of age; and 200,000 I.U. at 12 and 15 months of age. The supplemented group had a lower overall morbidity than the placebo group. Among the 85 children of known HIV status morbidity associated with diarrhea was significantly reduced in the supplemented infected children, whereas there was no effect of supplementation on diarrheal morbidity noted among the uninfected children. [The Effects of Vitamin A Supplementation on Morbidity of Children Born to HIV-Infected Women. Coutsoudis, Anna, Ph.D., et al, American Journal of Public Health, August 1995;85(8):1076-1081. Address: Anna Coutsoudis, Ph.D., Department of Pediatrics and Child Health, 23062 [AIDS, inf]University of Natal, P.O. Box 17039, Congella 4013, South Africa]

Vitamin A Supplementation

Exacerbation of AIDS may result in vitamin A depletion. Vitamin A at the level of 13,000 to 20,000 I.U. per day may cause slower progression to AIDS. [Vitamin A Depletion in HIV Infection and AIDS. Jolly, P.E., et al, AIDS, 1996;10(1):114. (Address: P.E. Jolly, Department of International Health, School of Public Health, University of Alabama at Birmingham, 720 S. 20th Street, Birmingham, Alabama 35294-0008, U.S.A.]

Vitamin A, B12 and Zinc Repletion Raises CD4 count

In evaluating 108 HIV-1 seropositive homosexual males it was found that a deficiency in vitamin A or vitamin B12 was associated with a decline in CD4 (helper) cell counts while normalization of vitamin A, vitamin B12 and zinc was associated with higher CD4 cell counts. Zidovudine did not affect these values. Low baseline values of vitamin B12 predicted accelerated HIV-1 disease progression. This data suggests that micronutrient deficiencies are associated with HIV-1 progression and raises the possibilities that normalizing these micronutrient levels may increase symptom- free survival. [Micronutrients and HIV-1 Disease Progression. Baum, Marianna K., et al, AIDS, 1995;9:1051-1056. (Address: Dr. M.K. Baum, Department of Epidemiology and Public Health, University of Miami School of Medicine, P.O. Box 016069 (R669), Miami, FL 33101, U.S.A.]

Vitamin A, Beta Carotene and Arginine Supplements May Enhance the Efficacy of Vaccines

In immune-competent and immune-incompetent mice that were inoculated with pox vaccine, supplemental vitamin A reduced the severity of the illness and prevented death. Mice without vitamin A pretreatment died. The authors note that in their work with monkeys, nutritional supplementation that supports immune function also enhances the efficacy of some vaccines. These authors believe that supplementation with immune enhancing nutrients, such as vitamin A, beta-carotene, and arginine, will help AIDS patients tolerate and have more success with vaccines and treatment. [Vitamin A Supplements and the AIDS Vaccine. Seifter, E., et al, Journal of the American College of Nutrition, 1991;548/Abstract 46. Address: Dr. E. Seifter, Albert Einstein College of Medicine, Bronx, New York 10461 U.S.A.]

Vitamin B12 and Cognitive Function

Eighty-four HIV type I infected homosexual men, 20 to 55 years of age were evaluated for the relationship between plasma vitamin B12 status and change in information processing speed. Deficiency was defined as vitamin B12 levels of less than 200 pg/ml. Significant improvement was seen in neuropsychological testing with normalization or maintaining of vitamin B12 levels, while a decline in these levels resulted in a reduction of scores. The authors conclude normalizing vitamin B12 levels in HIV type I patients may provide significant improvement in speed of retrieving overlearned information from long-term memory. [Plasma Cobalamin Levels Affect Information Processing Speed in a Longitudinal Study of HIV-1 Disease. Shor-Posner, Gail, Archives of Neurology, February 1995;52:195-201. (Address: Gail Shor-Posner, PhD, Department of Epidemiology and Public Health, University of Miami School of Medicine, Miami, FL 33101, U.S.A]

Vitamin B12 Deficiencies Doubles Risk of Progression to AIDS

Of 310 subjects who were seropositive for the HIV virus over a 9-yr. follow-up, those who had serum vitamin B12 concentrations of <120 pmol/L had significantly shorter AIDS-free time than those with adequate vitamin B12 levels (4 vs. 8 yrs.). Low vitamin B12 concentrations proceeded disease progression. Low baseline B12 was associated with a nearly two-fold increased risk for progression to AIDS [Tang AM, Graham NM, Chandra RK, Saah AJ. Low serum vitamin B-12 concentrations are associated with faster human immunodeficiency virus type 1 (HIV-1) disease progression. J Nutr 127:345-51, 1997].

Vitamin B12 Deficiency and AIDS Cognitive Changes

Twenty-five percent of asymptomatic HIV-1 infected subjects have either marginal or frank B12 deficiency. Subjects with the lowest plasma vitamin B12 levels performed more poorly on tests of cognitive function, which include measures of information, processing speed, and visuospatial problem-solving skills. The authors feel that vitamin B12 deficiency may be a cofactor in subtle cognitive changes in asymptomatic HIV-1 infected patients. [Plasma Vitamin B12 Level as a Potential Cofactor in Studies of Human Immunodeficiency Virus Type 1-Related Cognitive Changes. Beach, Richard S., M.D., Ph.D., et al, Archives of Neurology, May 1992;49:501-506. Address: Richard S. Beach, M.D., Ph.D., Division of Neonatology, Broward General Medical Center, 1600 S. Andrews Avenue, Ft. Lauderdale, FL 33136, U.S.A.]

Vitamin B12 Deficiency in HIV-Diagnosed Individuals With Diarrhoea

This study evaluated vitamin B12 status in 36 HIV-infected patients with chronic diarrhea. Eight subjects with low levels of vitamin B12 and 8 with normal B12 levels underwent further evaluation. The results suggested below-normal levels of vitamin B12 are frequent in HIV-infected patients with chronic diarrhea. Screening for vitamin B12 deficiency in HIV-infected patients with chronic diarrhea is strongly recommended. [Malabsorption and Deficiency of Vitamin B12 in HIV-Infected Patients With Chronic Diarrhea. Ehrenpreis, Eli D., M.D., et al, Digestive Diseases and Sciences, October 1994;39(10):2159-2162. Address: Eli D. Ehrenpreis, M.D., Department of Gastroenterology, Cleveland Clinic Florida, 3000 West Cypress Creek Road, Fort Lauderdale, FL 33309, U.S.A.]

Vitamin B12 Deficiency May be Diagnosed as AIDS Dementia

A 33-year-old man with advanced AIDS dementia complex (progressive confusion, generalized weakness, and urinary incontinence) had low serum vitamin B12 levels due to malabsorption associated with low gastric intrinsic factor secretion. Within 2 mo. of initiating vitamin B12 supplementation, the dementia resolved [Herzlich B, Schiana T. Case report: Reversal of apparent AIDS dementia complex following treatment with vitamin B12. J Intern Med 233:495-7, 1993].

Vitamin B12 Deficiency May be Diagnosed as AIDS Dementia

Decreased vitamin B12 levels occur in up to 20% of Aids patients, and may result in dementia symptoms diagnosed as Aids dementia. These symptoms resolved in two months in one patient diagnosed with Aids dementia who was treated with vitamin B12. [Herzlich BC et al: Reversal of apparent Aids dementia complex following treatment with vitamin B12. J Intern Med 233(6): 495-7, 1993].

Vitamin B12 Malabsorption in AIDS

This study evaluated in 10 AIDS patients how much stomach acid they produced, intrinsic factor secretion (which is a substance that allows for B12 absorption), vitamin B12 absorption, serum vitamin B12 and other transport factors for B12. It is interesting to note the 10 patients ranged between the age of 29 and 43. Four of the 10 subjects had low gastric acid output which was maximally less than 1.5 mEq/h. The other six had normal gastric acid output greater than 2.5 mEq/h. Four patients had low intrinsic factor output. The authors concluded that low intrinsic factor secretion is common in AIDS patients and contributes to vitamin B12 malabsorption. This may be due in part to injury to the gut mucosa from a variety of sources, including the AIDS virus itself. Since there is low holotranscobalamin II, there may be a reduced delivery of vitamin B12 to tissues before there is depletion of vitamin B12 in the serum. The authors concluded vitamin B12 supplementation may be warranted in all patients with advanced AIDS. [Decreased Intrinsic Factor Secretion in AIDS: Relation to Parietal Cell Acid Secretory Capacity and Vitamin B12 Malabsorption. Herzlich, Barry C., M.D., et al, American Journal of Gastroenterology, 1992;87(12):1781-1788. Address: Barry C. Herzlich, M.D., Department of Medicine, Maimonides Medical Center, 4802 Tenth Avenue, Brooklyn, NY 11219, U.S.A.]

Vitamin B6 and Immune Function

Since vitamin B6 is required for normal nucleic acid and protein synthesis and for cellular multiplication, isolated B6 deficiencies cause more profound effects on immune system functions than deficiencies of any other B-group vitamin. Also, unlike any other B vitamin, deficiencies appear to inhibit cell-mediated immune functions as well as humoral responsiveness to a variety of test antigens [Axelrod AE, Traketellis AC. Relationship of pyridoxine to immunological phenomena. Vitam Horm 22:591-607, 1964].

Vitamin B6 and Immune Function

Vitamin B6 deficiency is associated with a reduction in number and function of both T and B lymphocytes, reduced delayed hypersensitivity responses, greatly diminished response to antigenic challenge, decreased secretion of immunoglobulins, reduced thymic epithelial cell function and reduced phagocytic activity of neutrophils [Levy JA. Nutrition and the immune system, in DP Stites et al, Eds. Basic and Clinical Immunology. 4th Edition. Los Altos, CA., Lange Medical Publications, 1982:297-30; Rall LC, Meydani SN. Vitamin B6 and immune competence. Nutr Rev 51(8):217-25, 1993].

Vitamin B6 and T Lymphocytes

9 normal volunteers received 300 mg daily of vitamin B6. After 2 mo., there was an increase in T4 lymphocytes. [Folkers K, Morita M, McRee Jr. J. The activities of coenzyme Q10 and vitamin B6 for immune response. Biochem Biophys Res Commun 193:88-92, 1993].

Vitamin B6 Deficiency and Reduced Immunity

Animal and human studies suggest that vitamin B6 deficiency impairs immune responses, including antibody production and white cell differentiation and maturation. A B6 deficiency has been associated with reduced immunity in the elderly, HIV+ individuals, and rheumatoid arthritis. [Rall LC et al: Vitamin B6 and immune competence. Nutr Rev 51(8):217-25, 1993].

Vitamin B6 Depletion and Immune Function

32 HIV-positive male homosexuals with persistent generalized lymphadenopathy but no other symptoms (CDC stage III) were studied. None admitted to using IV drugs and none was receiving antiviral medications. Based on in vitro coenzyme stimulation of red cell aspartate aminotransferase, 34% had evidence of B6 deficiency and another 30% had marginal status, even though total B6 intake was usually considerably greater than the RDA. Although mean daily B6 intake was greater in pts. than in HIV-negative controls, 67% of controls (vs 36% of pts.) had normal B6 status. B6-deficient pts. had significantly decreased lymphocyte responsiveness to phytohemagglutinin and pokeweed, and reduced natural killer cell activity, compared to pts. with normal B6 status. [Baum MK, Mantero-Atienza E, Shor-Posner G et al. Association of vitamin B6 status with parameters of immune function in early HIV-1 infection. J Acquir Immune Defic Syndr 4:1122-32, 1991).
Address: Dr. M.K. Baum, Department of Epidemiology and Public Health, University of Miami School of Medicine, P.O. Box 016069 (R-669), Miami, FL 33101, U.S.A.]

Vitamin B6 Supplementation Improves Immunocompetence

Experimental Study: 12/18 hemodialysis pts. were found to be B6-deficient and also showed reduced immunocompetence manifested by decreased T-lymphocyte rosette formation and reduced T-cell transformation in response to mitogens. Treatment with pyridoxine 100 mg/day for 4 wks. normalized these parameters [Sorice F, De Simone C, Meli D, et al. Effect of vitamin B6 on some immune responses in chronic uremia. Acta Vitaminol Enzymol 2:171-8, 1980] (in Italian).

Vitamin B6 Supplements Improve Lymphocyte Levels In the Elderly

15 elderly persons aged 65- 81. some of whom had low pre-supplement levels of pyridoxal-5-phosphate, received pyridoxine hydrochloride (vitamin B6) 50 mg daily or placebo. After 1-2 mo., treated subjects showed significant increases in lymphocyte responses to mitogens and antigens, and percentages of T3+ and T4+ but not T8+ cells increased significantly [Talbott MC et al. Pyridoxine supplementation: Effect on lymphocyte responses in elderly persons. Am J Clin Nutr 46(4):659-64, 1987].

Vitamin C and Immune Function

Elderly volunteers received either vitamin C 500 mg IM daily or placebo. After 1 mo., the T lymphocytes of treated pts. showed an enhanced proliferative response [Kennes B et al. Effect of vitamin C supplements on cell-mediated immunity in old people. Gerontology 29:305-10, 1983].

Vitamin C Megadoses and Opportunistic Infections

This article reviews the hypothesis that vitamin C is valuable in the treatment of AIDS if given continuously at massive dosages of 50 gms to 200 gms per day. Opportunistic infections are more readily treated with massive doses of vitamin C. The author believes the T-cell destruction may possibly be averted if vitamin C is given early enough on in AIDS. A topical vitamin C paste has been effective in the treatment of herpes simplex and, to a lesser extent, in the treatment of Kaposi's lesions. If long-term oral supplementation is used, a straw should be utilized to protect the enamel of the teeth. Also, sickle cell anemia and G-6-PD deficiencies should be ruled out in people of Mediterranean or African-American descent before high dose vitamin C is given. High doses of any nutrient may result in induced deficiencies of other nutrients and should be followed by a nutrition specialist. [Vitamin C in the Treatment of Acquired Immune Deficiency Syndrome (AIDS). Cathcart, Robert F., III, Medical Hypothesis, 1984;14:423- 433. Address: Robert F. Cathcart, III, 58 N. El Camino Real, 119, San Mateo, CA 94401, U.S.A.]

Vitamin D Deficiency and CD4 Counts

31 symptomatic HIV-infected pts. had significantly lower serum levels of 1,25 vitamin D (1,25 D) than 22 asymptomatic HIV-infected pts. and healthy controls. In HIV-infected pts., serum 1,25 D levels positively correlated with CD+ cell counts ($p<0.05$), deemed the most important marker of immunodeficiency in HIV-infected pts. and widely used to predict survival and progression to AIDS. Pts. with the lowest serum levels (<25 pg/ml) had significantly shorter survival times than the other HIV-infected pts. ($p<0.01$). Decreased 1,25 D concentrations were unrelated to vitamin D deficiency. [Haug S, Muller F, Aukrust P, et al. Subnormal serum concentrations of 1,25-vitamin D in human immunodeficiency virus infection: Correlation with degree of immune deficiency and survival. J Infect Dis 169:889-92, 1994].

Vitamin E and Beta Carotene Deficiency

In 20 children from 1 to 6 years of age with HIV infection, vitamin E and beta-carotene plasma levels were significantly lower than average values of the control group. The authors feel that the quantity of vitamins administered to seropositive children may need to be considerably higher. [Antioxidant Vitamins and Immunodeficiency. Mastroiacovo, P., et al, International Journal of Vitamin Nutrition Research, 1996;66:141-145. Address: Dr. P. Mastroiacovo, Institute of General Physiology, "La Sapienza" University, Faculty of Pharmacy, 00185 Rome, Italy]

Vitamin E and Infections

In a retrospective study of 100 healthy persons over age 60, there was a statistically significant correlation between serum vitamin E levels and the number of infections during the previous 3 yrs. [Chavance M et al. Immunologic and nutritional status among the elderly, in AL deWeck, Ed. Lymphoid Cell Function in Aging. Evrage, Rijswijk, 1984].

Vitamin E Deficiency

Of 311 HIV-seroprevalent homosexual/bisexual men, it was shown that men in the highest quartile of serum vitamin E level, experienced a 34% lesser risk of progression of AIDS compared to those in the lowest quartile [Tang AM et al. Association between serum vitamin A and E levels and HIV-1 disease progression. AIDS 11:613-20, 1997].

Vitamin E Status and Immune Parameters

This study evaluated the relationship between plasma levels of IgE and immune parameters in 100 asymptomatic HIV-1 seropositive and 42 HIV-1 seronegative homosexual males. Approximately 18% of the HIV-1 seropositive population showed evidence of plasma vitamin E deficiency. There was a dramatic elevation of IgE levels in 9 vitamin E deficient seropositive subjects. The low vitamin E levels are related at least in part to dietary intake. There was a strong relationship seen between IgE and CD8 (suppressor cells) and between IgE level and vitamin E deficiency. These results show that vitamin E deficiency may be a contributory factor in IgE elevation (immunoglobulin dysregulation) during the early stages of HIV infection. In some studies vitamin E supplementation has shown enhancement of zidovudine therapy and improvement in clinical status with recurrent infections. There appears to be a vitamin E- induced decrease in the immunosuppressor prostaglandin E2 and other lipid peroxidation products seen with improved immune responsiveness in healthy individuals. [Elevated IgE Level in Relationship to Nutritional Status and Immune Parameters in Early Human Immunodeficiency Virus Type I Disease, Shor-Posner, Gail, Ph.D., et al, Journal of Allergy and Clinical Immunology, 1995;95:886-892. Address: Gail Shor-Posner, Department of Epidemiology and Public Health, University of Miami School of Medicine, P.O. Box 01609 (R-669), Miami, FL 33101, U.S.A.]

Vitamin E Supplementation Reduces Oxidative Stress and Enhances Immune Function

This is a review article on the role of vitamin E in AIDS. Vitamin E is involved with cytokines, oxidative stress, general nutrition and general immune function. Vitamin E is unique in that it is a potential therapeutic agent that has little, if any, toxicity when taken orally. In vitamin K deficiency, vitamin E can exacerbate the defect in coagulation. With regards to HIV, vitamin E should not be considered a direct antiretroviral drug, but rather a substance that enhances immune function and acts as an antioxidative agent with antiviral effects through indirect mechanisms. These mechanisms may possibly include the inactivation of triggers of HIV gene expression. Vitamin E may be used in combination therapy with other pharmacologic agents such as zidovudine. Vitamin E may increase the likelihood of more complete viral suppression by reducing oxidative stress and enhancing immune function. It may allow antiretroviral drugs to be used at lower dosages, thereby limiting drug toxicity and limiting the production of drug- resistant HIV strains. Clinical trials involving vitamin E as a potential therapeutic agent in the role of AIDS have not been done. [Potential Therapeutics of Vitamin E (Tocopherol) in AIDS and HIV. Wang, Yuejian and Watson, Ronald Ross, Drugs, 1994;48(3):327-338. Address: Dr. Ronald R. Watson, Department of Family and Community Medicine, University of Arizona, Tucson, AZ 85724, U.S.A.]

Zinc and Immune Function

Animal studies of zinc deficiency have shown that a moderate period of suboptimal zinc causes thymic atrophy, lymphopenia, and alterations in the various subsets of lymphocytes and mononuclear phagocytes causing significant reduction in antibody-mediated responses to both T-cell dependent and T-cell independent antigens. Cytolytic T cell responses, natural killer cell activity, and delayed-type hypersensitivity reactions are also depressed. In humans with primary and secondary zinc deficiencies, pts. exhibit atrophic thymuses, lymphopenia, anergic delayed hypersensitivity responses, and reduced NK cell activity. Finally, addition of zinc salts to cultures can polyclonally activate lymphocytes as well as augment responses to mitogens [Fraker PJ et al. Interrelationships between zinc and immune function. Fed Proc 45(5):1474-9, 1986].

Zinc Deficiency and Immune Function

Zinc deficiency is associated with impaired

immune responses including impaired lymphocyte proliferation, differentiation and maturation and abnormalities in T-lymphocyte subpopulations [Prasad AS. Zinc: an overview. Nutrition 11(1 Suppl):93-9, 1995].

Zinc Deficiency and Infections

228 pts. with AIDS were studied. Patients with zinc deficiency had a significantly higher incidence of bacterial infection than zinc-normal patients. Patients with borderline zinc levels had an intermediate incidence of bacterial infection. Hypozincemia was associated with an increased incidence of systemic bacterial infection. The authors recommend a daily multivitamin that contains 15-60 mg of zinc oxide or zinc sulfate in addition to a well-balanced diet [Koch J et al. Zinc levels and infections in hospitalized patients with AIDS. Nutrition 12(7/8):515-8, 1996].

Zinc Deficiency

Low zinc status has been demonstrated in Aids sufferers and may cause thymic hormone failure. [Fabris N et al: Aids, zinc deficiency and thymic hormone failure. JAMA 259(6):839-840, 1988]

Zinc Gluconate and Suppressor T Cells

42 pts. with AIDS-related complex or cancer in remission and with severe, stable helper-T cell deficiency received 125 mg zinc gluconate twice daily. After 3 wks., while there was no significant change in helper-T cells, suppressor T-cells increased significantly in those with initially low suppressor T-cell counts, and decreased significantly in those with initially normal or high suppressor T-cell counts [Mathe G et al. A phase II trial of immunorestoration with zinc gluconate in immunodepressed cancer patients. Biomed Pharmacother 40(10):383-5, 1986].

Zinc Supplements Extend Survival and Reduce KS and Opportunistic Infections

HIV-positive pts. with an improved response to intradermal antigens following the application of topical, absorbable zinc at the test sites received zinc supplementation in addition to standard therapy. Retrospectively, the response of 37 pts., 17 of whom had received zinc supplementation, was compared. Both gps. were similar in regard to age, sex, weight, height, body mass index, initial zinc serum level, cell-mediated immune response in native and augmented tissue zinc levels, CD4 counts, platelets, hemoglobin, and serum albumin. Pts. in the CDC gp. IV (AIDS) lived 11.5 mo. ± 9.2 for the unsupplemented gp. vs. 25.9 mo. ± 28.3 for the zinc-treated gp. ($p<0.001$). Moreover, development of Kaposiís sarcoma and opportunistic infections were markedly reduced in the zinc-treated gp. [de Gordon AM. Effects of adjuvant therapy with zinc in human immunodeficiency infection. Abstract. J Am Coll Nutr 11(5):601, 1992].

Zinc Supplements Improve Body Weight and CD4 Count

Aids patients suffer from reduced zinc bioavailability. Since zinc deficiency is associated with immune abnormalities and an increased susceptibility to infectious diseases, zinc supplements were administered for 30 days to AZT-treated stage III and stage IV Aids patients. Body weight increased or stabilized, the CD4+ cell count increased and the frequency of opportunistic infections was reduced in the following 24 months. [Mocchegiani E et al: Benefit of oral zinc supplementation as an adjunct to zidovudine (AZT) therapy against opportunistic infections in AIDS. Int J Immunopharmacol 17(9):719-27, 1995].

Zinc, T Cell Function, Tumour Necrosis Factor and Viral Replication

This general review article notes the importance of zinc in AIDS. Zinc can stimulate T cell function, inhibit tumor necrosis factor (which is shown to be increased with HIV expression), and zinc has a negative effect on viral replication. [The Role of Zinc in Acquired Immunodeficiency Syndrome. Odeh, M., Journal of Internal Medicine, 1992;231:463-469. Address: Majed Odeh, M.D., P.O. Box 6477, Haifa 31063, Israel]

Sources

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2, Sacramento, California 95825, USA
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Conversions

1 IU vitamin A = 0.3 micrograms
1 IU vitamin D = 0.025 micrograms
1 IU vitamin E = 0.7 milligrams if the vitamin is in the usual supplement form of d-alpha tocopherol. Other forms of vitamin E have different equivalences.

human rights & policy

Photo : courtesy of the author

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International Forum for Accessible Science

AIDS: A Matter Of National Security

After a Report of the National Intelligence Council, US President Bill Clinton declared AIDS a matter of National Security on April 30th this year. The numbers of people diagnosed in the US with AIDS and 'HIV', the alleged virus suggested to be its cause, have been declining in the West at least since 1993. Why has the US-government all of a sudden made such a dramatic step?

Some background

In the summer 1996 the US State Department listed the protection of human health and reducing the spread of infectious disease in its Strategic Plan of International Affairs, following a Presidential Decision focusing on AIDS and other infectious diseases by Clinton . Secretary of State Madeleine Albright has since addressed AIDS twice. She introduced an initiative to combat 'HIV'/AIDS to the US government in December of last year. In the December 1999 National Security Report entitled 'A National Security Strategy for a New Century', AIDS is linked with world economy and security. Considered 'killer No. 1' in Africa, the report says HIV is killing over 5,000 people per day on that continent. The US thus makes health issues a matter of world affairs and, hence, world observation. Since then, according to the White House, interagency working groups have been developed expanding initiatives to drive international efforts.

On January 10th 2000 AIDS in Africa was on the agenda of the 15-member Security Council at the UN in New York, put there by this year's president of the UN Security Council, Richard Holbrooke, the US ambassador to the UN. Chairman of the meeting on AIDS was no less than US-vice president Al Gore. Secretary General Kofi Annan - African himself - considers AIDS is overwhelming the continent's health and social services and asked the industrialised world to help.
For the first time in the histories of both the US and the UN, a health matter was considered a Security Council issue.

At the end of April the National Security Council addressed the issue of AIDS in the context of national interests and based on a report by the Centre Intelligence Agency (CIA), Clinton put up US$254 million to combat AIDS abroad for 2001. In early May he issued an Executive Order to prevent the US government from punishing African countries who decide to manufacture their own generic drugs to combat the AIDS crisis whilst respecting Trade-Related Aspects of Intellectual Property Rights Agreements (TRIPS-Agreements).

The African Situation

Both 'HIV' and AIDS statistics are probably not accurate in most countries. This is partially because of the shady science AIDS is based on and partially due to the inaccurate accumulation of so-called 'HIV-positive' persons. However, if you intend to accumulate virtual 'HIV' and AIDS numbers, Africa is the place to do it.

Sophisticated medical diagnosing and *post mortem* examinations are as unaffordable as 'HIV' testing in most of Africa. This leads to unspecific AIDS-diagnostic measures in Africa such as the Bangui Definition by the World Health Organisation (WHO). Hence, at the end of the day the claims about African AIDS have no hard data to back them up. Unspecific symptoms are called AIDS in Africa. Virtual numbers - estimates exceeding the actual reported cases by as much as 38 fold (1998) - are added to compensate for the expected underreporting.

This gave the figure of 23.3 million 'HIV positive' people in Africa in 1999 as claimed by UNAIDS.

South African President Thabo Mbeki, the successor of Nelson Mandela, has realised the many problems with AIDS in Africa. Rather than relying on secondhand information and strategies where success has yet to materialise, he called for an international panel to re-assess AIDS in Africa. One of the aims is to put forward realistic solutions as opposed to more dependency on the West. Rather than appreciating this considered effort, the international media has attacked him indifferently and viciously, like guards of some dogmatic belief system that cannot be scientifically verified even after 20 years of billion dollar efforts. Media have made it their crusade to destroy non-conformists, rather than accurately report. People are still dying. Other than detrimentally toxic drugs hyped by the media, the 'HIV' establishment still has nothing to offer.
Africa has become the perfect place to use highly questionable data to raise funds and push particular agendas.

The leading international AIDS agency is the special program on AIDS of the UN. Special because it is distinct from the World Health Organisation (WHO), directly under the UN Security Council. Created in 1996 UNAIDS was removed from the WHO. With a bi-annual budget of US$140 million it is in competition with other UN agencies for the diminishing public funds. Initiated by the late Jonathan Mann it was designed to monitor AIDS. Much of its interventions is based on data collected by US Centres for Disease Control (CDC).

About the CIA report

The CIA report represents an initiative by the 'intelligence Community' of the US and has been carried out by the Officer for Economics and Global Issues of the CIA. The opening remarks make the presumption that this is a document only about AIDS. It is not. The report considers national dimensions of 'non-traditional threats', in this case mostly infectious diseases.

Recurring diseases such as TB and Malaria are addressed together with AIDS. It becomes evident from reading the report that TB, Malaria but also other infectious diseases are much more of a threat than AIDS.

The report confirms the weakness of statistics on 'HIV'/AIDS put together by agencies such as the World Health Organisation (WHO).
Also, it is made clear that the ranking of AIDS ahead of TB in Africa is merely because those dying of TB and expected to be carriers of the alleged 'HI-virus' are now are counted as AIDS cases. The facts that an AIDS-diagnosis in Africa does not require so-called 'HIV testing' and - even if tested - TB along with some seventy other conditions, many endemic in certain African regions, can make so-called 'HIV-tests' show positive, should make these statistics obsolete.

The report draws different scenarios for the burden of AIDS on economically deprived countries in Africa, Asia and former Soviet Union. The best case scenario for AIDS in the report is somewhat near the declared 5-year-goal to reduce 'new infections' by 25% put forward by UN Secretary General Kofi Annan.

Political dimensions

Reading Clinton's 'National Security Strategy for a new Century', and the CIA report and pre- and post issue articles especially by the US media the following becomes evident. The US administration bases its position on several assumptions.

1) They consider AIDS an infectious disease caused by a new virus ('HIV'). An unbiased look at crucial data, however, can easily show a different picture. AIDS does not behave like a sexually transmitted condition. Nor does its alleged cause 'HIV' behave like a sexually transmitted agent. While AIDS does have infectious components, the way AIDS and its alleged cause have been portrayed by the US is misleading.

2) Based on this false concept, the US administration considers the prevention strategies (use of condoms) to prevent 'new infections' with the alleged 'HI-Virus' as successful. The decline of 'new HIV infections' in the US and Western Europe is seen as a direct result of that. A close look at the occurrence of sexually transmitted disease (STD) and unwanted pregnancies and the suggested latent period of 'HIV' challenges this presumption. Statistics in Germany and Austria show that condom sales remained low and about the same prior to, during and post so-called 'prevention campaigns'.

3) The US leadership considers the new toxic treatments against AIDS as successes and the cause for the decline of AIDS in the West. But AIDS has been declining in the US and Western Europe, depending on what definition one uses, at least since 1993, long before the highly toxic drugs were put on trial in humans in 1996.

4) Lastly the US considers the development of a vaccine the only solution to the AIDS problem. Margaret Heckler, former Secretary of Health and Human Services, promised in 1984 a vaccine against 'HIV-infection' within a couple of years. Now, sixteen years later and with advanced technologies there still isn't - for good reasons - any promising looking data.

Nevertheless, these views are the bases for internationally perpetuated AIDS-programs and are used to claim leadership in the 'war on AIDS' by the US-administration. Hence, with both the problem's definition and the problem's solutions at hand, the US-establishment puts itself under the 'moral duty' to save those 'poor' AIDS ridden countries.

Several scenarios could become reality in combating what would be seen as consequences of AIDS in economically deprived countries.

1) The economic situation in Africa has made it increasingly difficult for people to find jobs to pay at least for their living, let alone hold to some kind of future opportunities. This leads some of the few who can afford training to seek their fortune abroad. 'Brain drain' is the name of this phenomenon. It can add to other already existing economic problems these countries face. Losing brain and (wo)manpower, affected countries rely more and more on 'importing' outside knowledge. Since, they cannot afford such imports, help comes from economically rich countries with strings attached. Lack of staff can be considered as justification for foreign 'help'. Especially key governmental and civil posts can become subject to foreign replacement. Like in Thailand, where - due to AIDS - we find a CDC office in the Thai Ministry Of Health, we would find civil servants supposedly working for one country yet paid by another. It would be interesting to see what the priorities of such 'americanised' staff would be - those of the country they would work in or those of the country they work for? Anyhow, domestic matters would be dealt with by non-citizens or not domestically trained staff.

2) Western Non-Governmental-Organisations (NGO) - perpetuating false claims about AIDS - would become even more influential in African countries. They would increasingly set agendas on health education. Furthermore, they would become forces to train (americanise) activists to 'lobby' (pressure) the governments in whatever direction agreed to by the funding nation. Because of AIDS, this, too, has become already a reality experienced by many African Nations.

3) Arguably the top concern,addressed as such in the CIA report, is disruptions of world orders due to AIDS and, hence, of US-interests and international security. Surely if claims were based on facts, AIDS would impact on national security forces too. However, the US-recruit study carried out on US military staff from 1985 till 1989 showed that there never was an AIDS threat to the US security forces. The steady rate of so called infection remained as low as 0.035 % over the period of five years. Yet, in South Africa it is claimed that up to 60% of the national military is 'infected' with 'HIV' and, hence, expected to die. Why should national forces in Africa be more affected by 'HIV' than those of the US? Because Africa, unlike the US and Western Europe, faces a heterosexual AIDS-epidemic we are told. No-one is clear why this should be so. But it is of course, not a scientific but a presumptive answer based on sexual stereotypes and racist attitudes towards Africa.

Such a 'personnel drought' in national army forces due to AIDS is considered a possible risk to regional stability. Given the twenty three armed conflicts flaming on a continent whose national borders have been drawn by the West, I wonder what more instability the CIA had in mind? Possibly more permanent 'peace-keeping' forces to replace national armies to protect 'regional stability' (Western interests). How 'peace keeping' this is, we know from the UN 'peace keeping' missions in Kosovo or East-Timor or simply from the rigid ways the CIA historically controlled and still controls Central and South America keeping US-interests in place. AIDS becomes an excuse for military interventions.

Of course not all suggested interventions by the USA are based on inappropriate interests. However, they are for the most part based on false interpretation of important observations.

The US-establishment has been leading in propagating false or misleading claims about AIDS. Challenging voices wanting clarification, even from within the scientific and political establishment, were censored, attacked or ridiculed in attempts to silence them.

Now in the National Security Strategies on combating AIDS Clinton has recorded, '...reaching agreement in 1999 with the G-8 states ('G' refers to 'group' which includes besides the US, Canada, Japan, Germany, France, the UK, Italy and sometimes Russia), in Cologne to link debt relief with social programs such as HIV/AIDS prevention.' This statement linking AIDS-programs to economical sanctions -

possibly followed by military interventions - could be seen as an attempt to cement the 'HIV'-AIDS-dogma. Until the US-government returns to scientific debate when addressing health measures we should look at suggested interventions as ways to manipulate and control people including whole nations.

Clinton also announced 'to work with the private sector on common goals for fighting these diseases.' Certainly the private sector has followed. On May 11th - correlating with Clinton's Executive Order - five major pharmaceutical multi-nationals (Bristol-Myers Squibb & Co., Glaxo Wellcome PLC, Merck & Co., Roche Holding AG and Boehringer Ingelheim GmbH) announced in Paris the lowering of prices for AIDS drugs in Africa and other 'poor' regions to as much as 90% off their normal prices. Lowering prices for economically deprived nations - which only make about 1% of the drug sales - so dramatically is seen as more profitable than losing the US and European market to cheap generic drugs coming from these nations. This just shows how much we (over) pay for our alleged cures. Or in other words this gives an indication of how much the pharmaceutical industry profits from human suffering.

The five pharma companies will work with international agencies (UNAIDS, WHO, UNICEF and the World Bank). These agencies, too, propagate the US AIDS-dogma and, so far, have done little to support scientific discourse on the issues of dispute. It seems realistic to assume that suggested interventions and foreign help (e.g. debt relief) will depend on how much a government is willing to accept dodgy propaganda on AIDS and 'tune in' its own approach to AIDS with that put forward by the West and multi-national corporations. Clinton has already 'successfully pressed' the government of India to a joint declaration on AIDS. India is one of the major producers of cheap generic drugs. It also hosted the first governmentally supported critical conference on AIDS - reported fairly by the Indian Media - just a few weeks before Clinton's visit in March.

Sometimes simply pouring AIDS-money into a country's establishment is enough to convince them to surrender to the propaganda. Regardless of what we think AIDS is or isn't, the US NSC measure on health threats certainly is a way to politically control peoples and countries.

The US said it in the National Strategy Documents: It is the aim of the US to not only enhance America's security but bolster its economic prosperity and promote democracy abroad. It is a national strategy document; putting one's nation first is something other countries would do too. Self-centredness would not remain my only criticism of these goals. However, urging other nations to 'sing along', singling out 'poor' nations and using a virtual virus to make health a matter of international control deserves rigorous challenging.

South African President Thabo Mbeki seems to break away from such binding ties. Besides calling for a re-assessment of AIDS he also considers the possibility of his country manufacturing their own pharmaceuticals (generic drugs) - considering the health crisis faced by many African countries and the lack of resources in health care budgets, a reasonable thing to do. It is not surprising than Mbeki's admission was seen by the US as an attempt to steal intellectual property. Hence, South Africa was put under special observation by the US Trade Department. Mbeki was unwilling to retract. All of a sudden on December 1st of last year South Africa was dropped from the 'watch list'.

Perhaps the US-establishment realised that force would not make a man of Mbeki's calibre back off. Having survived apartheid, he will not bend to white man again not even when they come in white coats too. He deserves admiration for this political strength.

President Clinton, after again understanding that not even an orchestrated, deeply hostile media campaign will break Mbeki's political will, changed strategy. Besides the already elaborated efforts to help 'AIDS-struck' Africa, he negotiated at the last minute for an extra set of US-governmental observers on the controversial AIDS panel. Did he want to make sure that the invited dissenters on AIDS did not get the upper hand in South Africa? Or did he just want to secure first hand feed-back?

Anyhow, if South Africa successfully retracts from the Western approach to AIDS other nations undoubtedly will follow. The US does not seem to like for Africa to use its own sources to claim independence.

It is election year in the US. The Democrat candidate is current Vice President Al Gore. He is a great proponent of the AIDS-dogma, therefore, well liked in the HIV-establishment and gay circles. He is a key player in making AIDS a NSC-issue. It is, furthermore, important to understand that the US and the EU are competitors when it comes to Africa and African resources. Africa is not as easily accessible to US interests as Central and Latin America, often referred to as

'the US back-garden'. Leading the war on AIDS could secure such access to Africa and expanding US interests on the continent of Africa.

Human Rights implications

Let us now look at the implications of the NSC-measures on human rights. To get a more realistic picture about possible implications on human and citizen rights we should understand some things about the National Security Council. The NSC is made up of the president, the vice president, the secretary of state and the secretary of defence. Other departments are called in as needed for advisory opinions. The NSC has no legislative power but serves the president to prioritise certain issues - in our case AIDS - and develop strategies and phrase policies. For any such suggested measure to have legislative power, it would have to pass Congress.

Given the fact that this albeit drastic move has been made by the Clinton administration (Democrats) in an election year, I do not expect dramatic legislative impact on the rights of people labelled as having 'HIV' or AIDS. As already indicated Vice President Al Gore needs strong support from within the gay and 'HIV'-establishment, especially now, when his Republican opponent George Bush jr. - appearing rather liberal - gains ground. Taking away rights of people who live with an 'HIV+' test result might just offend such groups! To justify their funding, these groups depend on their 'HIV'-labelled clients. Restricting the rights of these people would be seen as a conservative move not favourable in the current political climate.

Having said this, however, several issues must be addressed.
A 'HIV positive' test result or an AIDS-diagnosis are still reasons to be ineligible for a green card, even a tourist visa. Although this policy is said to be not in strict use in tourism, given the NSC-measures it is not likely to be lifted.

For refugees who test 'HIV positive' or are said to have AIDS the situation most likely gets even worse due to the NCS-measures. They can still obtain waivers for entry, if they have immediate family in the US, can demonstrate that they 'understand' the 'modes of transmission of HIV' and, hence, will not present a public health threat and do not rely on governmental health care funds. The exclusion has been legislated by Congress, and only Congress can lift the ban. Given that the US Congress is Republican dominated and the Clinton Administration (Democrats) has made AIDS in 'refugee-homeland' a NSC-issue it is very unlikely that the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 - treating refugees rather inhumanely - will change.

Could it be that by making AIDS a NSC matter, the US-government seeks further justification for excluding more refugees from economically deprived nations and regions of the world, which is, according to the CIA report, where AIDS is rampant. This, of course, is in violation of the Universal Declaration of Human Rights on seeking and enjoying asylum (Art. 14). The NSC-measure as well as US-legislation could give the US *carte blanche* to mistreat refugees and enforce a legislation on 'queer-looking' tourists upon entry into the country.

How could the situation of US citizens living with a 'HIV positive' test result or an AIDS diagnosis evolve due to the NSC measure?
Before drawing a negative scenario I would like to point out again, that I do not think the Clinton administration intends to use their NSC-efforts against persons living with either such label. However, times can change quickly as the forthcoming election could demonstrate. First it is important to understand that 'NSC-measures' is just another word for 'public health measures'. Looking at the history of 'public health' and 'public health measures' tells the story of how individuals' rights were waved against those of the 'public'. People affected by certain illnesses were perceived as a threat to the rest of society. When carefully considered, the infectious AIDS-model implies just the same.

The current dogma clearly implies that AIDS is an infectious disease. Transmission in the health context means passing 'it' on from one person to another. Outside the human body 'HIV' is said to 'die' quickly. Hence, it can only work directly from human body to human body. Following that logic, 'infected' individuals are seen as the AIDS threat. The fact that this has seldom been stated overtly - although clearly implied in the propagated AIDS-dogma - shows the political climate. But all policies to prevent an alleged infectious cause from spreading imply protecting the 'non-infected' from the 'infected' person. While we have learnt that social contact does not spread 'HIV', other important ways for humans to interrelate (sex, breast-feeding) can, according to the 'HIV'-establishment.

This could lead to the following scenarios:
a) Once the 'HIV' establishment has developed what they perceive as promising vaccines preventing alleged *infection*, those seen at risk for alleged infection (gays, drug addicts, mentally ill; in other words the socially not so accepted)

could be 'strongly urged' to get such a shot. One only has to look critically at vaccines to understand their potential danger and, therefore, decline such an 'offer'. This, however, could be seen as 'socially irresponsible', leading to legal procedures.

b) Once a 'promising looking vaccine to *postpone the onset of AIDS*' is developed, people living with a 'HIV positive' test result would be 'offered' such a vaccine. If also choosing to decline - for good reasons, since so far such vaccination attempts are more fruitful in causing rather than preventing AIDS - one could be seen as a 'burden on national health care' for long courses of expensive treatments as opposed to 'one cheap shot'.

c) Due to AIDS, sexual penetration is not to happen anymore without using condoms ('Safe Sex'), full stop. Failing to use them will be seen as an offense, a criminal act, e.g. attempted murder. Prosecution follows as already seen in several cases.

d) If a couple decides to have children, they would as 'responsible' parents undergo 'voluntary' 'HIV testing'. If he tests positive, he would - as a 'responsible' citizen - refrain from donating his sperm or pharmaceutically 'wash' it.
e) If the woman tests 'HIV positive' and cannot be 'convinced' not to have children - after all founding a family is a declared human right - she would be 'strongly recommended' the following: use of AZT in the last month of pregnancy, giving birth with caesarean section followed by administration of prophylactic drugs to the new-born until 'proven' 'HIV negative' or ..... dead. If she refuses - and there are PLENTY of good reasons to refuse such a toxic ordeal - she would be declared 'irresponsible', 'selfish' and, hence, an unfit mother. There goes custody and the child.

f) For those already ill with AIDS or 'vaccine naive', 'direct observed treatment' (DOT) would become 'treatment reality'. I do not know of anybody who survived the ever changing ever toxic AIDS drugs.

Such horror scenarios do happen already. It would be naive to believe further human rights violating measures could not be enforced as 'public health protection measures'.

'HIV testing' should be voluntary according to the International Guidelines on HIV/AIDS and Human Rights. There are good reasons for that e.g. risk of discrimination and other forms of degrading treatments and threats to life and security of a person. However, in reality 'voluntary' means more and more coercion, using 'moral' and 'social responsibility' implications to pressure people to 'consent'.

So far most AIDS-organisations have done little to prevent such violations of declared human rights (right to life and security of person). They seem more concerned with the interests of their sponsors: exploiting the AIDS markets or 'protecting the public from 'HIV'' on governmental grants.

The NSC and AIDS dissent

It has been suggested on several occasions that the NSC-measure will make it 'legal' for the CIA to take drastic actions against those dissenting from what is commonly propagated about AIDS. We should keep in mind that the CIA does not need 'authorisation' to carry out its often dirty business to 'solve' what is perceived as a threat to the establishment. That IS their mission after all.

Activities from rubbishing dissident positions and persons, to storming premises, to tapping phone lines, taking legal actions against dissenters, intensifying AIDS hysteria and plain censorship have been claimed as CIA actions against dissenters.

All quite possible. However, for those of us around that block several times these ordeals are not new. They have been used against us ever since the first dissenters raised their voices. Of course, when taken seriously like currently in South Africa, the challengers become a considered threat to prevailing paradigms. Bringing up the issues to a more serious political level, like a national AIDS-panel - due to publicity - can give certain public protection by raising public awareness.

The 'HIV' establishment will continue most likely try to avoid direct confrontations. Countering the dissidents will be done by more (pseudo) scientific publishing and media reporting and trying to influence opinion leaders and policy makers. Of course, there are the Mark Wainberg's, president of the International AIDS Societies, calling for jailing those who dissent on AIDS. On what grounds though? There might be many of those - whom I consider fascists - in the 'HIV' establishment. They might bump up now in greater numbers. After all they lose much when losing 'HIV'. Still, remember, tides do change, no NSC-strategy will prevent that.

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International Conference on the Validity of HIV/AIDS Programmes Including Methods of Testing

Roberto Giraldo reports on the remarkable meetings in India earlier this year

Roberto Giraldo MD is a specialist in Internal Medicine and Clinical Tropical Medicine, currently working in the laboratory of Clinical Immunology in the New York Hospital Cornell Medical Centre. In March he became President of the 700-strong international Group for the Scientific Reappraisal of HIV/AIDS. Dr Giraldo has published papers and articles on the problems with 'HIV testing', 'mother-to-child transmission' and breastfeeding, and the toxicity of 'anti-hiv' medications. His book *AIDS and Stressors* concisely explores severe immunodeficiency as a toxic-nutritional syndrome caused by the alarming increment of immunological stressor agents.

Public Health Institute, Government of Maharashtra, Vaccine Institute Campus.
Nagpur, Central India.
January 30 and 31, 2000.

BACKGROUND

For several years Dr. Shantilal Kothari, Nutritionist and President of Academy of Nutrition Improvement (ANI) in Nagpur, has been questioning the official Indian national AIDS program (NACO). He has sent lots of letters with scientific documents from the AIDS dissident researchers, to the health authorities of the State of Maharashtra, to the Ministry of Health of India in New Delhi, and to WHO and UNAIDS in Geneva. He has also written dissident articles in the main newspapers of India. A year ago he created a Club with people diagnosed as "HIV positive" which currently has over 200 members.

Last year Dr. Kothari performed a peaceful hunger strike, to try to force the Government of India to meet with us. On August 10th, 1999 the Ministry of Health, Government of India finally asked Dr. Kothari to organise an International Conference with experts and scientists from both sides of the HIV/AIDS debate.

ORGANISATION

The conference was organised by Dr. Kothari and Dr. K.C. Jain (Conference Coordinator), in Co-operation with the Ministry of Health and Family Welfare of the Government of India and the
Directorate of Health and Family Welfare of the Government of Maharashtra.

Rajendra Khatry, journalist of the Indian Express was responsible for promoting the conference in the media.

A group of people diagnosed with AIDS or labelled "HIV-positive" were working as volunteers to the conference.
The walls of the hall where the conference took place, were artistically decorated with copies of articles from Peter Duesberg, David Rasnick, Gordon Stewart, John Lawritsen, Eleni Papadopulos-Eleopulos, Etienne de Harven, Neville Hodgkinson, Joan Shenton, Huw Christie, Christine Maggiore, Michael Baumgartner, Michael Ellner, Paul Philpott, and Roberto Giraldo.

During the lunch and coffee breaks all attendees of the Conference had the opportunity of testing the exquisite Indian vegetarian cuisine.

FINANCIAL SUPPORT

Written documents, food, refreshments, national and international lecturers transportation, were financially supported by the

generosity of Dr. Kothari and the Academy of Nutrition Improvement.
The Directorate of Health and Family Welfare of the Government of Maharashtra provided the conference hall free of charge, and a vehicle for the local transportation of delegates.

ATTENDANCE

The conference was attended by 100 people from different states and cities of India and Nepal.

There were several health care officials from the Government of Maharashtra like the Principal the Public Health Institute, Government of Maharashtra (Dr. S.C. Gupta), the representative of the WHO to the Indian program of AIDS in New Delhi (Dr. Shanshikant), the Director of the Indian National Institute of Virology in Pune (Dr. D.A. Gadkari), the Director of Maharashtra State AIDS Control Society (Dr. V.S. Shangari), and a representative of the Indian Medical Association, Nagpur Branch (Dr. G.M. Bang).

Also there were several MD's and other health care professionals, leaders of NGOs dealing with AIDS in Bombay and other cities, homeopathic and ayurvedic practitioners.

During the lectures and discussions there was always a group of about 15 people who have been diagnosed with AIDS or who have been labelled as "HIV positive" and who are members of "The Nagpur HIV-positive People's Club" created by the Academy of Nutrition Improvement. At the opening ceremony some of them welcomed the delegates.

INTERNATIONAL LECTURERS

Dr. Etienne de Harven, MD from France, who lectured on the issues of HIV purification and isolation; Dr. Klaus Koehnlein, MD from Germany, who lectured on the toxicity of the antiretroviral medications, and Dr. Roberto Giraldo, MD from USA, who lectured on the inaccuracy of the tests for HIV and upon the toxic and nutritional causes of AIDS.

INDIAN LECTURERS

Dr. Manu Kothari MD, Professor Emeritus of Seth Medical College and Kem Hospital, Bombay (HIV/AIDS - crying wolf, crying eureka baselessly); Dr. Ritu Priya MD, University of Jawaharlal Nehru, New Delhi (The National AIDS Control Programme: Some socio-culture and organisational issues from an epidemiological perspective); Dr. D.A. Gadkari, Director National Institute of Virology and National AIDS Research Institute, Pune (Molecular Epidemiology of HIV: HIV-1 Subtypes in Western India); Dr. Amit Amin, Lata Medical Research Foundation, Nagpur (Is universal HIV screening in the antenatal setting justified?); Dr. Pramod Chabrani, Kasturba Medical College, Mangalore (Prevalence of candida infections in HIV positive patients); Dr. Shehal Shrivastava, Lata Medical Research Foundation, Nagpur (Modification of P.A.N.A. programme by vitamin A supplementation); Dr. Asha Shirivastava, N.S.C.B. Medical College, Jabalpur (Women and AIDS awareness, attitude and social issues); Dr. N.T. Deshmukh, Nagpur (HIV positive/AIDS patients treated by natural and ayurvedic system); Dr. Madhu Agarwal, Nagpur (HIV/AIDS patients treated by homeopathy).

PANEL DISCUSSION

There was a three hour panel discussion with the participation of Dr. Etienne de Harven (France), Dr. Klaus Koehnlein (Germany), Dr. Roberto Giraldo (USA), Dr. Shanshikant (Representative of the W.H.O. to the Indian AIDS Control Program), Dr. D.A. Gadkari (Director of the Indian National Institute of Virology), Dr. S.M. Yyawahare (Pathologist, Nagpur), Dr. Asha Shrivastava (Jabalpur), Dr. K.H. Deshpande (Senior Advocate) and Dr. Shantilal Kothari (Conference Organiser). The panel was moderated by Professor Emeritus Dr. Manu Kothari (Bombay).

All the main issues of the AIDS dissident movement were pointed out. There were hot moments during the discussion, however, thanks to the high spirit of professionalism of all panelists and the public the discussion came to a friendly end.

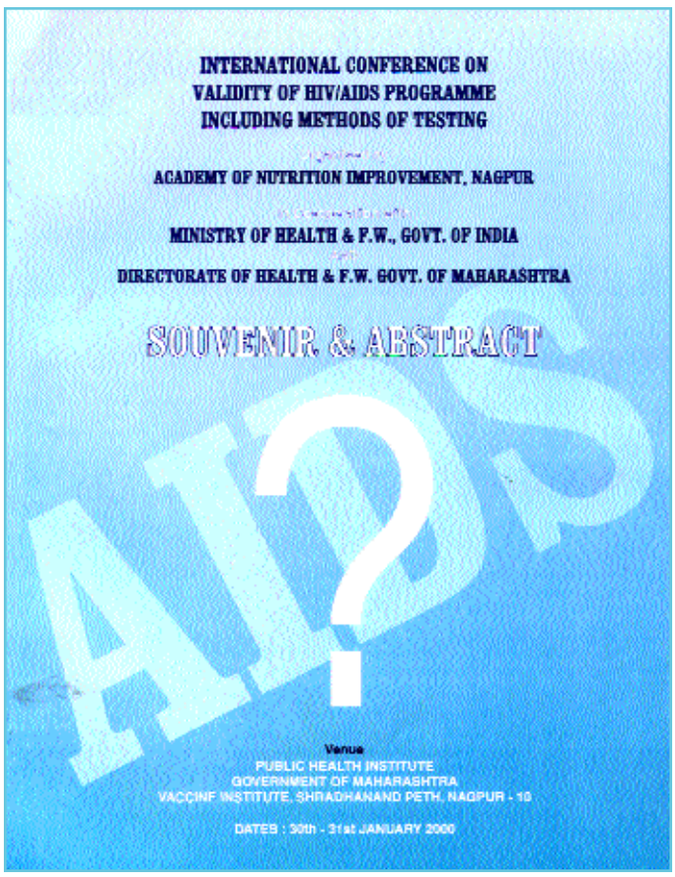
PROCEEDINGS OF THE CONFERENCE

An elegant booklet containing the program of the Conference, welcome messages, abstracts of the lectures, and articles of AIDS dissidence, was given to every attendee, media people, and to the Health Authorities and other authorities of the Government of India, and WHO in Geneva.

The booklet has welcome messages sent to the Conference by Shri K.R. Narayanan, President of India; K.C. Pant, Deputy Chairman Planning Commission of the Government of India; R.A. Mashelkar, Director General, CSIR & Secretary, Government of India, Department of Scientific & Industrial Research; G.M.C. Bulayogi, Member of the Indian Parliament - Speaker of Lok Sabha; and Shri Vasant Sathe, Politician from

Nagpur, Former Member of the Indian Parliament and Former Ministry of Energy of India.

This memories booklet also contains copies of articles by Peter Duesberg and David Rasnick, Gordon Stewart, Eleni Papadopulos-Eleopulos et al, Etienne de Harven, Klaus Koehnlein, Vladimir Koliadin, John Lauritsen, Rosalind



'An elegant booklet containing the program of the Conference..'

Harrison, Simon Barker, Felix De Fries, Michael Baumgartner, Christine Johnson, and Roberto Giraldo.

MEETING WITH AIDS PATIENTS

On Saturday January 29 Dr. de Harven, Dr. Koehnlein, and Dr. Giraldo had the very unique experience of meeting with a group of 20 people labelled as "HIV positive" or who have or had been diagnosed as having AIDS. All are members of "The Nagpur HIV-positive People,s Club".

This meeting took place at the Academy for Nutrition Improvement, Nagpur. We had the opportunity of chatting with them and their families, listening to their testimonies, and read their medical records.

As expected, most of them were patients suffering from tuberculosis and because they react positive on "the tests for HIV" they are diagnosed as having AIDS. Only two of them could be seen as having clinical manifestations of a severe immunodeficiency different from that common to patients with tuberculosis.

It was very distressing to find out that once such patients are diagnosed with AIDS, the orthodoxy health practitioners stop the treatment for tuberculosis and prescribe them only with antiretroviral medications.

Currently, all these individuals are being treated with natural, nutritional, homeopathic or ayurvedic approaches. The treatments are supervised by highly qualified professionals of these holistic medicines, some of these professionals are professors at universities and schools of holistic medicines which are common in India.

MEDIA COVERAGE

There was an excellent media coverage! Prior to the conference several newspapers of India and Nepal announced the Nagpur AIDS dissident meeting. The day before the conference started there was a three hour press conference with participation of 15 journalists from local and national media of India and Nepal. Dr. de Harven, Dr. Koehnlein and Dr. Giraldo explained to the media people all our scientific views upon AIDS.

"Coincidentally", at the same time of the dissident conference there was another meeting of the AIDS orthodoxy in Nagpur organised by the Indian Academy of Medical Sciences.

The main newspapers and magazines had headlines in front pages such as "Divergent views on cause of AIDS trigger controversy", "Is HIV the cause of AIDS? Two events organised in the city on Sunday have contradictory views to offer", "Dogmatic views of the west challenged at Academy of Nutrition Improvement Conference on AIDS" , "Developed nations purposely creating panic about AIDS", "National AIDS Research Institute maintains position on HIV as cause of AIDS", "Researchers demolish myths about AIDS', 'Hypothesis that HIV causes AIDS, a sham: Dr. de Harven', 'AIDS is neither infectious nor sexually transmitted, claims Dr. Giraldo', 'HIV theory is a big mistake, aver AIDS researchers', 'An AIDS control project under fire', 'AIDS: virulent myth', 'It isn't HIV that causes AIDS?' 'WHO adopts defensive stance

over anti-HIV campaigners' contention'.

A month after the Nagpur meeting ended, newspapers and magazines were still publishing articles with interviews with Dr. de Harven, Dr. Koehnlein, and Dr. Giraldo.

OUTCOME

After the conference Dr. Kothari sent letters with the main conclusions of this meeting to Dr. Gro Harlam, Director of World Health Organisation in Geneva, to Dr. N.T. Shanmugam, Ministry of Health and Family welfare, Government of India in New Delhi, and to Dr. Thomas C. Benjamin, Secretary of the Department of Medical Education and Drugs, Government of Maharashtra, Bombay. He sent to them copies of the proceedings of the conference together with copies of articles from newspaper reporting on the meeting.

The government of India cannot say now that they did not know that the entire view of AIDS as an infectious and viral condition has never been scientifically validated or not brought to their attention. We clearly asked the Government of India to stop HIV testing and to stop immediately the use of antiretroviral medications to treat or to prevent AIDS in pregnant women, infants, children and anybody else.

FURTHER INFORMATION

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MEETING WITH JACK GROUP IN NEW DELHI.
February 1st and 2nd , 2000

During the preparations of the Nagpur Conference and thanks to the media coverage, Dr. Kothari came in contact with this group in New Delhi.

Background

In the 70's JACK (Joint Action Council Kannur) was working on developmental issues in rural areas of India, with funds from international charitable donors. Soon they realised that those kinds of resources were grossly inadequate for any meaningful development, and that international donor agencies and the NGO's that they support had other interests far from people's needs. They saw a dead-end in developmental activism and pulled out of it.
Already in the 80's when HIV/AIDS became the focus internationally, they were working on these issues, and were initially swept away by concepts of 'foreign disease', 'testing' and 'high-risk groups'. Soon after, they realised that these actions while not contributing to AIDS prevention had a detrimental impact on Indian society. Since 1992 they began to question these programs, and by 1995 they got into open confrontation with the national and international agencies dealing with AIDS in India.
They have written several pamphlets, booklets and flyers for the public and the media, where they analyse and question the main strategies of NACO (National AIDS control Organisation of India) and their links with UNAIDS, WHO, UNICEF, CDC, NIH, pharmaceutical companies, British Government, and World Bank loans.

They have focused their analysis on the economic and political issues of the official AIDS programs. Last year they published a booklet, 'HIV/AIDS Industry: Agenda Behind the Epidemic', which provides an overview of all the issues they have been addressing. This is the first of a series of booklets that they are publishing on different aspects of HIV/AIDS related to the Indian context.

They have sent documents with their criticisms to the Ministry of Health and Family Welfare and to members of the Indian Parliament. The media have written objective articles on JACK activism against the main issues of the Indian National AIDS program.

In their documents they make an objective parallel between African AIDS programs and the Indian program.

We were very well impressed with the library that they have with several dozens of books, magazines, newspapers, and other documents with economic analysis of the AIDS crisis in western countries and in the underdeveloped world.

JACK has members and friends from the different sectors of the society in all Indian states.

Press Conference

On February 1st, JACK organised a press conference in New Delhi, capital of India, with 50 journalists from the main media. Journalists were aware of JACK activism against the official

AIDS program.

For about three hours Dr. de Harven, Dr. Koehnlein, and Dr. Giraldo, had the opportunity to explain in full detail the scientific dissident views on AIDS. After the press conference, several journalists made separate interviews with the three of us. Dr. Kothari explained at the press conference the main discussions and conclusions of the Nagpur Conference.

This was a very dynamic meeting with lots of questions from the journalists, who already started publishing nation wide objective articles upon our views. Currently they are bringing to the public the international scientific debate on AIDS, mixed with JACK's economic criticisms. We think this is a very powerful mix.

Dr. de Harven and Dr. Giraldo were also in a TV interview transmitted to the Indian Nation.

LECTURE AT THE NATIONAL ACADEMY OF MEDICINE

On February second, JACK organised a lecture by Dr. Giraldo at the National Academy of Medicine. A group of physicians, researchers, journalists and individuals working with NGO's dealing with AIDS attended the lecture. There was a friendly and dynamic discussion and the main scientific issues of the AIDS dissidence were pointed out. Attendees welcomed our views on AIDS.

Socialising

On the evening of February first, JACK group organised a dinner in the house of Anju, a young lady dedicated full time to JACK AIDS activism. Here we had the opportunity to chat with professionals, researchers, and journalists, members and friends of JACK.

The AIDS dissident movement has lots of things to learn from this Indian group of AIDS activists. Mr. Purushothaman Mulloli, is the coordinator of JACK in New Delhi.

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LECTURE AT JAWAHARLAL NERHU UNIVERSITY IN NEW DELHI

During the Nagpur Conference, one of the participants was Dr. Ritu Priya, MD, epidemiologist and professor at the Centre for Social Medicine and Community Health of the Jawaharlal Nerhu University in New Delhi. Since 1994 she has written articles with criticisms upon the AIDS Indian program. She invited Dr. Giraldo to lecture on the scientific dissident views on AIDS.

The lecture took place on February 7, 2000. It was attended by a group of 40 university staff teachers, postgraduate students, molecular biologists, social and AIDS researchers, and epidemiologists. The discussion was also very dynamic and attendees welcomed our view on AIDS. The chairman of the Department of Community Health thanked Dr. Giraldo for wakening them up to the AIDS dissident views and challenges.

VIDEO DOCUMENTARY

Mr. Jethu Mundul is a journalist working on TV and movie documentaries. He is an AIDS activist residing in Bombay, who has been in contact with AIDS dissidence for several years. He is very familiar with Reappraising AIDS, Continuum, Alive and Well, HEAL, and IFAS organisations. It is important to remember that Bombay is the main center for making Indian movies.

He filmed all the lectures, panels and discussions of the Nagpur Conference and is planning to edit a video documentary with his recordings.

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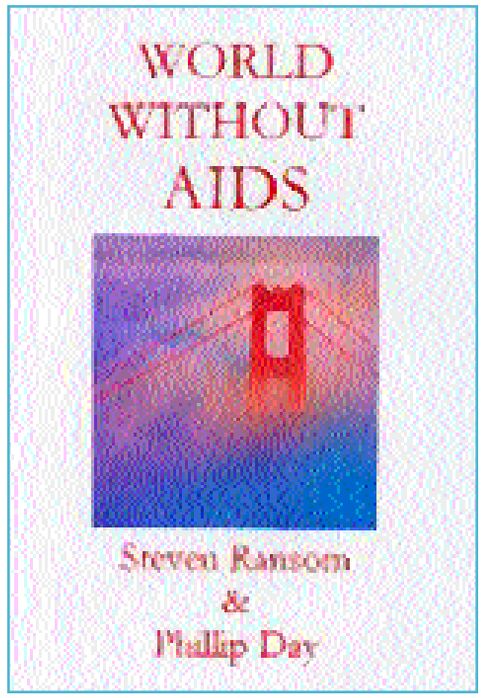
The AIDS dissident movement and the people suffering the tragic consequences of the HIV/AIDS hypothesis, have a great hope in India !!!

Book review

Alex Russell reports on *World Without AIDS*



World Without AIDS.
ISBN 0-9535012-5-6
by Steve Ransom and Philip Day
£12.50 279pp. Paperback

First published June 2000 by Credence Publications
Order Electronic at
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or Credence Publications, PO Box 3,
Tonbridge, Kent TN12 9ZY England UK

In their well researched and concisely argued book *World Without AIDS*, Steve Ransom and Philip Day expose with admirable clarity the politics of 'AIDS' and pseudo-science of 'HIV'. This investigative dossier of dissident 'AIDS' Files is compiled from the desks of the world's most renowned medical practitioners, scientists, researchers and activists, both orthodox and dissident. Reading like a Dictionary of 'AIDS' Dissident' Quotations, their book is an ideal quick reference source. Ransom and Day are the researchers behind Credence Publications, "an independent research organisation whose personnel have been reporting on contentious medical issues for over ten years". It is an enthralling read for the uninitiated and a useful summation of the known mistakes, prevarications and lies masquerading as 'HIV/AIDS' science. The authors state that the aim of their book will accomplish five goals: 1) Exposing The Politics of AIDS, 2) Exposing HIV, 3) Exposing the Real cause of AIDS, 4) Reporting the Many Case Histories of AIDS 'Sufferers', 5) Ending The Fear That Clouds Many Lives. They have certainly succeeded in their goals.

The authors classify the pseudo-scientific 'HIV/AIDS' paradigm as primarily a political and socio-economic discourse. They argue that the "myths and lies surrounding AIDS" are generated and perpetuated by the macro and micro power structures, from the global mass-media and pharmaceutical giants to government agencies and charity bodies. Throughout the book, the authors emphasise the socio-economic multinational power blocs and governmental agencies that keep AIDS Inc in business.

Part 1: 'Western' AIDS contains many mind-blowing quotes from Harvey Bialy, Stefan Lanka, Kary Mullis and Pietermaritzburg lawyer Anthony Brink, in the chapters 'Fake Diamonds' and 'Cooking Up HIV', which focus on the political construction and scientific deconstruction of 'HIV'. In part 2, 'African' AIDS, the authors argue that 'HIV/AIDS' is being used by Western powers as a post-colonialist political weapon for Malthusian manipulation of populations in the 'developing' world - Africa and India in particular; only by instilling fear into the populations through 'HIV' terrorism (condomania) can the population growth of these areas be curtailed. The authors state: "As we shall discover, The World Bank, IMF, UNDP, USAID, and UNFPA, all key players in the AIDS program, adhere fanatically to the philosophy of population control in all their major agendas, especially AIDS 'care'...The Durban 2000 AIDS conference has the funding of fifteen sponsors, eleven of whom are pharmaceutical industries and/or organisations who have a direct interest in population control. That the Ford Foundation is one of the sponsors of Durban 2000 will come as little surprise to readers au fait with the population control 'league of friends'..."

Whilst conspiracy theories should always be treated with the utmost caution, the authors do make a convincing case for 'HIV/AIDS' being used as a terror weapon for population control. The authors state their case: 'The Politics of AIDS' is macro-analysis of the 'AIDS' power blocs and brokers notably

Time/TimeWarner/Time Inc./AOL/CNN/Turner Inc, World Bank, WHO, IMF. It was Time, CNN Sky, and Reuters that spread the US government propaganda that 'AIDS' in Africa is now a security problem. There does seem to be a well-organised global mass media conspiracy to promote the lie of 'African AIDS', as Eleni Eleopulos states: "The uppermost question in the minds of intelligent Africans and Europeans is this: Why do the world's media appear to have conspired with some scientists to become so gratuitously extravagant with the truth?" The authors chillingly point out that: "Officials from the World Bank, IMF,Trilateral Commission, CFR, WHO, USAID, UNAIDS, UNICEF, CNN, Time Inc., Rothschild, Bilderberg, Rockerfeller/Ford/Gates Foundation, and related pharmaceutical and media consortiums are meeting to decide on their exact approach to the 'Third World and Sub-Saharan AIDS' campaign."

The section 'AFRICAN' AIDS is timed perfectly in the context of the recent Durban 2000 AIDS Conference which marketed the myth of an African 'HIV/AIDS' pandemic. The habitual 'AIDS' Industry freeloaders flying out (all expenses paid) to the Durban junket should have been forced to read this book before they set off: it might shame them into telling the truth for once- rather than perpetuate pernicious, scientifically erroneous 'AIDS' dogma.

Regarding deadly Durban 2000, the authors ask: "Given the source of sponsorship monies, what opportunities will there be at Durban 2000 to discuss the ethics of widespread untested vaccinations on men, women and children?...Who will openly denounce Durban 2000's all-consuming profit-driven Malthusian mentality? Who will stand up and declare this whole gathering despicable?"

The authors situate the mythology of 'African AIDS' in the historical context of the Western colonialist-racist stereo-types of 'sex-craved savages'. They cite Joseph Conrad's *Heart of Darkness* and Oliver Stone's *Apocalypse Now* as "the parallels between their journey into darkness and ours into African AIDS becoming ever more apparent the further up-river we travel."

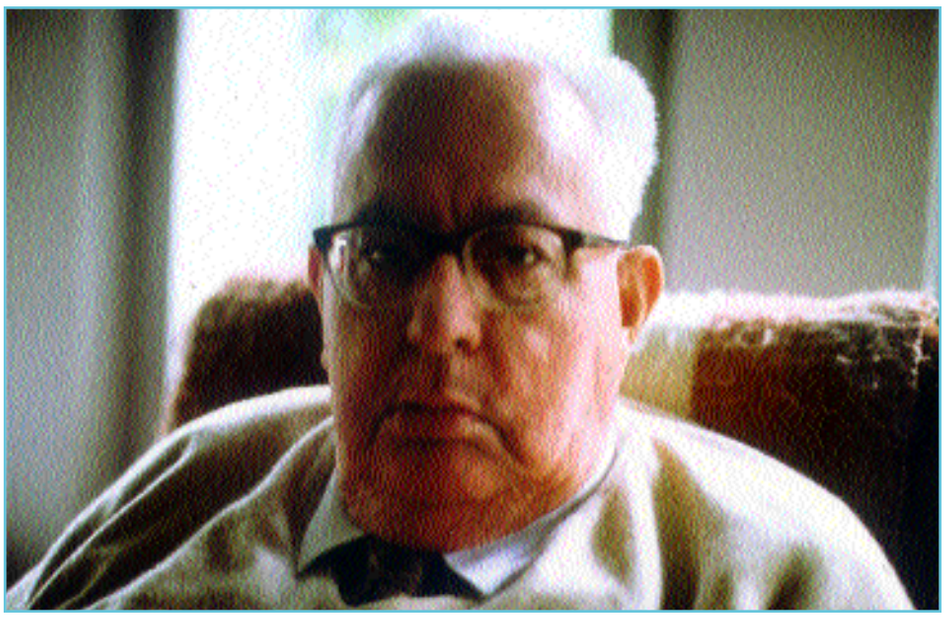
The racist rubbish of an 'African AIDS epidemic' is demolished by first-hand accounts from Celia Farber, Christian Fiala, Rosalind Harrison, Philippe Krynen, Winifred Mwebe and Joan Shenton. Says Journalist Celia Farber: "Many believe that the statistics have been inflated because 'AIDS' generates far more money in the Third World from Western organisations than any other infectious disease. This was clear to us when we were there: Where there was 'AIDS' there was money - a brand new clinic, a new Mercedes parked outside, modern testing facilities, high paying jobs, international conferences...". Winifred Mwebe who lived in Uganda for 30 years reports: "I have never seen or heard of any Ugandan, young or old, dying of any illness other than so-called HIV-related illnesses. Whenever you asked what happened if someone dies, the answer is 'What else?' I think that shows how ignorant our community is about these controversial issues. Ignorance kills. It will not stop until we educate our people. And education is never widespread when there is big money and politics involved. Many Africans still think the white man is superior and that they do not make mistakes."

The chapter 'Some Conquerors' presents us with "tremendous testimonies" from "people who have come out or are coming out from under the curse of the myth of HIV." These personal histories become the ultimate embodied deconstruction of the 'HIV/AIDS' lie: their experiences and survival demonstrates that we can, and will, live without 'AIDS'.

For the ill-informed and uninitiated, the chapter 'Frequently Asked Questions' is designed to help answer some of those pub-quiz Reader's Digest questions concerning 'HIV/AIDS' mythologies. This format is ideal for those millions who have been spoon-fed 'AIDS' pap sound-bites. At the same time, it is not written in a patronising manner. As the authors state, so much written on 'HIV/AIDS' is mystified science-fiction; this section strips down the myths by offering crystal clear analysis.

In 'OK. So What Can You Do' the authors offer their readers a chance to add their voice "to the debate", by listing the major UK and US media consortiums. This book is not a purely academic affair but a powerful political polemic fused with a call to their readers to turn their words into action:
"It is said that history is written by the victors. It is our fervent hope however that this book, along with your dissident voice and helpful actions, will significantly contribute to the rewriting of the tragic history of HIV and AIDS".

In 'People Helping People To Return to Health' the authors append a list of useful organisations and contacts for those who want to take direct action to help themselves. This book is a convincing and persuasive summary for those unfamiliar with the dissident viewpoint.



Prof. Alfred Hässig

8th April 1921 - 14th November 1999

Remembered by Michael Baumgartner

One of the early leading voices of AIDS dissent died on November 14th 1999 after several months of illness. Besides being a generous benefactor of organisations such as Continuum, Meditel Productions and the International Forum for Accessible Science, and a devoted, published AIDS-dissenter, Alfred Hässig accomplished more than many can aspire to. Let us give some time here to honour his life. A life that has touched many. A life that ended too early. A life, shortened according to many by the tragic court case brought upon him in his later days.

Alfred Hässig's life was that of dedication. In his professional career he was dedicated to building up and developing the Swiss Red Cross (SRC) Blood Transfusion Service and its Central Laboratory in Bern (ZLB). He strongly influenced immuno-haematology and other fields of medicine in Switzerland and abroad.

He was a circumspect doctor and scientist. His life-work was the one of a doctor, a scientist and an entrepreneur. As a young assistant doctor at the Institute of Hygienics at Zürich University he followed a call in 1949 from Bern to become the head of the Bacteriological and Serological Department of the newly founded ZLB. In 1955 he became its director and in 1961 he became unsalaried lecturer for immunology, essentials on transfusion and forensic serology at the University of Bern.
Alfred was a successful pioneer. The first move was to build up a modern blood-group serology with the aim to avoid and to treat jaundice (hepatitis) of newly born children. The first pastorizable and thus hepatitis-safe plasma protein product was developed in 1954. This treatment for people with haemophilia has been adopted by several European blood donation centres. It was greatly appreciated by the people with haemophilia as it offered them a life-saving treatment for their illness.

An important ethical principle in Hässig's professional life was the non-remunerated nature of blood-donations, an idea which was not, at the time, taken for granted in many countries, including Switzerland. For

this issue, ZLB recruited unpaid blood donors and made them available to hospital blood banks, on condition that they became members of the SRC Blood Transfusion Service and no longer relied on paid donations. Within a few years, non-remunerated blood donation had been introduced throughout the country.
As a representative of Switzerland in the Council of Europe, the World Health Organisation and the Federation of Red Cross and Red Crescent Societies he successfully helped promote unpaid blood donation in other countries. In the 1950s and 70s, the recommendations of these international bodies were - unlike today - mainly based on ethical considerations.

The introduction of routine blood screening tests in 1970 made clear that paid donors were more frequently infected with transfusion-relevant infectious pathogens than unpaid donors, and that products from paid plasma sources thus carried a greater risk.

His successful international engagement in support of unpaid blood donation was met with considerable animosity from the emerging profit oriented plasma product industry. Death threats, family life interruptions by anonymous phone calls and attempted bribery from those who wanted to benefit from human suffering were the consequences. Hässig would not bend, putting altruism before profiteering.

In 1962 Hässig was awarded the Marcel Benoist Prize. In 1966 he became professor of immunopathology, transfusion medicine and forensic serology at the University of Bern. From 1974 to 78, he was president of the German Society of Transfusion Medicine and Immunohaematology, and from 1982 to 84 he presided over the International Society of Blood Transfusion.

Upon his retirement from the ZLB he founded in 1986 together with colleagues Kurt Stampfli and Hannes Cottier the Study Group for Nutrition And Immunity in Bern. As an independent team they investigated and addressed fundamental questions relating to the influence of nutrition on ageing and old age disease such as arteriosclerosis, as well as immunity and cancer.

During the last few years Hässig started to have doubts about certain aspects of conventional allopathic medicine. A reputable scientist who once was a treating physician himself he understood that the increasing technocratic medicine had - despite great achievements in heroic medicine - sadly little to offer when it comes to actually successfully treating diseases. He started to worry about wrong targets or incorrect decisions taken by doctors as well as the pharmaceutical industries.

Unfortunately these years were overshadowed by legal proceedings. He found himself being accused of ‘manslaughter in second degree’ and ‘careless behaviour in a position of responsibility’ by four ‘HIV positive’ haemophiliacs. This case brought against him in 1993 had been provoked by the pharmaceutical industries. It hit hard and made him turn his attention to AIDS. The reduction of the infectious risk and the well-being of people with haemophilia had been one of his central concerns throughout his life. The accusation of ‘manslaughter in second degree’ was soon dropped. He was found guilty of ‘careless behaviour in a position of responsibility’ in 1998, despite lack of evidence. It was not only a rather controversial but also political judgement. Only after his death he was sentenced for two years on probation. He died heart broken before the Federal Court confirmed this rather political judgement upon appeal this year.

Alfred Hässig has always been a very conscientious and far-sighted doctor and a socially inclined patron. One could call him the father of blood transfusions in Switzerland. Medicine owes him great respect and full appreciation.

In 1988 Alfred Hässig met Karl Lutz the founder of PADMA, a company specialising in Tibetan Medicine and Felix DeFries founder of the Study Group for AIDS Therapies. At a time when challenging the AIDS-dogma was a lonely endeavour met with even greater hostility than today, they alerted affected people to the dangers of

early AZT treatments and subsequent toxic drugs. Alfred was appalled by the death sentence given by AIDS doctors to already vulnerable people. This unfortunately today common sort of mal-practice made him look into non-aggressive therapeutic models in AIDS. He put together important information on treating immune deficiency with natural medicine. Many of his powerful investigative publications on AIDS, suggesting non-harmful treatments were published in CONTINUUM.

Vivid is the memory when a gay man affected by AIDS called the office to tell Alfred, that he considers him to have saved his life by breaking the deadly spell hanging over the heads of labelled people. Indeed, when ever asked to speak on the misrepresentation of AIDS and in support of people living with a positive 'HIV' test result he would do so nationally and internationally. His office became a meeting point for radical thinkers and a refuge for people living with a 'HIV' positive test result. How many have survived, possibly thanks to Alfred Hässig's work, history will tell.

Due to a mutual sponsor of his work and my studies, Alfred and I met in the early 90s. He encouraged me when leaving my job to follow my calling, starting to work on the human rights side of the AIDS disaster. His office became IFAS' first home. His gentle spirit and inspiration and the quality of his work is greatly missed by his sixteen colleagues.

Besides initially helping to establish the Swiss AIDS Foundation, Hässig generously supported financially over several years several AIDS-dissident organsiations amongst them Meditel Productions, *Continuum* and IFAS. He was proud to be part of a movement combining such a diversity of individuals. He enjoyed relaxed social moments just as much as the sometimes heated debates, something he saw at risk of extinction in modern scientific progress.

Alfred Hässig died at the age of seventy eight. He is survived by his sister, his three children and five grand-childern. He will be remembered by his many friends and colleagues. Concerned about the people at risk of iatrogenic (medically induced) death, he had asked me before his death, if I would continue this, our work. The people affected are not safe yet, the AIDS-war is not over yet. My answer was 'Yes'. This commitment remains.

Thank you, Alfred

Thanks to Kurt Stampfli, Felix DeFries, Andreas Morell, Hans, Lena and Marietta Hässig and Hans Wirz.