Child-to-Child

Activity Sheet 6.10

Child-to-Child Activity Sheets are a resource for teachers, and health and community workers. They are designed to help children understand how to improve health in other children, their families, and their communities. Topics chosen are important for community health and suit the age, interests and experience of children. The text, ideas and activities may be freely adapted to suit local conditions.

AIDS

THE IDEA

Every country has AIDS. In some countries the number of cases recognised so far are very few. In others the disease is wide-spread and many people are dying. In all countries everybody, including children and young people, must learn the facts about AIDS. Children everywhere in the next ten years of their lives will be in danger of catching the AIDS virus. In countries where many young adults are infected, the future of the society depends on their children's knowledge, attitudes and practice.

This sheet gives explicit facts about how the AIDS virus is caught and how it can be prevented. It also looks at people's attitudes and practices concerning AIDS. It aims to develop in children, their teachers and their families an openness to discuss these sensitive issues, a confidence to take decisions for themselves, and a sense of caring for people with AIDS.

WHAT DOES 'AIDS' MEAN?

A **Acquired**
means 'to get'.
AIDS is acquired (or got) from other people who have the AIDS virus.

I **Immune**
means 'protected'.
The body is normally immune (or protected) against many diseases.

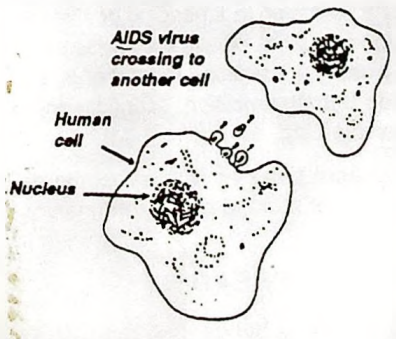
D **Deficiency**
means 'a lack of'.
With AIDS, the body has a deficiency (or lack) of immunity against many diseases.

S **Syndrome**
means 'a group of different signs of a disease'.
When people have AIDS they have a syndrome or many different signs of disease.

WHAT IS AIDS?

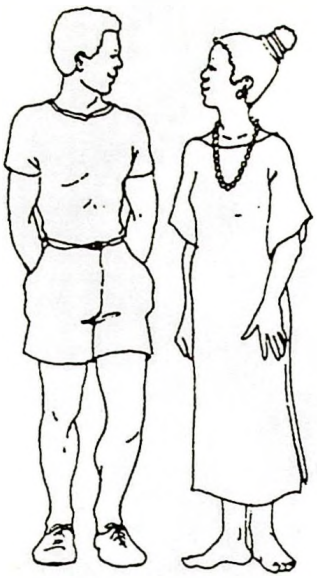
AIDS is a disease which attacks the body's protective system. The body is unable to protect itself properly from other diseases such as diarrhoea, TB, coughs and sores in the mouth. With AIDS, these diseases make people very sick and they may even die.

AIDS may take 2-10 years to develop but the infected person can pass on the virus even if they show no signs of disease. AIDS is caused by a virus (Human Immuno-deficiency Virus [HIV] which we call 'the AIDS virus' in this sheet).



Here the AIDS virus, which is much smaller than a human cell, is leaving one cell before entering and infecting another cell. (Drawing from a microscope picture.)

For further information, please contact:
Child-to-Child, Institute of Education, University of London, 20 Bedford Way, London WC1H 0AL, U.K.



The AIDS virus can be passed from any infected to any healthy person by UNPROTECTED sexual intercourse, EVEN ON ONE OCCASION.

Although in some cases no symptoms are noted for up to 10 years, any infected person remains able to infect others during this time.

Any time after 2 years from infection, AIDS disease can appear and the consequences of common infections, such as diarrhoea, cough, etc., can become more serious and lead to death

HOW IS AIDS SPREAD?

There are two main ways of getting AIDS. The AIDS virus is transmitted:

- By sexual intercourse (vaginal or anal) with any infected person;
- Blood-to-blood, if someone receives blood containing the AIDS virus from another person:
  - by sharing needles or using unsterilised needles (for injections);
  - by transfusion in a hospital or clinic where the blood has not been properly tested;
  - by using unsterilised instruments that cut the skin (for circumcision, scarification, tattooing, ear-piercing, etc);

However, unborn babies can also get the AIDS virus from their mother's blood during pregnancy.

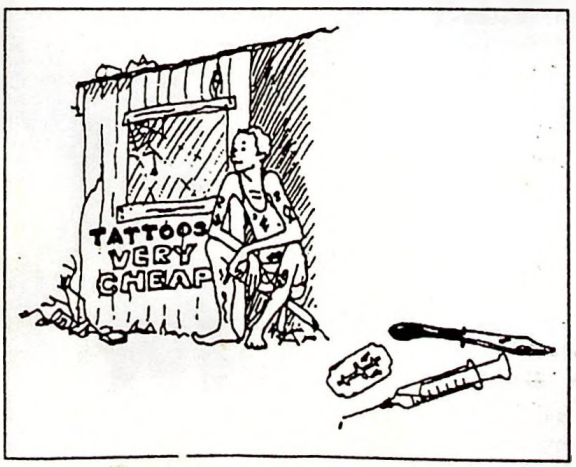
AIDS IS NOT SPREAD BY

- Shaking hands
- Touching
- Breathing
- Kissing
- Mosquitoes and bed bugs
- Caring for those with AIDS
- Cutlery and cooking utensils
- Bedding and clothing
- Toilets and latrines

MOTHERS WITH AIDS SHOULD CONTINUE BREASTFEEDING. BREASTMILK IS STILL THE BEST FOOD FOR BABIES.

PREVENTING THE SPREAD OF THE AIDS VIRUS

The AIDS virus must be prevented from passing between one person and another. It is impossible to tell by looking at someone whether they carry the AIDS virus. Therefore it is very important to protect oneself against catching the virus.



HOW CAN THE AIDS VIRUS BE PREVENTED FROM SPREADING BY SEX?

- By staying with one faithful sexual partner. The more partners people have, the greater the risk for both of catching the AIDS virus.
- By having safe sex. Kissing, cuddling, touching are safe sex. Penetration by the penis is not.
- By using a condom always. Condoms, if used properly, will do much to protect people from AIDS and other sexually transmitted diseases.
- By drinking less alcohol. Alcohol causes people to lose their judgement about safe sex. Drugs such as marijuana, hashish, cocaine, heroin, etc. can do the same thing.
- By seeking early treatment for sores or unusual discharge from the penis or vagina. People with these sores or discharge are more likely to catch and spread the AIDS virus.

PEOPLE HAVE LIVED IN THE SAME HOUSE AS SOMEONE WITH THE AIDS VIRUS FOR MORE THAN 10 YEARS WITHOUT GETTING AIDS

HOW CAN THE AIDS VIRUS BE PREVENTED FROM SPREADING BY BLOOD?

- By ensuring that needles, syringes and cutting instruments are thoroughly washed after use and sterilised by heat or chemicals. In national immunisation programmes, health workers have been specially trained in giving injections safely.
- By asking for medicines which can be given by mouth instead of by injection.
- By avoiding contact with other people's blood. When giving first aid, it is important to cover cuts and sores and wash hands well afterwards.
- By reducing the number of blood transfusions. Because blood can carry many diseases, doctors now choose to give fewer blood transfusions.

WHAT CHILDREN CAN DO

AIDS worldwide is a new problem and requires changes in behaviour everywhere. Governments can make some changes but families, communities and schools play an important part.

School children are the future community and must learn to be responsible for others as well as themselves. Guided by school teachers, health workers and community leaders, children can learn how to protect their family, their partners and themselves against AIDS. Children and young people can make decisions about their own behaviour and thereby offer safer patterns of sexual behaviour for the community. For example, in Zambia there are over 600 'Anti-AIDS Clubs' organised by students in schools throughout the country. The main aim of these clubs is to give information on how AIDS is spread and how to avoid it.

Here is part of a letter from a club member to the 'Anti-AIDS Project' in Lusaka which initiated the clubs:

I received the things you sent and I was very, very glad. I've signed on the membership card and I've kept the promises which I must promise to follow as a member of the Anti-AIDS club. I've got questions for you to help me .....

CARING FOR PEOPLE WITH AIDS

We all care for each other, in our families and communities. Sick people, small children, old people and orphans need our care. When a person has AIDS, they may feel lonely and frightened. We need to show that we care for them.

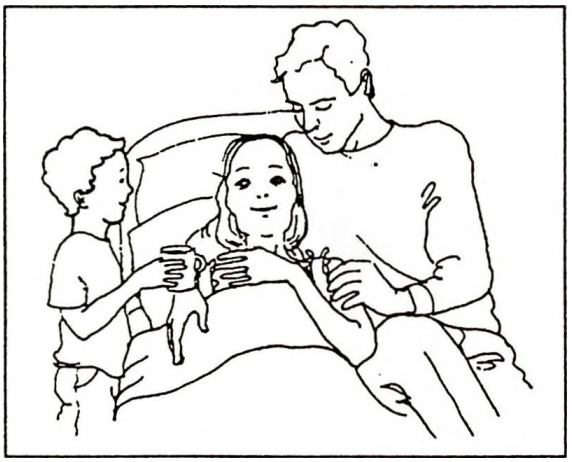
People with AIDS need food, support, medical care, physical help and particularly family and friends who will accept them and listen to them. They can be encouraged to live an active life wherever they are. We can help them to lead a healthier life by encouraging them to eat well, smoke less and drink less alcohol.

We cannot catch the AIDS virus by caring for someone who is sick with AIDS. We must remember:

- to protect the person with AIDS from infections;
- to protect ourselves and others from the AIDS virus.

We do this by following the usual hygiene principles:

- Covering open wounds on our hands;
- Washing hands before and after caring for the sick person;
- Washing hands before handling food;
- Keeping the sick person and surroundings clean.



ACTIVITIES FOR SCHOOL AND YOUTH GROUPS

All teachers, not just the health education teacher, have a responsibility to include teaching on AIDS in their lessons. There are also many opportunities for teaching about AIDS on other occasions where children and young people gather together - in clubs, religious meetings, youth and scout/guide groups. The adults leading these sessions can choose the appropriate activities. (In the following examples the word 'teacher' can apply to all adults working with children.)

WHAT EVERY CHILD SHOULD KNOW

Schools should develop a policy that every child should leave school knowing these essential facts. Health workers and youth group leaders can make a similar commitment to pass on this vital knowledge.

WHAT IS AIDS?

- AIDS is an infection. AIDS makes people unable to protect themselves against many kinds of diseases, such as diarrhoea, TB, cough. Due to AIDS, these diseases can make people become very sick and die.

HOW IS THE AIDS VIRUS SPREAD?

The AIDS virus is spread from person to person:

- By sexual intercourse with a person carrying the AIDS virus;
- By blood containing the AIDS virus getting from one person's body to another in blood transfusions or on needles and sharp instruments;
- From an infected, pregnant mother to her unborn child.

THE AIDS VIRUS IS NOT SPREAD BY

- Insect bites, touching, and caring for people with the AIDS virus.

WHEN AND WHERE TO DISCUSS ABOUT AIDS

- In health clubs or special anti-AIDS clubs, in which the children learn about how AIDS is spread and make a commitment to protect themselves and teach others how to prevent AIDS.
- Sometimes it is easier to talk about these sensitive issues in single sex groups. The groups of girls or boys can discuss issues about AIDS, share their concerns openly, and support each other to have confidence in the decisions they need to make. It is easier if the adult involved is also of the same sex.

GETTING THE FACTS RIGHT

Children can:

- Play a 'true/false' game. The teacher writes down true or false statements about AIDS on separate pieces of paper, e.g.: 'You can catch the AIDS virus from mosquitoes' (false); 'You can't catch the AIDS virus by shaking hands' (true). On the floor mark three areas - 'TRUE', 'FALSE' and 'DON'T KNOW'. Each child takes one statement, puts it on one of the three areas and explains the reason for their choice. Anyone else can challenge the decision.
- Write quiz questions about AIDS and discuss the answers in pairs.

FINDING OUT ACTIVITIES

Children can:

- Where possible, find out from newspapers or government health departments the number of AIDS cases in the country. Work out the percentage of the total population this figure represents.
- Visit a local health centre. Health workers can talk about why they give injections and demonstrate how needles and syringes are sterilised.

DISCUSSION AND ROLE PLAY ABOUT AVOIDING AIDS

Children can:

- Imagine how AIDS might affect their lives. They can shut their eyes and imagine their lives in two years' time. The teacher can ask questions like: 'Who will you be living with?'; 'Who will your friends be?'; 'How will you show your love and friendship?'; 'Might you try drugs, alcohol or smoking?'; 'How might AIDS enter your lives or the lives of your families and friends?' The children can then imagine their lives in 10 years' time and answer the same questions. Finally they can imagine that they are parents and have children aged 13. What advice would they give them?
- Make a role play about different married couples and how they treat each other. Which are the happiest marriages?
- Discuss situations when it is sometimes difficult to say 'No' and list the reasons. In pairs, children can role play different situations, imagine how people might try to persuade them to do something and how they could say, 'No' in a way which is polite but firm, e.g. when asked:
  - to have a cigarette;
  - to go somewhere with a stranger;
  - to go out for the evening.
- Find out what guidance their religious books give on sexual practices.

DISCUSSION AND ROLE PLAY ABOUT ATTITUDES TO PEOPLE WHO HAVE AIDS

Children can:

- Collect newspaper cuttings concerning AIDS and discuss the attitudes the articles suggest.
- Write poems expressing their feelings about AIDS and its effect upon their own or other people's lives.

CHILDREN IN ROLE-PLAYING GAMES

- Use pictures, e.g. of someone caring for a friend with AIDS, to help them to imagine how they would feel in the role of one person in the picture. They can ask questions about what events led to the scene shown and what might happen in the future.

- Create short plays, for example about caring at home for a person with AIDS. They can first act the play themselves, then each make a simple puppet for their character and perform the play with puppets to the rest of the school or the community.

- Collect and discuss stories from religious books of people caring for the sick.

- Fill in the details of a story, for example about an imaginary school pupil thought to have AIDS. The children divide into groups representing, in this example, the pupil, other pupils, teachers and parents. Each group separately considers: 'What do I feel?', 'What are the main effects on me?', and 'What do I want to happen?'. After 15 minutes the groups reassemble and share their discussions.

- Listen to the following stories:

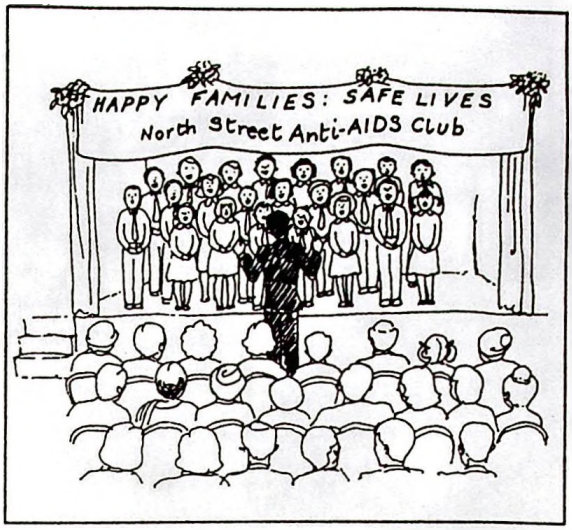
> *'A young woman returns to her village from a neighbouring city. As she walks across the square people shout at her "AIDS! AIDS!" Her stepfather insists that she gets an AIDS test before she lives in the family home. The test is positive.'*

> *'A group of politicians see a video showing a person dying of AIDS and make a policy that everyone should be tested and those carrying the virus should be locked up.'*

> *'The colleagues of a woman whose husband has AIDS refuse to work with her. She is sacked.'*

Then try to answer these questions:

- What do you think about these situations?
- Why do people react in these ways?
- Will these reactions help to control the spread of AIDS?
- What would you do if you were any of the characters in these stories?



PASSING ON THE MESSAGE

Children can:

- make up and perform songs, plays and puppet shows about AIDS;

- design and make posters to display in class and on open days;

- join in the promotion of sports for better health of people with AIDS.

FOLLOW-UP

Teachers can:

- ask children different questions to find out if they know:
  - what spreads AIDS;
  - what does not spread AIDS.

- ask children to write stories:
  - about people catching the AIDS virus;
  - about caring for people with AIDS.

  Then look at the stories. What do they tell us about children's **knowledge** and about their **attitudes**?

- ask children to find out how many local schools or youth groups have clubs and activities which look at AIDS. What do they do? Have the children joined them?

- find out if children have:
  - taken part in anti-AIDS campaigns;
  - helped anyone with AIDS;
  - warned other children about the risks of AIDS.

CHILD-TO-CHILD PUBLICATIONS

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DECEMBER 1993

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3.	**Child-to-Child and Disability** (2 Readers and 14 Activity Sheets concerning disability)	£4.20
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	I Can Do It Too (level 2)	£1.45
	Deadly Habits (level 3)	£1.45
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6.	**Primary Health Education:** Beverley Young and Susan Durston. This successful and extremely popular volume has been used by primary school teachers worldwide to help with health education in schools.	£5.50
7.	**Toys for Fun:** June Carlile (Ed). A book of toys for pre-school children with multi-lingual text (English, Arabic, French, Portuguese, Spanish and Swahili all in one volume).	£2.00
8.	**Children, Health and Science:** Hugh Hawes, John Nicholson and Grazyna Bonati. This book, designed for science teachers in primary and secondary schools, contains an introduction and 20 specially selected Child-to-Child activity sheets. Certain groups can receive bulk orders free. (French and Spanish versions are available directly from Unesco, Paris.)	£1.00
9.	**Child-to-Child: A Resource Book:** Grazyna Bonati and Hugh Hawes (Ed). This contains most Child-to-Child activity sheets, sections on methodology, evaluation and running workshops, and examples of action taken from round the world.	£5.00*
10.	**Education for Health in Schools and Teachers' Colleges:** This contains guidelines for the introduction of Child-to-Child approaches in primary schools, teachers' colleges and the curriculum, based on experience from projects over many years.	£2.00
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13.	**Children for Health:** Hugh Hawes and Christine Scotchmer (Ed.) This book contains all the messages in the 1993 version of **Facts for Life** together with sections to help children understand the health ideas and act upon them both in and out of school. 25% discount available on orders of 100 or more copies.	£2.00

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* Special price for overseas.

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- Teaching Thomas
- I Can Do It Too
- Diseases Defeated
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- Flies

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Child-to-Child Readers:
- **La Fièvre du Lion** (Le coup de chateur)
- **Le Vieux Roi et la Petite Fiancée** (L'alimentation des bébés)
- **L'Hyène aux Yeux de Poulet** (La vitamine A)
- **Halte aux Maladies!** (Les vaccinations)
- **Fati n'est plus Triste** (Les enfants handicapés)
- **La Revanche de Sonko-le-Lièvre** (L'hygiène des puits)
- **Mon Petit Frère est Malade** (La diarrhée)
- **Surveillons les Petits** (Les accidents)
- **La Pernique Rouge de Bouki** (Les poux)
- **Le Jeune Homme et le Dragon** (Les vers)

Available from the Child-to-Child Trust, Institute of Education, 20 Bedford Way, London WC1H 0AL, U.K.:

A set of 4 Activity Sheets **Helping Children in Difficult Circumstances:**
- **Children who Live or Work on the Street**
- **Children who Live in an Institution**
- **Helping Children whose Friends or Relatives Die**
- **Helping Children who Experience War or Disaster**

Christian Responses to AIDS

A Bibliography

Caritas Internationalis: El SIDA. Un Desafío a la Iglesia.
Memoria del Coloquio de Santo Domingo, Iglesia y Enfermos de SIDA, Enero 7 al 12, 1990. Secretariado Latinoamericano de Caritas (SELAC), Apartado Postal 1703 1389, Quito - Ecuador.

Catholic Health Associaton of the United States (ed.): The Gospel Alive. Caring for Persons with AIDS and Related Illnesses.
(1988). Catholic Health Association of the United States, 4455 Woodson Road, St. Louis, MO 63134-0889/ USA. ISBN 0-87125-149-3.

This book addresses AIDS in relation to the special opportunity it provides all of us, as Church, to herald Christ's message and care for others.

Cosstick, V.: AIDS. Meeting the Community Challenge.
(1987). St. Paul Publications, Middlegreen, Slough SL3 6BT/ United Kingdom. ISBN 0-85439-264-5.

This book brings together the precious experience of professionals and concerned laity, of religious leaders, priests and religious. And it makes abundantly clear that the solution to the moral problem which lies behind the questions of public health is not to be found in declarations by experts but in the perceptions and spiritual renewal of the whole people of God.

Cullen, T.: AIDS. A Christian Response.
(1991).Montfort Missionaries, P.O.Box 280, Balaka, Malawi.

This pastoral book aims at improving our understanding of the AIDS disease by presenting it from four different angles: the Spritual, Psychological, Moral and Cultural viewpoints. The book does not offer an exhaustive analysis of all these aspects; only a few are selected and reflected upon. The writers come from different Christian denominations and they are concerned to present a Christian response to the present AIDS crisis in Malawi.

Dorr, D.: Integral Spirituality. Resources for Community, Justice, Peace, and the Earth.
(1990).Gill and Macmillian Ltd., Goldenbridge, Dublin 8/ Ireland. ISBN 07171-1730-8.

Throughout the book there are guided meditations and other resource materials which can be used by groups or individuals to put the spirituality into practice. Beginning with a study of "down-to-earth-spirituality" which enables one to be "rooted" or "grounded", the author goes on to show how personal prayer plays a key role in spirituality.

Joinet, B.A.: The Challenge of AIDS. Vol.1: Basic facts.; Vol.2: Prevention and Survivors. (1992).Fr. Bernhard Joinet, W.F., P.O.Box 280, Dar es Salaam/ Tanzania.

These two volumes will give educators and pastors the information they need to help people make their own decisions when faced with the AIDS pandemic.

Kelly, R.(S.J.): Calming the Storm. Christian Reflections on AIDS.
Mission Press, P.O.Box, 71581 Ndola/ Zambia.

This book invites us first to make sure that we have some understanding of this new disease, how it spreads and how it can be prevented. Then we will reflect on what the AIDS crisis is saying to us as people and as Christians about modern society and the way we live and the values that influence our life-style.

Kirkpatrick, B.: AIDS. Sharing the Pain. A Guide for Caregivers.
(1990). Pilgrim Press, 475 Riverside Dr., New York, N.Y. 10115/ USA. ISBN 0-8298-0827-2.

The author offers practical and sensitive guidelines for the care of those infected by HIV. He explores the pain and difficulties of those who are going through the various stages of AIDS from initial to full-blown AIDS.

MAP International (Ed.): The Church's Response to the Challenge of AIDS/HIV. A Guideline for Education and Policy Development.
(1991). MAP International, P.O.Box 50, Brunswick, GA 31521-0050.

This document is not designed to be an exhaustive discussion of the issue, but rather a framework for the local church's approach to AIDS/HIV. It touches on the fears and the facts related to AIDS and HIV infection, as well as ways to educate and involve a local congregation. Each local church will need to address AIDS/HIV in its own specific community.

Mc Cloughry,R., and C. Bebawi: AIDS: A Christian Response.
Grove Ethical Studies, No.64. (1990). Grove Books Ltd., Nottingham NG9 3 DS/ United Kingdom.

In this small booklet there are two parallel lines of thought. The first may be seen by some as pessimism about the future. Even were it possible to find a vaccine for AIDS soon, many thousands of people will still die. The scale of the human tragedy to come is awesome, but far from bringing people to a new sense of their need of God. The second arises out of the Christian calling to hope, faith and love and to enable those who may otherwise choose despair to choose life.

Sandys, S.: Embracing the Mystery. Prayerful Responses to AIDS.
(1992). SPCK, Holy Trinity Church, Marylebone Road, London NW1 4DU/ United Kingdom. ISBN 0-281-04574-7,

In this book there are prayers, readings and meditations - many of them written specially for this book - that can be used by individuals or groups as part of their practical response to the tragedy of HIV infection.

Tilleraas, P.: The Color of Light. Daily Meditations for All of us Living with AIDS.
Hazeldon Meditation Series. (1988). Hazeldon Press. Pleasent Valley Road, Box 176, Center City, MN 55012-0176, USA. ISBN 0- 89486-511-0.

This book offers hope and comfort as we struggle to cope with AIDS in our lives and in our society. Here is daily guidance on moving from isolation toward loving support, rediscovering spiritual rewards, and reaching out with love and wisdom.

International Journal of STD & AIDS 1992; 3: 79–86

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EDITORIAL REVIEW

HIV and pregnancy

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Keywords: Human immunodeficiency virus, pregnancy, baby, transmission

In the United States and Europe, the number of women with AIDS is increasing rapidly, both in absolute terms and as a ratio to men[1,2]. Thus in the [redacted], 55% of all AIDS cases in women in the epidemic's first decade have occurred within the last two years[3]. Although injection drug use was the predominant mode of transmission initially, heterosexual transmission is becoming the dominant route[3], with all the potential this involves for much wider dissemination. In a Paris study, 20% of infections in women were attributed to heterosexual intercourse in 1987[4]. In 1989 the proportion was 58% and increasing.

In Africa, the scale of the problem and the potentially devastating consequences of maternal and childhood infection with HIV have long been recognized[5]. New worries surround reported increases in prevalence in South America[6], Thailand[7] and India[8].

In addition to the particularly harrowing problem of children becoming ill and losing parents, there are many unresolved scientific questions concerning [redacted]de, timing and prevention of vertical transmission. All these features combine to project pregnancy to the forefront of current concern in HIV infection.

In this necessarily limited review I will leave aside important issues such as testing and screening for HIV in pregnancy[9–11] and clinical management[12–14]. Instead, I will restrict discussion to three areas which are contentious, but of intense research and clinical interest; the effect pregnancy has on HIV disease progression; the effect HIV has on pregnancy outcome; and vertical transmission.

EFFECTS OF PREGNANCY ON HIV DISEASE

Pregnancy is believed to be associated with a mild impairment of the immune system, together with an increased virulence of some infections. This has fuelled concern that pregnancy may exacerbate the progression of HIV disease.

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Pregnancy and susceptibility to infectious disease

The evidence for a decline in immune response in pregnancy is conflicting. There is agreement that antibody mediated immunity is unchanged, with no alteration in B cell number[15], satisfactory antibody responses to vaccines in pregnancy[16–18] and unchanged or slightly increased complement levels[19,20]. Most studies have found a reduction in absolute T cell counts[15,21–23] but this could simply be a haemodilution effect, and there are differing reports about a decrease in CD_4 cells expressed as a percentage of total lymphocytes or as a CD_4/CD_8 ratio[22,23]. T lymphocyte function does not appear to be reduced[23,24]. Current opinion suggests that systemic T cell function is maintained, but that there is some depression of cell mediated immunity, perhaps due to the raised levels of some steroid hormones and/or plasma proteins in pregnancy[25]. There are many studies which suggest increased virulence of a number of infectious diseases in pregnancy and these have been excellently reviewed[26,27]. The methodology of many of these studies has been criticized[28] but the totality of supporting evidence is impressive. Perhaps the best example of increased susceptibility to infection is falciparum malaria[29] but there is also good evidence of increased risk with hepatitis[30,31], polio[32–34], influenza[35,36] and general clinical recognition of worsening of vulval papillomata[26].

Progression of HIV disease

For the above reasons there have been persistent concerns that pregnancy may adversely affect progression of HIV disease. Initial reports tended to confirm these concerns[37,38]. However, these studies were based on identification of mothers of children who had already developed AIDS, and who were themselves at particularly high risk[39].

Although several studies of the effect of pregnancy on the natural history of HIV disease are in progress, none have been reported in full. Two reports, one from France[40], the other from Haiti[41], suggested higher progression to CDC IV disease in women who had completed a pregnancy compared to a non-pregnant control group. However, numbers were

small, and whether the groups were comparable in time since seroconversion is not known. Similar studies from New York[42], Bethesda[43], and Genoa[44], did not document any adverse clinical effect of pregnancy on the progression of HIV.

A number of studies have examined prognostic markers which may be taken as surrogates for clinical progression. In Edinburgh, follow up of 152 women enrolled since 1985 has not shown women who had a pregnancy to be disadvantaged (compared with non-pregnant HIV infected women) in terms of clinical, virological, or immunological progression[45] (and unpublished data). Similar conclusions have been reached by Berrebi *et al.*[46] from Toulouse, France.

The type of analysis used in all the above studies has implicit methodological problems of ensuring comparability of disease status between groups. Indeed, systematic bias could occur if iller women deliberately avoided pregnancy; if non-pregnant drug users were more likely to continue to inject[47]; or if the non-pregnant group were significantly older. Another, and perhaps preferable, method is to study the effect pregnancy has on each woman's slope of fall in CD_4 lymphocyte count with time. She will thus be her own control, in terms of CD_4 decline before and after pregnancy. An attempt to do this was made by Biggar *et al.*[48]. The authors believed their data were compatible with the hypothesis that pregnancy may mildly accelerate HIV induced depletion of CD_4 lymphocytes, and could therefore increase the rate of progression. However, they had no non-pregnant HIV seropositive control group, and this conclusion does not seem justified.

In short, conclusive evidence about the effect of pregnancy on longer term progression of HIV disease is lacking. Available studies have small numbers, relatively short follow up, and methodological problems. However, it seems unlikely that pregnancy has any major adverse effect on asymptomatic women.

AIDS in pregnancy

There are other possible ways in which pregnancy could affect disease. In susceptible, immunocompromised women, the additional pregnancy-induced fall could reduce CD_4 lymphocyte count below the threshold for opportunistic disease. Pregnancy could also increase the probability of an AIDS defining illness being fatal, or affect longer term prognosis after a CDC 4CI defining event.

Published case reports suggest that the outcome of AIDS in pregnancy is poor. In the United States, the first 6 reported cases of *Pneumocystis carinii* pneumonia (PCP) were fatal[49–51] as was a case of listeria bacteraemia where AIDS was assumed[52]. Further reports of pregnancy-associated deaths from AIDS have followed[53–55].

In contrast to this, as late as 1990, Hicks *et al.*[56] described a single case of a woman who developed PCP during pregnancy but survived this initial episode. The authors claimed this was the first reported case of survival from PCP in pregnancy.

This bias to mortality is strikingly different from the situation in non-pregnant women. However, the gloomy outlook may simply represent reporting bias. Thus survival from PCP in pregnancy has been reported by others[57]. Physicians are more likely to report fatal cases, and perhaps journal editors are more likely to publish such reports. Nothing is known of non-fatal AIDS defining illness in the population from which these women are drawn, and there is no satisfactory information about survival time after AIDS in pregnancy.

The only series which addresses these issues, and has the advantage of being based on a total geographical population, is from Edinburgh[58]. Numbers are too small to provide reliable data, with only 22 women with AIDS, four of whom were pregnant. However, all three women who had PCP for the first time in pregnancy survived this initial episode, and survival time was not obviously reduced by the conjunction of AIDS and pregnancy.

Whether the onset of AIDS in pregnancy does carry a worse prognosis is not known. Because it remains an uncommon event in the developed world, and because the issue has not been specifically studied in Africa, it will be some time before this becomes clear.

EFFECT OF HIV INFECTION ON PREGNANCY OUTCOME

There are several theoretical ways in which HIV infection might affect pregnancy outcome[59].

Abortion

Several studies have found an association between HIV seropositivity and a history of spontaneous abortion[60–62] but these studies have the problem that the woman's HIV status during that pregnancy was unknown. A case control study in Nairobi showed HIV infection to be more common in women admitted with a spontaneous abortion, but the difference with control women whose pregnancy was continuing was not statistically significant[63]. A small prospective study[64] did not show an increase in spontaneous abortion. It is, therefore, uncertain at present whether HIV is directly associated.

Several studies have shown a higher HIV seroprevalence in women having induced abortion than in those continuing pregnancy[65,66] and it might be expected that women infected with HIV would accept termination of pregnancy readily. Thus, 80% of pregnant women in France[67] and 83% of young women in New York[68] were in favour of abortion for HIV infected women. Women actually infected, behave differently however.

Studies from New York[69] and Edinburgh[70] have not shown termination of pregnancy to be chosen

more commonly by HIV seropositive women compared to HIV seronegative drug using controls. Eighty-five per cent of women who tested HIV seropositive were estimated in a survey of major obstetric clinical centres to continue their pregnancy[71].

Some of the reasons which underlie decision making about pregnancy were discussed by Selwyn[69]. However, local perception of illness and death due to HIV may influence choice, and in Edinburgh, seropositive women now seek termination of pregnancy significantly more often than controls.

Powerful factors motivate an asymptomatic infected woman to continue pregnancy, and counselling must be sensitive to the extremely difficult issues considered by her in making her decision.

Pregnancy complications

Early studies reported a high incidence of pre-term labour, caesarean section, syphylis and low birth weight[72,73]. These studies were uncontrolled and illicit drug use and poverty are known to be associated with both HIV infection and poor pregnancy outcome.

The first controlled study, in Edinburgh women, most of whom had a history of drug use, showed both case and control groups to have a high incidence of pre-term labour, intrauterine growth retardation, and low birth weight. However, there were no differences according to HIV status[74].

A prospective study of methadone clinic attenders in New York[64] did not show differences in pregnancy complications and outcome, and nor did a larger study from New York[75]. Similar findings were reported from Milan[76] and Toulouse[77].

These data from the United States and Europe contrast with much information from Africa. Several large studies from Zaire[78,79], Congo[80], Zambia[81], Kenya[82], Uganda[83] and Rwanda[84,85] compared pregnancy outcome in women who were, and were not, infected with HIV. These studies include 1832 infected mothers and 3911 HIV seronegative controls. HIV seropositivity was associated with; pre-term delivery in some studies[78–83] but not others[79,82,84,85]; increased perinatal deaths in some studies[78,83,85] but no difference in others[82,84]. An increase in chorioamnionitis in HIV positive pregnancies was reported in one study[78], bleeding in the third trimester in another[82], twinning in another[80]. One large case control study from Kenya focused on stillbirth and low birth weight[86]. Linear logistic regression retained HIV status as a significant association of these adverse outcomes with odds ratios ranging from 2.0 to 2.9.

Although these reports on pregnancy complications are somewhat inconsistent, all of the African studies agree that birth weight is reduced in HIV infected women. The difference from controls ranges from 130 g[84] to 232 g (calculated from ref 78).

There is evidence that decrease in fetal size at birth is related to stage of maternal disease[78]. However, birth weight is unrelated to whether or not the baby is itself infected[78,87–89].

Congenital abnormality is probably not more common in HIV-infected women[82,84]. A dysmorphic syndrome associated with HIV was reported[90,91] but subsequent reports have not confirmed this finding[92,93] and an HIV dysmorphic syndrome was not seen in the large European Collaborative Study[89].

Reasons for the discrepancies between studies

The differences between African studies and those from Europe and the United States may arise partly from problems of methodology. Control groups in the African studies are loosely matched and clearly differ in other respects apart from HIV status. The differences tend to be in a direction which would favour the control groups as far as pregnancy outcome is concerned. Attempts have been made to allow for these differences using linear logistic regression, but residual distinguishing features may remain to confound the analysis.

There are other possible reasons for the discrepancies. The number of pregnancies studied in Europe and the United States is very small in comparison with the African studies and thus real differences could be missed. In addition, the great majority of women have been asymptomatic. In contrast 18% of women had AIDS in one African study[78] while 53% and 17% were symptomatic in others[81,82]. Finally, the difference in African populations may be due to differential load of other infectious diseases (particularly malaria) and to differences in nutritional status. Basic data on malarial parasites and maternal weight do not seem to have been reported.

Conclusions

In asymptomatic women, HIV infection per se may be associated with a modest reduction in birth weight, but the effect on pregnancy appears to be slight. Under African conditions, there may be increased rates of spontaneous abortion, pre-term labour and stillbirth. When a woman becomes clinically ill, it seems inevitable that there will be a detrimental effect on pregnancy, and there is evidence that this is so.

TRANSMISSION OF INFECTION TO THE BABY

Infection could be transmitted to the baby *in utero*, at delivery, or by breast feeding. The relative importance of these routes is still not certain, although unlike other retroviruses breast feeding does not seem to be the major mode of spread. The outlook for infected children seems poor with one third becoming ill with HIV disease within the first year of life[89]. There may be a bimodal pattern of disease in perinatally-acquired infection[94].

Timing and mode of transmission

The mode of transmission is uncertain. *In vitro* studies show that trophoblast is readily infected by HIV-1[95,96] though there is dispute about whether this is by a pathway mediated by CD_4[95,96]. Lewis *et al.*[97] apparently located HIV-1 antigen in villus trophoblast derivatives, villus mesenchymal cells, and embryonic blood cell precursors in tissues from 3 out of 3 8-week fetuses, and claimed that there is therefore a cytological pathway for transmission established by 8 weeks.

Several early studies suggested that transmission of HIV could occur *in utero*[34,98,99]. Subsequently, successful culture of HIV-1 was reported from 4 out of 14 second trimester fetuses[100,101] and HIV DNA sequence could be detected using polymerase chain reaction in 12 of 41 fetuses[101–104]. In all these studies, precautions were taken to minimize the possibility of maternal cell contamination, but it is difficult to exclude this beyond all doubt. One study which seems to have done this used a polymorphic DNA sequence adjacent to the cystic fibrosis locus[105]. These authors examined only fetuses where the mother was heterozygous, and the fetus homozygous, for this sequence. In 9 such fetuses, the maternal specific allele could not be detected, thus excluding maternal cell contamination, but HIV-1 DNA sequences were detected in 8. This seems a surprisingly high rate of HIV detection in the light of known figures for transmission to the child, and raises the possibility that defective fragments of DNA are being identified rather than true infection.

Even though infection can be transmitted early in intrauterine life, it is not clear whether this is the common or usual timing. The very early onset of clinical and immunological features in some infected children is suggestive. However, the fetus could be infected late in pregnancy, during delivery by exposure to maternal blood or cervical mucous, or postnatally through breast feeding. This timing is of critical importance because if infection is usually around delivery, the risk might be reduced by prophylaxis (for example with large amounts of soluble CD_4 or zidovudine). Unfortunately, though this is such a key issue, many uncertainties remain.

The risk of vertical transmission

Early reports suggested a transmission rate of at least 50% but were biased by the inclusion of children who presented ill. Prospective studies have suggested rates of 13–39%[78,81,87–89,106]. The largest study reported is the European Collaborative Study[89]. Of 419 children born 18 months or more before analysis, 372 were of known infection status, 48 were infected (12.9%). A further 4 had repeatedly positive viral cultures, even though they had cleared maternal antibody. Some of the differences in these studies can be attributed to methodological problems, as was discussed in the paper from the European Collaborative Study[89]. Thus some studies included younger children who were ill, hence inflating the numerator artificially. Others had a low follow-up rate, and one used virus culture on cord blood as an end point for infection. Nevertheless, it seems likely that much of the variation in transmission is genuine and is related to population differences. These include particularly stage of HIV disease, but may also include other infections, and breast feeding.

Factors influencing vertical transmission

These are becoming clearer. There are maternal features, probably mainly reflecting high viral load. Placental abnormality and fetal genotype may also be relevant.

There are accumulating, and convincing, data that transmission is particularly likely late in the course of disease[107], when the woman is severely immunocompromised. A French study[108] reported that 66% of 15 women with CD_4 count in pregnancy $< 150/cm^3$, 30% of 24 women with P24 antigenaemia, and 78% of 14 women who displayed a high viral replication rate of HIV in culture, transmitted infection to their babies. The significance of a low maternal CD_4 lymphocyte count was confirmed by others[39,109] while a Nairobi study[110] claimed that transmission correlated with maternal viral load as assessed by quantitative polymerase chain reaction.

In addition to late disease being a risk factor, there is evidence that vertical transmission is also likely in the first year after seroconversion[39]. This presumably also represents a time of higher viral load, before relative protection from broadly neutralizing antibody.

There is a search for more specific markers to identify those individuals most likely to transmit infection. This would help in counselling about pregnancy and termination and also could select out pregnancies at sufficiently high risk to justify trials of drug prophylaxis. The levels of antibody to epitopes on the hypervariable V_3 loop of viral gp 120, or the MN primary neutralizing domain, have been found by some workers to be predictive of fetal infection[106,111]. This has not been confirmed by others[112–117] and certainly infection does seem to have occurred despite high maternal levels of antibodies. Nsvami *et al.*[116] may be correct when they suggest that any protective effect of antibodies against gp 120 neutralizing epitopes is type specific rather than group specific.

As well as maternal factors, there are suggestions that placental damage may be associated with an increased rate of transmission. There is an association with chorioamnionitis[78]. The finding of a high transmission rate with maternal anaemia (though it could simply be a reflection of HIV disease activity) could result from malaria, which preferentially infects the placenta[118]. In addition, fetal genotype may be important. One study reported that susceptibility to HIV infection was related to genetic variation in HLA immune response genes[119].

Finally, what obstetric factors could influence transmission? Invasive fetal procedures, (cordocentesis, scalp sampling, application of scalp electrodes etc) could result in micro-inoculation of the fetus with maternal blood and hence cause infection. Interestingly, the only fetal sample with maternal blood contamination in one study was the one where earlier cordocentesis had been performed[101]. Such procedures should therefore be avoided where the mother is infected. The role of caesarean section is unclear. In theory elective caesarean section could be protective by minimizing time spent by the baby exposed to cervical mucus and blood from cervical dilatation. A study of twins discordant for HIV transmission could give support to this[120]. Of 15 discordant twin sets the first twin was infected in 13 cases, the second in only 2 ($P=0.01$). Infection of the baby has certainly occurred despite caesarean section being performed[72,87,88,106,121]. However, most studies do not clearly distinguish between elective caesarean section, with intact membranes, and caesarean section done after many hours in labour with ruptured membranes, where it would not be expected to be protective.

At present caesarean section should be performed for standard obstetric reasons only, but this advice may have to be revised as more evidence accumulates.

The situation with zidovudine is unclear. In the few cases reported so far, there have not been major problems with use during pregnancy[122,123]. However, infection of the infant has been documented despite zidovudine treatment throughout pregnancy[124,125].

Breast feeding

Other retroviruses, such as Moloney murine leukaemia virus[126] or HTLV I in the human[127] are spread principally by breast feeding. HIV-1 occurs in breast milk[128] and there is no doubt that infection has been transmitted to the baby postnatally by women infected by blood transfused for post partum haemorrhage[129–131]. In addition, an African study showed that 53% of women who were seronegative at birth but who later seroconverted, infected their babies[132]. In these situations, before the development of neutralizing antibody, viral load may be very high, and this may not parallel the situation with an already infected woman. However, one European study has reported significantly higher infection rates in breast fed babies[88].

It seems probable that breast feeding carries a risk of infecting an otherwise non-infected baby. This extra risk is probably small, and current belief is that breast feeding is not a major route of transmission. The avoidance of breast feeding itself carries risks, particularly in developing countries but also to a lesser extent in the industrialized world. Advice about breast feeding is therefore dependent on an assessment of these different risks in the population. Mathematical models of the event frequencies which have to be taken into account have been suggested[133]. In general terms, HIV infected women in developed countries should be advised to bottle feed. In countries where formula milk is not readily available, and where poor standards of hygiene are used in constituting milk powder, breast feeding should continue to be promoted, as offering infants the optimum chances for survival.

Conclusions

Progress is being made in several aspects of the interaction between HIV and pregnancy. However, many uncertainties remain. In particular, the timing and mechanisms of vertical transmission are critically important but poorly understood, and there is so far no effective way of interrupting transmission to the baby.

There is no reliable way of predicting early in pregnancy which woman will transmit infection, and no fully established method of early diagnosis of infection status in the infant. The only certainty about HIV and pregnancy is that the problem will not disappear in the near future.

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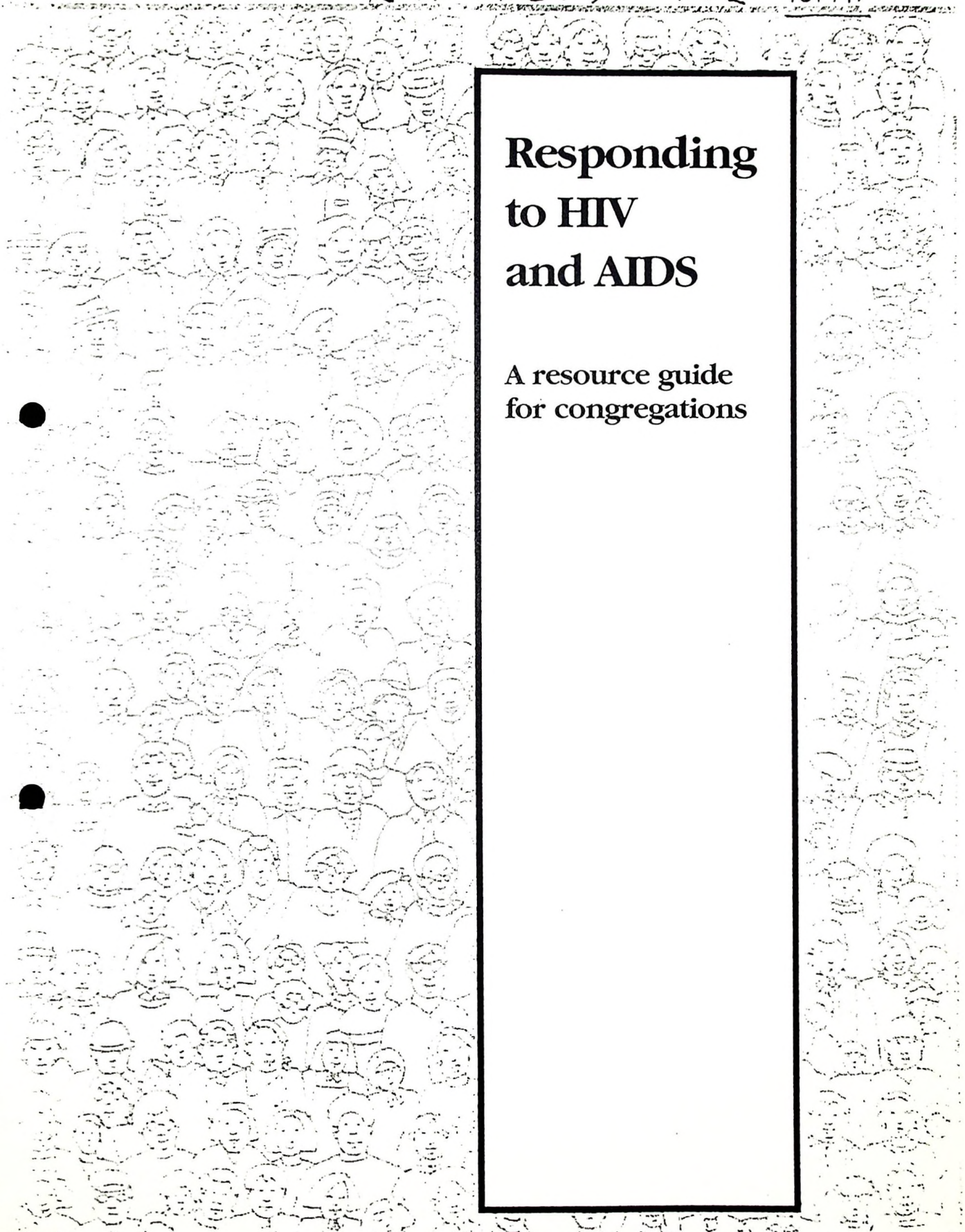

Responding to HIV and AIDS

A resource guide for congregations

Contents:

AIDS and HIV Infection

Throughout this guide we will be referring to both AIDS and HIV infection. Since what we know about AIDS has increased and the infection has spread, it has become important to focus on both HIV infection and AIDS. Persons with HIV infection but not AIDS are the main source of AIDS, so prevention efforts must focus on HIV more than AIDS..

In this resource, those with AIDS will usually not be referred to as AIDS "victims," but "people with AIDS."

The Changing Face of AIDS

Information about AIDS (Acquired Immune Deficiency Syndrome) has increased during recent years. The Christian church must now face how AIDS is changing society:

- AIDS continues to **spread quickly**. About 195,000 cases of AIDS were reported by the end of 1991 and 125,000 deaths resulted.
- Current health care facilities have not been able to keep up with the demand for AIDS care.
- The **cost** of AIDS will affect us all. AIDS care in the U.S. will cost ten billion dollars a year by 1994. Since Medicaid provides some money, taxes will increase to pay for treatment.
- Insurance costs will also increase. Claims will rise as people with AIDS turn in expenses and hospitals raise fees to cover the costs of non-paying patients.
- AIDS brings up several **important issues** which are difficult to deal with: suffering, death, compassion, and sexuality. AIDS causes discomfort because it forces us to look at our understanding of Biblical teaching in these areas.
- **Education and changing behavior** are the only ways to prevent HIV infection. Sex education has often been difficult. Today, however, education is a matter of life and death. We need to learn how to prevent HIV infection and also how to be caring.

The church's challenge and opportunity

Today's church is being forced to respond to AIDS. How will people in your congregation:

- respond to the changing views of people who practice medical care?
- see the church as a place to provide care in kind and inexpensive ways, especially for the terminally ill?
- respond with compassion to persons with AIDS as they prepare for death and seek hope?
- openly discuss the issues of sexuality, suffering, and death?
- prevent the spread of HIV infection among children and youth by helping them develop responsible behavior and appropriate views of their sexuality?
- overcome fear and prejudice by living the hope and compassion of Jesus?

Resources for Your Congregation

This resource booklet includes a variety of ideas and suggestions to help you. There are basic facts about AIDS to help lessen fears and correct misinformation. A discussion guide for adult small groups is also included. The rest of the booklet directs you to other resources available in the church and the community. These resources were designed primarily for use with adults. We encourage you, however, to include AIDS education in your children and youth programs to supplement the secular education that occurs in schools.

Flexible options

Helping your congregation to welcome people with AIDS will take careful thought, much effort, and prayer. You may need to plan different kinds of input to meet different needs among members—to give facts, to encourage discussion, to further understanding and action. All the resources listed here are recommended by the Educational Resources staff of Mennonite Mutual Aid, but we strongly recommend you preview them prior to use in your congregation.

Some public resources, such as those from county health departments or the American Red Cross, do not emphasize strong religious values. They can, however, provide helpful information to add to your congregation's own teaching of a Christian response in sermons, Sunday School classes, youth group meetings, fellowship group discussions and other settings.

Preparing for ministry

Mennonite churches are already responding to members with HIV infection or AIDS. Even if AIDS has not yet touched your congregation, it is likely that it will. Soon, nearly all of us will know someone with AIDS.

We will need the help of our congregations to face the suffering and preparation for death that seem certain with this disease. As church leaders and as disciples of Christ, we are responsible to prepare ourselves and our congregations for the challenges of HIV infection and AIDS. May we, through study, prayer and discussion, be ready to follow Jesus' model of compassion as we face the future.

Terms Defined

AIDS:
Acquired Immune Deficiency Syndrome. A physical condition caused by the HIV virus which attacks a person's immune systems, thus damaging the body's ability to fight diseases. There is no known cure.

HIV:
Abbreviation for the name of the virus that causes AIDS. It is called the Human Immunodeficiency Virus, or HIV.

HIV positive (seropositivity):
When HIV enters the blood stream it begins to attack certain white blood cells. The body responds by producing substances called "antibodies" to defend itself against the infection. It is these antibodies that signal the presence of HIV in the body. People who test positive for these antibodies are "HIV positive" or "seropositive."

NOTE: It can take several months or even years, however, from the time the virus enters the body until these antibodies are produced. Therefore, before blood tests show evidence, a person may be infected and can spread the infection to others. He or she may experience few or no AIDS symptoms or only several during this time. Between the onset of infection and becoming HIV positive is the time of high risk because tests during this time may not be reliable.

Opportunistic diseases:
Diseases which occur because resistance is lowered. When a person's immune system becomes impaired with HIV infection, bacteria, fungi, parasites and viruses, or certain cancers can cause "opportunistic diseases. These diseases would not ordinarily be devastating, but lowered resistance gives them the opportunity to infect and destroy. HIV may also attach itself to the nervous system and cause damage to the brain, resulting in mental illness or dementia.

A Discussion Guide for Adult Group Leaders

Read the guide

MMA made the following discussion guide to help you lead group discussions about HIV infection and AIDS. Read the guide carefully, thinking about the group you will lead and the resources available to you.

Plan your sessions

You, as leader, will plan the agenda. A small amount of preparation time may be needed to arrange for the resources you want to use. Please feel free to adapt or adjust the materials in the guide as needed for your congregation.

Schedule adequate time for your group to deal with the issue of AIDS. The guide was designed for three sessions. Although it could be used for only one or two sessions, you should allow the time for more, depending on the group's interest.

Discover your congregational issues

A week or two before you begin the session(s) on AIDS, set up an anonymous question box to discover the issues of greatest importance. This will give you time to get information and prepare responses that will be most helpful to your group.

Schedule resources

Schedule any video or film you want to use well in advance. This will allow you time to see the material before the session and determine how to lead the discussion or add to the material with more input. It will also ensure that you get the audiovisual you want at the time you want it.

Session I: Facts about HIV infection and AIDS

1. Begin with the quiz, "AIDS: How Much Do You Know?" on page ". Have people complete the quiz and be sure to tell them they will not report or share their answers. Use the answers in the booklet to present facts about HIV infection, the AIDS condition, what causes the spread of AIDS, and how to prevent it.

   For more information about AIDS, consult the resource listing later in this packet.

2. Some people may be afraid of getting the disease through casual contact or may not be informed about it, so these facts are an important beginning point. Help the group discuss how they understand HIV infection and AIDS. Help to relieve unnecessary fears about infection, and also emphasize what behaviors will put one at risk of HIV infection.

   After understanding the facts, it is important to examine our attitudes about and actions toward those who are HIV positive or have AIDS. Encourage the group to discuss these issues openly in the next sessions.

"We do not believe that the God of love, wages germ warfare on the human family, including the unborn and newborn."

Session 2: Biblical perspective on AIDS

1. Begin the session by contrasting responses of different Christians to HIV infection and AIDS. Here are examples:

   - In a survey by the group Americans for Moral Integrity, one pastor said a person with AIDS is "obviously being punished by God," that the problem was in God's hands and that there was nothing he could do.

   - A statement of the United Methodist Church Council of Bishops says, "While the origin of the virus is still in question in the medical community, we in the religious community are certain that it is not sent as a curse from God upon those whose lifestyle is called into question. We do not believe that the God of love, revealed in Jesus Christ, wages germ warfare on the human family, including the unborn and newborn."

   - A church member told the mother of a person with AIDS that she should not come to church until her son had died.

   - A statement on AIDS adopted by the Church of the Brethren Annual Conference in 1987, recommends that "Congregations and individuals become involved in direct care for persons with AIDS, care for the affected families and friends, and the giving of spiritual support through the healing ministries of visitation, counseling, anointing, and in other appropriate ways to promote wholeness and acceptance."

2. Lead the class in looking at scriptures which show the kind of response we as Christians are called upon to give. Suggested passages from the Gospels are included in this booklet (page 10), along with questions to start discussion.

3. Choose a method of discussing these scriptures that fits your group. You may want to divide into smaller groups and give each participant a different passage to read and discuss; then have these clusters share with the larger group the insights they have. Or you could ask people in the larger group to read the verses aloud and invite responses in that group setting.

4. Invite group members to suggest other Bible passages that can give insights into a Christian response to AIDS. However, guide the discussion so it does not become focused on the issue of homosexuality. Keep in mind that AIDS is not a "male homosexual disease"; it afflicts both sexes, including children, and many who are not homosexual. Worldwide, 75 percent of those infected with HIV got the virus through heterosexual intercourse.

   Move on to related issues if time allows. Here are several suggestions:

AIDS and sin

Some people say those with AIDS "deserve it" because of sinful behavior. However, we seldom blame a person for heart disease, and it can, in some situations, also result from "sinful behavior": overeating, underexercising, not managing stress, or eating excessive amounts of fat are also not being good stewards of our bodies. Why are we more likely to accept people with heart disease (or cancer) but judge those with HIV infection? Tony Campolo, Christian speaker and evangelist, has written, "If God sent a disease like AIDS immediately upon every human being who was participating in some sinful act, it seems we would all be on our deathbeds at this very moment."

Does our attitude toward persons with AIDS reveal that we believe some persons "deserve" our help while others do not?

AIDS and difficult issues

AIDS raises questions about our understanding of sexuality, illness, suffering, death and dying. How can our Christian faith grow as we study these issues in the context of HIV and AIDS? Does AIDS help us understand these in a new way? Does AIDS reveal issues we need to study further in our own Christian discipleship? For example: Does the fear of HIV infection interfere with our readiness to care for the person with AIDS? Does our attitude toward persons with AIDS reveal that we believe some persons "deserve" our help while others do not?

AIDS, race and economics

AIDS has had a disproportionate impact on non-whites and the poor. What does this imbalance say about the racial and economic climate in our country? What is our responsibility in the factors that contribute to drug dependency and limited medical care for those at high [redacted] for AIDS?

Can we comprehend the hopelessness of those living in the poverty of inner cities? How can we understand the mentality of unemployed young people in violent areas who say, "Why worry about safe sex or contaminated needles when I'll be killed by age 30 anyway?"

Session 3: What can our congregation do?

1. To concretely show what it means to care for someone with AIDS, show the video, "AIDS: A Family Experience" available from MMA. Follow this with a discussion from the guide provided with this video.

2. If time allows, focus on one or more of the following issues:

AIDS education in the church

What needs does the congregation have for AIDS education? What needs do youth have? Parents? How can these needs be met? How can we help young people develop a healthy understanding and appreciation of their sexuality as well as strong values about the role of sexuality in their lives and commitment to family life?

Preparing to respond

Some congregations are adopting statements about AIDS before the disease directly affects their members or families. Then these congregations are prepared (in a more objective way) to respond when AIDS does affect them directly. How can your congregation prepare to deal with AIDS? What study and discussion will be helpful? What resources will you need? Confidentiality is one of the primary issues as a congregation helps someone with HIV infection. How will your congregation protect confidentiality while helping persons with AIDS? (For examples of statements on AIDS, call MMA.)

AIDS and community opportunities

What are the current needs in the community related to AIDS? Is there a hospice program needing volunteers? Is there an education need that members of the church can address? Can members help persons with AIDS in tasks of daily living such as housecleaning, shopping, child care, etc.? Can members be a support group to families of persons with AIDS?

Use the following quiz at the beginning of a session on AIDS and HIV infection. It will help create interest in the issues, and the answers which follow will help counter misinformation and myths. Photocopy this page for each group member and allow time to answer the questions. Do **not** *ask people to share or report their answers.*

AIDS and HIV Infection: How Much Do You Know?

Information about AIDS is prevalent in the media. But how much do we know? Try to answer these questions. You will not be asked to share or report your answers.

1. Should I be afraid of becoming HIV infected from my dentist or physician?

2. Thanks to HIV antibody testing of blood and blood donors, the nation's blood supply (for transfusion purposes) is truly safe. *True or False?*

3. Because HIV has been found in saliva and tears, kissing has become risky because it might be a means of transmitting the virus. *True or False?*

4. A person whose blood tests positive for HIV can pass the virus on even when there are no symptoms present. *True or False?*

5. On a university campus a student with AIDS comes to school after a holiday to learn that 20 percent of returning students are going to the Health Center for treatment—there is an epidemic of bronchitis/flu. The student refuses to attend classes, gets back in his car and drives home. *Why?*

6. A person applies for employment at a school cafeteria. A blood test reveals that this person has HIV. Considering the environment of knives, meat slicers, and food preparation, should this person be hired?

7. Compared to other viral diseases, AIDS is regarded as highly contagious. *True or False?*

8. Who should be tested for HIV?

9. "Safe sex" is achieved by the regular, conscientious use of a condom. *True or False?*

10. An individual has tested positive for HIV. How likely is that person to develop symptoms within the next ten years?

11. Why have the American Medical Association and other public health authorities been so reluctant to support widespread mandatory testing for HIV?

12. In what ways does the use of alcohol increase one's chances of getting AIDS?

Developed by Willard Kraxberger, M.D.

How Much Do You Know?

Answers and Explanations about AIDS and HIV Infection

1. The chances are low that your professional health caregiver is infected, and the chances of he or she transmitting the virus to you in the course of ordinary care are even more unlikely. All health professionals are expected to take "universal precautions" like wearing gloves. HIV infected professionals are expected to avoid doing invasive procedures.

   Requiring **all** health professionals to be tested would be to throw vast amounts of money at a problem without giving us either assurance or protection (see question #11). To determine public policy based on isolated cases seems unwarranted.

2. Physicians are not making absolute statements about the safety of our blood supply. The blood supply is very safe, but there is still a small window of risk. After a person has become infected with HIV, it may take several months or even years before the body begins to produce antibodies. Testing for these antibodies is currently the only way to detect the presence of the virus. So there is a period of time when a person could donate blood—after infection, but before developing antibodies—and test negative but be able to pass the virus to others.

   It is because of this slight risk that people facing elective surgery are encouraged to bank their own blood ahead of time in case a transfusion is needed.

3. *False.* There have been no cases of HIV infection in which saliva or tears were found to be the means of transmission. However, in practicing "safe sex," avoid deep, wet kissing. If a person has an open lesion in the mouth and participates in deep, wet kissing, the virus could be transmitted from one person's blood stream to the other's. The transmission is by way of blood, not saliva.

4. *True.* A person can be infected with HIV for many years without developing AIDS. The virus can be transmitted from anyone carrying it to another person through high risk sexual behaviors.

5. A person with AIDS has lessened immunity to other infections and viruses. Thus, a cold or the flu which is an inconvenience to a healthy person can be life-threatening to a person with AIDS. We are more dangerous to a person with AIDS than he or she is to us unless we are sharing needles or having sex with them.

6. We cannot acquire the virus through our digestive tract. Also, the virus cannot live outside the human body. For these reasons, we should not be concerned about someone with AIDS preparing or serving food. However, a person with AIDS may want to reconsider employment in the food industry because of his or her own safety.

7. *False.* AIDS is not highly contagious; other viruses, such as hepatitis B, are more easily transmitted. Many viral illnesses are much more contagious; you can get them simply by being in the presence of an infected individual. But with AIDS, you must do specific, defined actions (exchanging body fluids) to become infected.

8. Anyone who is at risk of having ever acquired HIV infection. This includes anyone who:

   - received a blood transfusion between 1978-1985.
   - injected illicit drugs or shared hypodermic needles.
   - has hemophilia.
   - has had sexual intercourse with gay or bisexual men.

When someone engages in intercourse, he or she has sex with everyone that person has ever had intercourse with.

- has had any sexually transmitted disease (chlamydia, gonorrhea, syphilis, etc.). The occurrence of other sexually transmitted diseases puts one at greater risk for HIV infection.
- has had sexual intercourse with any person whose sexual history is unknown or uncertain. When someone engages in intercourse, he or she has sex with everyone that person has ever had intercourse with. The facts about HIV transmission are powerful support for the church's teaching that sexual intercourse should be reserved for marriage and for faithfulness within marriage on the part of both partners.

Since it has been learned that drugs such as AZT can help delay the onset of full blown AIDS, it is even more important that everyone who carries the virus should be identified. Because some people in our congregations have had multiple sex partners, voluntary confidential HIV testing should be chosen by many people throughout our churches.

9. Condoms mean **safer** sex, not **safe** sex. Condoms are not 100 percent reliable; they only reduce the risk of becoming infected with HIV and only if they are used for every sexual encounter. Using the condom is the best preventive measure for those who will not abstain from sexual activity or practice monogamy. To call the use of the condom "safe" is misleading. Recommendations for condom use come after the preferable recommendation to abstain or be monogamous. AIDS and all sexually transmitted diseases are diseases of multiple partnerships.

10. The average time from infection to the development of symptomatic AIDS is currently about ten years. Blood tests, however, can detect falling immunity and the use of drugs such as AZT can, in some persons, delay the onset of full blown AIDS. Anyone who is HIV positive should be closely monitored.

11. The HIV antibody test only reveals the HIV status of the person at that particular time, not next week, next month, or next year. So how often would you want to test? It is quickly apparent that a single test can be misleading, and frequent testing would be prohibitively expensive. Furthermore, mandatory testing tends to drive "underground" those most likely to be HIV positive.

    The millions of dollars required for mandatory testing would be better spent on prevention strategies, on education, and on selective confidential testing of those at high risk.

12. There are two ways alcohol increases one's possibility of developing AIDS: a) people do things when they have been drinking that they would not do otherwise, such as being less selective in choosing sexual partners, less careful about using condoms, and less careful in using injectable drugs; and b) alcohol depresses the immune system. Alcohol use and abuse is a known risk factor for HIV infection.

Adapted from material developed and compiled by Willard Krabill, M.D., Goshen, IN

What priority did Jesus give to healing those in need?

AIDS: What Does the Bible Say?

The Bible does not address AIDS directly. But it does address related issues: healing, caring for others, the relationship between spiritual brokenness and sickness, and responses to other serious illnesses. Examine these Gospel passages in the current context of AIDS. What does the Bible say? What does Jesus' life show us?

Judging others

Matthew 7:1-5, Luke 6:37-42

Have you ever done anything for which you were afraid of being judged? Did you feel judged by others? What was that like? What did you want to do as a result of feeling judged? How did you work through that event? How did you experience Jesus reaching out to you?

Healing a person with leprosy

Matthew 8:1-4

How do you see yourself as a leper? How does that affect your life and your relationships with others? Have you ever felt shunned, excluded, or on the "outside?" Who reached out to you and what did they do? Have you been healed of that leprosy? How did the healing happen? Did Jesus touch you? Through whom? What did that person do to help you experience Jesus' healing?

Healing and gathering food on the Sabbath

Matthew 12:1-13

What priority did Jesus give to healing and feeding those in need? What risks did Jesus take to carry out that priority?

The parable of the good Samaritan

Luke 10:25-37

Is it possible that persons with AIDS have something to teach us? Why did the Samaritan help the wounded man? Martin Luther King said the priest and Levite asked,"What will happen to us if we help?" The Samaritan asked, "What will happen to him if I don't help?" Would you be willing under any circumstance to risk your health for the sake of helping another person? Why? Why not?

Parable of the prodigal son

Luke 15:11-31

With whom do you most identify? Does that change from time to time? What urges you to leave the Father at times? What draws you back? Are you ever resentful of those who think you have "wasted" their lives? What do you do with those feelings? How do you respond to those who you think have taken advantage of the Father's gifts of love? How do you feel about a Father who will take someone back who you don't think deserves being taken back?

Healing the man by the pool

John 5:1-14

What did Jesus mean by his statement at the end of this passage? What implications does this have for how we relate to persons with AIDS? (Note that Jesus first healed the man, then told him to stop sinning. Jesus did not make compassion and healing contingent on the man changing.)

Woman caught in adultery

John 8:1-11

How does this encounter apply to our attitudes to persons with AIDS? What does this encounter say to persons who have contracted AIDS through high risk behaviors?

Illness and spiritual brokenness

John 9:1-3

The New Testament seems to view illness in more than one way. At times it is seen as resulting from people's wrong choices. But in this passage, what did Jesus say about whether people's illness or injury is punishment? Do we ever identify ourselves to be among those in need?. How are we like the leper, the prodigal, the older brother, the adulteress? Do we hurt or help to heal?

Additional Resources for HIV and AIDS Education

Toll-free telephone numbers

- Mennonite Mutual Aid: 1-800-348-7468

  A bibliography of Mennonite church press articles about HIV and AIDS can be obtained from the MMA Educational Resources team.

- U.S. Public Health Service hotlines:

  AIDS information line: 1-800-342-AIDS
  Spanish language: 1-800-222-SIDA
  Hearing impaired: 1-800-553-AIDS

Brethren/Mennonite AIDS information hotline

- Telephone number: 717-393-7140

  Several Lancaster County, Pa., Mennonites and Brethren started a hotline in 1990 for persons who are HIV positive or living with AIDS. Any person who feels isolated or wants additional church support in dealing with AIDS can call. Though the hotline was formed out of a local initiative, it is now open to callers from all parts of North America. Callers seeking basic information or supportive relationships will be referred to the closest local resource if they wish. All calls are strictly confidential: callers are not required to give their names.

Video resources

These videos provide reliable data about HIV infection and AIDS, prevention and care. Preview these materials and supplement them with teaching on Christian compassion, commitment to strong family and moral values, and understanding of sexuality.

"AIDS: What Everyone Needs to Know."
Rental: $60
Purchase: Video $275/Film $390
Order from
Churchill Films
662 North Robertson Boulevard
Los Angeles, CA 90069-5089
800-334-7830; (213)657-5110 in California

"AIDS: A Family Experience"
A family shares how they are dealing with a son/brother with AIDS. Presents issues of feelings about homosexuality, fears of contracting the disease, reactions of friends, and feelings about facing death. Also includes interviews with a medical doctor and psychiatrist to give medical data about AIDS.

33 minute video
$15 rental from Mennonite Mutual Aid
Discussion guide included

U.S. Department of Health and Human Services and local County Health Departments:

"Teens, Questions and Answers," video by Dr. C. Everett Koop, former Surgeon General, with discussion guide for teenage audiences.

"Epidemic of Fear: AIDS in the Workplace"
Includes video, discussion guide, and guidelines for writing policies.

"Can I Get It?" Outlines sexual behaviors that increase risk of HIV infection.

Printed materials

National Council of Churches Task Force on AIDS:

AIDS: A Resource Packet for Congregations.
475 Riverside Drive, New York, NY 10115. $5.00.

AIDS, A Manual for Pastoral Care.
Ronald H. Sunderland and Earl E. Shelp.
Philadelphia: The Westminster Press, 1987.
Includes medical facts, fears about AIDS, recognizing and dealing with grief, ethical issues, and case studies.

When AIDS Comes to Church.
William E. Amos,Jr. Philadelphia:
The Westminster Press, 1988.
Excellent first-person account of a pastor's experiences in working with persons with AIDS. William Amos is pastor of a Baptist congregation in a Ft. Lauderdale, Fla., suburb.

AIDS and the Church.
Earl E. Shelp and Ronald H. Sunderland.
Philadelphia: The Westminster Press, 1987.
Encourages the church to respond to AIDS; gives medical information, considers the responsibility of the church, and describes ways of ministering to those with AIDS.

"Sex education has often been difficult. Today, however, education is a matter of life and death."

—Willard Krabill, M.D.

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GLOBAL AIDSNEWS

The Newsletter of the World Health Organization Global Programme on AIDS

WHO accepts drug donation for AIDS patients in Africa

A Belgian pharmaceutical firm has agreed to give the World Health Organization a large quantity of drugs to treat people in developing African countries for two common fungal infections related to AIDS: oral and oesophageal candidiasis. WHO believes the drugs donated by Janssen Pharmaceutica of Belgium will be enough to treat 300 000 people over five years.

The agreement, signed on 25 November, is a result of GPA collaboration with the pharmaceutical industry on improving HIV/AIDS care in developing countries.

Dr Hiroshi Nakajima, Director-General of WHO, expressed his thanks to Janssen for the donation. "Our objective is to alleviate the suffering of hundreds of thousands of AIDS patients in Africa and to improve the quality of their life," he said. "I sincerely hope that others interested in helping AIDS patients will make similar donations."

continued page 3

Inside Global AIDSnews

Sex education leads to safer behaviour

Teaching young people about sexuality and contraception is often thought to encourage early sexual experimentation. This belief, which is a powerful barrier to the introduction of HIV/STD prevention programmes, has been conclusively disproved by a GPA review of studies on the effects of sex education in schools. In fact, sex and AIDS education often encourages young people to delay sexual activity and to practise safer sex when they are sexually active.

Among the studies that evaluated the sexual behaviour of students exposed to sex education, 19 considered its effect on reported age at first intercourse and reported levels of sexual activity.

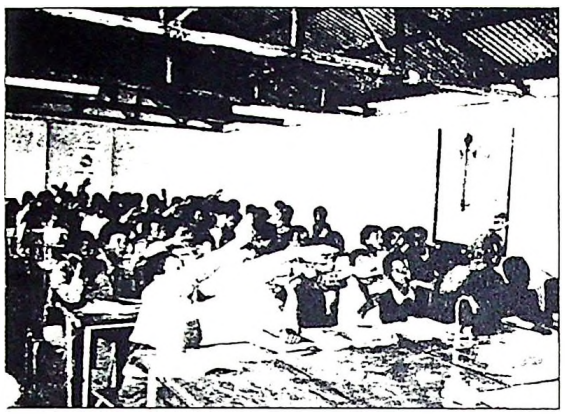
- No study revealed evidence of sex education leading to earlier or increased sexual activity in young people.
- In six studies, sex education either delayed the onset of sexual activity or caused a fall in its overall extent.
- Two studies showed that access to counselling and contraceptive services did not encourage earlier or increased sexual activity.

continued page 2

GLOBAL
AIDSNEWS

Sex education leads to safer behaviour

(continued from page 1)



■ Ten studies showed that sex education increased the adoption of safer practices by sexually active youth.

School programmes which promoted both the postponement of sexual intercourse and the use of condoms when sex occurs were more effective than those which promoted abstinence alone. They were also more effective when given before young people become sexually active, and when they emphasized skills and social norms rather than knowledge.

Two public information programmes on HIV/AIDS brought about a large rise in the use of condoms and other contraceptives, while causing no decrease in age of first intercourse and no rise in the amount of sexual activity among young people. ■

The GPA review was conducted by Drs Peter Aggleton, Mariella Baldo and Gary Slutkin of GPA's Office of Intervention Development Support, in collaboration with the National Centre for HIV Social Research, Macquarie University, Sydney, Australia; the Institute of Population Studies, University of Exeter, UK; and the Psychology Department, Bowling Green State University, Ohio, USA.

"Young people – children – need to learn about AIDS prevention before they become sexually active, and school-based education programmes must make sure they do."

Dr Michael H. Merson, Executive Director, GPA, Third Pan American Conference on AIDS and Ninth Latin American Congress on Sexually Transmitted Diseases, Cartagena, Colombia, 3 November 1993.

Typical studies reviewed:

1. Two programmes, each of 15 modules lasting 50 minutes, among 722 males and females averaging 15 years old.

   FINDING: Programmes delayed initiation of unprotected sex in those with no sexual experience.

2. Cross-sectional survey of 1880 males aged 15-19.

   FINDING: AIDS/sex education was associated with fewer sexual partners, less frequent intercourse and more condom use.

3. Intercountry comparison of education, sexual behaviour, teenage pregnancy and abortion.

   FINDING: Information and services did not boost sexual activity.

4. Survey of 3711 males and females aged 15-19.

   FINDING: Those who had sex education were no more likely to have sex, but were *more* likely to use contraception.

5. Peer-led education programme among 536 adolescents aged 13-14, focused on contraception and postponement of sex.

   FINDING: Programme caused postponement of sex (particularly in girls), greater contraceptive use and lower pregnancy rates.

6. Fifteen skills-based lessons focused on contraception and postponing sex among 758 males and females aged 15-18.

   FINDING: Programme delayed start of sexual intercourse and raised the use of contraceptives among the sexually active.

7. Analysis of 14 separate sex education programmes.

   FINDING: No effect on incidence of sexual intercourse.

Pain

Pain,
Perpetual pain,
Aching, slogging, grieving,
feeling,
piercing, future blinding
round embracing,
isolating,
oneness
loneness
weary sadness making.

Pain of watching,
waiting
nothing certain
one year, two years
time is breaking over
day by day
and holding in its grasp
our lives and loss

Pain of never winning
not improving
slowly waiting
for the end that will be no end
but start again of grieving
paining,
pining
further anger
sadness

Pain of being rendered helpless.
Nothing cures
though love can ease the time
of days and nights of
help me, turn me, lift me
feed me,
touch me softly, giving
hopeful love's embrace.

Is this empty
PAIN of inner man?
Analgesics cannot touch
this deeper hurt.
Can it covered be by
alcohol's soft dream
or drugs' high lift?

Is there in the hurt
endured,
a glimpse of Christ
hanging, waiting, paining
on the tree.
Is this pain a part
of when our Lord
is crossing me?

No-answer have I
Only this I say
that when I look at him
He is with me.

Ivan Mann

Trust

Loving God, you show yourself to those who are vulnerable and make your home with the poor and weak of this world;
Warm our hearts with the fire of your Spirit. Help us to accept the challenges of AIDS.

Protect the healthy, calm the frightened, give courage to those in pain, comfort the dying and give to the dead eternal life;
Console the bereaved, strengthen those who care for the sick.

May we your people, using all our energy and imagination, and trusting in your steadfast love, be united with one another in conquering all disease and fear.

Terrence Higgins Trust Interfaith Group

Guilt

A Carer's greatest fear
I have been guilty again –
Guilty of being tired
Guilty of possession
Did I do that right?
Guilty of pushing that fear down hard
Guilty of being hurt and hurting
Of making decisions
Guilty of crying
Did I try as hard as I should?
Guilty of keeping my emotions in check and not
succeeding
Of not communicating
Guilty of exploding with my frustration
Can I do better tomorrow. Guilty
And then my absolute exhaustion makes me feel guilty,
Can't I have two more minutes to myself, on my own.
Guilty
But today I am much better, guilty of being
A good Carer
Guilty of loving and caring and knowing
I have got it right
And tomorrow I will be guilty again
Guilty of not feeling guilty
Till tomorrow I will feel alright
But then, I really must find a new guilt
I have used all these before

Ross Davis

Should wider HIV testing be encouraged on the grounds of HIV prevention?

S. BEARDSELL
SIGMA, Department of Sociology, University of Essex, UK

Abstract *The issue of the role of HIV testing in HIV prevention is an important one. Some commentators have argued that HIV testing should be encouraged more widely on the grounds that it can stimulate behaviour change to safe sex and drug use. Testing has been advanced as an important means to control the epidemic. There is, however, insufficient evidence to support this contention at this time. The hypothesis of a link between HIV testing and behaviour change is based on the assumption of a linear relationship. It is argued that this assumption is based on two others, that the 'stimulus' of testing and counselling is uniform, and that information will be perceived and used by all recipients in an identical way. It is argued that there is currently insufficient research evidence to encourage more widespread testing on prevention grounds. Issues which should be considered in future research designs are discussed.*

Introduction

The issue of HIV antibody testing and the balance of its advantages and disadvantages has always been a contentious issue, and one which constantly needs to be re-examined. Whether to take an HIV antibody test or not is a major decision and the individual must be aware of and weigh the benefits against the drawbacks at any one point in time.

For those who test positive there is still no 'magic bullet' of a cure and they are faced with terminal illness and the additional burdens of stigmatization and discrimination, social isolation and rejection, even from partners, family and friends. Given this, an individual may simply 'not want to know'. On a practical level, even if the result is negative difficulties in getting life insurance or a mortgage may be experienced (Carne & Kapila, 1988).

On the other hand, testing can put the individuals' mind at rest (BMRB, 1991; Bor et al., 1991) and allow long-term plans to be made, including those regarding sexual practices, contraception and pregnancy (Leen *et al.*, 1989; Carne & Kapila, 1988). Moreover, the major advantage of testing is ongoing monitoring in order to identify clinical problems early on and receive early prophylaxis and therapies:

> ... an anti-testing position is at best self-defeating and at worst dangerous. It is self defeating since only from patients can we learn more about the natural history of

An earlier version of this paper was prepared for the Inter-Regional HIV/AIDS Forum Working Group on HIV Testing while the author was Senior Research Officer at North East Thames Regional Health Authority.

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> HIV infection so that we can plan for their care and treatment; it is potentially dangerous because patients are denied the benefits of treatment that may prolong life. (Bor *et al.*, 1991)

There is increasing evidence that early treatment and prophylaxis may delay the progression of HIV disease (for discussions see, for example, Miller & Pinching, 1989; Arno *et al.*, 1989; Friedland, 1990). Evidence from the US (Bennett *et al.*, 1989) and the UK (Whitmore-Overton *et al.*, 1993) suggests that early access into medical care may slow disease progression and lead to improved survival. (Note that these conclusions are inferred since early referral is also related to the experience of the treatment centre (Whitmore, personal communication)). Thus, Friedland argues that HIV testing provides a "powerful program for delaying the progression of HIV infection".

Access to medical services may now well be the most crucial factor in individual decision making around HIV testing. The focus of this paper however is a public health advantage that has been discussed extensively: whether HIV testing can perform a health education role and bring about behaviour change. It is argued that the experience of having an HIV test leads to a reduction or cessation in behaviours likely to put the individual at risk of HIV infection.

The proposed prevention component of HIV testing has been discussed as an important means of controlling the HIV epidemic (see, for example Weiss & Thier, 1988; Rhame & Maki, 1989). Testing has been held by some physicians and public health commentators to be a necessary part of promoting behaviour change (see Bayer, 1989; Miller & Pinching, 1989). Calls have therefore been made for routine HIV testing of those at 'high risk' (e.g. Brandon, 1988; Barbacci *et al.*, 1991) or even of the whole adult population (e.g. Rhame & Maki, 1989). Given that there is already mandatory testing of certain groups in the US and elsewhere, these arguments are on a slippery slope to advocating mandatory testing (for a discussion of the ethical issues see, for example, Gillon, 1987; Miller & Pinching, 1989; Bayer, 1989; Rhame & Maki, 1989; Brandt, *et al.*, 1990).

In Britain, the Department of Health appears to be developing a more proactive policy towards testing. In December 1990, Sir Donald Acheson, the Chief Medical Officer stated that "If people think they have been at risk they should seek a test" and in July 1991, Virginia Bottomley, Minister for Health, said "I want to encourage people to come forward for a test. There should be no stigma attached". This developing policy [see, for example, Chief Medical Officer's press statement of 25 July 1991; Department of Health guidelines PL/CO (92)5, 1992] appears to be based on two premises, the medical care available to those who test positive and behaviour change:

> A person who is unaware that he or she is HIV infected may unintentionally infect sexual or drug misusing partners. Conversely, people who know that they are infected have the opportunity to adopt behaviours that minimise the risk of transmitting the virus to others. Furthermore, evidence now suggest that an infected person may benefit clinically from prophylactic treatments to delay the onset of HIV related disease and from earlier treatment of any such conditions. [Department of Health guidelines PL/CO (92)5, 1992.]

> In the great majority of cases people will be found to be negative but testing will still be beneficial because it means they will have access to advice about how to protect themselves and others from the risk of infection in the future. (The Chief Medical Officer in a press statement of 25 July 1991.)

Demand for testing does seem to be increasing. In the North East Thames Regional Health Authority, testing services experienced a significant increase in workload during 1990–1. This coincided with a national HIV prevention campaign but there was a particularly large increase in requests for advice and testing following the statement by the Chief Medical Officer in 1990. Demand declined after the initial impact but levelled at a higher point than before (NETRHA, 1991). More recent figures indicate that this increased demand continued in 1991–92 (O'Brien *et al.*, 1992). In response to the preliminary findings of the anonymised seroprevalence surveys, some centres (e.g. genito-urinary medicine and antenatal clinics) now offer a more proactive testing service—that is, testing is offered to all clients instead of only responding to their requests for a test. Recent Department of Health guidelines [PL/CO (92)5, 1992] also encourage offering HIV testing more widely and the setting up of alternative testing sites.

Would more testing help to control the spread of HIV? If testing is found to be an effective prevention tool, this has serious ramifications. To change our current strategy in Britain would have huge resource implications and care would have to be taken to ensure that the quality of counselling services was not compromised. Moreover, how would more people be encouraged to be tested? A survey commissioned by the Department of Health and the Association of British Insurers (BMRB, 1991) found that 80% of HIV/AIDS specialists (doctors, health advisers, helpline workers, charity workers, etc.) believed that the questions on HIV testing on life insurance forms would put people off having a test. In Sweden, HIV testing is one of the most important part of the authorities' prevention policy and the government strongly encourages voluntary testing—more people per million inhabitants have been tested than in any other European country, despite comparatively low rates of HIV infection (Henriksson, 1988). Between 1985 and 1989 the numbers of gay and bisexual men, and injecting drug users coming forward for HIV testing decreased slightly while the numbers of heterosexuals (mainly HIV negative) dramatically increased (Månsson, 1990). Thus, Månsson (1990) concludes that "people who are unlikely to be infected are the ones who take the test, in droves". Therefore, encouraging testing may not actually help to identify those who are HIV positive. (From a prevention perspective, of course, it could be argued that having many seronegative individuals coming for testing may be no bad thing, since they will have access to HIV prevention counselling). HIV testing may even be emphasized to the neglect of other prevention measures—Watney (1990) has commented that "... culturally, antibody testing is still being promoted as a form of technological solution to safer sex, largely by the mass media". In the worst instance, there is also the danger that calls for an increase in testing would lead to calls for more coercive measures in order to 'protect the public health'. We must thus examine the assumptions around testing and prevention very carefully if testing is to be adopted as an HIV prevention strategy. The present paper will critically examine a number of assumptions made around this issues by commentators, policy makers and researchers.

Since 1985 it has been the policy of the Department of Health and Social Services that everybody seeking an HIV antibody test in Britain should receive pre- and post-test counselling. Any proposed effect on behaviour will, therefore, be a result of the *combination* of testing and counselling, and it is not possible to isolate the individual contribution of each to any behaviour change. All discussions of the effect of HIV testing on behaviour in this paper will relate only to situations similar to Britain where testing has been accompanied by counselling. It is thus the effects of the whole testing *process* that is being considered.

Assumption 1: There is a correlation between HIV testing/counselling and behaviour change

Assumption 2: Behaviour change should be most marked in those who test positive

As discussed above, policy makers and commentators have claimed or implied that testing can be of benefit to public health by leading to behaviour change (e.g. Department of Health guidelines, PL/CO(92)5, 1992; see also discussions in Bayer, 1989; Miller & Pinching, 1989; Brant *et al.*, 1990). That is, that the experience of HIV testing and associated counselling will lead to a reduction or cessation in behaviour patterns likely to put the individual at risk of HIV infection and that "No-one would then spread the virus ignorant of the fact that they were infected" (Brant *et al.*, 1990). This assumption has been tested by looking at data from various studies, mainly from the US and Europe. Most of these studies have also tested the hypothesis that there will be a difference between those who test HIV positive and those who test seronegative. It has been suggested (Jacobsen *et al.*, 1990) that a negative result may reinforce or even decrease the perceived threat of HIV and, therefore, limit motivations to change behaviour. On the other hand, one could also hypothesize no difference between seropositives (who change to protect others) and seronegatives (who change to protect themselves).

Research has rarely been designed with the express purpose of evaluating the effects of counselling and testing on behaviour, and studies which systematically evaluate the effect of HIV counselling are absent, probably due to the crisis response of HIV counselling (Carballo & Miller, 1989). However, a review of available research was published at the end of 1991 (Higgins *et al.*, 1991). The 'effectiveness' of counselling/testing was defined in terms of self-reported behavioural indices such as condom use, number of sexual partners, frequency of drug use and needle sharing, needle hygiene, etc., and participants were followed longitudinally or compared cross-sectionally to assess any changes on these parameters. Studies were organized into the following samples: gay men, intravenous drug users, pregnant women and 'other heterosexuals'. Readers are referred to the Higgins *et al.* paper for a full review of the relevant studies. The purpose of this paper is not to replicate their work but to consider some of the issues arising from their conclusions. For the readers convenience, however, the following sections precis the findings for the above samples:

Gay men

Seventeen studies, predominantly from the US, were reviewed. Comparisons were mainly done on those who knew their antibody status versus those who did not and, among those who knew their status, those who were seropositive versus those who were seronegative. Over the periods of research, all groups tended to report 'dramatic reductions' in risk behaviour, although it is clearly not possible to empirically establish that this was due to counselling and testing alone. Cross-sectional comparisons indicated greater reductions among those who knew their serostatus compared to those who did not but these results often disappeared when longitudinal analyses were conducted, suggesting that changes in behaviour were independent of knowledge of serostatus. Some studies indicated greater risk reduction among known positives as opposed to negatives, but some contradictory evidence leaves this issue unresolved.

Intravenous drug users

Twelve studies from the US, UK and the Netherlands were reviewed. Improvements were made in needle-use behaviour and there was some sexual behaviour risk reduction. However,

all but one sampled their participants from methadone maintenance programmes, so it is impossible to separate the effects of the programme from that of HIV counselling and testing. No differences were reported between those who tested positive or negative and those who were untested, indicating that any differences are not due to knowledge of HIV status.

Pregnant women

Eleven studies from the US, Scotland, France, Switzerland and Nairobi were discussed. Prevention was defined in terms of seropositive women electing to abort. [This definition of prevention is somewhat value laden and perhaps reflects the pressure on seropositive women to terminate in order not to infect the foetus, despite more recent evidence from the European Collaborative Study (1991) of a 13% perinatal transmission rate (in women who were mainly asymptomatic).] Serostatus did not effect termination decisions. However, there was no control for how much a baby was wanted in the first place—all the US women were in antenatal programmes which may indicate commitment to the pregnancy. Only the Nairobi study looked at condom use, but found no significant effect between seropositive and seronegative women.

Other heterosexuals

Ten studies were banded under this heading. They include four studies of couples consisting of one seropositive and one seronegative (seven European sites, Rwanda, New York, Los Angeles), one of women in Zaire, one of STD clinic clients (Los Angeles), one of couples with an intravenous drug using history (New York), two of high risk women (New York, Long Beach) and one of adolescents (New York). In contrast to the studies discussed above, there was a trend for counselling and testing to have an effect on safer sex. Only one study provided tests of statistical significance.

Results are thus contradictory and as yet the relationship between testing and prevention remains unproven. Even where changes in unsafe behaviour were observed over time, other factors, such as the mass media and health promotion initiatives, were at work concurrently. Clearly, methodologically, it is not possible to isolate the effects of each. Testing and counselling may well have contributed to the behaviour changes, but it is not possible to say to what extent. Many studies shared the hypothesis that knowledge of serostatus would have a significant effect (i.e. that it is not just the experience of testing and counselling that effects behaviour, but knowing that one is HIV positive or not), but there was only evidence for this in some of the studies of gay men. The conclusions that we can draw from the current research into the behavioural effects of HIV testing are limited by methodological limitations and there are also theoretical reasons why the predicted effects may not occur anyway. These will now be discussed.

Methodological problems with available studies

The major methodological flaw in the available studies is the lack of any control or comparison group (Higgins *et al.* 1991)—*all* participants receive counselling and testing, and changes in behaviour are monitored over time. Given the plethora of other variables that can

effect sexual and drug-taking behaviour, we can never be sure that these changes were solely due to the testing experience or what degree of contribution counselling and testing could have. However, given the ethical problems of refusing counselling and testing to groups of clients who want it, this problem is unlikely to be addressed. Hypotheses are often based on the presumption that the effect of counselling and testing will be to decrease risky behaviour. However, a negative result may lead to a false sense of security that may sustain or even increase these behaviour patterns. Some commentators on intravenous drug users have expressed the view that testing may be counter-productive to prevention, with a positive result leading to more chaotic drug using and sexual behaviours (Mulleady, 1989; see also Bond, 1991). Thus, the process of counselling and testing could have the effect of changing risk behaviours in *either* direction. It is possible that individual differences within samples may lead to these effects cancelling themselves out in statistical analysis.

The time period between receiving counselling and testing and behavioural assessments is usually not reported (Higgins *et al.*, 1991), but this may be a crucial factor. It may be, for instance, that assessments taken very soon after testing show the largest effect which may then quickly dissipate. Alternatively, later assessments may show a greater effect, reflecting the time for intentions to be translated into behaviour. For individuals who test positive, it is also likely that counselling will be ongoing, so that any behaviour changes are due not just to pre- and post-testing sessions only. There is a need for more longitudinal research with assessments made at regular intervals.

Assessments of behaviour are often taken only at two points in time. Studies therefore fail to take account of those individuals who are inconsistently safe by not considering behaviour over a long enough period (Hart *et al.*, 1992) or negotiate unprotected sex or needle sharing through knowledge of partners identical HIV status (Hart *et al.*, 1992; Kippax *et al.*, 1992). Behaviour change, moreover, is not irreversible.

Behavioural measures are self-reported retrospectively. Thus they rely on memory and are subject to various intentional or unintentional errors (for instance, 'social desirability' responses may occur when an individual does not want to admit unsafe sex to a researcher in the context of a study on HIV). Measures, moreover, vary across studies, making them less comparable. Wording of questions can be very important as shown, for example, in the work of Project SIGMA on different interpretations of identical sexual terminology (e.g. Coxon, 1988; Hunt & Davies, 1991).

The studies under discussion are also biased by the self-selecting nature of the sample (Higgins *et al.*, 1991). That is, participation in the study was dependent upon respondents coming forward and wanting a test, and also upon them coming back for the results and agreeing to take part in follow up. It could be hypothesized that they come forward because they are more aware of their own risks and may, therefore, be more motivated to change their behaviour. Similarly, the longer participants stay in the study, the more motivated they may be around HIV issues. Well controlled studies tend to show that those who come forward to be tested may have made greater changes in high risk behaviour *before* testing, and that while counselling and testing may have hastened the behaviour change, it did not cause it (Miller & Pinching, 1989; Cohen, 1991). Testing and counselling may not be the occurrence that leads to behaviour change, but a mid-point in the change process. A current study of HIV testing in women in Newhaven, USA, indicates that behaviour prior to testing is the best predictor of behaviour after testing (Ickovics, personal communication).

The temptation, therefore, is to design studies which specifically address the hypothesis of a relationship between counselling testing and behaviour change, and which take account of these methodological issues. However, the hypothesis is still based on several assumptions

which can also be challenged and which also have serious methodological implications for any studies that are to be designed.

Assumption 3: The relationship between receiving testing and counselling, and behavioural change is a linear one

Implicit in various discussions around the effects of HIV counselling and testing on prevention is the notion of a linear effect between exposure to the 'stimulus' (HIV testing and counselling) and the 'subject' (the person being tested), the effect being a reduction or cessation of risky practices. It will be argued that this assumption is erroneous and is, in fact, based on two further assumptions which assume a simplistic notion of behaviour change:

Assumption 4: The 'stimulus' of testing and counselling is uniform

The nature and content of the counselling session itself are uncontrolled factors in the available research. The content and methods of HIV test counselling may vary widely (Bond, 1991), therefore, the studies may not even be evaluating the same thing and it would be erroneous to hypothesize that they would have a uniform effect on behaviour. Why should we, in any case, assume that all testing and counselling will work to similar ends?

There is limited research as to what actually goes on in HIV test counselling and whether its content can reasonably be predicted to affect behaviour change, although it should include information on risk reduction. The notable exception is the work of Silverman and colleagues (e.g. Silverman, 1990; Silverman & Perakyla, 1990). Using discourse analysis of real life counselling sessions, they have illustrated the degree of disparity in the content of sessions and the way that counsellors* work:

> ... [some] ... faced with a heavy patient load for pre-test counselling, may concentrate on conveying accurate information in order to obtain informed consent. Still others, with lower patient loads, may manage pre-test counselling sessions of up to 45 minutes, based on theoretical models that may be fundamentally at variance with individualised, psycho-pathological theories. (Silverman, 1990, p. 200.)

Initial analysis of pretest counselling identified four styles which are described in Silverman (1990) as follows:

The information-giving model

This model is basically a paramedical one with a stress on getting informed consent for the test. The emphasis is on understanding body functioning and on civil rights issues such as confidentiality and insurance.

The medical model

Under this model history taking is followed by physical examination.

*Throughout this paper the term 'counsellor' does not necessarily refer to someone with a professional counselling qualification, but to whoever conducts HIV test counselling, whatever their profession/discipline.

The systems model (e.g. Miller & Bor, 1988)

Information is tailored to the individual client and advice giving is avoided. Based on family therapy, it seeks to identify patients' understandings and practices in the context of their support systems in community.

The psycho-pathological model

Many social workers defined HIV/AIDS counselling in terms of emotions and fears. Themes of 'empowerment' and building up 'self-esteem' are central.

Individual counsellors may produce widely differing 'prevention effects'. HIV test counselling may be undertaken by a wide variety of health care professionals—doctors, nurses, health advisors, psychologists, psychiatrists, social workers, etc., with a good deal of disparity in terms of qualifications and training (Coyle & Sodin, 1992), counselling (in the British Association of Counselling's meaning of the word) experience and time available. It is understandable that this too will affect the nature of the counselling session although there is no evidence that adherence to any particular philosophy of counselling affects outcome (Aspy & Roebuck, 1977). What may be important, however, are the qualities of the counsellor—empathy, positive regard, genuineness and concreteness (Rogers, 1958; Truax & Carkhuff, 1967). The WHO Global Project on AIDS sees "a supportive and trusting relationship on the basis of which crises and problems emerging from HIV awareness or infection can be mutually addressed and overcome" (cited in Carballo & Miller, 1989) as implicit in prevention counselling. In the limited time available (one or two sessions, if HIV negative) some counsellors with some clients may find it difficult to develop this relationship, which in turn will affect client 'compliance' to risk reduction advice. Many of the British counsellors consulted by Bond (1991) thought that preventative work was unlikely to be effective without such a counselling relationship. On a practical level, this lack of time also makes it difficult to cover issues around having an HIV test, ensuring informed consent, etc., *and* prevention measures adequately, particularly in busy clinics where time is at a premium.

There is a plethora of work on the communication problems in doctor–patient interactions (see Pendleton & Hasler, 1983). Much non-compliance with doctor's advice is due to the patient not understanding what the doctor said and the fact that doctors use terminology that even they themselves believe will not be understood by the patient. Difficulties in doctor–patient communication also increase with social distance (e.g. social class, sexual orientation, ethnicity, etc.) between the doctor and patient. In terms of information around risk reduction, in some instances, similar processes may operate, which may act to decrease the likelihood of behaviour change. Moreover, clients may only be able to take in limited information when worried about the possibility of a negative result (pre-test) or relieved by a negative result (post-test), although, clearly, if positive and receiving ongoing counselling there is more opportunity for risk reduction advice. Individual differences in comprehension and retention of information received should be accounted for in any analysis of the effects of counselling.

Assumption 5: Information will be received by all clients in an identical way

Even if the nature and content of testing and counselling is identical for all recipients, it would still be erroneous to assume that effects would be the same. Individual differences between clients in the way that risk reduction information is perceived and put into practice must be taken into account—relevant studies utilize rather crude categorizations based on

transmission categories. Recent data (Ostrow, 1992) indicated that a 'lapse' from safe sex prior to testing to unsafe sex after the test among a sample of self-identifying gay men was associated with lower income, slightly lower education levels, higher rates of depression (as assessed by standardized scales), lower social support, higher levels of social conflict and isolation and higher denial/fatalism. HIV status had no effect. Data from a study of women in Newhaven (Ickovics, personal communication), however, shows no effect of psycho-social characteristics, so clearly more research is necessary in this area. There are clearly limitations to these studies; Hart *et al.* (1992) have produced an excellent critique of the concept of 'relapse' and the variables studied were closed-ended, and did not explore fully the economic and social bases of sexual interactions, but they do highlight the need for considering psychological and social factors.

Motivation on the part of the person being tested to change risk behaviour is an uncontrolled factor in all relevant studies. The transtheoretical approach to change, developed from the work of Prochaska & DiClemente on addictive behaviours and processes of change (e.g. Prochaska, 1979; Prochaska & DiClemente, 1982; DiClemente & Prochaska, 1982), is relevant here. They propose that in order to change an addictive behaviour there must first exist motivation to change. They argue that without it change is not possible and clients may in fact actively resist change by finding reasons to maintain the current behaviour. Research with smokers (e.g. Prochaska & DiClemente 1983) and opiate users (e.g. Van Bilsen & Emst, 1986) supports this argument. Although I am not suggesting that sex is an addictive behaviour and injecting drug use can occur without addiction, it is easy to see how the basic tenets of the model can be translated to changing sexual or drug taking habits. Motivation to change may thus vary in the samples who took part in the various studies, which will influence behavioural outcomes. This has implications for widening HIV testing. The effectiveness of counselling may vary depending on whether the client comes forward for the test and asks for it, as opposed to being offered the test without any prior thought of the issues (as in the case of routine antenatal testing, for instance). It is also a good argument against calls for mandatory testing of certain groups, in that it may be useless without motivation. A study in San Francisco (Watters *et al.*, 1986) showed that 53% of intravenous drug users contacted in the community would not enter treatment even if it were available 'tomorrow'. Similarly, resistance to condom use among male heterosexuals may also work against counselling success. There is also a need to consider existing attitudes and beliefs, and the relative importance of HIV risk in an individual's life—poverty and housing concerns may make HIV a minimal concern, for instance.

Motivation to change is not enough, however. Much available research works within the framework of the Health Belief Model (Becker, 1974; Rosenstock, 1974) or the Theory of Reasoned Action (Fishbein & Azjen, 1975; Azjen & Fishbein, 1980). The former sees health related decisions as based on rational evaluation of 'facts'. The assumption is that knowing how to protect yourself and knowing what the consequences of not protecting yourself are will automatically lead to protection. The latter sees behavioural intentions (affected by beliefs, knowledge and subjective norms) as the best predictor of behaviour.

There is increasing evidence, however, that this assumption of rationality is misplaced (see Cohen, 1991; Ingham, *et al.*, 1991). Simply providing health-related information is not sufficient to produce and sustain behaviour change (see Gatherer *et al.*, 1979). The social science literature on social perception and cognitive processes conceptualizes the perception of information as an active constructive process not a passive one (Bransford & Franks, 1971; Shank & Ableson, 1977; Hamilton, 1981; Neisser, 1980; Miller & Turnbill, 1986). It is argued that pre-existing schemata are confirmed through selective perceptions (Markus & Zajonc, 1985). Echabe & Rovira (1989), for instance, have found that people have different

social representations of AIDS and that recall of information congruent with these schemata was more likely than recall of incongruent information.

The Health Belief Model has been found to be a poor predictor of health-related behaviour generally (e.g. Reid & Christensen, 1988; Rosenstock *et al.*, 1988) and with reference to HIV (e.g. Montgomery *et al.*, 1989; Hingson *et al.*, 1990; see also a review of studies with gay men by Cohen, 1991).

Whatever the motivation or intent to change behaviour, there are external constraints on behaviour change. There is a qualitative difference between deciding to be safe and actually being safe (Salt, *et al.*, 1990). The Health Belief Model focuses on individual perceptions (Hart *et al.*, 1992), but drug using may take place with others and sex, by definition, involves more than one person. Thus, the behaviour and attitudes of others may intervene in the change process and affect the efficacy of counselling. One clear example is the difficulties many women experience in negotiating sexual activity within the context of gender ideologies and power relations (e.g. Holland *et al.*, 1990a, 1990b; Ingham *et al.*, 1991). Expecting change is to neglect the significance of sexual or drug-taking behaviour in an individual's life. We cannot ignore the cultural meanings of certain behaviour patterns and beliefs. In his evaluation of the Gay Men's Health Crisis '800 men project' in the US, Silin (1987) argues that such projects "... are built on the belief that we can change our behaviour while ignoring questions of the deeper meanings with which these may be charged by different elements of society ...".

There may also be positive reasons for not behaving in a 'rational' manner (Ingham *et al.*, 1991). For instance, as Cohen (1991) points out, condoms may not be used, despite knowledge that they can protect against HIV, simply because they are not liked.

A rational intent to change behaviour may also be thwarted by other factors such as state dependency effects. Sexual arousal, anxiety, alcohol or drug intoxication, etc., may all affect 'rational' cognitions, memory retrieval and behaviour (e.g. Birnbaum *et al.*, 1978; Ostrow, 1990; Plant *et al.*, 1989; Stall *et al.*, 1986, but see also Weatherburn *et al.*, 1992 for a conflicting view on the effects of alcohol).

The linear model of behavioural change is rooted in stimulus-response psychology and assumptions of a direct link between exposure to information, and attitude and behaviour change. This approach has been supplanted by a more cognitive approach which sees individuals as active, not passive, recipients of information (e.g. Bransford & Franks, 1971; Shank & Ableson, 1977; Neisser, 1980) and change as a two (or more) way process. The attitudes and beliefs an individual brings with them to the counselling session will interact with information given to produce selective perceptions, not necessarily in line with the intent of the counsellor. Changing attitudes and behaviour is a complex process unlikely to be effected in just a couple of counselling sessions (which, it must be remembered, cover more than just advice on safe sex and drug-using behaviour). Sexual and drug-taking behaviour patterns are complex, adopted over a period of time and affected by a variety of beliefs and experiences. Why should change be simple or quick? The emphasis on rational decision making in behaviour change fails to account for the fact that 'non-compliance' to advice may be unintentional and that human beings are often far from 'rational'.

In the light of this, if we are investigating the effects of HIV test counselling, perhaps instant behavioural changes are unrealistic outcome measures. The linear model also seems in conflict with the wider goals and aims of counselling, as outlined in the psychological literature. As discussed above, the counsellors consulted by Bond (1991) saw the counselling relationship as a priority in prevention counselling. It was felt that counsellors should use "... counselling methods and [resist] the temptation to switch to giving advice or general

information." They believed that any information giving should be presented selectively and in a personally relevant way:

> This way of presenting information ensures that it takes the minimum time and can be alternated with times when the counsellor uses reflective responses to elicit the clients views and feelings and thus helps them to process this information. (Bond, 1991, p. 56.)

A focus on an 'expert' who 'tells' a client 'what to do' is a disempowering experience (Homans & Aggleton, 1988), at odds with the philosophy of counselling although this approach may, nonetheless, be used by some HIV counsellors before and after the HIV test (Silverman, 1990).

Assumption 6: Prevention should be one of the aims of HIV testing

For many individuals, coming for an HIV test may be the only opportunity they may have for personal HIV education. Many commentators see risk reduction as an important component of the testing process as the following quotations illustrate:

> [HIV counselling is] ... an on-going dialogue and relationship between client or patient and counsellor with the aims of preventing HIV transmission and providing psycho-social support for those affected, directly and indirectly, by HIV. (WHO's Global Project on AIDS, 1989.)

even internationally it is

> ... increasingly being proposed as a key component of HIV prevention programmes which compliments other information, education and communication strategies. (Carballo & Miller, 1989.)

In the UK, counselling is viewed as an important strategy in the prevention of the transmission of HIV:

> ... we have been repeatedly told that the most effective means of providing information and enabling individuals to understand that information and relate it to their own life is through one to one counselling. (The House of Commons Social Services Committee, 1986–87.)

At a policy level, therefore, there is some agreement that HIV test counselling should include a prevention component. However, not all counsellors would concur with this view. Bond's (1991) survey found tensions between the role of the counsellor and an information giving role:

> [there was felt to be] ... incompatibility between counselling viewed as a client-centred activity in which the client sets the agenda for the counselling sessions and identifies their own goals, with the introduction of preventative strategies derived from an externally created agenda and series of goals. One person summarised the conflict she felt by asking "is the counsellor there for the client or to help the client meet someone else's agenda?" (Bond, 1991.)

Bond concludes that a significant minority of counsellors have thus avoided preventative work although many could cite instances in which they may have contributed to prevention. Thus, whether test counselling can have an effect may depend on the counsellors expectations of the session. However, Bond recommends that "Contribution to HIV prevention is a

new task for most counsellors which should be incorporated into the training of HIV counsellors". It is not clear, however, how this would work in practice given the wider agenda of test counselling and time limitations.

Conclusion

This paper has examined the argument that HIV testing (and associated counselling) will lead to a reduction in risky practices, thus protecting the individual from future infection if negative and protecting future sexual or intravenous drug using contacts if positive. The wider implications of this argument is that testing is an important component of HIV prevention activity and that by adopting a proactive policy towards testing we can help to halt the epidemic.

The assumption that there is a positive relationship between testing and receiving information on risk reduction during pre- or post-test counselling may have surface validity, but it is argued that the relationship between testing and counselling and behaviour change is more complex than that and we currently have insufficient empirical evidence for a clear statement on the effects of testing and counselling. Moreover, the hypothesis of a linear relationship is rooted in an outdated model of human behaviour. Individuals may move between safe and unsafe behaviour depending on a variety of situational and personal factors and there is no reason to suppose that an HIV test will lead to irreversible changes in established behaviour. For some counsellors with some clients in certain circumstances, testing for HIV may, indeed, have an effect, but it is difficult to draw generalizable conclusions.

It is argued that if a more proactive policy towards testing is adopted, this should not, at this stage, be on prevention grounds alone. This does not mean that testing should not be encouraged on other grounds, such as the advantages of early treatment. It must be remembered, however, that a wider programme of testing has serious resource implications. There is a danger that wider testing will lead to a cutback in counselling and more emphasis on information giving and advice. This type of counselling seems problematic for some counsellors and may be less likely to produce any behavioural changes than pre- and post-test counselling founded in more therapeutic approaches.

Clearly, the issue of prevention and testing is an issue that will continue to be debated and will no doubt be the focus of future research. Hopefully, this discussion has highlighted some of the important issues that any rigorous methodology will need to consider.

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ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) — DATA AS AT 30 JUNE 1994
SYNDROME D'IMMUNODÉFICIENCE ACQUISE (SIDA) — DONNÉES AU 30 JUIN 1994

Country/Area — Pays/Territoire	Number of cases Nombre de cas	Date of report Date de notification
Africa — Afrique		
Algeria — Algérie	138	08.08.93
Angola	703	31.12.93
Benin — Bénin	742	09.05.94
Botswana	1 415	31.12.93
Burkina Faso	4 193	31.12.93
Burundi	7 225	10.12.93
Cameroon — Cameroun	3 072	13.12.93
Cape Verde — Cap-Vert	143	10.12.93
Central African Republic — République centrafricaine	3 730	30.11.92
Chad — Tchad	1 523	08.12.93
Comoros — Comores	4	12.04.94
Congo	6 393	23.03.94
Côte d'Ivoire	18 670	24.02.94
Djibouti	490	19.04.94
Egypt — Egypte	91	07.02.94
Equatorial Guinea — Guinée équatoriale	43	02.12.93
Eritrea — Erythrée	372	31.12.92
Ethiopia — Ethiopie	12 958	03.06.94
Gabon	472	10.12.93
Gambia — Gambie	277	31.12.93
Ghana	11 629	03.03.94
Guinea — Guinée	976	31.12.93
Guinea-Bissau — Guinée-Bissau	380	11.06.93
Kenya	30 126	31.12.93
Lesotho	479	10.12.93
Liberia — Libéria	191	10.12.93
Libyan Arab Jamahiriya — Jamahiriya arabe libyenne	10	01.02.93
Madagascar	9	14.03.94
Malawi	31 857	10.02.94
Mali	1 874	25.11.93
Mauritania — Mauritanie	50	01 12.93
Mauritius — Maurice	18	31.01.94
Morocco — Maroc	196	20.05.94
Mozambique	826	31.12.93
Namibia — Namibie	5 101	31.12.93
Niger	921	15.06.93
Nigeria — Nigéria	1 148	04.04.94
Reunion — Réunion	65	20.03.92
Rwanda	10 706	30.06.93
Sao Tome and Principe — Sao Tomé-et-Principe	24	10.12.93
Senegal — Sénégal	911	31.05.93
Seychelles	2	10.12.93
Sierra Leone	95	07.07.93
Somalia — Somalie	13	01.01.91
South Africa — Afrique du Sud	3 210	28.02.94
Sudan — Soudan	904	17.04.94
Swaziland	413	28.02.94
Togo	3 472	23.02.94
Tunisia — Tunisie	136	21.05.93
Uganda — Ouganda	43 875	31.12.93
United Republic of Tanzania — République-Unie de Tanzanie	38 719	07.01.93
Zaire — Zaïre	22 747	26.04.94
Zambia — Zambie	29 734	20.10.93
Zimbabwe	27 905	31.12.93
Total	**331 376**	
Americas — Amériques		
Anguilla	5	30.09.93
Antigua and Barbuda — Antigua-et-Barbuda	34	31.12.93
Argentina — Argentine	3 904	31.03.94
Bahamas	1 389	31.12.93
Barbados — Barbade	418	31.12.93
Belize	82	31.12.93
Bermuda — Bermudes	223	30.06 93
Bolivia — Bolivie	87	31.03.94
Brazil — Brésil	49 312	28.02.94
British Virgin Islands — Iles Vierges britanniques	6	31.03.94
Canada	9 511	31.03.94
Cayman Islands — Iles Caïmanes	15	31.03.94
Chile — Chili	831	31.12.93
Colombia — Colombie	4 583	31.03.94
Costa Rica	587	31.03.94
Cuba	245	31.12 93
Dominica — Dominique	26	31.12.93
Dominican Republic — République dominicaine	2 353	31.03.94
Ecuador — Equateur	381	31.03.94
El Salvador	630	31.03 94
French Guiana — Guyane française	232	30.09.90
Grenada — Grenade	58	31.03.94
Guadeloupe	353	31.03.93
Guatemala	499	31.03.94

Country/Area — Pays/Territoire	Number of cases Nombre de cas	Date of report Date de notification
Guyana	465	31.03.94
Haiti — Haïti	4 967	31.12.92
Honduras	3 473	31.03.94
Jamaica — Jamaïque	669	31.12.93
Martinique	266	30.09.93
Mexico — Mexique	18 353	31.03.94
Montserrat	7	31.03.94
Netherlands Antilles and Aruba — Antilles néerlandaises et Aruba	157	30.06.93
Nicaragua	66	31.03.94
Panama	644	31.03.94
Paraguay	77	23.05.94
Peru — Pérou	1 068	31.03.94
Saint Kitts and Nevis — Saint-Kitts-et-Nevis	41	31.03.94
Saint Lucia — Sainte-Lucie	56	31.03.94
Saint Vincent and the Grenadines — Saint-Vincent-et-Grenadines	56	31.03.94
Suriname	177	31.03.94
Trinidad and Tobago — Trinité-et-Tobago	1 545	31.03.94
Turks and Caicos Islands — Iles Turques et Caïques	39	30.09.93
United States of America — Etats-Unis d'Amérique	411 907	31.12.93
Uruguay	469	31.03.94
Venezuela	3 511	31.03.94
Total	**523 777**	
Asia — Asie		
Afghanistan	—	15.02.92
Armenia — Arménie	2	30.04.93
Azerbaijan — Azerbaïdjan	—	31.03.94
Bahrain — Bahreïn	13	21.03.94
Bangladesh	1	14.06.94
Bhutan — Bhoutan	—	14.06.94
Brunei Darussalam — Brunéi Darussalam	3	17.05.93
Cambodia — Cambodge	—	31.03.94
China[a] — Chine[a]	36	31.12.93
Cyprus — Chypre	31	19.05.94
Democratic People's Republic of Korea — République populaire démocratique de Corée	—	14.06.94
Georgia — Géorgie	2	30.04.93
Hong Kong	99	28.02.94
India — Inde	713	14.06.94
Indonesia — Indonésie	49	14.06.94
Iran (Islamic Republic of) — Iran (République islamique d')	92	15.03.94
Iraq	26	28.04.94
Israel — Israël	279	31.03.94
Japan — Japon	713	30.04.94
Jordan — Jordanie	31	03.02.94
Kazakhstan	4	31.03.94
Kuwait — Koweït	10	17.04.94
Kyrgyzstan — Kirghizistan	—	30.04.93
Lao People's Democratic Republic — République démocratique populaire lao	14	30.04.94
Lebanon — Liban	72	24.05.94
Macao	7	15.04.94
Malaysia — Malaisie	107	28.02.94
Maldives	—	14.06.94
Mongolia — Mongolie	—	14.06.94
Myanmar	261	14.06.94
Nepal — Népal	24	14.06.94
Oman	33	10.05.94
Pakistan	41	09.05.94
Philippines	136	31.03.94
Qatar	41	20.03.94
Republic of Korea — République de Corée	19	31.03.94
Saudi Arabia — Arabie saoudite	61	29.04.94
Singapore — Singapour	75	31.12.93
Sri Lanka	37	14.06.94
Syrian Arab Republic — République arabe syrienne	26	30.04.94
Tajikistan — Tadjikistan	—	31.03.94
Thailand — Thaïlande	5 654	14.06.94
Turkey — Turquie	130	31.03.94
Turkmenistan — Turkménistan	1	30.04.93
United Arab Emirates — Emirats arabes unis	8	12.02.93
Uzbekistan — Ouzbékistan	2	30.06.93
Viet Nam	107	15.04.94
Yemen — Yémen	8	19.01.94
Total	**8 968**	
Europe		
Albania — Albanie	1	31.03.94
Austria — Autriche	1 150	31.03.94
Belarus — Bélarus	10	31.03.94
Belgium — Belgique	1 603	31.03.94
Bulgaria — Bulgarie	24	31.12.93
Croatia — Croatie	66	31.03.94
Czech Republic[b] — République tchèque[b]	48	31.03.94
Denmark — Danemark	1 411	31.03.94
Estonia — Estonie	3	31.03.94
Finland — Finlande	158	31.03.94
France	30 003	31.03.94
Germany — Allemagne	11 179	31.03.94
Greece — Grèce	916	31.03.94
Hungary — Hongrie	149	31.03.94
Iceland — Islande	31	31.12.93
Ireland — Irlande	392	31.03.94
Italy — Italie	21 770	31.03.94
Latvia — Lettonie	8	31.03.94
Lithuania — Lituanie	5	31.12.93
Luxembourg	79	31.03.94
Malta — Malte	29	30.09.93
Monaco	24	30.09.93
Netherlands — Pays-Bas	3 055	31.03.94
Norway — Norvège	375	31.03.94
Poland — Pologne	201	31.03.94
Portugal	1 811	31.03.94
Republic of Moldova — République de Moldova	4	31.03.94
Romania — Roumanie	2 736	31.03.94
Russian Federation — Fédération de Russie	136	31.03.94
San Marino — Saint-Marin	1	30.09.92
Slovak Republic[b] — République slovaque[b]	7	31.03.94
Slovenia — Slovénie	32	31.03.94
Spain — Espagne	24 202	31.03.94
Sweden — Suède	1 001	31.03.94
Switzerland — Suisse	3 662	31.03.94
Ukraine	27	31.03.94
United Kingdom — Royaume-Uni	9 025	31.03.94
Yugoslavia[c] — Yougoslavie[c]	334	31.03.94
Total	**115 668**	
Oceania — Océanie		
American Samoa — Samoa américaines	—	31.08.93
Australia — Australie	4 727	31.12.93
Cook Islands — Iles Cook	—	15.04.94
Fiji — Fidji	6	31.12.93
French Polynesia — Polynésie française	33	13.10.93
Guam	20	31.03.94
Kiribati	1	31.03.94
Mariana Islands — Iles Mariannes	4	12.04.94
Marshall Islands — Iles Marshall	2	30.04.94
Micronesia (Federated States of) — Micronésie (Etats fédérés de)	2	09.09.93
Nauru	—	26.08.93
New Caledonia and Dependencies — Nouvelle-Calédonie et Dépendances	32	15.04.94
New Zealand — Nouvelle-Zélande	431	31.12.93
Niue	—	20.04.94
Palau	1	19.07.93
Papua New Guinea — Papouasie-Nouvelle-Guinée	64	19.04.94
Samoa	1	18.04.94
Solomon Islands — Iles Salomon	—	25.04.94
Tokelau	—	31.04.94
Tonga	6	31.12.93
Tuvalu	—	26.07.93
Vanuatu	—	06.05.94
Wallis and Futuna Islands — Iles Wallis et Futuna	—	24.05.93
Total	**5 330**	
World total — Total mondial	**985 119**	

[a] Does not include the Province of Taiwan which has reported 48 cases. — A l'exclusion de la Province de Taiwan qui a notifié 48 cas.

[b] Previously reported under Czechoslovakia. — Notifiés antérieurement sous Tchécoslovaquie.

[c] Refers to states, areas of the former Socialist Federal Republic of Yugoslavia not otherwise listed separately. — Concerne les Etats/territoires de l'ancienne République fédérale socialiste de Yougoslavie qui ne sont pas cités séparément.

The current global situation of the HIV/AIDS pandemic

As of 30 June 1994, 985 119 AIDS cases have been reported to WHO since the onset of the pandemic. This represents a 37% increase since 30 June 1993.

The accompanying table provides the number of reported AIDS cases to date, by year of diagnosis.

Fig. 1 compares the global distribution of reported and estimated AIDS cases to mid-1994. Allowing for under-diagnosis, incomplete reporting, and reporting delay, and based on the available data on HIV infections around the world, it is estimated that around 4 million AIDS cases in adults and children have occurred worldwide since the pandemic began. This represents a 60% increase over the estimated 2.5 million cases as of July 1993. The proportion of AIDS cases estimated to have occurred in Asia has increased from 1% in mid-1993 to 6% in mid-1994, due primarily to the rapid evolution of the epidemic in South and South-East Asia.

La situation actuelle de la pandémie de VIH/SIDA dans le monde

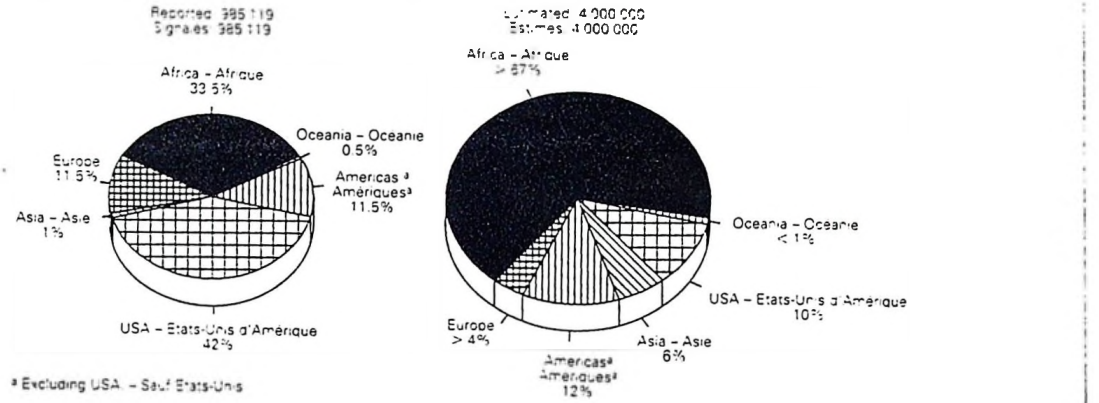
Au 30 juin 1994, 985 119 cas de SIDA avaient été signalés à l'OMS depuis le début de la pandémie. Cela représente une augmentation de 37% depuis le 30 juin 1993.

Le tableau ci-contre donne le nombre de cas signalés jusqu'ici, par année de diagnostic.

La *Fig. 1* établit une comparaison entre la répartition au niveau mondial du nombre de cas signalés et du nombre estimé de cas de SIDA au milieu de l'année 1994. Compte tenu du sous-diagnostic, ainsi que des lacunes et des retards dans la déclaration des cas, on estime, en s'appuyant sur les données disponibles concernant les infections à VIH dans le monde, qu'environ 4 millions de cas de SIDA se sont produits chez les adultes et les enfants à l'échelon mondial depuis le début de la pandémie. Cela représente une augmentation de 60% par rapport à l'estimation de 2,5 millions de cas en juillet 1993. On estime que la proportion de cas de SIDA qui se sont déclarés en Asie est passée de 1% à la mi-1993 à 6% à la mi-1994, en raison principalement de l'évolution rapide de l'épidémie en Asie du Sud et en Asie du Sud-Est.

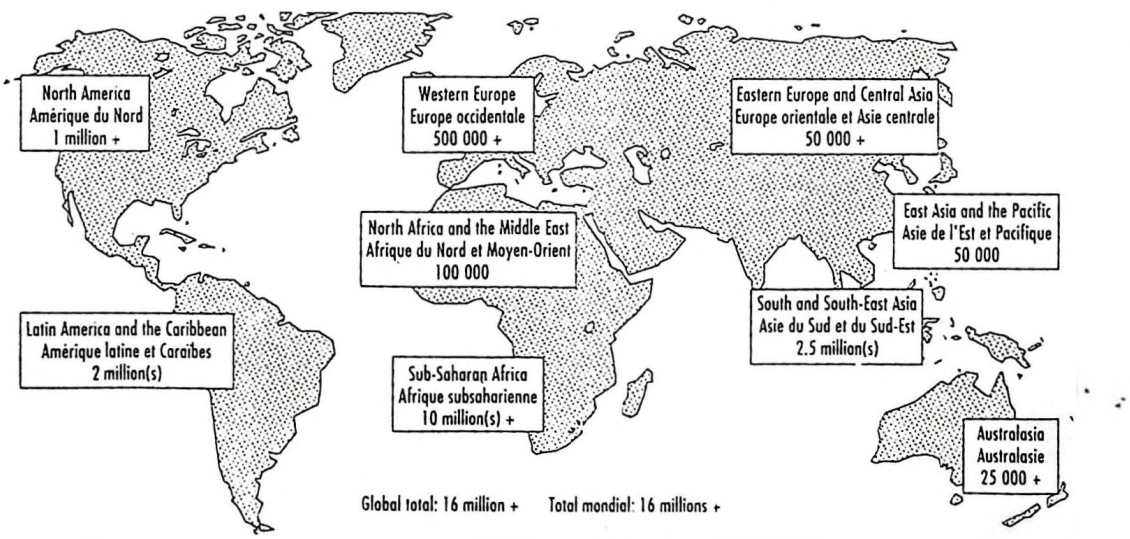
Fig. 1 **Total number of AIDS cases in adults and children from late 1970s/early 1980s until mid-1994**

Fig. 1 **Nombre total de cas de SIDA chez les adultes et les enfants depuis la fin des années 70/début des années 80 jusqu'à la mi-1994**



Map 1 **Estimated distribution of total adult HIV infections from late 1970s/early 1980s until mid-1994**

Carte 1 **Répartition estimée du total des infections à VIH chez les adultes depuis la fin des années 70/début des années 80 jusqu'à la mi-1994**



As of mid-1994, it is estimated that over 16 million adults, and over 1 million children, have been infected with HIV since the beginning of the pandemic (late 1970s to early 1980s). *Map 1* presents the regional distribution of total HIV infections in adults to date; WHO estimates

A la mi-1994, on estime que plus de 16 millions d'adultes et plus d'un million d'enfants ont contracté l'infection à VIH depuis le début de la pandémie (de la fin des années 70 au début des années 80). La *Carte 1* donne la répartition régionale actuelle de l'ensemble des infections à VIH chez l'adulte; l'OMS estime que

that 80-90% of the infections in children have occurred in sub-Saharan Africa.

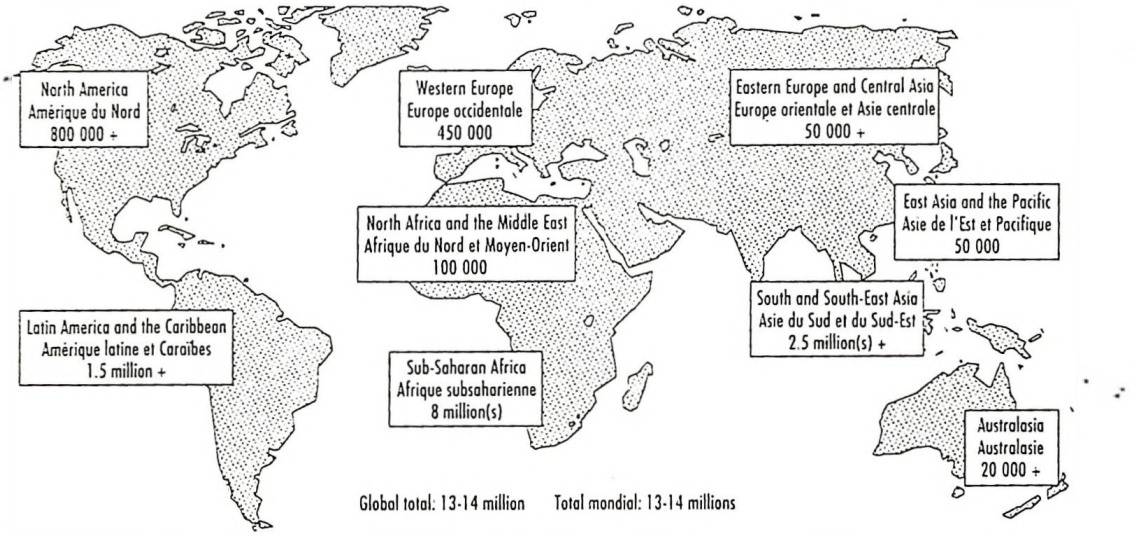
Map 2 shows the regional distribution of HIV-infected adults (including AIDS cases) alive as of mid-1994. The continued increase in HIV infections, particularly in sub-Saharan Africa and South and South-East Asia, has accentuated the disproportionate impact of HIV/AIDS in developing countries. Although reliable studies are relatively few, the available data also suggest significant HIV transmission in populations at risk, in certain parts of North Africa and the Middle East, as well as in East Asia and the Pacific. The estimated number of HIV-infected adults alive as of mid-1994 in industrialized countries remains more or less unchanged since mid-1993, indicating that the number of deaths from AIDS over the last year has approximately equalled the number of new HIV infections.

80 à 90% des infections touchant les enfants se sont produites en Afrique subsaharienne.

La *Carte 2* indique la répartition régionale des adultes infectés par le VIH (y compris les cas de SIDA) encore vivants à la mi-1994. Comme le nombre des infections à VIH a continué à s'accroître, en particulier en Afrique subsaharienne de même qu'en Asie du Sud et en Asie du Sud-Est, la disproportion de l'impact du VIH/SIDA s'est accentuée au détriment des pays en développement. Malgré le nombre relativement restreint d'études fiables, les données dont on dispose incitent également à penser que, chez les populations à risque, il y a une transmission non négligeable du VIH dans certaines régions d'Afrique du Nord et du Moyen-Orient, ainsi qu'en Asie de l'Est et dans le Pacifique. Le nombre estimé d'adultes porteurs du VIH encore vivants à la mi-1994 dans les pays industrialisés n'a guère changé depuis la mi-1993, ce qui indique que le nombre de décès du SIDA au cours de l'année écoulée a été sensiblement égal au nombre de nouvelles infections.

Map 2 **Estimated distribution of HIV-infected adults alive as of mid-1994**

Carte 2 **Répartition estimée des adultes infectés par le VIH encore vivants à la mi-1994**



Index, Volume 69, 1994, Nos. 1 to 26
Subject index

Index, volume 69, 1994, Nos 1 à 26
Index des sujets

Index of countries and territories[1]

[1] This index relates only to articles concerning specific countries. Articles which contain general information are not indexed by country, but by subject (see above). Moreover, the notes on influenza are not included in this index, but appear in the subject index.

Index des pays et territoires[1]

[1] Cet index ne couvre que les articles concernant des pays spécifiques. Les articles contenant des informations générales ne sont pas indexés par pays, mais par sujet (voir ci-dessus). En outre, les notes sur la grippe ne sont pas comprises dans cet index, mais se trouvent dans l'index des sujets.

Notifications of diseases subject to the Regulations

PLAGUE

Africa

America

CHOLERA

Africa

America

Notifications de maladies soumises au Règlement

PESTE

Afrique

Amérique

CHOLÉRA

Afrique

Amérique

Note on geographical areas

The form of presentation in the *Weekly Epidemiological Record* does not imply official endorsement or acceptance by the World Health Organization of the status or boundaries of the territories as listed or described. It has been adopted solely for the purpose of providing a convenient geographical basis for the information herein. The same qualification applies to all notes and explanations concerning the geographical units for which data are provided.

Note sur les unités géographiques

Il ne faudrait pas conclure de la présentation adoptée dans le *Relevé épidémiologique hebdomadaire* que l'Organisation mondiale de la Santé admet ou reconnaît officiellement le statut ou les limites des territoires mentionnés. Ce mode de présentation n'a d'autre objet que de donner un cadre géographique aux renseignements publiés. La même réserve vaut également pour toutes les notes et explications relatives aux pays et territoires qui figurent dans les tableaux.

DISEASES SUBJECT TO THE REGULATIONS — MALADIES SOUMISES AU RÈGLEMENT

Notifications received from 24 to 30 June 1994

C – cases, D – deaths, ... – data not yet received,
i – imported, r – revised, s – suspect

Cholera • Choléra

Asia • Asie

	C	D
Hong Kong	20-23.VI	
	3(1i)	0

Notifications reçues du 24 au 30 juin 1994

C – cas, D – décès, ... – données non encore disponibles,
i – importé, r – revisé, s – suspect

	C	D
India – Inde	1-31.V	
	195	0
Lao People's Dem. Rep.		
Rép. dém. pop. lao	8.IV-26.V	
	2 009	78

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Young Women: Silence, Susceptibility and the HIV Epidemic

Young Women: Silence, Susceptibility and the HIV Epidemic

Gender as an independent variable for HIV infection

There is a critical reality about the HIV epidemic which is yet to be grasped. It can be glimpsed through the following three assertions.

First, women are increasingly becoming infected with HIV. In most of the third world, there are as many, or more, infected women as there are infected men[1]. These women are wives and other partners, daughters and grandmothers, sisters, aunts and nieces.

Second, women are becoming infected at a significantly younger age than men. In areas where the epidemic is newly emerging and in areas where it is deeper, the same pattern is recorded: on average, women become infected five to ten years earlier than men.

Third, proportionally more girls and young women in their teens and early twenties are becoming infected than women in any other age group. A possible exception is post-menopausal women who also seem to be particularly susceptible to HIV infection.

The response to each of these assertions must be to ask why this is occurring.

The implications are that it is plausible that women become infected more easily than men, possibly at all ages and most definitely when they are in their teens and early twenties and after menopause. There appears to be a biological, immunological and/or virological susceptibility in women which changes with age.

Silence

The first diagnosed case of AIDS in a woman was recorded as early as 1982, in the first year of the known epidemic. In 1984, the first joint US/Belgian mission to Zaire clinically diagnosed virtually as many women with AIDS as men. Nevertheless the characterization of the epidemic by gender (male) and sexual orientation (homosexual) remained dominant.

In 1986 two critical studies, disaggregated by gender and age, became available. One from the University Teaching Hospital in Lusaka, Zambia, showed one in ten women attending the ante-natal clinic infected with HIV and, amongst the hospital patients:

- one in three men aged 30 to 35 were infected;
- one in four women aged 20 to 25 were infected.

The other study reported the first 500 cases of AIDS diagnosed in Mama Yemo Hospital, Zaire (Figure 1)[2]. This data set was also remarkable in showing:

- as many women as men were diagnosed with AIDS;
- the diagnosed women were on average ten years younger than the men;
- there was a sharp peak in AIDS cases in younger women, 20 to 29 years old.

These data were deeply disturbing yet they did not elicit a particular concern about women and HIV at the international level nor did they challenge and change the dominant discourse on the epidemic and thus the responses[3].

First 500 cases of AIDS, Mama Yemo Hospital, Kinshasa, Zaire, 1986

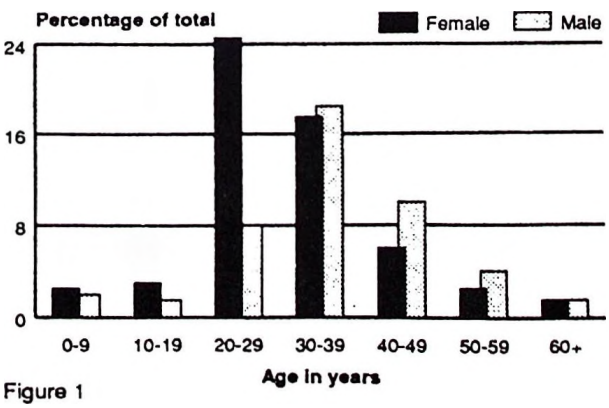

Figure 1

Now, ten years after the first woman was diagnosed, an estimated three and a half million women are infected, the vast majority through sexual transmission. For most women, the major risk factor for HIV infection is being married[4,5,6]. Each day a further three thousand women become infected and five hundred infected women die. Most infected women are between 15 and 35 years old.

Age as an independent variable for HIV infection

The profile of extremely high rates of HIV infection or AIDS in young women, first seen in the 1986 Kinshasa data set, reappears time and again in later data sets, in newly emerging epidemics, Thailand and Myanmar for example (Figures 2 and 3), in established epidemics, Uganda for example (Figure 4) and in industrialized countries, Europe for example (Figure 5)[7].

These data sets dramatically indicate that the patterns are everywhere and over time similar:

- the prevalence of HIV infection is highest in young women aged 15 to 25 and peaks in men five to ten years later in the 25 to 35 age groups; and
- among women, the infection profile by age has a precipitous peak in the age group 15 to 20 and declines for older pre-menopausal age groups.

Thailand

Age and gender disaggregation of rates of HIV infection cumulative to 1990

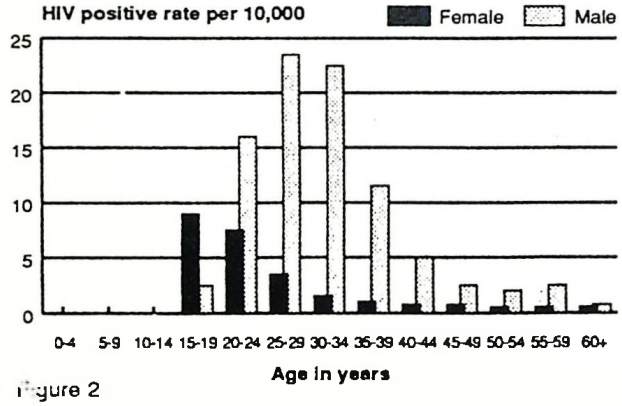

Figure 2

Myanmar

Age and gender disaggregation of people with HIV infection

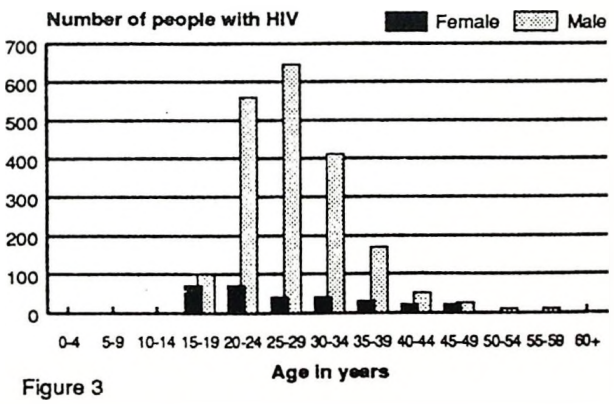

Figure 3

Uganda

Age and gender disaggregation of people diagnosed with AIDS (to June 1991)

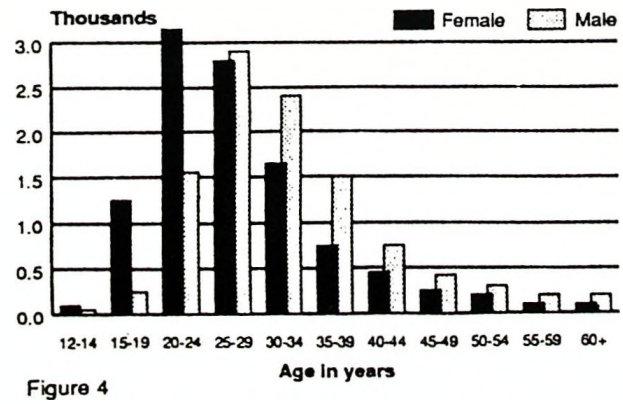

Figure 4

Europe

AIDS cases disaggregated by age and gender Cumulative 31 European countries to 1991

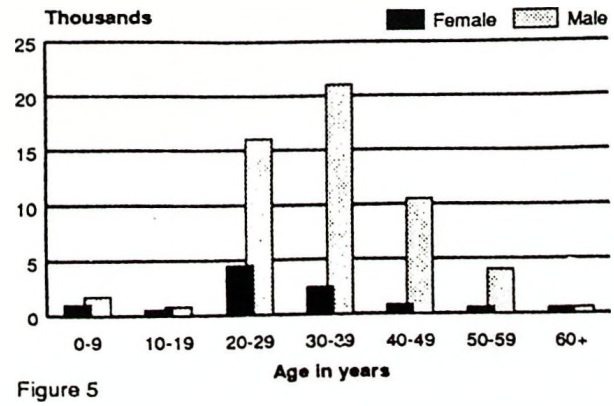

Figure 5

Other studies[8,9,10] are providing dramatic illustration of the vulnerability of young women when they become sexually active early in life. Anne Chao's data from Rwanda (Figure 6) show that the younger the age of first pregnancy or first sexual intercourse the higher the incidence of HIV infection: over 25 percent of young women pregnant at age 17 or younger are infected and about 17 per cent of those 17 or younger at first sexual intercourse are infected. Infection rates decrease sharply in both categories in later age groups.

It is our contention that the extent of HIV infection in young girls in their teens or early twenties shown in these data sets will be affected by all the contributory factors currently identified in the literature as increasing the rates of infection in women and men but cannot be adequately accounted for by these factors, even in the aggregate. In the case of young women there would seem to be other influential factors. These need to be identified.

The factors identified in the literature include the incidence of sexually transmitted infections (STIs)[11,12], frequency of intercourse[13], sexual practices[14], and male/female age differences in sexual relationships[15,16]. To these may also be added women's nutritional status[17], and the presence of lesions, inflammation and scarification in the female genital tract from causes other than STIs[18] as well as women's socio-economic status[16].

These may well be contributing factors but cannot be the complete explanation. Individually they are as true or more true of older, pre-menopausal women or young men in the same age group. However, these groups do not exhibit the same extent of infection. Frequency of intercourse is not adequate as an explanatory variable since young women have become infected with HIV during their first act of intercourse[19] and with infrequent sexual activity[20]. Infected young women have not been shown to be more sexually active than uninfected young women in their age group, than older women or than young men[20].

Similarly, sexual practices which cause lesions or inflammations of the genital tract are not usually practised by young women. These are more prevalent after the birth of the first child[21].

Nutritional status is not a sufficient variable since it is poor in all women of childbearing age. Furthermore, the social and economic conditions through which women enter sex work apply as much or more to women in the age group 20 to 29 as in the age group 10 to 19.

When social explanations are offered for this pattern of high infection rates in young women, they are usually offered in terms of older men having sexual intercourse, consensually or otherwise, with younger women[15]. Whilst this and all the above are clearly contributory factors, we contend that they are insufficient, even in the aggregate, to explain the steepness of the infection profile in girls and young women.

Anatomy as destiny?

The extent of the early and easy infection of young women, exhibited in the figures above, indicates a particular susceptibility to infection in this group. This susceptibility cannot be adequately explained by the cultural, social or economic conditions under which young women have intercourse, nor by the presence of infections and lesions, frequency of intercourse or nutritional status. The possibility of physiological vulnerability as a contributory factor must be explored urgently.

A series of questions can be posed.

Is the intact female genital tract in young women less efficient as a barrier to virus penetration than that of older women, and if so, why?

A young woman's genital tract is not mature at the time she begins to menstruate. The mucous membrane changes from being a thin single layer of cells to a thick multi-layer wall. This transition is often not completed until late teens or early twenties. It is conceivable there-

Risk of HIV in Rwandese women

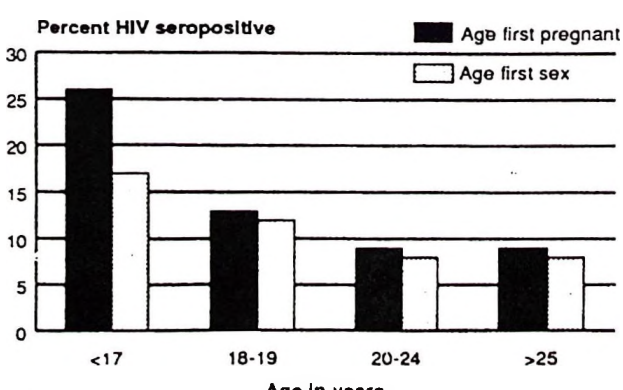

Figure 6 Anne Chao, 1991

fore that the intact but immature genital tract surface in young women is less efficient as a barrier to HIV than the mature genital tract of older women. In post-menopausal women, the mucous membrane becomes thinner and so it is also possible that the genital tract wall, even when intact, is less efficient as a barrier.

Is mucous production in young women less proficient than in older women?

Mucus in the female genital tract has four relevant roles. It acts as a physical barrier, separating semen and other material from the vaginal and cervical walls. It is a lubricant, protecting the surface of the vagina from abrasion during intercourse. It flushes the cervix and vagina in the same way that mucus flushes the respiratory tract, removing foreign material. It has an immune function[22], that is, mucus contains cells of a separate immune system whose function is to activate the immune responses of the cells in the vaginal and cervical surfaces.

If mucus production in young women, and post-menopausal women, is less proficient than in older pre-menopausal women, so too will these protective roles be less effective. There will be less of a barrier to viral penetration. It will provide less assistance in minimizing irritation and tearing of the genital membranes and so facilitate viral entry[25].

It is known that the hormonal fluctuations of the menstrual cycle influence the production of vaginal and cervical secretions[24]. Secretion is most prolific at mid-menstrual cycle and so at other times of the cycle of young women whose mucus secretion is not fully developed, may be inadequate. This could also be true of young women whose menstrual cycle is irregular.

Does the presence of cervical ectopy in young sexually-active women make them more prone to HIV infection?

The cervix has been postulated as the most likely site of HIV infection in women[25]. Any erosion of the cervix or damage to it would increase the likelihood of virus entry. An association between HIV infection and the incidence of cervical ectopy has been reported[20,26] but the causal relationships need to be clarified[26]. In particular it urgently needs to be determined whether the presence of cervical ectopy disposes women to HIV infection. There is already considerable evidence that disproportionately more young sexually active women contract human papilloma virus and herpes simplex virus infections and that human papilloma virus infection of the cervix is a major cause of the cellular changes which lead to cervical ectopy and to cervical cancer. Furthermore, it has been known since at least 1950 that the incidence of cervical cancer is higher in young women who began sexual activity or were married before the age of 17[27].

Do the hormonal and physiological changes at menopause increase the vulnerability of older women to infection?

There is some case evidence that the efficacy of transmission in post-menopausal women is higher than in pre-menopausal women[28]. However, epidemiological evidence is lacking since the female population most usually tested (commercial sex workers and pregnant women) do not include them. It could be anticipated that post-menopausal infected women would usually die without diagnosis or treatment.

The biology of a woman's genital tract is poorly understood. We know more about the increased protection from HIV infection offered by intact genital mucosae in monkeys[29]. The above analysis, however, does show the urgency of developing an international commitment to providing answers to these questions.

Situational factors

The influence on vulnerability to infection of these biologically based differences may be amplified by the circumstances and situations in which young women have sexual intercourse.

Non-consensual, hurried or frequent intercourse may inhibit mucus production and the relaxation of the vaginal musculature both of which would increase the likelihood of genital trauma. A lack of control over the circumstances in which intercourse occurs may increase the frequency of intercourse and lower the age at which sexual activity begins. A lack of access to acceptable health services may leave infections and lesions untreated. Malnutrition not only inhibits the production of mucus but also slows the healing process and depresses the immune system[30]. Cultural norms may favour early pregnancy, discourage the use of condoms or facilitate intercourse with older men who are more likely to be infected

The unheard scream

These data show that girls and young women are excessively vulnerable to HIV infection. When will the agony of these young infected women press upon us? Anecdotal evidence from one geographic area suggests that one half of all young women there aged 15 to 19 years are infected. In other areas, the figure is one in three or one in four[8].

When will the pain and anger of these young women goad us to action? Or will we be capable of ignoring this too? There is the possibility of a disturbing parallel in the acceptance throughout the world of the loss of women's lives during pregnancy and childbirth. In Africa, as many as one woman in 21 die in the process of bearing a child. In Asia, it is one in 54; in Latin America and the Caribbean, one in 73. The tragedy and suffering of these women is too often unremarked and their deaths unmarked[31]. These deaths are needless[32].

The prophetic voice

The growing numbers of women infected and dying bring a deep sadness but must sound an urgent alarm. We must be aware of what the world will lose through the deaths of so many young, and older, women.

Because we live in sharply gender-divided worlds, the impact of women's deaths is different from that of men. Most, if not all, cultures raise girls differently from boys and treat women differently from men. As a result, women bring to daily life different qualities from men. Women tend to be the guardians of compassion rather than ambition, of connectedness rather than control, of healing rather than harming, of closeness rather than conquest, of mercy rather than judgement. They make possible the circle of the dance as an alternative to the ladder.

Women are the creators of new life, the caretakers of daily life and the custodians and transmitters of community norms and social values. However, in some parts of the world, one third or one half or more of all women are infected. How will the loss be borne?

Cabbage soup, writes Hélène Cixous, can only warm us passingly. To live, we need the presence of women who pay attention to life[33]. Yet even soup is usually prepared by women. It is not solely a matter of appeasing hunger, of providing shelter, of resolving conflict, of raising children, of tending fields. Women bring much more to life.

An action agenda

We must respond to this tragedy. There are two essential elements in the immediate strategy. First, the silence around the infection of young women must be challenged at every level: individuals, families, communities and organizations, nations and internationally. Second, a new research agenda must be established. The established hypotheses and assumptions about the nature of the epidemic, about research priorities and about gender must be set aside so that the research agenda can be reconceptualized. To do this, those responsible for the agenda must also change. The critically important and insightful works of Nancy Alexander[25], Bruce Forrest[22], Elizabeth Duncan[23], Zena Stein[34] and others must be acknowledged, valued and acted upon.

These two elements are necessary but not sufficient conditions for an effective strategy to protect girls and young women from being infected through their sexual and reproductive activities. An effective strategy will need to address all the factors which directly contribute to their susceptibility to infection. It must also address, in the short term wherever possible but certainly in the longer term, the indirect contributory factors[35]. There will be many elements in such an action agenda. Here we identify only a few to stimulate thought and discussion.

Neither the immediate strategy nor the broader response will be effective without political will and pressure for change. Politicians, community leaders and parents will need the courage to speak out to save these lives, to save the continuity of life. We are all responsible.

Breaking the silence

The silence surrounding the infection of young women must be broken. Girls and young women must be able to speak out, to cease to feel silenced or powerless to change what happens to them. Others, too, must speak out.

It is critical that parents, communities and nations realize that, unless they face this issue urgently, not only will many young women be lost but so, too, will their children and their children's children. Clans and communities will cease to exist and, with them, their ancestors. Pregnancy, birth and nurturing, the continuity of life will all be placed in jeopardy.

If the silence is broken and young infected women begin to speak out and tell their stories, we must have already in place effective programmes to prevent their

younger sisters from also becoming infected. If not, the breaking of the silence will add the agony of younger girls who will now know that they face a future of possible, perhaps almost certain, infection, to the agony of the young women already infected. Young girls will feel powerless to avoid the fate of their mothers and older sisters.

The psychological trauma of such a situation is virtually beyond comprehension. If we do not succeed in developing an effective, timely agenda for action, the insight and analysis which demand that the silence be broken will become a curse.

Changing the operational research agenda

The mere possibility of a physiological basis to the susceptibility of infection in young women should provide the impetus for an urgent and significant research effort. Answers to questions about the female genital tract identified here, as well as others, must be found so that protective programmes can be developed.

Those who are undertaking relevant research on the female, and male, genital tracts must be supported and their findings widely and quickly disseminated. A focused effort must be made to bring together the observers of the reality and those undertaking such research and analyses together with research funders so that priorities in the bioscientific research agenda can be reset and financial support be immediately available. Doctors, nurses and social workers who are observant and understanding of the relationship between the condition of young women's genital tracts and their life situations are essential partners in the process of determining the research agenda.

Sanctuaries

Strategies must be found that lengthen the time before the onset of sexual intercourse in young women, increase the age at first pregnancy, and which increase the ability of young girls to control the situations in which they are sexually active.

Spaces must be created within which young girls can be free, and feel free, from the threat of HIV infection, within which they can pass more time before leaving to enter the world of sexual relationships and procreation and within which they can talk to one another about their coping and survival strategies, their difficulties and their successes.

Safe havens must also be found or created which would allow social and emotional interactions between girls and boys, young women and young men, and in which they can discuss and set aside the peer pressures, cultural norms and gender archetypes which increase their vulnerability to infection.

The family should be the foremost of these sanctuaries. Young girls should leave their families uninfected and should be able to return to them when in fear of infection. The silence around incest must be broken, above all by mothers and those who minister to and provide service to such families. The direct price of incest is higher than ever now. The collusion of families, whether from greed or acceptance, in customs and practices which threaten the lives of their daughters must cease. Neither young women nor young men should be pressured into child or early marriages or into early pregnancies. Dowry payments or patrilocality should not prevent the possibility of a young woman returning to her family home when in fear of being infected.

Families alone cannot change cultural norms, values and practices[36]. Thus, advocating families as sanctuaries requires a complementary strategy of cultural change. Such a strategy must be led by the guardians and enforcers of culture, influential community leaders, older women, the elders, as well as by those who are now demanding such change, young men and women and their parents.

The school should also be a sanctuary from infection. However, the school is a site of non-consensual sexual activities and of HIV infection. Rape, sexual abuse and coercion by male staff and pupils combined with the exchange of sex with older men for school fees currently make the school a feared and fearful place. Community acceptance of this as normal must change. A policy of providing scholarships would obviate the need for young girls to find older men to finance their schooling. Sanctions enforced by local communities would change entrenched patterns of sexual exploitation of young girls by teachers or male students. These sanctions are now beginning to be imposed in some seriously affected areas as communities strive to keep some of their young girls uninfected.

Organizations and clubs for young women create sanctuaries where young girls can spend time without the threat of infection. They break the isolation of individual women and can lead to the creation of social support

networks where young women can seek counsel and be given support to change their behaviour and to create change in their communities.

Groups working amongst street children in Brazil have opened safe houses where the girls can escape from the pressures of the street and regain a feeling of security and control over their lives. One such house is the *Casa de Passagen* (Passage house) in Recife, Brazil[37].

Such groups and organizations can also provide a refuge where infected girls and young women can come together and provide one another with support, exchange information on care and treatment and discuss issues of basic concern such as disclosure, sexuality, discrimination, pregnancy and their children's futures.

It is critical that religious organizations also create such sanctuaries for women and for men, separately and together. This would lend their moral authority to a recognition of the importance and value of young women and would help families and communities to find the courage to change and to provide sanctuary themselves.

These safe havens are critical for young girls to reach the physical maturity and the emotional and social maturity necessary to have greater control over their lives and the situations in which they have sexual intercourse.

Sanctions

The urgency of the situation may well necessitate the use of sanctions. In this respect the law can be used as an agent of social change. For example, the introduction and enforcement of laws in Southern Africa requiring men to provide financial support to all children they father, whether within marriage or outside it, have led to a significant decrease in the number of such children.

Laws against rape and incest and family law relating to the age of marriage or divorce have been less successful where there have not been concurrent changes in social and cultural values. Communities must therefore accept and decide to enforce such laws and place pressure on their members to change.

In Uganda, recent changes in governmental and community attitudes brought about by the epidemic have led to military courts trying soldiers for rape, legal services being expanded for women who have been sexually abused, vigorous reporting by the media of sexual abuse in schools and teachers being sacked for unacceptable sexual behaviour[38].

Safety

For women throughout the world, safety, that is, freedom from physical, sexual, verbal, psychological and other forms of violence, is an issue that dominates all others in their lives. The data on the extent of violence to women is quite appalling[39] but little known or acknowledged.

Abuse in the childhood or early adult lives of young women leads to low self-esteem, little ability for self-assertion and the probability of increased abuse by others, all factors which have been shown to increase the likelihood of HIV infection. In men, childhood abuse also leads to low self-esteem and to an increased likelihood of their abusing others[39].

New women's crisis initiatives exist in at least 35 developing countries[40]. All of these are dependent on external support agencies for their financing. It is vitally important to support and expand programmes to lessen violence to women and to provide refuges for abused women. This can become a significant role for external support agencies.

Restructuring gender

The ability of young women to protect themselves from infection becomes a direct function of power relations between men and women and, in particular, of men's sexual identity. Gender is formed in families but constructed by societies[36]. Changing accepted patterns of male behaviour and expected patterns of female behaviour requires community organizing and collective action.

Individual families and societies must change how they value girls. The more women are valued, the better they will be fed and nurtured, given access to health services and education, provided with the skills required for economic autonomy and have their rights honoured, in particular to land and property, especially through inheritance.

This valuing of women will make it possible for women to value their own bodies, to improve their genital health and to have their genital infections and conditions diagnosed and treated, for cultural practices such as infibulation which increase women's likelihood of infection to be changed and for women to live through pregnancy and childbirth with minimal risk of death or lifelong disability[32].

Families must also change what they value in boys and men so that men will be less likely to place themselves and others at risk of infection. Boys and men, not only girls and women, must become the guardians of compassion, of respect for others, of healing, connectedness and of mercy.

The circle of the dance

For young women to be able to remain uninfected, men and women, their communities and nations must want this to happen and be committed to work urgently towards it. Only then will there be hope. The priorities of the bioscientific research agenda must be changed and knowledge of all the factors which contribute to the susceptibility of young women to HIV infection deepened. Agendas for action must be drawn up locally and nationally. This will best be achieved through the creation of consultative processes which involve all those implicated in the required changes. These processes must be such that men feel able to participate, that women's insights and analyses are valued and listened to and that the external factors, the socio-economic and political climate which creates the conditions which increase women's and men's vulnerability to infection, can be addressed. Such processes are already occurring either spontaneously[41] or set in motion by concerned individuals as in the case of the Women and AIDS Support Network in Zimbabwe. They are critical if the lives of young women are to be saved. The resulting agenda for action will provide the basis for hope.

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This is one of a series of publications by the HIV and Development Programme intended to raise issues of importance to the global understanding of the HIV epidemic and the required responses.

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NEWSLETTER 7

NOVEMBER 1986

Two years have passed since the last CHILD-to-child Newsletter. During this time much has been happening. The aim of this Newsletter is to let you know about some CHILD-to-child activities in different parts of the world.

Amongst the developments which we will be looking at are the Workshops, the opening of a French CHILD-to-child office in Paris, and the Readers.

WORKSHOPS

The fifth edition of the Newsletter looked at the planning of workshops. Since then workshops have become an important CHILD-to-child activity. In 1986 workshops have been held in India, Uganda, Benin, Somalia, Botswana and Zambia. At some of these workshops, CHILD-to-child booklets and Activity Sheets written in London have been translated into local languages; at others, new booklets and activity sheets have been written on topics which have not previously been covered but which are particularly important to local situations. For example, at a workshop in Ahmedabad held in May 1985, several new Activity Sheets were produced including one on the control of intestinal worms and another on the treatment of Malaria. There are plans for workshops next year in Burkina Fasso, Lesotho, and Guatemala.

If you wish to run a local or national workshop **PLEASE WRITE TO US**, we may be able to offer some help.

3401

ADDRESS BY PRESIDENT KENNETH KAUNDA TO THE CHILD-to-child WORKSHOP IN ZAMBIA, JULY 1986

Last year CHILD-to-child Zambia held a successful workshop in Lusaka which was opened by President Kaunda. In his speech the President said:

"It really gives me great pleasure to officially open this CHILD-to-child Seminar. I want you to know that I am speaking straight from the heart of my deep concern for children. Children are, after all, the most helpless members of any society. One of the reasons for their helplessness is the fact that they have no voice. This is true not only in a physical sense, but is true also in any other area of Human endeavour including of course the political. Children have no spokesman. They are the weakest and most vulnerable members of our society."

"My fundamental concern is to make Zambia a healthy nation; a peaceful nation; and a happy nation. Children are sacred. They are lent to us by God our Creator. Was it not our Lord Jesus Christ who said: 'Suffer not the little children for theirs is the Kingdom of Heaven. See that you do not despise one of these little ones . . .' 'Let the children come to me, do not hinder; for to such belongs the Kingdom of God.' "Of course we find similar wise instruction from other faiths."

"And yet, the health and lives of children in many countries are ravaged by preventable sickness and premature death. Some three hundred and fifty million children in developing countries remain beyond the reach of even a minimum of essential services in health, nutrition and education. Worse still it is estimated that within the next year, five million children will die in Africa. These deaths are not inevitable. They are not 'acts of God'. Almost without exception they are the result of man's lack of concern. They are the result of man's inhumanity to man. Let us draw our attention to this fact. It is in our power to let this situation remain as it is or to change it for the better. We should quite seriously reflect upon problems that our sons and daughters, and our younger brothers and sisters are facing."

"Childhood problems are common to the whole of mankind. But there are problems which are particularly acute in countries such as Zambia which lack the material resources of the so-called industrialised nations. When looking at problems which confront us in these difficult times, it is easy to be discouraged. Many of the problems appear to be far beyond our ability to control, let alone to solve."

"My great delight in opening this seminar comes with the realisation that much of the suffering which afflicts our children can be prevented, lessened or overcome altogether. I am also pleased by the fact that this can be done in a way which does not entail foreign exchange, but also no currency at all save the currency of human kindness combined with enlightenment."

"I understand that this CHILD-to-child Programme has already started in a small way and in certain districts of the Northern Province. It is my heartfelt wish that the spark which has already been kindled will fan into a bush fire as a result of this seminar."

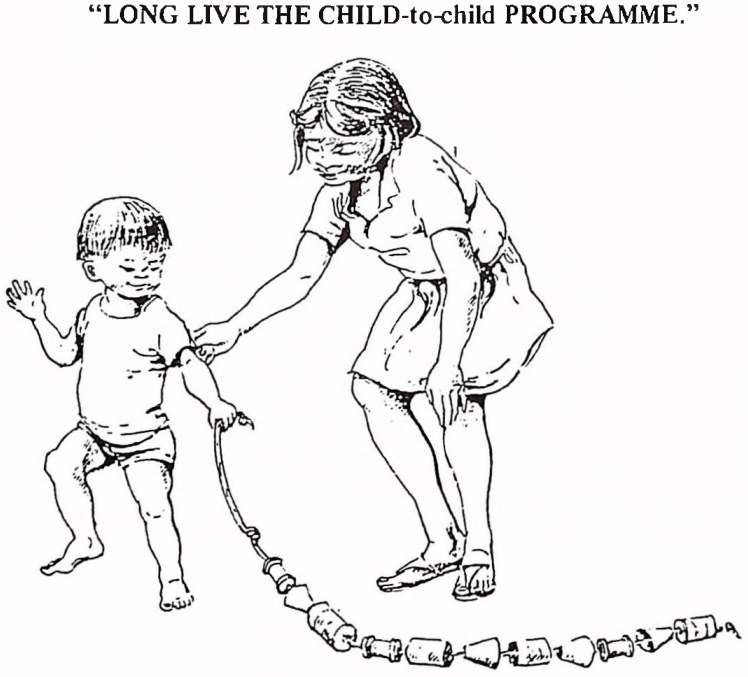
"We all know that prevention is better than cure. This age-old axiom has acquired increased importance since the emphasis in medical care has shifted from curative to preventive care. It therefore pleases me that the CHILD-to-child Programme aims at making children themselves the principal agents of this campaign."

"It aims at making the children help themselves. This is something marvellous. It is a unique example of self-reliance which is the corner-stone of our national Philosophy of Humanism. It equips children with knowledge with which to tackle the sufferings of their younger brothers and sisters. One of the wonderful traits of children is their trust. When an adult tells them something, they believe it."

"We adults become cynical. We hesitate to accept new ideas and programmes. We are easily suspicious of a programme that claims that children can become the most useful health-workers in society. Let us acquire some of that child-like trust in embarking on this CHILD-to-child Programme. I guarantee that you will be amazed at the results. Children work without counting the cost. If they have the encouragement of kind and skilled adults, they work even harder and more fruitfully."

"I sincerely hope that the launching of the CHILD-to-child Programme is the beginning of something really great in our country. I want to see this concern for involving children in improving the health of their younger brothers and sisters really take root in Zambia. I want to see it in every school in the Republic, teachers, health workers, agricultural workers, church personnel, all helping each other to help children to help themselves."

"LONG LIVE THE CHILD-to-child PROGRAMME."



Illustrations from a book on how children can make toys for younger children, "Toys for Fun – A Toybook for Preschool Children." To be published in 1987.

L'ENFANT pour l'enfant

CHILD-to-child

SECRÉTARIAT : 137, BD. MALESHERBES, 75017 PARIS - TÉL. : (1) 47 63 98 40

Last year the International Catholic Children's Bureau generously offered office facilities to CHILD-to-child. ICCB in both Paris and Geneva through Dr. Lucien Michon and Stefan Vanistendael has supported CHILD-to-child activity for a number of years. French material and advice are now available from the address given above. We in London have difficulty in providing our material, the "basket of ideas" in English, and maintaining material in other languages is difficult. We are delighted with this French initiative and with Dr. Lucien Michon's drive we are discovering many new ideas. We hope this will lead to similar initiatives in many other language areas.

CHILD-to-child Readers

EVERYONE LOVES A GOOD STORY AND STORIES REPRESENT ONE OF THE MOST EFFECTIVE WAYS OF PASSING ON HEALTH EDUCATION MESSAGES

Language teaching enjoys higher status in the school than health education. Education authorities and individual parents may be more willing to pay for language books than for health education books, especially if they serve a double purpose by helping develop language skills as well as passing on health messages.

CHILD-to-child has produced a set of six stories, in graded English. These stories are clearly and simply written so they are easy to translate into another language if necessary. There are two levels, Grade One and Grade Two.

Boys and girls are the heroes and heroines in the Readers. In one story, for example, a girl saves her younger brother from being scalded, while in another, a boy helps his brother to become bright and alert. (Accidents and Teaching Thomas). The Readers thus convey to young people the idea that they too can take an active part in promoting food health practices. The stories are attractively presented, with illustrations on each page, and each Reader ends with puzzles and games. The stories and illustrations are based on African situations.

TITLES

Grade One	Good Food	Accidents	Dirty Water
Grade Two	Down with Fever	Teaching Thomas	A Simple Cure

These Readers have been adopted as Supplementary Readers in Zimbabwe and are under consideration in a number of other countries. Some have already been translated into French, Chinese and Nepali.

HOW TO GET THE STORIES

The Stories are published by Longman and sold at the subsidised price of 65p for Grade One Readers and 80p for Grade Two Readers. They are available through TALC, P.O. Box 49, St. Albans, Herts AL1 4AX. United Kingdom. The pack of six titles costs £5.85 including post & packing by surface mail.

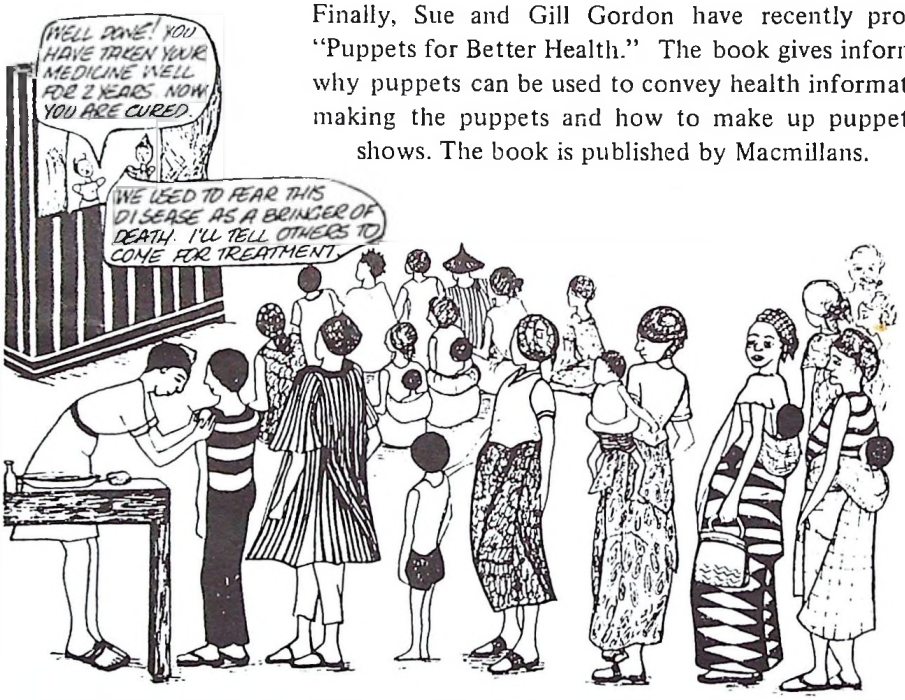
The books are published by Longmans and are available from local bookshops.

OTHER CHILD-to-child TEACHING MATERIAL

The organisation TALC, which sends out the Readers and the CHILD-to-child book, also produce other materials which may help adults to organise activity. TALC have many slide sets which can be used in classes. There is a set called "Schools – a resource for primary health care:" which shows how school children become involved in practical health and in the local village programmes in South India.

TALC also stock a book called "Happy Healthy Children" by Janie Hampton. This is a resource book for teachers and health workers which includes ideas for activities for the children to learn about health topics as well as reference information for adults.

Finally, Sue and Gill Gordon have recently produced a book on "Puppets for Better Health." The book gives information on how and why puppets can be used to convey health information, with detail on making the puppets and how to make up puppet show stories and shows. The book is published by Macmillans.



School-children put on a puppet play at a vaccination centre session

"Primary Health Education" is a new book written by Dr. Bev Young and Sue Durston, published by Longmans. To most of us teaching primary science conjures up a picture of students in a laboratory, but this is not the case of the authors of this book. Bev Young shows how teaching can be very practical using material which is readily available. He particularly emphasised the CHILD-to-child approach and how this can be used in schools. Practical ideas have spread in his family, when he asked his son how he could show children in a classroom to measure salt and sugar for making up the oral rehydration solution his son came back with an answer in half an hour. Origami – the art of folding paper. We strongly recommend this practical book.

REVIEW OF CHILD-to-child ACTIVITIES

WE NEED YOUR HELP

CHILD-to-child was started in 1979, for the International Year of the Child, so it has now been running for eight years. In 1981 a survey of early activities was undertaken but we now feel it is time for a more detailed review. On the files in London we have numerous letters describing CHILD-to-child activities in many countries. We are sure that there are many other programmes using CHILD-to-child materials, for example Activity Sheets or Readers, or involving child approaches which we have not heard of. Will you please help us to find out about these?

If you are involved in a programme using CHILD-to-child approaches or materials we should be most grateful if you would write to us describing the programme. It would be useful if you could tell us what the main activities are, and what groups of people take part.

If you know of programmes but are not personally involved with them, would you please drop us a note giving us names and addresses of people we can contact?

If you would be interested to receive a pack of recent CHILD-to-child Activity Sheets, please tell us when you write and we will send you one.

Please write to:

GEORGINA PAGE
CHILD-to-child
Institute of Child Health
30 Guilford Street,
London WC1 1EH
United Kingdom

THANK YOU IN ADVANCE FOR YOUR HELP