The circular reasoning scandal of HIV testing

By Neville Hodgkinson
21 May 2006

(See original in The Business on line)

IT WAS an icon of compassion, a sign you cared. To wear the red ribbon meant to express solidarity with HIV/Aids victims everywhere. It signified you knew the importance of antiviral drugs and HIV testing, Aids awareness and condoms – and of the urgent need for a vaccine.

In contrast, if you cast doubt on the ever-burgeoning and massaged HIV/Aids statistics; or suggested the billions raised for HIV research and treatment might be better spent on established medicines and in fighting poverty; or – perish the thought – if you questioned the theory that Aids is caused by a sexually transmitted virus, you lost your right to be considered a sensible and decent member of the human race. You were a "denialist", a "pariah", a "flat-earther", a "crackpot". Even if you were a leading scientist, your funds would disappear and your ability to publish in mainstream journals reduced to zero.

Today, whether it is frightening the residents of a Cornish town with a cluster of purported infections, or causing the former head of South Africa's National Aids Council to apologise for having unprotected sex with an HIV-positive Aids activist, or enabling U2 front-man Bono to edit an issue of the Independent newspaper dominated by impassioned accounts of Africa's HIV/Aids plight, the virus that has held such sway in the popular mind for more than 20 years is still never long out of the news. It is now very big business: American Express, Motorola, Gap, Converse and Armani are among the corporate giants supporting Bono's RED campaign promoting special products to raise funds for Aids in Africa.

But unreported in Bono's Independent (or in any other edition of the paper, which for years has followed an unquestioning line on Aids) there are signs that the power of the red ribbon is in serious decline. In the United States, where respectable opinion has long held the HIV theory of Aids to be immune to questioning, a controversial 15-page critique in the influential Harper's Magazine has caused culture shock. As well as detailing a cover-up by government scientists regarding Aids medication trials, the article approvingly quotes scientists who have argued for years that HIV is not the cause of Aids.

Meanwhile the Washington Post last month published an investigation headlined "How Aids in Africa was overstated", arguing that "increasingly dire" and inaccurate assessments of HIV infection by UNAIDS (the Joint United Nations Programme on HIV/Aids) had "skewed years of policy judgments and decisions on where to spend precious healthcare dollars".

In India, a proposed Red Ribbon Campaign through the national rail network has been abandoned, following a national convention on HIV in Bangalore last October attended by more than 1,500 HIV-positive people where the once-fashionable symbol of Aids awareness was ceremoniously rejected. In front of

television cameras, a six-foot red ribbon was cut into pieces as a protest against the “oppressive and patronising” symbol.

Speakers said there were no similar icons of solidarity for people suffering from other diseases. The ribbon’s connotations that “HIV=Aids=Death” – the scientific orthodoxy subscribed to by UN agencies, pharmaceutical interests and thousands of activists around the world – was said to further the isolation, discrimination and sense of doom suffered as a result of an HIV diagnosis. Veena Dhari, the first woman in India to declare herself HIV-positive, said that when HIV-positive people see the ribbon “we feel like committing suicide”. She called on all Aids organisations to stop using it.

The story appeared on the front pages of newspapers as well as national television in India, where media have proved more resistant than in most African countries to huge pressures to conform to international opinion on HIV/Aids.

Two years ago Richard Holbrooke, former US Ambassador to the United Nations and now president of the Global Business Coalition on HIV/Aids, an alliance of 200 international companies promoting Aids testing, treatment and support, said in Washington that a major impediment in dealing with Aids globally was that many governments – and people – were still in "a denial phase – they believe they have no Aids problem."

Citing India as an example, he said that if it did not change its policies, it would soon have the highest HIV/Aids tally in the world. By last year that had already happened, according to Richard Feacham, head of the Geneva-based Global Fund to Fight Aids, Tuberculosis and Malaria, the main beneficiary of the Product RED initiative.

"The epidemic is growing very rapidly. It is out of control," Feachem said in Paris. "There is nothing happening in India today that is big or serious enough to prevent it." India had to wake up, because without action, "millions and millions and millions are going to die."

That is not the view of Anju Singh, of JACKINDIA, a Delhi-based Aids policy study group. Singh, chief guest at the Bangalore convention, told The Business last week that "there are no reports – not even anecdotal ones – that reflect visible proof of an epidemic in this country." The official estimate for HIV infections is around 5m; but a dearth of Aids cases – averaging 10,000 a year over the past 10 years - suggests that is grossly wrong.

Nor has there been any abnormal increase in death rates, even in suspected "high risk groups" such as red light areas. The Indian government does not publish data for Aids deaths; but "questions we got asked in Parliament have elicited a cumulative figure of 1,100." When UNAIDS published a figure of 310,000 Aids deaths in India in 1999 alone, and a cumulative total of 558,000 Aids orphans, JACKINDIA challenged them publicly. In late 2001 the figures were withdrawn – but only after being used earlier that year to project the state of the epidemic in India at the UN General Assembly Special Session on HIV/Aids in New York.

"For years now, agencies like the CIA, World Bank, UNDP, UNAIDS, a plethora of NGOs as well as articles published in respected science journals have been

talking of an exploding epidemic in India, and Africa-like conditions," Singh said. "We have consistently challenged the agencies that claim India is underplaying figures and is in denial; none of them has been able to provide any alternative data or evidence to substantiate their claims."

The iconoclastic Harper's article, entitled "Out of Control: Aids and the corruption of medical science", has sparked intense debate. Greeted by a chorus of condemnation and calls for the resignation of Harper's editor, it has nevertheless found many defenders. It was written by Celia Farber, a journalist and long-standing critic of the science surrounding the HIV theory.

In an editorial, the Columbia Journalism Review accused the magazine of "racing right over a cliff" in publishing Farber. A blog called New Aids Review responded that the editorial was "a poor specimen of what journalism students are learning at one of the great universities", adding that the author would do better to write a thesis on "The Media in Aids: How Journalists Failed the American Public".

But even some long-standing HIV/Aids activists have admitted themselves shaken by the facts Farber set out about the lethal potential of some antiviral drugs; and the controversy has also taken the lid off a claim made repeatedly in response to attempts to reopen debate on the causes of Aids, that only a handful of scientists question the orthodox view.
Thanks to the internet, an association started 14 years ago to press for a scientific reappraisal of the HIV/Aids hypothesis now lists more than 2,300 public dissenters, including Nobel Laureates in chemistry and medicine on its website (http://rethinkaids.info/quotes/rethinkers.htm). Many have advanced degrees in the sciences and medicine as well as direct experience of working in the public health sector in Africa and other supposedly HIV-ravaged parts of the world.

One of these is Dr Rebecca Culshaw, assistant professor of mathematics at the University of Texas, a mathematical biologist who for 10 years studied and published models of HIV disease and treatment. In an internet posting entitled "Why I Quit HIV", Culshaw calls for a ban on HIV tests. She says they do "immeasurably more harm than good" because of an "astounding" lack of specificity and standardisation; she adds that many people are being treated with drugs on the basis of an insupportable theory. "My work … has been built in large part on the paradigm that HIV causes Aids and I have since come to realise that there is good evidence that the entire basis for this theory is wrong."

In Australia, the idea that anyone can be diagnosed as infected with HIV is to face a court challenge. In a hearing set down for July, the lawyer for a man found guilty of endangering the lives of three women through having unprotected sex (one woman has tested positive, while the other two are negative) is to call evidence from a Perth-based group of scientists who during nearly 25 years researching the scientific literature on Aids have come to an even more radical conclusion than the American dissenters quoted in Harper's. The group (www.theperthgroup.com) will testify that "HIV" has never been isolated from the tissues of Aids patients; and that in consequence the HIV test has never been validated and there is no proof HIV is transmitted sexually.

Dr Robert Gallo, the American government researcher whose team developed and marketed the first test kits, says in a letter in this month's Harper's that "no test in medicine is perfect, but done correctly and with a confirmatory second test, the HIV blood test developed in our laboratory comes close." Gallo and others, including activists promoting anti-viral drugs in South Africa, make similar assertions in their rebuttal of Farber's article stating that: "HIV tests were highly accurate from the time they were developed in 1984 and have become much more accurate over time as the underlying technology has evolved. HIV tests are amongst the most accurate available in medical science."

In fact, as demonstrated in a two-part investigation published in The Business in May 2004 (see panel), experts have known since the early years of Aids that "HIV" test kits could not be used to diagnose Aids. Delegates at a World Health Organisation meeting in Geneva in 1986 heard that the kits were licensed to protect blood and plasma donations, not as a screen for Aids or people at risk of Aids. But, dictated by public health needs, usage had expanded and "it was simply not practical" to stop this, as Dr Thomas Zuck, of the US Food and Drug Administration, put it.

The 100 experts from 34 countries heard that, though the tests were useful in safeguarding blood supplies, something more was needed to distinguish genuine infection with HIV. Dr James Allen, of the US Centres for Disease Control Aids programme, said studies suggested some people were reacting to components of the cell line used to grow HIV for many of the test kits licensed in America. Other reactions occurred because of antibodies to normal cell proteins, naturally occurring in the body. Allen warned that the problems could be magnified in areas of the world that did not have the sophisticated facilities of America.

The meeting was told that a so-called "confirmatory test", called western blot, relied on the same principle as the test kits it was supposed to be checking and so was liable to the same kind of false-positive reactions. Subsequent research has repeatedly confirmed this problem: more than 60 conditions that cause such false-positives have been documented. One is tuberculosis, which produces symptoms of Aids as defined in Africa and is immensely widespread among impoverished people.

As the HIV/Aids paradigm won worldwide acceptance, increasingly complex procedures for trying to make a reliable diagnosis came into being. But the basic problem – not being able to validate any of these procedures against pure virus taken from patients – still remains.

Harper's has published pages of letters in the latest (May) issue in response to Farber's article, which appeared in March. Roughly half are supportive, half against. The first letter is from Culshaw, who writes: "This debate should have happened long ago, before an unproven hypothesis of an immune-destroying retrovirus was thrust upon a vulnerable public, and without being thoroughly critiqued in the scientific literature. Despite the promises made in 1984, there is still no cure and no vaccine. Instead, there has been a fundamental erosion in scientific and clinical-trial standards, with implications reaching far beyond HIV.

"To do the best we can for those affected by Aids – including those in Africa, where Aids presents a clinical picture quite different from that in the developed world – there urgently needs to be an honest scientific debate."

There is an association between testing HIV-positive and risk of developing Aids. This is the main reason why scientists believe HIV is the cause of Aids. But the link is artificial, a consequence of the way the test kits were made.

It never proved possible to validate the tests by culturing, purifying and analysing particles of the purported virus from patients who test positive, then demonstrating that these are not present in patients who test negative. This was despite heroic efforts to make the virus reveal itself in patients with Aids or at risk of Aids, in which their immune cells were stimulated for weeks in laboratory cultures using a variety of agents.

After the cells had been activated in this way, HIV pioneers found some 30 proteins in filtered material that gathered at a density characteristic of retroviruses. They attributed some of these to various parts of the virus. But they never demonstrated that these so-called "HIV antigens" belonged to a new retrovirus.

So, out of the 30 proteins, how did they select the ones to be defined as being from HIV? The answer is shocking, and goes to the root of what is probably the biggest scandal in medical history. They selected those that were most reactive with antibodies in blood samples from Aids patients and those at risk of Aids.

This means that "HIV" antigens are defined as such not on the basis of being shown to belong to HIV, but on the basis that they react with antibodies in Aids patients. Aids patients are then diagnosed as being infected with HIV on the basis that they have antibodies which react with those same antigens. The reasoning is circular.

Gay men leading "fast-track" sex lives, drug addicts, blood product recipients and others whose immune systems are exposed to multiple challenges and who are at risk of Aids are much more likely to have raised levels of the antibodies looked for by the tests than healthy people – because the antigens in the tests were chosen on the basis that they react with antibodies in Aids patients. But this association does not prove the presence of a lethal new virus.

The tests do discriminate between healthy blood and the blood of patients with Aids or Aids-like conditions, because Aids patients suffer a range of active infections and other blood abnormalities, some of which are transmissible. This is why the tests are useful as a screen for the safety of blood supplies.

But to tell even one person that they are HIV-infected on the grounds that they have antibodies that react with the proteins in these tests is an unwarranted assault.

Neville Hodgkinson is a UK-based journalist who has been writing about Aids for 20 years. He is the author of AIDS: The Failure of Contemporary Science (Fourth Estate, 1996).