

**the
act**
I s s u e N o . 9

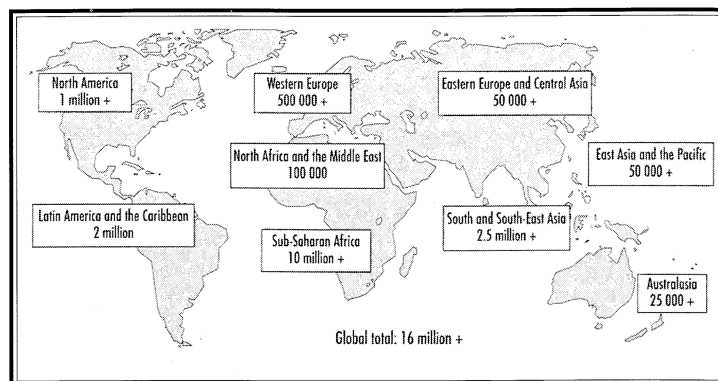
WORLD AIDS DAY '94
"ONE FAMILY, ONE WORLD"



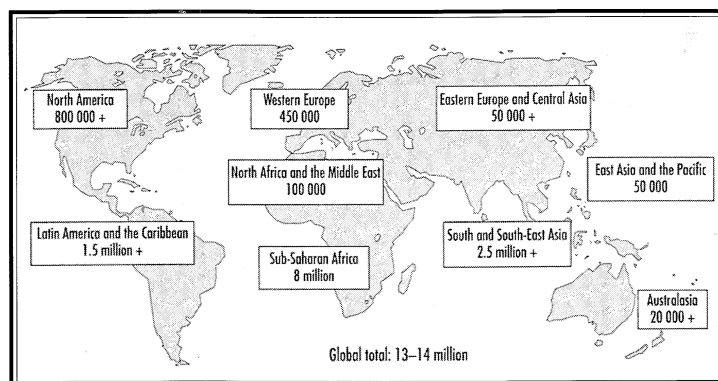
GLOBAL

UPDATE

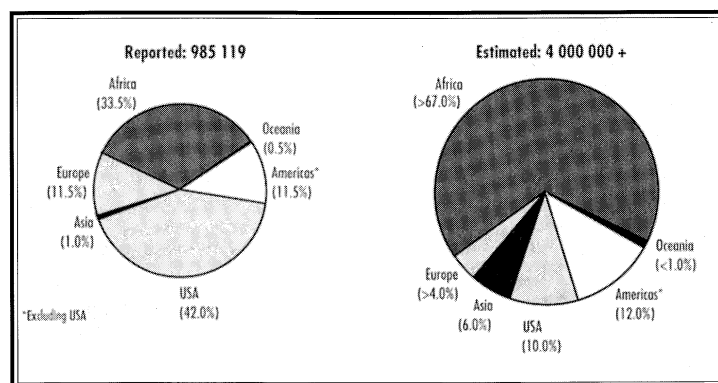
Estimated distribution of **total adult HIV** infections from the start of the pandemic until mid-1994



Estimated distribution of HIV infected adults **alive in mid-1994**



Total number of **AIDS cases in adults and children** from the start of the pandemic until mid-1994



(Source: WHO)

The ACT is published by ACTION FOR AIDS SINGAPORE
c/o DSC. 31 Kelantan Lane, #02-16, Singapore 0820
MITA (P) No. 065/11/93

Editors : ROY CHAN, KAN SHEUNG KIN

Editorial Board : DAWN MOK, PETER LEE LUCINDA KANG, ABDUL AZIZ AGIL

Editorial

World AIDS Day

on **December 1st** is coming around again. This year we are expounding the theme **"AIDS and the family"**. As the infection becomes more widespread, more people would also be likely to experience "AIDS in the Family". Traditional and non-traditional families around the world are responding to **the AIDS challenge** by being a central point in AIDS education and information networks, support and care resources.

After a little over a decade since its first appearance in the world, AIDS and its compendium of nomenclature like HIV, condoms, **safe sex**, gay, sex workers, NGO and victims have entered mainstream casual conversations. While AIDS may have become a cool and politically vogue cause and phenomenon to champion, it is by far more important for it to be incorporated into our formal education curriculum as part of human and social biology, ethics, civics, general paper and even economics. **Society needs to address AIDS as "one of OUR problems" rather than that of "those poor AIDS victims"**. Right now we are still far from integrating discussions about AIDS into the average Singaporean family.

In this issue of **The Act** (#9), various contributors have put together a collage of stories of AIDS in the family. A family learning to live with a son and brother with AIDS. AIDS issues relating to women are more than just feminist issues, we need to examine the roles that women play in the family and society which are often taken for granted, even by women themselves. Roles that make women more vulnerable to being infected with and affected by HIV.

Simplistic calls for universal HIV testing as the central measure for preventing AIDS continue to be heard from various sources. In this issue, we reprint an excellent article from the World Health Organisation (WHO) which examines in detail **the arguments for and against mandatory screening**, which we hope will shed some light on the matter and provide a rational and objective perspective.

The 10th International Conference on AIDS held in Yokohama, Japan in August this year gave participants a blunt report from the research laboratory: **"There is no cure for AIDS yet."** Yes, we do have new drugs and vaccines on trials. No, we are nowhere nearer to a cure than last year. We feature reports from Yokohama on **anti-HIV drugs** and **gene therapy research**.

Holding the conference in Japan was a significant step towards highlighting the **potential explosion of the AIDS epidemic in Asia** in the next few years. Paralleling recent economic and political trends focusing greater attention on East Asia and Asia-Pacific regions, non-governmental organisations are learning to re-organise themselves on regional and cultural basis for more effective transplantation of models of education and support for people living with AIDS.

The conference was attended by 12,000 delegates and captured worldwide media attention by the high political profile of its opening ceremony which was graced by the Japanese Prime Minister and also the Crown Prince and Princess of Japan. Yet it was scarcely reported in the local press. **Have we become complacent about AIDS, or worse still, become fearful of addressing AIDS and all its attendant issues in less than an open manner?**

At home in Singapore, **our numbers are still rising**. Patients are still being diagnosed and informed as having AIDS only upon their first admission to hospital. It is one thing to know all the facts about AIDS, and another to understand it well enough to identify yourself as a **potential candidate** for an AIDS test and counselling session.

I look forward to the day where we can truthfully say **"Aids and the family, AIDS in the family, what's the difference?"**

CAN *mandatory* HIV testing STOP the AIDS epidemic?

Forcing someone to undergo medical testing of any kind is an invasion of privacy and a violation of human rights. This is a fundamental reason why WHO and its member countries have taken a strong position against forced testing for HIV. But what about protecting the health of the public? The following Questions & Answers explain why compulsory HIV testing, far from protecting the public health, can actually endanger it.

Compiled by **Suzanne Cherney**, communications scientist for the
Global Programme on AIDS, WHO.

Some people say that the reason AIDS continues to spread is that we aren't aggressive enough about finding out who is infected with the human immunodeficiency virus (HIV). Shouldn't we be testing everyone for HIV - if necessary, against their will?

If a person tests positive for HIV, it means that he or she has HIV infection and, scientists believe, will ultimately develop AIDS - a fatal disease for which there is at present no cure. But this can take 10 or even 15 years, and some people would prefer to live those healthy years without knowing their diagnosis. In addition, people with HIV infection or AIDS can suffer exclusion, discrimination and even persecution. So testing for HIV is a very serious matter.

People who are counselled about the personal and social implications of taking an HIV test can of course decide to be tested voluntarily. But forcing someone to undergo HIV testing is a highly coercive, intrusive measure.

But why worry only about the infected people? Surely compulsory testing is justified in the case of a fatal epidemic disease?

There are a number of reasons why compulsory testing for HIV makes no sense. To begin with, testing someone for HIV just gives you a diagnosis, and a

diagnosis alone never stopped an epidemic. Testing only helps if there are ways of breaking the chain of transmission. For example, when you test donated blood prior to transfusion and discard the infected blood, you are helping to prevent the spread of the virus. The testing of blood for transfusion, and of tissues or organs for transplantation, is the only area where testing needs to be compulsory.

Testing has helped contain other infectious diseases. Why not AIDS?

Because HIV is different. There is no drug available that can cure the infection or make the person uninfected - that is, incapable of transmitting the virus to another person. And once a person is infected with HIV, it's for life. A person who tests positive for syphilis can be cured with a short course of antibiotics. When someone tests positive for meningitis, the individuals in close contact with him or her can be treated and/or vaccinated. With HIV, there is no medical way to "test and treat" or "test and vaccinate" so as to break the chain of transmission.

Yes, but people with HIV are nevertheless a danger to others. They could be isolated.

They don't need to be, because HIV infection is not "contagious" in the usual sense. Unlike tuberculosis, it doesn't spread through coughing. Unlike

typhoid, it can't be transmitted through food or water. You can't catch HIV from swimming with an infected person, or sharing an office or home, or drinking from the same cup. So locking up infected people is not justified or practical. It's not even necessary to isolate HIV-infected people when they're hospitalised.

We all have a responsibility to look after ourselves. And the fact that HIV spreads mainly through sexual intercourse means that uninfected people are not defenceless against the virus. They have ways of protecting themselves from HIV without locking up the infected individuals. They can abstain from sex, stay faithful to an uninfected partner, engage in sex without penetration, or else use a condom every time for sexual intercourse.

Still, if we could screen the whole population through compulsory testing and then isolate the infected people for life, it might stop the epidemic.

Mass HIV testing sounds straightforward. In practice, it's extremely costly, logistically unwieldy, incapable of identifying everyone who is infected, and fraught with problems that could be avoided by offering voluntary tests and guaranteeing the confidentiality of the test results.

Logistically, it's impossible to take blood samples from everyone, test them, and give everyone their results on the same day. So, even if the authorities managed to trace all infected people (clearly, many won't turn up voluntarily to find out their test results) and isolate them, this wouldn't prevent sexual contact between the uninfected and those who have yet to be tested.

And even if these logistic obstacles could somehow be eliminated, no mandatory testing programme can expect to identify all HIV-infected people. Individuals who think they might be infected can go to extremes to avoid testing and follow-up, given the serious consequences of a positive HIV test - especially when there is a threat of isolation.

Not all HIV infected people will be identified even if they are tested. Most commercially available HIV tests work by determining not the virus itself but antibodies to the virus which the person's immune

system produces following infection with HIV. But it takes up to 12 weeks, or sometimes more, for these HIV antibodies to be produced and become detectable in a blood sample. This is the "window period" during which the person continues to test negative.

At best, an HIV test result is a "snapshot" of someone's infection status today. It's no guarantee that he or she won't become infected tomorrow, or next week or month - and how often can people be tested?

In any case, periodic testing of the entire population is prohibitively expensive in terms of staff time, transport of blood samples, etc. (The actual HIV test kits account for only a fraction of the total costs.) In many developing countries, testing the whole population just once would cost more than the government is able to spend on *all* health care in a year.

Surely some countries have attempted to test everyone?

No. The financial and logistic impossibility of testing the whole population periodically has been recognised even by the few countries that have devoted most of their AIDS budget to testing. And most of these now realise that instead of mandatory testing - which failed to stop the epidemic - they should use their resources for preventive measures of proven effectiveness, such as informing the general public about HIV transmission, making condoms cheap and accessible, providing school-based education for young people, and ensuring blood safety.

Even if you can't identify and trace all infected people, you could at least isolate the ones you find.

Apart from being a serious violation of human rights, lifetime isolation would be an unnecessary economic burden on the individuals' families and on society. In many places in Africa, and increasingly in Asia, 10% or more of all young adults are infected. Isolation means forfeiting their economic productivity during the decade or so of good health that these young adults can expect. It means depriving their families of breadwinners and care-givers. And it means keeping thousands or even millions of fit individuals fed, clothed and looked after for years on end - at government expense.

I'm still concerned about all the healthy people walking around with HIV who don't even know that they have the virus. Granted that isolation makes no sense and that there is no medical way of curing them or making them uninfected. Compulsory testing would at least force them to find out their diagnosis and take precautions against transmitting the virus to others.

In other words, won't people who learn they are HIV-infected through compulsory testing simply avoid unsafe sex from then on? To begin with, not even *voluntary* counselling and testing achieves a uniformly "preventive" effect. When testing is purely voluntary, and people are presumably well motivated to protect themselves and their loved ones, the evidence shows that some infected people manage to change their sexual behaviour, others do not. For example, helpful behaviour change (increased condom use) has been seen in couples who seek voluntary testing *together* and find out that just one of them is HIV-infected.

Is *compulsory* testing likely to be more effective than this in achieving behaviour change? On the contrary. First of all, someone who is forced to find out he or she is infected may have less interest in protecting others - or even in self-protection (safer sex protects both partners). But the main point is that a permanent, lifelong change in sexual behaviour isn't achieved automatically or quickly. The consistent use of condoms, for example, takes continuing motivation, will power, personal commitment. It takes the availability of inexpensive and readily accessible condoms. And for someone in a long-term relationship, it takes the full cooperation of the other partner.

The bottom line is that HIV prevention rests on the individual's willingness to avoid unsafe behaviour. Will power and motivation can't be coerced. You don't gain cooperation by forcing them to be tested.

T rue, but even if the infected person doesn't voluntarily adopt safer behaviour, at least other people can be warned...

Who? Medical test results are supposed to remain confidential. Imagine how suspicious we would be of doctors if they turned into law enforcement officers! We'd stop seeking medical help for a whole

range of problems if we thought our diagnoses would be handed out.

This doesn't mean that voluntary contact tracing is useless, though with HIV it's far less useful than for syphilis or gonorrhoea, where the sexual contact can be tested, treated and cured. But it's obvious that people infected with HIV will be less likely to volunteer information about their sex partners if they suspect that those individuals may also be forced into testing. Once again, making the test mandatory instead of voluntary makes it less rather than more effective.

Suppose an infected man refuses to use condoms or tell his wife about the infection. What will happen if the health care provider doesn't keep the diagnosis confidential but goes ahead and informs her? The wife might decide to leave the relationship, assuming she is economically able to do so. But while that might help her (if she is still uninfected), there are two reasons why it might endanger the public health. First, her rejected husband may well find new sex partners - and the epidemic will continue to spread. Or, if she is infected and doesn't know it, she might infect her *new* partners. Secondly, there is ample evidence that in place where test results aren't kept strictly confidential, people simply avoid HIV testing and continue to behave as though they were not infected. Helpful behaviour change that might have occurred as a result of voluntary counselling and testing is thus forfeited.

In some places, couples have to get tested for syphilis before marrying. Why not for HIV?

Even with syphilis, a curable disease, experience from around the world shows that mandatory premarital screening has little or no impact on the public health. For HIV, mandatory testing makes even less sense. First, fear of a compulsory test will dissuade many couples from marrying where such a requirement exists - a disadvantage that voluntary testing doesn't entail. Second, why pick the time of marriage? People often begin their sexual experimentation well *before* that. (Indeed, if premarital sex were rare, testing before marriage would turn up virtually no positive HIV results!) And, most important, sex with other partners can and does take place after marriage. For the many people whose main risk of HIV is their partner's extramarital activity, a negative premarital

test offers no protection - just an illusion of safety.

But HIV can be transmitted from an infected woman to her fetus or newborn. Wouldn't it be helpful at least to insist on testing all pregnant women?

Once a woman is pregnant the fetus may well be infected already, although there is no way to know this. At this stage the only possibilities for prevention are abortion, a decision not to breast-feed (although in many settings bottle-feeding may be *more* risky for the baby), or perhaps treatment with an antiviral drug around the time of delivery (this is still experimental). All these are major decisions which cannot be forced on any woman but which she must take, if at all, voluntarily. Therefore, voluntary counselling and testing is what should be offered. Forced testing may also dissuade pregnant women from seeking medical care.

In any case, the best time of prevention is *prior* to pregnancy. Married or unmarried, people need to be aware of all the implications of HIV infection before they decide whether to have children.

Some employers test job applicants before hiring them, Does that make sense?

No. It won't protect the general public. And it won't protect the firm's employees because HIV infection is not "contagious" and doesn't spread in the workplace. The emphasis in any firm should be on preventing infections among the *existing* workforce, which is always far larger than the number of new staff recruited each year. Some employers provide their workers with AIDS education, encouragement for condom use, and care for sexually transmitted diseases (STDs) such as syphilis and chancroid, which if left untreated greatly increases a person's susceptibility to HIV infection. They report a decrease in STD rates among their employees, which is good news on two counts. It means employees are less likely to get HIV and, for companies that offer or reimburse STD care, it means a decrease in company expenditure.

I can see why forcing ordinary people to be tested is useless. What about restricting compulsory testing to high-risk groups?

At first sight this seems more practical than

compulsory testing of the general population, but in fact it's got even more problems. To begin with, many such groups are hard to define, and even harder to locate. For example, men who have unprotected sex with prostitutes are clearly at high risk - but how do you identify them? And where do you draw the line? At those who seek out a sex worker twice a year? Or those who do so every payday? And what about their wives - are they a high-risk group to be tested? In many places, after all, most women with HIV have been infected by their one partner - their husband.

One well-defined group, at least, is drug users who inject their drugs. Isn't it true that they are at high risk of acquiring HIV?

Yes. If they don't use new or freshly sterilised equipment every time they inject, they can easily become infected - and then pass the virus on to their sex partners. So the most urgent need is to teach them to clean their equipment carefully each time, never share it with anyone, or exchange their used syringes for sterile ones - and to encourage them to use condoms for sex. (Over the longer term, they need encouragement to switch from drug injecting to safer forms of drug use, or no drug use at all.) These so-called "harm reduction" measures are clearly vital for the public health as well as for the users themselves.

The biggest hurdle for harm reduction programmes is that drug users live on the margins of society. Almost everywhere, drug use is secretive or frankly illegal, and users are mistrustful of authorities. In many places, health workers have to persuade the local police not to arrest drug users who come in for education, new syringes, bleach or condoms. Any threat of mandatory HIV testing would scare them away even more, doom the harm-reduction programmes to failure, and endanger the public health.

Shouldn't we at least insist that sex workers be HIV-negative?

This is yet another idea that sounds fine in theory but works poorly in practice. Compulsory testing is as counterproductive for prostitutes as it is for drug users. Authorities need to work with prostitutes, not against them. They need to strengthen their ability to demand condom use by clients. (This is the standard harm-reduction measure for commercial sex work.)

If prostitutes are harassed and driven away by the threat of mandatory testing, they will be out of reach of effective harm-reduction programmes.

Prostitutes who can't escape testing and turn out to be HIV-positive may be fired (if they work in a brothel) or lose their registration. But this doesn't protect the public health. Infected individuals will simply move on to another place. Where there is a system of registration, the infected sex workers will join the ranks of unofficial prostitutes, who generally have even less power to negotiate safer sex. Testing doesn't even protect the local clients. No matter how many "condom only" signs are posted, any brothel owner (or government official) who insists on testing sex workers - and lets the client know that they are HIV-negative - is sending a clear message that if a client doesn't want to use a condom, he'll still be safe. Of course the client may well be infected himself and infect the prostitute, who will then infect others who decide not to use a condom, and so on. Testing sex workers even as often as every 3 months still means that, because of the "window period", they can have HIV for nearly half a year - and infect many clients - before their infection is diagnosed.

You may well ask, why test the prostitutes and not their clients? From the standpoint of common decency, it's just as important to safeguard sex workers as sex work clients. From the standpoint of public health, protecting the prostitutes is even more important. Besides, there's something illogical about putting the responsibility of HIV prevention and safe sex on the sex worker. After all, in almost all cases, whether the prostitute is male or female, it's the client who has to wear the condom!

If condom use by men is the key, why not try to test STD patients systematically for HIV? After all, they're mostly men. And by coming down with a disease like syphilis or chancroid, they have proven that they are engaging in unsafe sex and are at risk of HIV.

There's no doubt that men (and women) with an STD are a very important "audience" indeed when it comes to HIV prevention. Attendance at a clinic or doctor's office provides the ideal opportunity for educating them about AIDS and condom promotion - just at the time they are confronted with evidence of their vulner-

ability to all STDs. But people with an STD need encouragement to seek care at the earliest possible sign of disease. Any threat of mandatory testing would frighten them away.

So compulsory testing can't even help with people who engage in high-risk behaviour?

No. When it comes to drug injectors, sex workers and STD patients, mandatory HIV testing has nothing to recommend it - and multiple disadvantages as compared with voluntary testing. First, people are hard to track down for compulsory testing, and expensive to trace for follow-up. Then, what do you achieve? When you find infected individuals, you can't isolate them for life or enforce behaviour change. Indeed, voluntary testing is more likely to result in the adoption of safe behaviour.

Not only are the "benefits" of compulsory testing illusory, but the side effects are a positive danger to the public health. The main ones are driving vulnerable people away from harm-reduction and other prevention programmes, and encouraging a false sense of HIV-free security in the general population. Voluntary testing hasn't got these disadvantages. Hence there is nothing to be gained for the public health, and much to be lost, by making HIV tests compulsory instead of voluntary and confidential.

Aren't coercive measures ever necessary?

Yes. It is occasionally necessary to override people's individual rights in the interest of public health. For example, WHO recommended obligatory vaccination against smallpox until it was eradicated, and still endorses the need for mandatory vaccination against yellow fever for people travelling from zones where this disease is endemic. If one day a medicine is found that can make HIV-infected people non-infectious to others, WHO will re-examine its policy on HIV testing. For the moment, AIDS happens to be a disease for which coercive testing is not only pointless but harmful to the public health.

In the AIDS era, there is no way to sideline the infected people so that everyone else can go on living as before. Today, *everyone* has a responsibility to avoid unsafe behaviour.▲

Women and AIDS

Ovidia Yu summarises some social issues relating AIDS and women highlighted at the 10th Yokohama AIDS Conference

Why should special attention be given to women living with AIDS?

Because HIV+ women may or may not transmit infection to their babies, because a woman doesn't have the option of putting on a condom to protect herself during sex, because women in many societies have very little control over their own sexual and reproductive lives, because in addition to all the ways men are exposed to infection, women can also be infected through ritualized female genital mutilation, because so often women are caregivers of people living with AIDS even when they are infected themselves, because in Western Europe women are the fastest growing group of people with HIV, because 3,000 women are infected with AIDS every day...and every day 500 women die of AIDS.

An HIV+ woman may not infect her unborn child. Rates of mother-child HIV transmission seem to be lower in industrialised countries, probably due to lower rates of breastfeeding. Apart from breastfeeding, the most probable routes of infection are via the placenta, maternal blood, ascending infection from the vagina, and infection of the newborn as it passes down the birth canal. This last is suggested by first-born twins having a higher risk of infection. Studies have produced the hypothesis that 35% of babies of HIV+ women are infected before birth, and 65% during delivery. According to a major French study, if cesarean section is performed before the water bag breaks, rate of mother-child transmission is far lower. In some societies, pregnant HIV+ women are pressured into having abortions, in other societies, the fear of AIDS coupled with anti-abortion policies drive HIV+ women to high-risk, illegal abortions.

Woman, especially women who live in economic dependence on men, need access to affordable, safe, effective and self-applicable methods of barrier contraception. Research in this area must be funded, access to education, counselling and health care services must be promoted.

Little woman-specific health care is available, because most of the work up till now has been done on men. Little woman-specific research has been done. We need to pay more attention to women living with AIDS.

Could we begin with the French Summit on AIDS in Paris, December 1, 1994?▲

AFA ACTIVITIES

The Carnival on Jiak Kim Street

was held on Sunday 5th September 1993 at the carpark of Zouk. Planned as a fundraiser as well as an awareness-raising event, the afternoon's festivities featured a food-and-games funfair, a stall selling over 1,000 pieces of pre-used designer clothes donated by celebrities and "taitais", and pasar malam stalls selling trinkets, knick-knacks and apparel. There was also a series of open-air, live band performances. The evening ended with the launch of Club-AIDS Project Singapore (CAPS) in the discotheque. **About \$15,000 was raised**



(Pictures courtesy of Her World Magazine)

The charity premiere of **Philadelphia** the award-winning movie was held at the Orchard Cinema on Wednesday 23rd March 1994. Under the kind sponsorship of **CK** (Calvin Klein), Cathay Organisation and Columbia Tristar Pictures, the **event raised almost \$160,000** for AFA.

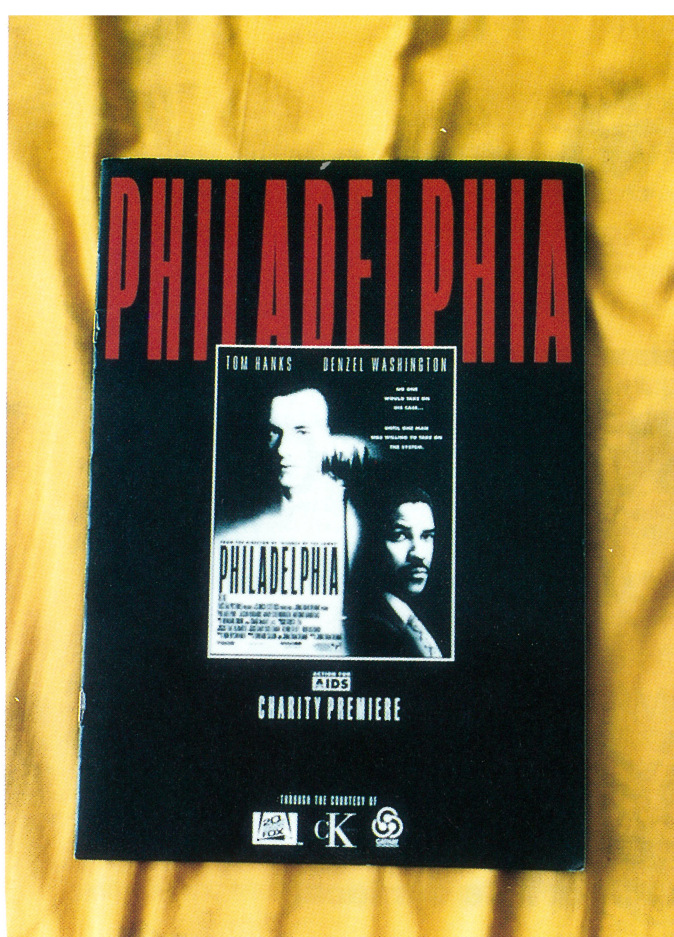
Tickets, which were priced at \$25 and \$100 each, were sold out. The guest-of-honour was Mr Loh Meng See, Chairman of the Government Parliamentary Committee on Health, and Mrs Loh. The movie was preceded by a reception hosted by CK, which also marked the launch of the fashion label in Singapore. AFA received a personal donation from Mr Calvin Klein of US\$5,000. Our other sponsors were Piaget, Tsao-McKown, Morgan Grenfell Asia, Bintan Resorts Management, Wellcome Pharmaceuticals, Christie's International, The Lee Foundation, Singapore Petroleum Company, Opera Cafe and Hard Rock Cafe.

As part of this year's Singapore International Film Festival, HBO (Home Box Office) Asia screened

And The Band Played On

as a charity premiere in aid of AFA. The movie chronicles the early years of the HIV/AIDS epidemic in the USA and Europe, centering on the events and personalities involved in the race to unravel the mysteries of the "new" infection and its cause.

The premiere was held on 22 April 1994 at Capitol Cinema and tickets priced at \$12 and \$100 were sold out. Our guest-of-honour was the Minister of State for MITA, Mr Ker Ser Tsin. The major sponsors were HBO Asia, the Singapore International Film Festival, the Lee Foundation and Riche Monde. **The estimated amount raised was about \$50,000**



(Pictures courtesy of Club 21)



Vivian Wong (extreme right), AFA exco member and some guests at Philadelphia premiere.



Dr and Mrs Loh Meng See and Gerard Ee.

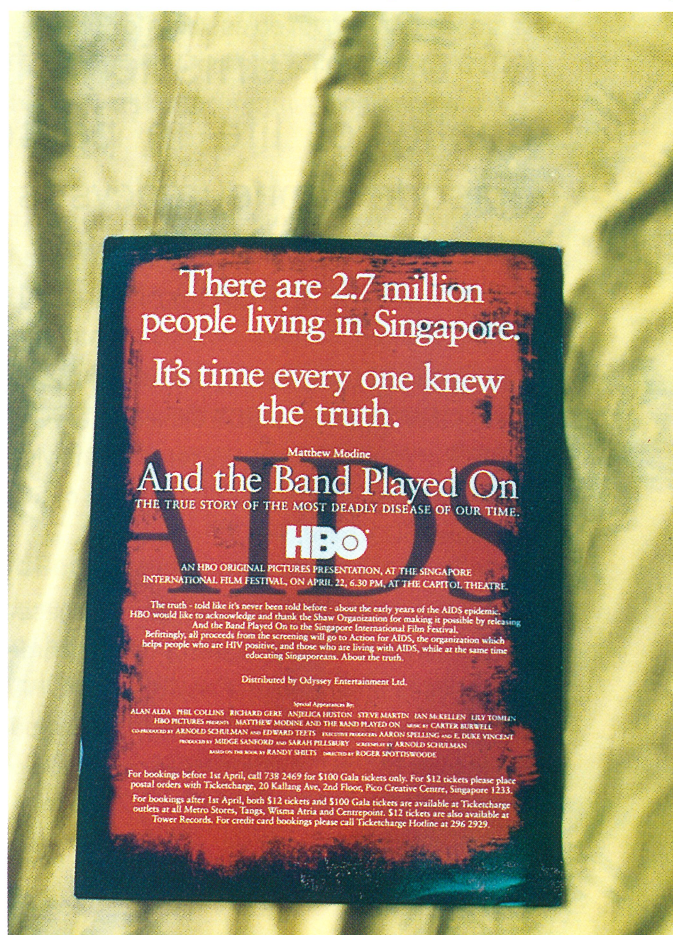


Jacintha and Mrs Chan Ah Kow at And the Band Played On.



Mr Bill Hooks (left) of HBO Asia and Mr David Conner, Country Corp Officer of Citibank NA

(Pictures courtesy of HBO)



Current status of HIV therapy

by OML

The role of anti-HIV drugs in the management of HIV infection is becoming very confused and difficult to recognise. In this article our local medical expert examines the issue.

In **1986**, the first large clinical trial provided strong evidence that zidovudine (**AZT**) prolongs survival, decreases severity of opportunistic infections, and improves the quality of life in persons with AIDS after their first episode of pneumocystis carinii pneumonia as well as those with ARC. Zidovudine was first approved by the Food and Drug Administration (**FDA**) in March 1987.

The optimal time for initiation of AZT in HIV infection remains controversial. The first study of early therapy was the AIDS Clinical Trials Group (**ACTG 019**) in 1987, which showed a delay in the progression to AIDS in asymptomatic HIV infected individuals with CD_4 counts below $500/mm^3$ who received AZT 500mg daily. FDA then approved AZT in a dose of 500mg per day for patients with HIV infection who had CD_4 counts less than $500/mm^3$.

The second large-scale clinical trial to assess early therapy for HIV infection was the **Concorde Study** initiated in 1988. A critical issue raised by the Concorde Study was the benefit of early zidovudine therapy on the survival and disease progression of asymptomatic HIV individuals. **The results showed no benefit over three years of immediate AZT therapy** compared with treatment deferred until symptomatic disease. However the results of the Concorde Study are not inconsistent with the results of studies that show that zidovudine has some short-term efficacy.

There are several reasons for the interest in treating asymptomatic HIV infection namely:

- 1) there are many asymptomatic HIV infected persons
- 2) the vast majority of asymptomatic HIV-infected persons will progress to AIDS
- 3) pathogenetic studies show a dynamic process in this part of the disease spectrum
- 4) agents that can inhibit plasma viral DNA are available.

The decision to start antiretroviral therapy in an asymptomatic HIV individual must be based on the balance between potential benefits and risks. The implication of years of treatment with the agent, particularly the side effects and toxicity, needs to be considered. The possibility of HIV resistance to the agent also exists.

Didanosine (ddI) was approved in 1991 for patients with advanced HIV disease who were intolerant to or unresponsive to AZT. **Zalcitabine (ddC)** has been approved for use in combination with AZT in patients with advanced HIV infection. It is generally recognised that AZT monotherapy loses benefit over time.

In the ACTG 116B/117 study, the group receiving ddI 500mg/day showed improved clinical outcomes compared to those receiving ddI monotherapy (750mg/day) and AZT monotherapy in patients with advanced HIV disease who had previously received fourteen months of AZT. The ACTG 106 trial evaluated the safety of concurrent AZT and ddC in patients with advanced HIV infection with CD₄ counts less than 200/mm³. The AZT and ddC combination showed improved outcome compared to AZT monotherapy.

The recent ACTG 076 evaluated the efficacy, safety and tolerance of **AZT for the prevention of maternal-fetal HIV transmission**. AZT was started between fourteen and thirty-four weeks gestation in pregnant HIV women with CD₄ counts less than 200/mm³ and included six weeks of newborn treatment. AZT reduced the rate of maternal-fetal transmission of HIV by two thirds. The results of ACTG 076 are compatible with results from trials in both symptomatic and asymptomatic HIV-infected adults. We know that viral load is considerably reduced soon after the drug is started.

ACTG 175, European Delta trial, Community Program Clinical Research Association CPCRA 007, are currently underway comparing combination therapy. Investigators are also evaluating combinations of AZT and acyclovir, foscarnet, interferon, cytokines and non-nucleoside reverse transcriptase inhibitors. A new class of drugs, protease inhibitors, looks promising. From the recently completed ACTG 229, the triple combination of AZT, ddC and **saquinovar** (protease inhibitor) was better in immunologic and virologic markers than the two double combination regimens.

Combination therapy has several advantages including reduction of drug toxicity, increasing effectiveness because of synergism and potentially reducing the opportunity for resistance.

The HIV treatment policies continue to vary widely and are often country and culture specific. Some clinicians and patients believe, notwithstanding the results of the Concorde Study, that AZT should be started early with a switch to other antiretroviral drugs as the disease progresses. Others have interpreted the Concorde results as indicating that AZT has no place in the treatment of HIV infection, even in symptomatic disease ("Concorditis").

In my opinion, early treatment of HIV infection is justified as studies have demonstrated that the viral load grows rapidly as HIV infection progresses and that drug-resistant viral mutation occurs more readily in the later stages of the infection. The treatment strategy should be in the form of early combination therapy with two or even three antiretroviral drugs and then maintenance therapy with two agents. I still recommend anti-HIV therapy at CD₄ counts between 300 to 500/mm³ regardless of symptoms. The means of monitoring viral load and determining suitable markers for separating rapid from slow progression will permit individualisation of treatment of HIV infection in the future.▲

gene therapy PROMISING in **AIDS WAR**

Compiled by Carl Lum

Evidence indicates that gene therapy is promising as a treatment for HIV infections. This was reported by Dr. Flossie Wong-Staal of UCSD, La Jolla, California. She presented her group's research findings on Gene Therapy for HIV Infection on 10th August 1994 at the 10th International Conference on AIDS in Yokohama.

The basic idea of gene therapy against AIDS is to create HIV-resistant human cells by putting an anti-viral (therefore anti-HIV) gene into normal human cells. These resistant cells used should be the target cells of HIV infection, eg. white blood cells. These resistant cells if infused into a compatible HIV-positive recipient, should ideally reproduce to create more resistant cells to replace the recipient's dying infected cells and prolong the healthy state of the recipient. Consequently, the HIV would eventually run out of new susceptible host cells to infect.

Such therapy, in order to be effective, would have to be started at a stage of HIV infection before the immune system has been irreparably damaged.

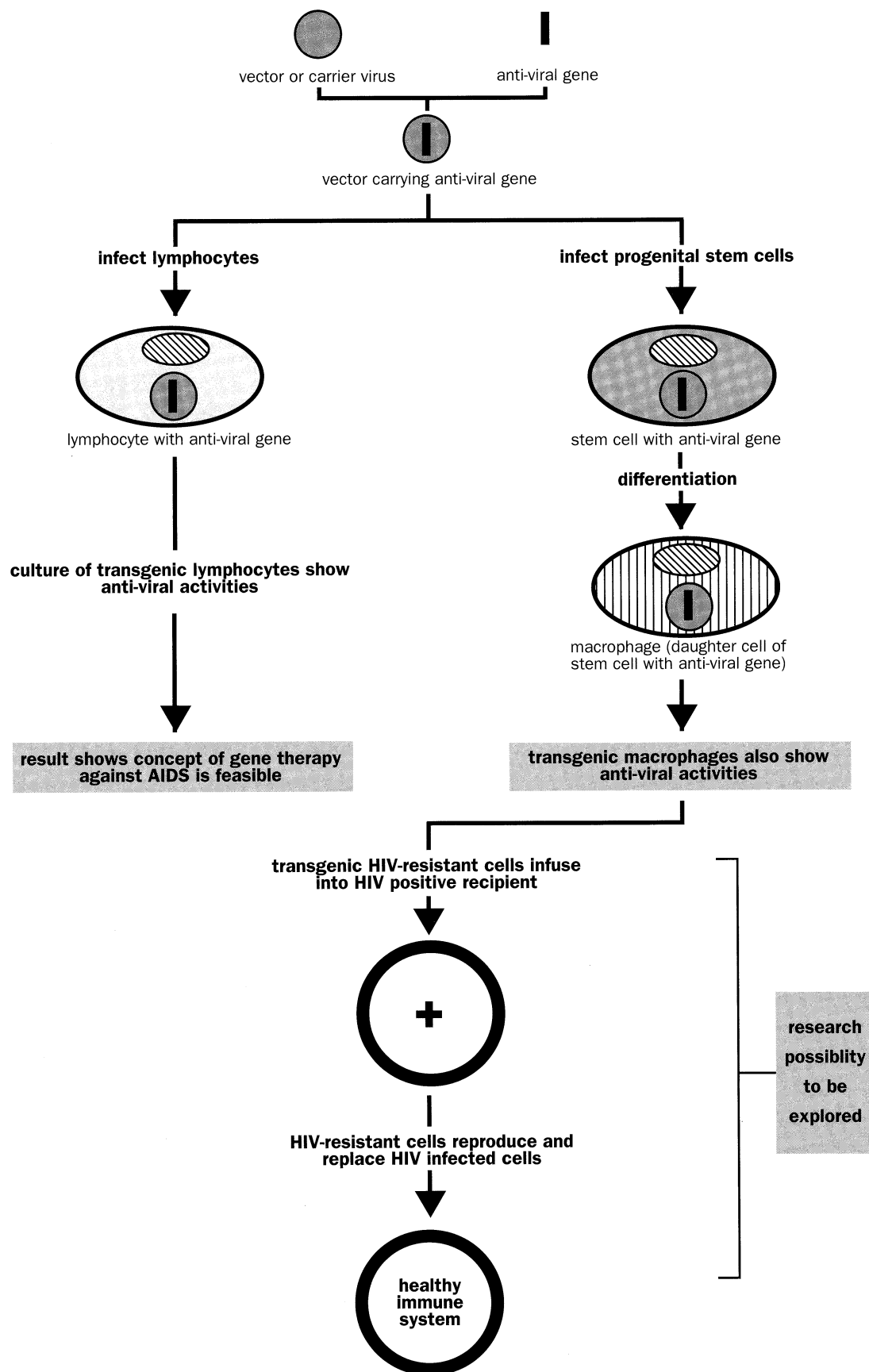
She explained that her group had created in her laboratory an anti-viral gene (a ribozyme gene) which can cut the HIV and destroy it. With the help of a vector, the Murine Leukaemia Virus, they have introduced this gene into healthy human lymphocytes (a type of white blood cell). A vector is a carrier virus or vehicle, benign to the lymphocytes, that would help the anti-viral gene to enter the cell, avoid being destroyed once inside, and be integrated permanently into the lymphocytes if possible. The lymphocytes were obtained from blood samples of a normal donor. **Subsequent cell cultures have shown that the genetically altered lymphocytes carrying the anti-viral gene are able to carry out normal cell functions as well as suppress HIV and be protected from infection.**

So far this was just a trial on lymphocytes that were relatively easy to obtain. The positive results of the trial was encouraging, and has proved that the concept of gene therapy against AIDS as feasible. In light of this, her group then proceeded to introduce the anti-viral gene into progenital stem cells obtained from umbilical cords and adult bone marrow. Progenital stem cells are mother cells that are able to differentiate into every type of HIV-infected cell. They are rare and hence the required trial tested on lymphocytes first. The daughter cells (eg. the macrophages) of these stem cells after differentiation in the laboratory were also found to exhibit anti-viral activities.

The findings hitherto are exciting and encouraging. But where will gene therapy go from here? These directions are being explored by Dr. Flossie Wong-Staal's group:

- 1) to develop a more effective anti-viral gene and better vector system to introduce these genes into human cells
- 2) to test on animal models, and
- 3) to proceed to Phase 1 clinical trials which are done on human volunteers.

Gene therapy against AIDS is still in its early stages. The protocol will have to go through four levels of FDA regulatory approval. **It should be several more years before it becomes applicable as part of AIDS treatment.▲**



AIDS in my family

by Jane Chew

My brother wrote a letter to me. It was in his usual style - each paragraph punctuated with a smiley face. But it did contain a one-liner that his best friend, Sid, had died in his arms a couple of weeks before. He relayed the news with no trace of emotion. The only thing that betrayed any sense of loss was that he expressed mild disbelief that his friend was truly gone.

I felt his loss. I also realized his desolation, more so than a tirade of abuse at the injustice and waste could ever have conveyed. But the most vivid emotion I felt then and now was guilt. In the face of his loss, I continued to be more acutely conscious of my own feelings. It was then that I realized how truly alone he, and perhaps many others like him, was.

My brother is 25. He is HIV positive and has been since he was 19. He contracted the virus on his first sexual encounter. His partner then knew he was HIV positive. He had neglected to mention it.

When he first told me he was homosexual, I was smugly gratified. So pleased that he chose to tell me first, I did not realize that it was not because he felt I would understand, but because he knew my vanity to reach intellectual bohemianism would force me to fashionably accept his choice. I did accept it, and congratulated him. I even self-righteously thought to give him advice as his big sister. He quietly accepted all I had to say without contradiction or impatience. As he once said, he did not believe in fighting fools. I remember emerging from that long distance conversation feeling right pleased with myself for having been so liberal. **It did not cross my mind that his choice successfully alienated him from the rest of the society which we knew.** He attempted to tell me. I did not listen well.

Two years after that conversation, I was back in Singapore on a summer break and he, oddly enough, seemed to have returned home from the States seemingly for good. It was then that I was told he was

HIV positive. In fact, my parents and younger brother knew, and had known, round the same period he told me about his homosexuality. **He did not get the chance then to tell me about his testing positive because I had not learnt to listen.** They chose not to tell me for fear that I would be so deeply affected my studies would suffer.

My mother had blurted the truth to me after my brother and I had a row and I was bullying him to accept my point of view over some silly incident the content of which I cannot for the life of me remember. This was the same mother who had come into my room two summers in a row before to cry and blame herself for her son's lifestyle choice. I thought she merely had trouble accepting his homosexuality. I was not aware that she was grieving from the imminent possibility that her son might die before she.

I felt guilt then at my lack of perception for the problems that my family was grappling with. At the same time, I felt so far removed from the sense of alienation and fear that I knew my brother must have been going through. **It was perhaps then that I began to understand how little I could empathize with him, and yet it was precisely that empathy which he sought.** His conversations with me that were invaded with reflections on life and death. I did not want to hear the latter so brushed it off with an inconsiderate "you might not develop AIDS. You might not die. Think positive and fight it."

How trite it appears to me now. My brother is a microbiologist by training. He does research for a pharmaceutical company. Of course he knows more about the disease than I ever could. My inability to face death merely sent him further into his silent turmoil.

I could not fathom how he felt. I am not HIV positive. I am not the one looking imminent death in the face. I am not the one having to live with the knowledge that when I died, I would do so with society's condemnation and relief.

After all this time, I would like to say that I finally empathize. But like many with friends or loved ones with AIDS who say they understand, I would be lying.

It annoys me now to see 'well-meaning people', believing that their sense of charity was a gift of benefit to the stricken community, pontificate about the feelings of the dying. I will always remember my brother's words to me "Don't presume to tell me you understand or how I feel. Even if you were stricken with AIDS or some life threatening disease yourself, you are not me and cannot know how I feel." How true.

So where does my belief lead me? Do I just ignore the problem and say it's not mine? Surely that would be to misunderstand his cry for help. But I think I have come to understand a little the kind of support my brother is asking for. **He wants to be allowed to live and be treated like anyone else. Without undue prejudice.** Without ostracism from ignorance and little minds. He is asking for the simple respect for his feelings, recognition for his strength and tolerance for his weaknesses.

I learn from my parents, whose courage and love for their children continue to surprise me even today. My brother had returned to Singapore at the request of my parents. They wanted to be around should he become very ill. But being around them merely made him unhappy for he did not really want them to see him when AIDS finally does set in. He yearned for the care he knew he would receive from them but could not endure the pain he knew it would cause them.

His tumult was not lost on my parents. They bought him a ticket back to the States after a year. When my father received a call from him upon his arrival back in America, he said with both regret and relief "I should have sent him back earlier. He sounds so much happier." My parents now call him regularly. They encourage. They advise. They scold for things which they feel he was in the wrong. They bond. More importantly, they carry on with their lives, for if they did not it would have given my brother the guilt he shouldn't need to have to deal with.

In other words, **they treat him like any other 25 year old trying to live his life the best he can,** with or without AIDS.

And that is what I try to do.▲

DEAR COUNSELLOR...

What are the early symptoms in women who have HIV? I have recurrent vaginal thrush and wonder if I should have an HIV test. I've slept with several boyfriends.

Thrushy woman

The early symptoms in women who have HIV are not different from early symptoms occurring in men. About 2 - 4 weeks after acquiring the infection, there may be fever associated with a rash, cough, sorethroat, enlarged lymph nodes, joint & muscle pains and headache.

This is a short-lived episode and usually subsides after 1 - 2 weeks without any specific treatment. It is often confused with other acute viral infections of the upper respiratory tract and glandular fever.

During or shortly after this attack of what is now called PRIMARY HIV INFECTION, antibodies to HIV become detectable in the blood. Thereafter, the patient whether male or female, enters the asymptomatic phase, which in developed countries is between 8 to 10 years on average. To date, gender-specific immunological abnormalities have not been identified.

Early symptoms of AIDS in women, as in men, are non-specific, including night sweats, diarrhoea, thrush, cough and weight loss. Vaginal candidiasis is a common infection in HIV-uninfected women. There is some evidence to show that it is more frequently seen in HIV-infected than in HIV-uninfected women, although it does not occur in every HIV-infected woman.

Vaginal thrush occurs when only mild immuno-suppression is present (in one study when the mean CD₄ count was 500 cells/mm³) and is probably the most frequent infection that heralds symptomatic HIV infection in women. Recurrent attacks of thrush and those that do not respond well to standard therapy in the absence of other predisposing factors should alert women and their doctors to consider HIV testing.

If you have slept with several boyfriends it is advisable that you go for an HIV test and other tests to screen for other sexually-transmitted diseases.

I have HIV but I don't want to be admitted to the AIDS ward in CDC when I get ill. It's a horrible place and full of death. Is there an alternative?

Live in hope

If you have been followed-up by

doctors in CDC, then the best place to be admitted to would be CDC, as all your medical records and the specialists are there.

Although there are AIDS specialists in other hospitals, they see very few patients and do not usually admit AIDS patients, unless in emergencies. Generally, after the emergency is over, patients are transferred to CDC for further management and follow-up.

In theory, AIDS patients can be cared for by any doctor who feels competent enough to do so and they may be seen in any hospital.

However, in practice, this is rare as medical, nursing and hospital administrative staff in other hospitals are not ready to accept AIDS patients; furthermore, most patients and their loved ones feel more comfortable and secure in the CDC.

My husband has already given me genital herpes and I'm very scared he's going to give me AIDS. He laughs when I mention it. Is there a women's group in Singapore who can help us discuss this?

Worried wife

AFA has recently formed a women's group to address issues related to women and AIDS. Please write or call us if you would like to speak to members of this group. (see AFA projects & programmes page).

My son died of AIDS recently but we were not allowed to give him the full funeral rites according to the Hindu tradition. Why is this? It upset the entire family.

Grieving mother

In order to prevent any accidental transmission of HIV after death, the Ministry of Health and the Ministry of the Environment have, since the mid-1980s, ruled that anyone who dies with AIDS or HIV infection should be cremated within 24 hours (unless there are religious objections).

Only experienced staff are allowed to handle the corpse, this means that only staff of the CDC are allowed to handle, transport and dispose of the body. Religious cleansing rites with adequate safety precautions are usually granted, eg. Moslems and Hindus. However, this has to be done in the CDC and no embalming or autopsies are allowed.

If anyone goes to any prostitute in Singapore, what are the chances of getting AIDS? Is the risk higher if one uses the low-class prostitutes of Desker Road?

What percentage of prostitutes in Singapore carry the AIDS virus?

E & E Eng. Undergraduate

Condoms must be used for any form of penetrative sexual intercourse (including oral sex). The risk of contracting STD and AIDS in these circumstances is almost nil, even if the partner is a carrier of HIV or any other STDs.

If no condom is used with a partner who is infected with the HIV virus, the risk of contracting the infection is in the order of about 1%. This risk will increase if there are other infections on the genitalia.

Regardless of whether one patronises lower or higher class sex workers, always use condoms - anyone can be a carrier. Routine testing for HIV is no guarantee that the sex worker is free of infection as she may have contracted the infection from unprotected sex after the blood test was done.

If any sex worker is found to be HIV-positive in Singapore, he or she is not allowed to practise the trade. However, please remember that there are sex workers who are not tested and may therefore have a higher chance of being HIV-positive.

Why do some people survive with HIV infection for more than 10 years while others come down with AIDS within a few years?

There are some HIV-positive patients who survive more than 12 years of infection but show no AIDS symptoms and have stable CD₄⁺ cell counts. We call them long term survivors or non-progressors.

Research findings reveal that their CD₄⁺ lymphocytes are not atypically resistant to infection

Two factors seem to have contributed to their ability to keep the infection under control: firstly they can mount particularly strong immune response to infection, and secondly the replication ability of the infecting HIV strain in these individuals appears to be defective.

Possibly as a result, they show a remarkably low level of HIV in their blood and a low level of viral replication in their lymphoid tissue that allows them to survive longer than others.▲

ACTION FOR AIDS' PROJECTS & PROGRAMMES

EDUCATION & BEHAVIOUR MODIFICATION

HIV Education and Workplace (HEW) Committee

Coordinator: Douglas Ong
Pgr: 205 0223

Education is still the mainstay in preventing the spread of HIV; with this aim in mind, HEW - the public education arm of AFA - trains volunteer lecturers to speak to interested groups and organisations to help raise AIDS awareness. Lecturers are also trained to help organisations develop workplace policies relating to HIV and HIV-infected workers. HEW welcomes requests for talks, as well as persons interested in becoming volunteer lecturers. There will be a lecture-training course early next year - you will be taught how to use the presentation packages to educate target audiences (fluency in various languages is greatly appreciated); please call for registration details.

The ACT

Coordinator: Sheung. Tel: 441 3431

This is AFA's in-house publication which provides medical, social and personal articles and updates AFA's activities to its members and volunteers, as well as schools, libraries, organisations, clinics and hospitals. We need writers and journalists to deal with topics and share their experiences, and contribute to help raise AIDS awareness. We also need people to assist the editorial board - access to computers/word processors will be helpful - as well as layout and graphic artists to design the publication.

Outreach Programme For Homosexual Men

Coordinator: Edward. Tel: 353 8842

This programme is designed to reach out, educate and empower men who have sex with men (MSM) to adopt and maintain safe sex practices. Volunteers are needed to help plan, implement and evaluate programmes for this more at-risk population in Singapore.

AFA Malay Group

Coordinator: Abdul. Tel: 293 9716

Formed to meet the challenge of educating the Malay-Muslim public on the AIDS epidemic, the group supports AFA's public education projects through various Malay-Muslim organisations.

AFA Research Committee

Coordinator: Roy Chan. Tel: 250 9495

This committee funds HIV-related research. It invites proposals from medical, paramedical and social workers, and researchers.

Sign It Safe (SIS)

Coordinator: Luna Ho. Tel: 861 2755
ext 14 (o) 779 3924 (h)

This is an AIDS awareness project targeted at the hearing-impaired community in Singapore. SIS also aims to empower the community to access the services and programmes available in AFA. The group's medium of communication is sign language. Volunteers fluent in sign language are needed to initiate and promote educational activities on HIV/AIDS - through workshops or on a one-to-one basis.

Club AIDS Project (CAP)

Coordinator: Roy Chan. Tel: 250 9495

CAP coordinates AIDS awareness events at local nightspots and develops party packs complete with educational materials for free distribution.

Information & Counselling Hotline (Tel: 259 1153)

Coordinator: Rashid. Pgr: 408 6496

Provides information and counselling services on AIDS and related issues. Phone lines are manned by trained AFA volunteer counsellors between 6.30 - 9.30 pm on Tuesdays, Thursdays and Fridays.

SOCIAL SUPPORT & WELFARE

Buddies & Friends Support Group

Coordinator: Gerard David
Tel: 278 0278

This is a support group for people living with HIV/AIDS (PLWHAs) and their families. We need volunteers to provide support, care and concern for PLWHAs. If you have experience in dealing with HIV, terminally-ill patients, crisis counselling, sexual problems and alternative therapies, you will be of valuable use to this group. The necessary training will be provided and volunteers will be assigned to work in home care teams or as personal counsellors to PLWHAs.

Women & AIDS Committee

Coordinator: Josephine Tan
Tel: 350 2451

More and more women are contracting HIV and at ever increasing rates. In response to this challenge, some women have banded together to form a group to be run "by women; for women" to tackle issues and problems women will face in dealing with the AIDS pandemic. Our goals are 1) to educate women on HIV/AIDS; 2) to draw attention to the social and economic ills prevalent in many societies which have made it more difficult for women to protect themselves from contracting the disease; 3) to give support to women who have HIV/AIDS and women who have to care for loved

ones afflicted by the disease, and 4) to fight discrimination. We need caring and committed women volunteers to achieve our goals.

The Quilt & The Candlelight Memorial

Coordinator: Daniel Tan. Pgr: 409 8302

Both annual events help draw people into the circle of AIDS awareness by allowing friends and relatives to openly express their grief and emotion of coming to terms with death and AIDS. These events have become powerful symbols of the presence of AIDS in Singapore and the world.

Life Goes On (LGO)

Coordinator: Iris Verghese
Tel: 256 8123/4 or 359 9591

While death is a part of AIDS, so is life. LGO is a self-help group comprised of and organised by PLWHAs, funded by AFA. Besides being a support group, LGO also networks with similar self-help groups regionally and shares experiences and information that are mutually beneficial. Through LGO, PLWHA interests and rights are represented in all AFA activities, in both organising and participation levels, with confidentiality preserved. LGO meetings are restricted to PLWHAs and their spouses. There are separate support circles for heterosexual men, married couples, gay men and women.

Survivors

Coordinator: Iris Verghese
Tel: 256 8123/4 or 359 9591

This support group helps link relatives and friends of PLWHA's who have passed on. Members help each other come to terms with their losses and move on to help others learn to live with AIDS in their families and relationships.

Legal & Ethics Working Group

Coordinator: Wilfred Ong
Tel: 326 0851

The group provides free legal advice and assistance to PLWHA's and their families.

CLINICAL SERVICES

Anonymous Counselling & Testing

Coordinator: Roy Chan
Tel: 250 9495

This programme provides pre and post-test counselling for voluntary, anonymous HIV testing at DSC clinic, 31 Kelantan Lane, #02-16 (0820) - it is the only place for anonymous testing in Singapore. It is run on Saturdays between 1 to 4 pm.

Funding For Medications

AFA provides funding for selected medications to PLWHA's, such as aerosolised pentamidine and anti-pneumococcal vaccine, which would otherwise be out of their reach.▲

TALKS

"AIDS - Putting A Cap On It" • Talk at Bedok Library • 19 Nov • 2.30 - 4.00pm

"Say No To AIDS" • Teen Forum at Zouk • 19 Nov • 2.00 - 5.00pm

"Sign It Safe" • Presentation for Singapore Association For the Deaf • 20 Nov 2.30 - 5.00pm

"What Every Family Should Know About AIDS" • Public Forum at Marina Mandarin Hotel • 26 Nov • 1.30 - 5.00pm

"Sex Without AIDS" • Talk at Ang Mo Kio Library • 29 Nov • 7.00 - 8.30pm

EVENTS

Charity Treasure Hunt On Wheels • Kallang Stadium Car Park G • 20 Nov • 11.00 - 9.30pm

"Lets Talk 90's" Plays/Forum Discussion • DBS Auditorium (Tickets: \$10 at Sistic outlets) • 7.30 - 9.00pm

"Kisses On All Your Openings" (English) • 24 Nov "Lintasan" (Malay) • 25 Nov "I Met Him This Morning" (Chinese) • 28 Nov

"One Family, One World" Family Fair • Centrepont Shopping Centre • 1 Dec • 11.30 - 9.00pm

"Club AIDS" Dance Party At Zouk • 1 Dec • 10.30 - 3.00am

Tickets \$12 (plus 1 drink) available at Tower Records.

MAJOR SPONSORS

PLAYBOY CONDOMS • 2ND CHANCE

GUARDIAN • VJ TIMES

CENTREPOINT SHOPPING CENTRE