AIDS
5 years since ICPD
Emerging issues and challenges for Women, Young People & Infants
UNAIDS Discussion Document
The Acquired Immune Deficiency Syndrome (AIDS) is a profound human tragedy. But it is much more besides: it is a threat to economies and to the very fabric of our societies. In badly affected countries, the socioeconomic effect of this most destructive disease is measured in declining per capita incomes, shrinking profits in labour-intensive businesses, loss of productivity from cultivated land, and deteriorating public services such as health, welfare and education, as key staff fall ill and die. AIDS undermines the future, too, as families and communities struggle with the burdens of sick people and orphaned children, building up debts and frequently having to remove children from school because of lack of funds or because the labour of even the littlest is needed to help the family survive.

As the human immunodeficiency virus (HIV) continues its devastating spread, blighting the lives of another 16,000 people every day, the virus is increasingly targeting women, babies and young people. By the end of 1998, there were close to 14 million HIV-positive women of childbearing age. Well over half of all new infections are in people below 25 years of age — a large proportion of them newborn babies who contracted the virus from their infected mothers before or during birth, or from breastfeeding.

Behind these dry statistics are women from traditional families caught in the terrible bind of pressure to produce children, and unable to
admit that they have contracted HIV from a husband who is unfaithful. There are teenage girls from very poor homes whose only way of staying on at school is to barter sex with teachers or “sugar daddies” who will pay for books, uniforms and fees. There are young men whose initiation into adulthood involved visits to brothels with older friends, often fired up with alcohol, and no thought or perhaps knowledge of the risk of disease. And there are babies born healthy to HIV-positive mothers and who acquired the infection from breast milk because their mothers had no real choice: they were unaware of the risks of breastfeeding, or there was no safe and affordable alternative. Many will have been too afraid of drawing attention to their HIV status by not breastfeeding, and suffered the silent agony of putting their babies at risk because of the cruel stigma of AIDS.

HIV does not strike at random, and over the years we have learnt a great deal about what makes people vulnerable. Where once the focus was solely on personal risk behaviour, today we know that there are factors way beyond the control of the individual that encourage risk behaviour and make it hard for people to protect themselves. These factors include poverty, discrimination, lack of education and opportunity, and, crucially, the subordination of women which puts young females at even greater risk than males. Thus in some of the worst affected countries, HIV-infected women outnumber infected men by as much as 16 to one in the younger age groups.

Besides being a personal tragedy, the disproportionate risk for women has enormous social implications, since they are the principal guardians of future generations, the carers and nurturers of society. Yet women’s health and wellbeing have always had low priority. So, too, have the special needs of young people for healthy development. The case for righting these wrongs has never been more pressing.

On the AIDS front, we know what must be done. We must expand and intensify HIV prevention measures, because we know from experience that prevention works. And we must act on two levels simultaneously — at the level of the individual to increase knowledge and skills and encourage safe personal behaviour, and at the level of society, its institutions and attitudes, to create an environment supportive of safe behaviour. Furthermore, our prevention campaigns must give higher priority to the most vulnerable groups. They must actively involve their target populations to ensure they are relevant. And they must strive for equity so that people in all countries and all walks of life are able to benefit from the advances in science and technology that only a tiny minority enjoy at present.

However, turning the tide on AIDS will require much greater commitment of time, energy and resources. Let us determine now to make those commitments, and to make the most of what we have learnt and the weapons we have developed to challenge this crippling epidemic.

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In the five years since the International Conference on Population and Development (ICPD) held in Cairo, the AIDS epidemic has worsened dramatically. The numbers infected with HIV to date are even greater than was predicted at that time, and in some countries the epidemic is frankly out of control.

A cumulative total of 47 million people have contracted HIV since the pandemic began, and some 14 million people have died of AIDS, leaving more than 33 million living with the virus by the end of 1998. Last year alone, there were nearly 6 million new infections, which means that every minute of every day 11 people contracted the virus.

Sub-Saharan Africa remains the epicentre of the pandemic, with nearly 23 million men, women and children infected with HIV. But the spotlight is now turning on the Asian continent, where an estimated 7 million people are already infected and the virus has begun to take off in earnest in the world’s most populous countries, India and China. Eastern Europe too presents an extremely alarming picture. At the time of the Cairo conference, only an estimated 30,000 of the region’s 450 million people were HIV-infected, compared with 15 times that number in Western Europe and 400 times as many in sub-Saharan Africa. But in the last four years there has been a six-fold increase in HIV infections in the region as a whole — and an astronomical 70-fold increase in Ukraine alone. In the Russian Federation, too, the number of infected people has increased — 27-fold between 1994 and 1997.

At the same time there have been marked changes in the pattern of spread of HIV. The proportion of women among those infected has been rising inexorably, so that, on a global scale, women accounted for 43% of all infected people in 1998. The risk is increasing for women in developed and developing countries alike. Thus in France, women’s share of reported AIDS cases rose from 12% in 1985 to 20% ten years later. In Spain, female AIDS cases rose from 7% to 19% of all AIDS cases during the same period. And in Brazil, the proportion rose from just 1% in 1984 to 25% ten years later. Not surprisingly perhaps, the number of babies who acquire HIV from their infected mothers before or during birth or from breastfeeding has also been rising dramatically. Globally, one in ten of those who became newly infected during 1998 was a child under the age of 15 years.

However, in countries where HIV has its strongest stranglehold the virus is now spreading fastest among young people between the ages of 10 and 25 years. This is partly because high rates of infection in the general population mean that young people are likely to encounter infected partners early in their sexual careers. On a global scale, over half of all new infections past infancy today are in people under 25 years, very many of them still teenagers.

Despite this grim picture, the global response has increased enormously in sophistication, effectiveness and scope over recent years. This has been made possible by an expansion in the numbers of people who have joined the fight against AIDS and the great diversity of skills and expertise they have contributed to the effort. It has relied on imaginative partnerships, close collaboration and dynamic leadership. During this period, the Joint United Nations Programme on HIV/AIDS (UNAIDS) itself was created, to focus and strengthen the work of the six UN agencies most active in the field of HIV/AIDS, and to drive and support the global response (see box).

Today AIDS is being tackled on a multitude of fronts. Because mother-to-child transmission (MTCT) of HIV and infection among young people are the epidemic’s new trends, UNAIDS is giving these issues the highest priority for action. This report will discuss these trends.
and the strategies we must adopt to reverse them. Moreover, many of the issues raised in the ICPD Programme of Action as being central to the quest for reproductive health also carry high priority for UNAIDS because they are of direct relevance to AIDS prevention and care for mothers, infants and young people. They include:

- the empowerment of women and other measures to improve their social and economic status;

- the importance of gender influences, and the role of men in promoting reproductive health and rights;

- the reproductive health and rights of adolescents and young people;

- the need to expand coverage of primary health care, with special attention to quality of services, equity of access, and relevance to women and young people;

- the central role of human rights, especially reproductive rights, in protecting and promoting health;

- the role of civil society and imaginative partnerships in reproductive health.

This report will discuss what makes women, babies and young people specially vulnerable to HIV, and describe the strategies that have been developed to meet their needs, the work going on at present, and the future challenges. And drawing lessons from experience and examples from the field, it will identify successful approaches to HIV prevention.

It is clear today, however, that HIV/AIDS is a social and development problem as well as a medical one: fighting this most complex of diseases requires constant reappraisal of strategies in the light of new knowledge.

THE BIRTH OF UNAIDS

As the HIV/AIDS epidemic grew and its dire effects on societies became increasingly clear, so too did the need for a greatly expanded response. It was to strengthen the contribution of the United Nations system in the fight against AIDS by better coordination of its efforts and a stronger, more unified voice, that UNAIDS was established and began operations in January 1996 as the HIV/AIDS programme of six UN agencies. The partners in this pioneering effort at a joint response within the United Nations are the United Nations Children’s Fund (UNICEF), the United Nations Development Programme (UNDP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Population Fund (UNFPA), the World Health Organization (WHO) and the World Bank.

UNAIDS’ mission, as the main advocate for global action on HIV/AIDS, is to lead, strengthen and support an expanded response aimed at preventing the transmission of HIV, providing care and support, reducing the vulnerability of individuals and communities to HIV/AIDS, and alleviating the impact of the epidemic.
Mother-to-child transmission of HIV

More than 4 million children below the age of 15 years have become infected with HIV since the AIDS epidemic began, and more than 3 million of them have already died of AIDS. The vast majority of infected children acquire the virus from their mothers. Though Africa accounts for only 10% of the world’s population, to date around nine out of ten of all HIV-infected babies have been born in that region, largely as a consequence of high fertility rates combined with very high infection rates. In urban centres in southern Africa, for example, rates of HIV infection of 20-30% among pregnant women tested anonymously at antenatal clinics are common. Rates of 59% and even 70% have been recorded in parts of Zimbabwe, and 43% in Botswana. According to data from UNAIDS, there are very few places outside sub-Saharan Africa in which the prevalence of HIV infection among pregnant women has even reached 10%, let alone the extremely high figures seen in this region. However, this is partly because the epidemic in other badly affected countries is younger and less advanced than in sub-Saharan Africa, so there is no room for complacency.

What are the risks?
In the absence of preventive measures, the risk of a baby acquiring the virus from an infected mother ranges from 15% to 25% in industrialized countries, and from 25% to 35% in developing countries. The difference is due largely to feeding practices: breastfeeding, now known to be a significant source of infection, is more common and usually practised for a longer period in developing countries than in the industrialized world. Evidence suggests that the risk of mother-to-child transmission (MTCT) is increased if the mother is newly infected with HIV, or is in an advanced stage of disease, or if the baby is highly exposed to her infected body fluids during birth.

The virus can be transmitted to the infant during pregnancy, childbirth, or breastfeeding. It has recently been established that, among infected babies who are not breastfed, about one-third acquire the virus while still in the uterus and most commonly during the last three months of pregnancy. The other two-thirds become infected around the time of delivery. In populations where breastfeeding is the norm, however, infected breast milk may account for up to one-third of all cases of MTCT (see box).

Until very recently we knew of no way to reduce the risk of an HIV-positive pregnant woman

THE BREASTFEEDING DILEMMA

Promotion of breastfeeding as the best possible nutrition for infants has been the cornerstone of child health and survival strategies for the past 20 years, and has played a major part in lowering infant mortality in many regions of the world. Therefore the evidence that has accured over recent years that breast milk is a significant source of HIV infection has caused real dilemmas for mothers, for the health personnel who advise and support them, and for policy-makers.

The cost of infant formula is often beyond the means of poor families in developing countries. Besides, many lack easy access to the clean water and fuel needed to prepare replacement feeds safely. If used incorrectly — mixed with dirty unboiled water, for example — a breast milk substitute can cause infections, malnutrition and death. But even if a mother has the means to feed her baby safely with a breast milk substitute, she may face other dilemmas. In cultures where breastfeeding is the norm, the very fact that she chooses not to breastfeed may draw attention to her HIV status and invite discrimination or even violence and abandonment by her family and community. For health care workers and policy-makers a further dilemma is how to make infant formula available to the small minority of women and babies who need it without undermining commitment to breastfeeding more generally, thus threatening the health and survival of many more children.

In August 1997, WHO, UNICEF and UNAIDS issued a joint Policy Statement on HIV and infant feeding. This takes account of the latest scientific evidence of transmission via breast milk and promotes informed choice of infant feeding methods for HIV-positive mothers. The Policy Statement was followed in early 1998 by two complementary documents offering detailed guidelines for policy-makers and for health care workers on HIV and infant feeding. The guidelines emphasize that the provision of information and counselling on HIV and infant feeding should be part of an integrated package of care for all pregnant and lactating women. They emphasize, too, that it is the individual mother’s right ultimately to decide how she will feed her child, and she should be given appropriate support for the course of action she chooses. Coercion, no matter what the circumstances or motives, is an abuse of her human rights.

THAILAND: spreading the benefits of research

In July 1997, Thailand introduced a programme in the northern province of Phayao to reduce MTCT of HIV using a short course of the antiretroviral (ARV) drug zidovudine (ZDV). The relatively poor province, home to 517,000 people, is particularly hard hit by the epidemic, with some 5.5% of pregnant women being HIV-infected at the start of the intervention. Today, ARV regimens are offered through seven public hospitals – the most peripheral level of the health service with the facilities and capacity to handle the new service. The vast majority of pregnant women in Phayao attend antenatal clinics, where voluntary counselling and testing (VCT) has been available since 1993. At the start of the programme, all pregnant women were offered VCT on their first antenatal visit and told about the new measures to reduce the risk of MTCT of HIV. Virtually all who were offered an HIV test accepted, and by the end of 1997, around 68% of those who were HIV-positive had been enrolled in the programme. Breast milk substitutes are supplied to all participants, and are free of charge for a year to those with little income. Despite the inconvenience for women of having to attend hospital throughout pregnancy rather than a local health centre, and the possibility that this would identify those with HIV and expose them to stigma and discrimination, the treatment has had a 90% compliance rate. The programme has been incorporated into routine mother and child health care, and required two days of extra training for laboratory technicians, and three days for the hospital-based counsellors. It was set up with very little external assistance and is run by the Ministry of Public Health at an additional cost of just US$0.13 per capita per year — or less than 1% of public health expenditure in Thailand. It has identified key conditions for success as:

- an uninterrupted supply of key resources such as HIV tests, ZDV and laboratory supplies;
- accessibility of services to all in the target population;
- acceptability of services to the target population;
- continuity of care, and compliance;
- high quality of service;
- free and informed choice about participating, and self-reliance in adhering to the regimen;
- equity of coverage, with special effort made to reach groups who may remain excluded.

Passing the virus on to her baby if she wished to give birth. But that is no longer the case. Scientific research has increased our understanding of this route of transmission considerably in recent years and offered a number of strategies for prevention.

What are the options for preventing MTCT?
The risk of MTCT of HIV can be reduced by mothers who know they are infected choosing an alternative to breastfeeding for their babies, reckoning on the two-to-one chance that the newborn infant is not already infected. One study in Thailand showed, for example, that this strategy alone reduced the rate of MTCT in a sample of 199 infected women to 18%, compared with the “norm” for developing countries of 25-35%.

But since 1994 there has been another strategy available for preventing MTCT, which involves the use of the antiretroviral (ARV) drug zidovudine (ZDV, also known as AZT). The strategy was developed by French and American scientists who found that when ZDV is given to HIV-positive women orally from the 14th week of pregnancy onwards and intravenously during labour, and to their infants for six weeks after birth, the risk of transmitting HIV from mother to child is reduced by over two-thirds if breastfeeding is strictly avoided. The strategy is now used routinely in the industrialized world. However, the regimen costs an average US$1,000 per mother/child pair and is complicated to administer, which means it is unsuitable for widespread use in developing countries.

Early in 1998, trials in Thailand sponsored by the country’s Ministry of Health and the US Centers for Disease Control and Prevention showed that a shorter and simpler course of ARV drugs is able to cut MTCT by at least half if the baby is not breastfed. The treatment is given to the mother only and consists of 300mg of ZDV taken by mouth twice daily from the 36th week of pregnancy and during labour. The cost of the drugs alone for each mother/child pair in the Thai trial was approximately US$50.

As part of these efforts, research is currently being conducted to test the effectiveness of an even shorter ARV regimen, using two drugs in combination. The PETRA study, as it is known, is supported by WHO and UNAIDS and began in 1995 in South Africa, Tanzania and Uganda.

So far, the success in reducing MTCT using ARV drugs has only been demonstrated when breastfeeding is strictly avoided. No-one knows how effective the strategy might be if mothers do breastfeed their babies. It is critical that this issue be resolved as quickly as possible since the majority of HIV-positive women who risk transmitting the virus to their infants come from cultures where breastfeeding is the norm, and where artificial feeding often presents great difficulties. Research...
is being carried out in a number of countries and results are due shortly. Preliminary results of this and other studies point to a limited efficacy in breastfed infants tested at six months of age.

From research to general practice

For ARV regimens to be introduced certain services have to be already in place. These include voluntary counselling and testing (VCT) (see box) and good quality mother and child health services. All pregnant women must have ready access to antenatal and postnatal care and be able to give birth in a maternity ward or clinic with professional assistance, since skilled supervision of treatment is necessary. Other prerequisites are efficient systems of quality control, supply and distribution of drugs, and laboratory facilities with adequate capacity and skills. In reality, many countries are nowhere near able to meet these conditions. Some 40% of the world’s women lack access to adequate antenatal care. In sub-Saharan Africa, less than half of all births are attended by professional health staff, with proportions well below this being reported from individual African countries as well as from parts of Asia. Moreover, the proportion of people without access to health care at all ranges from over 40% in some parts of Latin America and Asia to nearly 80% in the poorest parts of Africa.

This represents a huge challenge for those committed to seeing that mothers and babies everywhere benefit from advances in science and technology. When results from the Thai study came in, UNAIDS, together with UNFPA, UNICEF and WHO, convened an international meeting in May 1998 to discuss how to promote the widespread adoption of strategies to reduce MTCT of HIV, and, crucially, what kind of support countries would need in order to set up programmes. Mechanisms are now being developed and put in place to mobilize resources, share information and lay the necessary foundations at national level. In addition, a number of documents discussing in detail the strategies for MTCT prevention have been prepared.

A package of measures developed by UNAIDS and its partners is being piloted in around 14 countries. The package comprises:

- measures to prevent HIV infection in women of childbearing age;
- measures for the prevention of unwanted pregnancies;
- VCT + ARV + replacement feeding.

### VOLUNTARY COUNSELLING AND TESTING

The two most important interventions for the reduction of MTCT — avoidance of breastfeeding and antiretroviral programmes — require a woman to know whether or not she is HIV-infected. This means having access to voluntary counselling and testing (VCT) facilities. Yet, at present, such facilities are scarce in developing countries where they are needed most. Ideally everyone should have access to VCT since advances in knowledge and understanding of HIV have greatly increased the benefits of knowing one’s serostatus. People who know they are HIV-infected are likely to be motivated to look after their health, perhaps with behaviour and lifestyle changes, and to seek early medical attention for problems. They can make informed decisions about sexual practices and childbearing, including seeking abortion where this is desired and legal. Mothers can make informed decisions about infant feeding, and about seeking care for sick children without delay, and those whose test results are negative can be counselled about how to protect themselves, and their children, from infection. Furthermore, infected individuals can take steps to protect partners who may still be uninfected.

Since the primary purpose of VCT is to encourage informed decision-making and behaviour, it is very important that individuals have ready access to the relevant services. These include family planning services for those women or couples who wish to avoid or postpone pregnancy, or practice safe sex during pregnancy and lactation; abortion services, if legal, for those who choose to terminate a pregnancy; mother and child health and other health care and support services for HIV-positive people.

Experience to date in many countries shows great variation in willingness to make use of the VCT services that are available. For example, a significant proportion of women who accept an HIV test during antenatal care fail to return for the results. The fear of stigma and discrimination if they test positive undoubtedly deters people — and has proved all too tragically realistic in a number of cases, where infected people have been rejected and even killed by their communities. However, this is only part of the picture and intensive research is being undertaken, especially in Africa, to identify the full range of factors that influence decisions to take an HIV test and what is needed to overcome resistance.

In 1997 UNAIDS issued a policy statement on HIV counselling and testing which endorses the value of this service as a critical part of an effective response to HIV/AIDS, and sets down the guiding principles. UNAIDS promotes the establishment of VCT services everywhere, offers technical assistance, and is currently supporting pilot projects in selected countries.

ZIMBABWE GEARS UP TO PREVENT MTCT OF HIV

In July 1997, Zimbabwe’s Ministry of Health and Child Welfare established a special task force to spearhead activities for the prevention of MTCT of HIV. With assistance from UNICEF and UNAIDS, the task force has designed a pilot project that will offer antiretroviral (ARV) drugs to HIV-positive pregnant women at three urban sites and provide a testing ground for prevention activities to be introduced nationwide in due course. It is estimated that about 1 million of Zimbabwe’s 12.5 million people are currently living with HIV, and about 700 people die each week from AIDS. Virtually all new infections in children are acquired from their mothers, and, in the pilot sites, around 30% of pregnant women are believed to be HIV-positive. The project has calculated that the three primary health clinics involved will see between them about 440 pregnant women each month, and that of these around 155 will be HIV-positive. The plan is to introduce voluntary counselling and testing (VCT) services and ARV regimens into the existing maternal and child health services. Infant formula will be supplied free to HIV-positive women in the programme who have limited incomes, and uninfected pregnant and lactating women who believe themselves to be at risk of HIV will be supplied with female condoms. A senior nursing officer will be appointed as the project coordinator in each site.

The situation analysis conducted before planning of the project began highlights strengths it can build on, including good access to clinics for the target population, committed health staff, and almost no prejudice against working with HIV-infected people. Moreover, breast milk substitutes are readily available on the local market, and clean piped water is almost universal in the pilot sites. Another strength is that the vast majority of women (93% nationwide) give birth with professional assistance.

The analysis shows, however, that the primary health care system in all three sites needs considerable strengthening in order to take on the new responsibilities. There are shortages of staff, especially those with skills in STI/HIV management and counselling, shortages of laboratory facilities, and minimal access to VCT services. ARV drugs are currently only available in private pharmacies in Zimbabwe. Moreover, attendance at antenatal clinics — a crucial element in the project — appears to be inhibited at present by the fact that a charge is made for the service. The three sites have antenatal attendance rates of 55%, 70% and 72% respectively. The analysis also suggests that provision will need to be made for an increased number of healthy orphans who will need care and support throughout childhood.

The budget for the two-year pilot project comes to approximately US$736,000, to cover everything from extra staff and their training, to drugs, test kits, female condoms, and infant formula, transport and office supplies. Besides strong commitment from the city health departments, national government and local authorities, the MTCT taskforce believes partnerships — with a wide range of organizations both national and international — will be the key to successful operation of its plans.

The cost of ARV programmes is a major consideration in developing countries, and UNAIDS and its partners regularly engage in negotiations with industry to try to secure more affordable prices for drugs as well as HIV test kits and infant formula. In March 1998 Glaxo Wellcome announced preferential prices for its product Retrovir zidovudine (ZDV) for the prevention of MTCT in developing countries. ZDV for MTCT prevention, along with a number of other drugs for treating HIV infection and AIDS-related illnesses, has now been included on the WHO Essential Drugs List for developing countries, which helps to reduce prices through bulk purchase.

In places where the health infrastructure is particularly weak, UNAIDS recommends that measures to reduce MTCT be introduced in stages, as funds and other resources permit. A guiding principle for policymakers and planners is that such a package should be part of the broader strategy to prevent the spread of HIV and other sexually transmitted infections (STIs), to care for HIV-positive women and their families, and promote maternal and child health. Besides the direct benefits to children and those who care for them, introducing measures to reduce MTCT has major benefits for the population at large. The need to strengthen primary health care, and in particular mother and child health services, as a foundation for such measures benefits not just HIV-positive women and their offspring, but all mothers and babies. And, as has already been discussed, increasing access to VCT services plays a vital part in encouraging responsible behaviour and in countering denial of the HIV/AIDS epidemic and discrimination against those affected.

A question of ethics

Introducing ARV programmes for the prevention of MTCT in countries where ARV drugs are not available for the treatment of HIV-positive people more generally has raised sometimes heated debate about ethical implications. It is a key principle that any measure taken be in the interests of the mother and baby as a pair, and the question asked is: if a mother’s access to ZDV is limited to the period of
pregnancy and labour, does this amount to treating the mother for the sake of her baby alone? In fact, it has been established that a short course of ZDV monotherapy during pregnancy, while increasing the chance that she will give birth to an uninfected baby, does no harm to the health of an HIV-positive mother. Moreover, because MTCT prevention programmes are intended to be integrated with other HIV/AIDS and mother and child health programmes that offer a wide range of prevention and care services, there will be many secondary benefits for the health of mothers who choose to participate.

### Widening the choice for prevention of MTCT

A number of other measures are currently being explored for their effectiveness at reducing MTCT. As with ARV regimens, minimum requirements for their introduction are a properly functioning primary health care system and access to clean water. The measures focus on strengthening the quality of care provided to women and include the following:

- **Vitamin A supplementation**
  There appears to be an association between vitamin A deficiency in an HIV-positive mother and greater risk of transmission of the virus to her baby. Trials are being conducted in several African countries to see whether adding vitamin A to the diet of pregnant HIV-positive women is effective in reducing the risk of MTCT.

- **Cleansing of the birth canal**
  Exposure of a baby to the mucus and blood of an HIV-infected mother puts it at higher risk of contracting the virus. Therefore, the effectiveness of vaginal washing (or lavage) using microbial agents such as chlorhexidine, before and during delivery, is being investigated in developing countries.

- **Delivery by Caesarian section**
  This too can reduce the risk of MTCT by reducing exposure of the baby to the infected body fluids of its mother. But it is not a feasible option in many places because of the cost and service requirements and the risk it carries of post-operative complications for the mother.

### Other obstetric modifications

Avoiding invasive procedures such as episiotomies, unnecessary rupture of the membranes, and fetal scalp electrodes and blood sampling also reduces the exposure of the infant to the infected body fluids of the mother.

Of course, the first priority in any strategy to reduce MTCT of HIV is to prevent women of childbearing age from becoming infected with the virus in the first place. Primary prevention of MTCT requires that countries:

- provide education, information and skills enhancement for young people aimed at promoting safe and responsible sexual behaviour;
- ensure access to condoms so that people can act on their knowledge;
- provide good quality, user-friendly prevention and care programmes for other STIs, the presence of which increases the risk of HIV transmission up to ten-fold.

It also requires that governments take steps to deal with the social and economic factors that make girls and women specially vulnerable to HIV infection. For it has become increasingly clear over the years of the pandemic that women’s low status and subordination to men are root causes of their vulnerability to HIV.

### Orphaned children

By the start of 1998, 8.2 million children had lost their mothers to AIDS, and many had lost their fathers as well. More than nine out of ten children orphaned by AIDS are in sub-Saharan Africa, where the burden of care is straining extended families and communities to breaking point in many places. Strategies to reduce MTCT of HIV will inevitably lead to an increase in the numbers of motherless children who are uninfected and will need care and support throughout childhood. However, from the point of view of planning for care and allocating resources, it is important to recognize that, in the absence of measures to reduce MTCT, many more orphaned children will be HIV-infected and will require medical care as well as support, many in the long term. Contrary to predictions early in the pandemic that babies born with HIV would die very young, more than half of such children in developing countries and three-quarters in the developed world are now surviving beyond their fifth birthdays, and a significant number are teenagers today.

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A person’s gender is one of the most powerful determinants of individual risk. Gender biases affect both sexes, and in a multitude of ways. In all its activities UNAIDS takes the broad definition of gender. However, our main focus here is on the risks and vulnerability associated with being female. The factors that put girls and women at special risk from HIV are both biological and social.

The risk of becoming infected with HIV during unprotected vaginal intercourse is two to four times higher for a woman than a man. Male-to-female transmission is more efficient because, during vaginal intercourse, a woman has a bigger surface area of mucosa (the membranes lining the genital tract) exposed to her partner’s sexual secretions than does a man. Furthermore, there is generally a higher concentration of HIV in semen than in the sexual secretions of a woman. Age is also important. The immature genital tract and scant vaginal secretions of young women put them at even greater risk than mature women because they provide less of a barrier to HIV. And there is evidence that the more fragile genital membranes and reduced vaginal secretions of post-menopausal women increase their vulnerability to HIV also.

Compounding women’s biological vulnerability to HIV infection is a host of cultural, legal and economic factors that put them at special risk. In many societies girls face discrimination from birth onwards. Typically they have less access to education, information and skills training than boys, which handicaps them for life. As adults they have limited opportunity for employment; often no right to work or to own or inherit land and property in their own names; limited access, if any, to finance for their own business ventures; and often limited access to health care services. The low status of women makes them socially vulnerable to HIV, for all these discriminatory forces limit their opportunities to be informed about the functioning of their bodies, sexuality and health, and cripple their autonomy and power to protect themselves from infection.

In many cultures it is considered indecent for a woman to take the initiative in sexual encounters. Thus they are inhibited from seeking out information on HIV or procuring condoms themselves. And many women dare not bring up the subject of safer sex even with a regular partner for fear of a violent reaction or even abandonment by a man on whom they are totally dependent for survival. While in many societies infidelity in women is strictly and often violently censured, they are generally expected to tolerate infidelity in their menfolk even though, in the AIDS era, tolerance and silence may cost them their lives. A study from Pune, India, illustrates a situation common in very many societies. Of a sample of nearly 400 women attending the city’s STI clinics, 93% were married and 91% had never had sex with anyone but their husbands. All of these women were infected with an STI and 13.6% tested positive for HIV.

If a woman is a reluctant partner, the risk of damage to the genital or anal mucosa is great, because of lack of lubrication and often rough handling by the male partner. The risk of infection with HIV is heightened too. Research confirms that non-consensual sex is a pervasive reality in girls’ and women’s lives. In a study in Papua New Guinea, for example, half the young women questioned said they had been forced to have sex, often violently. A study in Malawi made very similar findings, and in Nigeria one young woman in five questioned by researchers reported coercion. Cultural practices such as female genital mutilation may also...
increase the risk of HIV transmission through trauma and tearing during sexual intercourse. Currently, according to UNFPA, some 130 million women worldwide are living with the consequences of this practice, and an estimated 2 million little girls are newly subjected to it each year.

Prostitution constitutes another situation in which women are unusually vulnerable to HIV infection, yet for multitudes of women without skills or resources, it offers the best opportunity for making a living. Sex workers may lack knowledge about HIV and how to protect themselves. But even if well informed they may find it hard to insist on safe sexual practices for fear of violence, or fear that an unwilling client will take his business elsewhere. Furthermore, prostitution is illegal in many places and simply carrying condoms can be taken by police as evidence of sex work. Prostitution’s illegal status often drives it into the shadows and makes it hard to reach vulnerable people with lifesaving information and supplies. Among the most powerless and vulnerable people in the world are children and women coerced into the sex trade by traffickers, for they have multiple sex partners and no autonomy whatsoever. According to UNFPA, an estimated 2 million girls aged 5-15 may be coerced worldwide each year.

AIDS presents women with another dilemma in their sexual relationships. Safer sex — in particular the use of condoms — is incompatible with pregnancy, and those who want a child and yet who believe they are at risk of contracting HIV therefore face painful choices. In some societies a woman’s social status, and perhaps even survival, depends on bearing children, and where personal desire and social pressure coincide with very high levels of HIV infection, the choice for women is particularly cruel.

NEW TECHNOLOGIES HELP WOMEN PROTECT THEMSELVES

The female condom was launched in Switzerland in 1992, but it is only very recently that it has become widely available. Manufactured solely by the US-based Female Health Company, it is now marketed in more than 30 countries and over 4 million had been sold in the developing world by early 1998.

Consumer research throughout the world shows that it is acceptable to many, and that one of the commonest advantages cited by women is the personal control it gives them in the sex act. A woman can use it without discussion or active cooperation from her partner, and it can be put in place hours before intercourse, if desired, which means she can take steps to protect herself in unpredictable circumstances.

However the female condom is more expensive than the male condom, costing between US$2 and US$3 on the open market in developing countries, which puts it way beyond the means of the populations who could most benefit from it. UNAIDS has negotiated a special low price with the Female Health Company and has launched a major promotion campaign in developing countries with Population Services International. A variety of social marketing programmes are currently distributing male condoms with great success in the developing world, and their potential to distribute female condoms also at acceptable prices is being tested in a number of countries. There is a need for further advocacy at all levels to increase knowledge of and demand for female condoms. It must be noted though that the female condom will not change the balance of power between men and women in sexual relationships. In parallel, social marketing programmes of the female condom must work with women and men in the community to discuss and change gender-related inequalities.

Another product that would increase women’s control in the sex act is a microbicide, a substance capable of killing HIV and micro-organisms that cause other STIs and that can be introduced into the vagina (or rectum) before sex. Unlike the female condom, which remains visible, a microbicide would ideally be invisible and odourless, hence undetectable by an uncooperative male partner. Despite the enormous need and potential for such products, the development of microbicides has been slow for a host of political and commercial reasons. Research is hampered, too, by the fact that scientists still have a poor understanding of how HIV is transmitted during sexual intercourse.

Nevertheless, in the years since Cairo, the number of microbicidal products under investigation has increased considerably, though there have been no breakthroughs as yet. The spermicidal agent nonoxynol-9 (N-9) looked promising in the laboratory, but proved not to be so in field trials recently concluded. However, there are at least two newly designed microbicides that could be ready for efficacy testing before the year 2000.

Since 1996, UNAIDS has served as Secretariat for the International Working Group on Microbicides, and acts as a strong advocate for microbicide research. It has published guidelines for the development of products that are intended to stimulate activity in the field.
Young people and HIV/AIDS

“The future of the HIV epidemic lies in the hands of young people. The behaviours they adopt now and those they maintain throughout their sexual lives will determine the course of the epidemic for decades to come. Young people will continue to learn from one another, but their behaviour will depend largely on the information, skills and services that the current generation of adults choose to equip their children with.”


UNAIDS has estimated that every minute of every day, five young women and men become newly infected with HIV. Worldwide, nearly half of all new HIV infections today are in young people aged 10-25 years, and in the worst-affected countries the proportion is even greater, exceeding 60% in some places. This grim statistic reflects the fact that, in advanced epidemics where there is a high prevalence of HIV in the general population, new infections become increasingly concentrated among young people because they run the risk of coming into contact with an HIV-positive partner almost as soon as they become sexually active. A study in Malawi, for example, found that the annual rate of infection in teenage girls was six times higher than in women over 35 years.

In sub-Saharan Africa and Asia the virus is spread predominantly through heterosexual intercourse, whereas in Latin America the main route of transmission is sex between men, and in Eastern Europe it is needle-sharing between drug users. In places where the epidemic is heterosexually driven, young women are often disproportionately affected, for reasons already discussed. Thus studies sponsored by UNAIDS and its partners show that in western Kenya nearly one girl in four between the ages of 15 and 19 years is living with HIV, compared with one in 25 boys in the same age group. In Zambia in this age range, 16 times as many girls as boys are infected. And in rural Uganda among 20-24 year olds, there are six young women who are HIV-positive for every infected young man. Very high rates of teenage pregnancy and of STIs give an indication of the extent of unprotected sexual activity among young people, and therefore of their vulnerability to HIV/AIDS. Demographic and health surveys conducted in sub-Saharan Africa between 1990 and 1996 show, for example, that nearly 70% of women in Uganda, Burkina Faso and Guinea were pregnant by the age of 19, and over half the women in Benin, Cameroon, Namibia, Tanzania and Zambia also became pregnant as teenagers. As far as STIs are concerned, the under 25 year olds account for around half of the 333 million new cases per year. Fortunately, many of these infections are easy to cure (for those young people with access to affordable youth-friendly health services), but left untreated they increase by as much as ten-fold the risk of acquiring HIV during intercourse.

Among young people, those who live on the margins of mainstream society are the most vulnerable to HIV/AIDS. Where they have been able to access appropriate knowledge, skills and means, young people have shown a remarkable propensity to adopt safer behaviour — even more so than their elders. Countries that have worked with young people to reduce risk in sexual and drug-taking behaviour have often been rewarded by dramatically lowered levels of HIV infection. In northern Thailand, for example, half as many 21-year-old men visited sex workers in 1995 as had done so four years earlier. And of the ones who did visit brothels, far more used condoms than before — 93% in 1995 compared with 61% in 1991. Rates of STIs and HIV among men of this age were dramatically lower than recorded among 21-year-olds in 1991. In Uganda, too, safer behaviour has caught on. For example, young people are increasingly abstaining from sex in the face of HIV. In 1995, over half of men and 46% of women aged 15-19 said they had never had sex, a rise of over 75% since 1989 for both sexes. HIV rates among pregnant teenagers in Uganda have also dropped dramatically in several urban centres — in some cases falling to less than 5% from over 20% at the start of the decade. In Western Europe new infections dropped by nearly 40% between 1995 and 1997, thanks to postponement of first intercourse and consistently high rates of condom use among young people from the beginning of their sex lives.
vulnerable of all to HIV infection. They may be living on the streets, as orphans or fugitives from poverty-stricken or violent homes. They may be refugees or displaced people, young people growing up in urban slums, or young people isolated by prejudice and discrimination because they are homosexual in a society that refuses to accept or acknowledge homosexuality. Young people like these often have limited access to education, services and supplies that might help them protect themselves, and their lifestyles, all too often, are laden with risk. They may sell sex to survive, or use it to bargain for protection, a meal, a place to sleep; or sex may provide one of few opportunities for human warmth and intimacy. Violence, sexual abuse and exploitation are common experiences, and drug-taking is often part of the culture — a response to feelings of loneliness, boredom and despair.

Taking action to minimize the threat of HIV/AIDS to young people is more than a moral obligation. It is also absolutely necessary for halting the HIV epidemic. Experience to date shows that interventions for, and in partnership with, young people are among the most effective. Besides tapping into the energy and idealism of youth, such interventions profit from the fact that young people are not yet set in their ways, and are generally more willing than older generations to question social norms and change behaviour if necessary.

Towards a safer world with young people
A myriad of programmes have been set up around the world to protect the rights and meet the needs of young people in the AIDS epidemic, and many lessons have been learned about what makes for success. It is very important, for example,
that young people be full and active partners, rather than passive recipients of programmes designed and run by adults. They should be involved at all stages of an HIV/AIDS programme, from the conceptualization and planning, to the running and monitoring of activities. This ensures that it is truly relevant to their needs, while profiting at the same time from the energy and enthusiasm of youth, building their confidence and self-esteem, and encouraging communication and mutual respect between the generations.

Building a safer world with young people means focusing on the individual to try to influence behaviour, as well as on the social context in which personal decisions are made and acted upon. It requires that young people be equipped with the knowledge, life skills and services they need to adopt healthy behaviour, resist unhealthy behaviour and protect themselves from diseases, including AIDS. And it requires at the same time that safe and supportive environments be created that are enabling and empowering. Such environments promote and protect human rights.

UNAIDS has always respected the rights and considered the needs of young people as a high priority. In 1998, UNAIDS, the Cosponsors and key partner organizations launched the World AIDS Day Campaign under the title “Force for Change: World AIDS Day Campaign with Young People”. The intention of the 1998 campaign was to sustain the momentum of the 1997 campaign, whose theme was “Children Living in a World with AIDS”, and to build on initiatives already taken. The 1999 campaign will build further on this foundation.

For the third consecutive year, the Inter-agency Working Groups on School AIDS Education and on Especially Vulnerable Young People will meet in 1999 to continue the identification of effective policies and programmes. Furthermore, regional consultations will take place with young people, Cosponsors and youth organizations to develop further the elements of a global strategy on young people and HIV/AIDS. The background discussion paper on this topic was recently welcomed by UNAIDS’ Programme Coordinating Board (PCB) meeting, held in New Delhi in December 1998.

**WHAT SHOULD HIV/AIDS EDUCATION COVER?**

Young people in many parts of the world are denied sex and health education in schools because parents and others in authority fear that it will give approval, and even encouragement, to early sexual activity. But there is compelling evidence from studies conducted around the world and in many different cultures that sex education has the opposite effect: it encourages responsibility. Knowledgeable young people tend to postpone intercourse or, if they do decide to have sex, use condoms.

In the era of AIDS, denying young people knowledge about their developing bodies, sexuality and prevention of disease, including HIV, is to leave them dangerously exposed to avoidable infection and early death. But experience shows that information is not enough. Young people also need life skills, such as sound decision-making, communication and negotiation. They need to understand the concepts of risk behaviour, such as unprotected sex and the use of alcohol and drugs, the possible consequences of such behaviour and how to avoid them. And they need to know where to go for services and help. AIDS education should cover all these areas. The use of role-play is an effective way of personalizing the issues. And peer education, in which young people are trained to spread messages and promote safe and responsible behaviour amongst their friends and colleagues, is a particularly powerful approach.

The documenting of best practice case studies on school-based sexual health education in Asia, Africa and Latin America is currently in progress.

Reproductive health and human rights in the AIDS era

“RECALLING THAT DISCRIMINATION against women violates the principles of equality of rights and respect for human dignity, is an obstacle to the participation of women, on equal terms with men, in the political, social, economic and cultural life of their countries, hampers the growth of the prosperity of society and the family and makes more difficult the full development of the potentialities of women in the service of their countries and of humanity.”

Preamble, Convention on the Elimination of all Forms of Discrimination against Women

Reproductive health care has a central role to play in AIDS prevention and should be given highest priority in the fight against the epidemic. According to universally agreed standards, everyone has the right to comprehensive, good quality reproductive health services that ensure privacy, fully informed and free consent, confidentiality and respect for the client. However, for huge numbers of people these rights mean precious little at present, for they lack access to even the most basic care. In many parts of the developing world, primary health care services are short of staff and basic supplies, facilities are overburdened, and health personnel lack the professional skills to deal with many of their needs, particularly with regard to HIV/AIDS. Furthermore, services are frequently inaccessible to women because they are provided at times and places that are inconvenient to people with heavy household responsibilities and perhaps limited mobility and cash.

In strengthening reproductive health services it is essential today that they be equipped to integrate HIV/AIDS into their regular activities. While the concept of reproductive health applies to both men and women, the burden of ill-health is almost three times greater among women than men and they should therefore be given priority in the allocation of resources. Moreover, as a point of principle, women should be given an active role in planning and running services to ensure they are truly relevant to their needs and female-friendly. In order to increase coverage, existing facilities should be used to their full potential, and responsibility for reproductive health services should be decentralized as much as possible, and shared with a wide range of partners in the field.

Every aspect of reproductive health care has a role to play in the prevention of HIV/AIDS and the care of infected people. Components of special relevance to AIDS prevention include:

- **Education and information**
  
  Education and information programmes on human sexuality and reproductive health should aim to reach people in their homes, schools, workplaces, and wherever they gather for recreation. For AIDS prevention, life skills are as important as information to enable people to act on their knowledge, increase their autonomy in sexual encounters, and encourage responsible behaviour. In the context of AIDS it is important that reproductive health education encourages males to show respect for their partners’ wishes and take equal responsibility for preventing disease and unwanted pregnancy. Other issues of importance

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**THE PHILIPPINES: human rights at the centre of new AIDS Law**

In the Philippines the fight against AIDS has the highest political support. A National AIDS Council was established in 1992 by former President Ramos after a meeting with two HIV-positive women at the presidential palace during World AIDS Day. In 1997, the Philippines hosted the Fourth International Congress on AIDS in Asia and the Pacific, at which the President took the opportunity to underline the urgency of an AIDS Bill then before the Philippine Congress. The AIDS Law, which comprehensively promotes and protects human rights as the basis for caring for HIV-positive people and for controlling the further spread of the virus, was passed by the Congress in February of that year. The law bans compulsory HIV testing, outlaws discrimination, insists on privacy and confidentiality, and expands social support and testing services throughout the country. It also provides for a nationwide programme of HIV/AIDS education and information conducted through schools and workplaces, and aimed at the whole population, including visitors to the Philippines.
include sexual exploitation and violence, harmful cultural traditions and social norms, and discrimination.

**Family planning services**
In the AIDS era, family planning services have a special role to play in counselling people about responsible sexuality and providing them with the means to prevent STIs/HIV and unwanted pregnancy. Their role in AIDS prevention makes it especially important that any barriers to access by adolescents or single people be removed. It is also important that all providers of services are knowledgeable about HIV and able to deal skilfully with the painful dilemmas the virus raises for some of their clients. HIV-positive women, for example, need appropriate advice on contraception and pregnancy. And those who believe they are at high risk of infection and wish to avoid pregnancy need a contraceptive method — or a combination of methods, such as the pill and the condom — that will be effective. Good quality, accessible and acceptable family planning services are also important for the success of voluntary counselling and testing (VCT) programmes for HIV, since people will only wish to know their serostatus if they have real choices of action.

**Maternal and child health**
Programmes to reduce MTCT can only be established where there is a properly functioning primary health care system, with efficient and accessible maternal and child health services. For MTCT prevention to be most effective, it is important that women be encouraged, through education and information programmes, to attend antenatal clinics as early as possible in pregnancy. Mother and child health services also need to be geared up to address the complex and sensitive issue of infant feeding in the era of HIV/AIDS.

**STI prevention and care**
The presence of another STI facilitates both the transmission and acquisition of HIV, so both partners are at greatly increased risk during intercourse if either has an STI. STI control programmes therefore have an important part to play in combating HIV/AIDS and are a key strategy in the primary prevention of MTCT (see box on page 18).

**A central role for human rights**
Protecting and promoting the full range of human rights creates the best possible environment for the prevention of HIV among young people, women and their babies, for this tackles the root causes of their vulnerability such as women’s subordination, exploitation, discrimination, and lack of information, education and services. Moreover, human rights principles provide the foundation for effective and ethical practice in many areas of HIV prevention and care, for example HIV testing, antiretroviral therapy, family planning and maternity services for HIV-positive women, treatment for STIs, and research involving human subjects.

However, the paradox at the heart of human rights is that in practice one person’s rights may conflict with another’s, and HIV has raised sometimes heated debate over competing interests. There is no simple equation that can resolve such conflicts, and in practice the context in which decisions must be made is all-important in finding the fairest and most just balance of rights. Raising awareness of the great complexity as well as the central importance of human rights issues to the pandemic is one of UNAIDS’ chief missions. In collaboration with WHO, UNAIDS is currently developing a paper on human rights and MTCT of HIV. The paper will help to create an environment for informed...
decision-making by identifying the legal and ethical issues that need to be considered in the development of policies and programmes and the human rights implications of different courses of action.

UNAIDS has also worked with people living with HIV to produce practical handbooks on human rights and AIDS to encourage countries to adopt and apply universal standards. In 1996, the Programme hosted an international consultation in partnership with the Office of the United Nations High Commissioner for Human Rights (OHCHR). The meeting produced guidelines for national governments on specific measures needed to counter AIDS-related discrimination and human rights abuses. These were jointly published by OHCHR and UNAIDS in 1998, and UNAIDS has since provided funding to the International Council of AIDS Service Organizations (ICASO) to prepare a more user-friendly version of the guidelines, in several languages, for use by nongovernmental organizations. Both organizations are intent to continue the advocacy for human rights in the area of HIV/AIDS through UNAIDS support for a focal point in OHCHR. Taking action against prejudice and discrimination is vital to the success of programmes to protect young people and reduce MTCT, for experience shows that wherever people have a legitimate fear of discrimination, they are afraid also to take advantage of services that might help them, or even save their lives, if they risk being identified as HIV-infected.

TAKING ACTION AGAINST STIs

Worldwide, there are around 333 million new STIs, excluding HIV, every year, of which at least 50% are in young people under 25 years. STIs account for approximately 9% of the total burden of disease in women and 1.5% in men. According to World Bank data, they are second only to pregnancy-related problems as a cause of healthy life lost in women aged 15-44 in developing countries.

Most STIs are easily cured, but frequently women are unaware of their presence because the symptoms are not obvious or they are culturally conditioned to believe the discomfort they feel is just part of being a woman and somehow normal.

Since the presence of another STI increases a person’s susceptibility to HIV, strengthening STI control can have a dramatic impact on lowering HIV transmission rates. A study in Tanzania, for example, has shown that treatment of other STIs at primary health care level and costing as little as US$2.11 per case can cut the number of people contracting HIV by over 40%.

WHO and UNAIDS have collaborated on a number of important initiatives to encourage and strengthen STI control measures worldwide. Together with other partners, they have set up a global surveillance system to ensure a regular flow of reliable information on HIV and STIs, so that the epidemics can be monitored and trends identified. Among other things, the system produces country profiles, which are updated regularly. Through a working group on STIs the two have prepared technical documents on policies and principles of STI prevention and care, mainly to assist Ministries of Health and others responsible for national programmes. And they are supporting a variety of research projects in different countries aimed at establishing what part education and information play in STI/HIV management and control; and also what is involved in integrating STI services successfully into mainstream reproductive health services. The latter is very important, for there are many obstacles to putting this ideal into practice in the real world.

Traditionally, the diagnosis of STIs relies on laboratory tests. STI control is hampered by the scarcity of laboratory facilities in many developing countries, and WHO has therefore developed a “syndromic” approach to diagnosis and management of STIs which does not require laboratory tests. For the purposes of diagnosis, the syndromic system classifies the pathogens responsible for the main STIs according to the cluster of symptoms they produce. Health staff then use a flow-chart to guide them in the antibiotic treatment of the syndrome they have identified. Syndromic management may lead to over-treatment in some patients — especially in cases of vaginal discharge — because the diagnosis is not specific enough. But despite several shortcomings, this system currently offers the best means of delivering STI care in settings where laboratory services are lacking or too expensive, and it is being used effectively in many places.
In the 16 years since the beginning of the pandemic, a great deal has been learnt about what does and does not work in combating AIDS. To make the most of this wealth of knowledge and share widely the lessons of experience, UNAIDS has undertaken to document and disseminate “best practices” in the response to the pandemic. The information in the Best Practice Collection is clear, concise and addressed to a wide range of potential users, from other UN agencies and national AIDS programmes to nongovernmental organizations, community groups and the media.

There is now a wealth of evidence that prevention campaigns, if well-designed and efficiently managed, can arrest or reverse HIV trends by encouraging people to change or avoid risky behaviour and lifestyles, and creating a supportive environment for them to do so. The best prevention campaigns work simultaneously on many levels — increasing knowledge about HIV, providing relevant services, ensuring access to supplies such as cheap condoms and clean injecting equipment, and helping people to acquire the skills they need to protect themselves. They work with, rather than for, their target populations, and focus not just on individual behaviour, but also on the social and economic factors that increase a person’s vulnerability to HIV. Furthermore, the effort must be sustained over the long term to be successful.

Programmes to prevent the spread of HIV work best as a package, with the various activities reinforcing each other. While it is not possible to attribute success in reversing HIV trends to any single activity, some strategies have proved specially effective.

Peer education
This recruits people of the same background and social standing as their target audiences to spread messages about HIV and promote condoms at grassroots level. Peer educators speak the same language, share the same values and know better than any outsider how to communicate with their audiences. The approach is proving very effective, for example, in the goldmining town of Carletonville in South Africa. This is one of the country’s “AIDS hotspots”, with HIV prevalence rates of 20% among the 88,000 mineworkers, 36% among women in the town’s general population, and over 70% among the 500 or so sex workers. In January 1998, 21 peer educators were recruited among the sex workers for a campaign aimed primarily at treating and controlling the high levels of other STIs, and promoting the use of condoms. Within six months, the demand for condoms had increased from 5,000 to 11,633 among sex workers and zero to 55,000 among mineworkers. Moreover, such strong solidarity had developed between the women that condom use with clients had already become the norm and anyone not prepared to observe the rule was driven out of the profession by her peers.

In Zambia in 1994, a group of nongovernmental organizations in the capital, Lusaka, got together with representatives of the Ministry of Health, the district council and young people in an informal working group to identify where the primary health care system was failing young people, and to develop a strategy to remedy the situation. One of the priorities identified was the need to involve more young people directly in the provision of services. Consequently, 52 young people were trained over a period of two weeks to provide counselling on pregnancy, STIs, substance abuse, financial matters and communication with sex partners. Following training, they worked as peer counsellors within primary health care clinics, providing services themselves and acting as a link between young people and the medical staff for those who needed medical care. With the introduction of peer counsellors to attend to some of their needs and support them in their dealings with the health system, the attendance of young people at the clinics has increased significantly. Furthermore, the programme has created strong links and enhanced mutual respect between adults and young people in the community. The peer education approach has helped break down the taboo on discussing sexual matters, particularly among young people, and has provided vulnerable populations with much-needed information as well as support.

Personal empowerment
This focuses on reducing vulnerability to HIV by expanding people’s choices and control over their own lives. In Brazil’s impoverished northeast, for example, girls considered by their communities to be at risk of violence and sexual abuse at home, and of drifting into homelessness and prostitution, are being invited to join support groups that teach them skills to improve their prospects and choices for earning a living, as well as skills to defend themselves against violence and unwanted sex. Of 850 girls helped by one such programme, there are...
no reports so far of anyone drifting into street gangs or prostitution, where the risk of contracting HIV is high: infection rates of around 17% are reported among poor sex workers in some of Brazil’s cities. And in Tanzania in 1994-6, the Office of the United Nations High Commissioner for Refugees (UNHCR) gave women in a camp for refugees from Rwanda and Burundi the support and training they needed to set up Crisis Intervention Teams to combat widespread sexual harassment and rape. The programme increased women’s self-confidence and esteem, and made daily life in the camp much safer.

**Counselling and HIV testing**

There is a growing body of evidence that people who have received counselling and know their serostatus are more likely to adopt safe behaviour, either to protect themselves from infection if they are uninfected, or, if they are HIV-positive, to protect their partners from infection. Preliminary results from a study in nine developing countries into the effects of voluntary counselling and testing (VCT) on subsequent behaviour found that most groups reported a reduction of 40-46% in unprotected casual sex among those who received VCT.

**Social marketing**

Recognizing that commercial products like beer, cigarettes and matches are available even in the most inaccessible settlements, social marketing is a concept, developed several decades ago, that uses the private sector and its advertising and distribution networks in the cause of public health. It has been used effectively to promote family planning, STI treatment, and other public health goals. And since the advent of AIDS its teams of committed salesmen have moved condoms into some of the remotest corners of the world and made them widely available at subsidized prices. At the time AIDS struck in Ethiopia, for instance, condoms were available almost exclusively from family planning clinics which served married couples only. They were one of the least popular choices for contraception and in 1987 only about 20,000 were distributed nationwide. In 1991, just a year after a social marketing programme was introduced, condoms were available widely in kiosks and village stores and sales were up to 6 million. In 1996, well over 20 million pieces were distributed nationwide through social marketing outlets alone. Worldwide, some 937 million condoms were sold through social marketing programmes in 1997, an increase of 20% over the previous year. Recently, programmes aimed at promoting female condoms have been launched in several countries, for example Uganda, Tanzania and Ghana.

**WHAT WORKS WITH YOUNG PEOPLE?**

A number of important lessons have been learned over the course of the last decade from AIDS prevention and care programmes. Many of these lessons can and have been adapted to different local situations and contexts. Countries that have been successful in maintaining low levels of HIV infection, or reversing negative trends in the epidemic, have at least two characteristics in common. First, they have established programmes that make HIV and AIDS highly visible. Second, they have included a set of mutually reinforcing interventions, to reduce both risk and vulnerability to HIV. This reflects the conviction that safer practices are not only the result of individual decisions related to behaviour but also the result of changing the context in which such decisions are taken. In many of these countries, young people are a focus of the national AIDS programme.

In many cases, courage has been required on the part of the authorities to raise issues never before publicly debated. Such issues include: sexual health and life skills education in schools, child sexual exploitation, multiple partnerships among young people, lack of dialogue between parents and children on sexual health, and issues relevant to men having sex with men. More and more countries are incorporating these issues specifically in their national AIDS plans and in major public fora. For example, sexual health and AIDS education for young people in and out of school became national policy and are implemented in many countries, such as the Philippines, Myanmar and Colombia.

The increasing global commitment to advancing the human rights of young people has also provided a stronger foundation for successful programmes. On one hand, the promotion of human rights of people affected by HIV and AIDS has helped to create a more supportive atmosphere that is necessary for successful prevention and care efforts. On the other hand, human rights promotion has helped to reduce discrimination and stigmatization directed against marginalized individuals and groups in society. Young people living with HIV/AIDS have been instrumental in the development of such environments, an example being Pinoy Plus in the Philippines. The nongovernmental organization provides discussion fora and peer education among young people living with HIV as well as AIDS education to young people in schools and public education campaigns to reduce discrimination. Another path to the reduction of discrimination and vulnerability for marginalized people, many of whom are young, is the enactment of legislation. For example, in the state parliament of São Paulo, Brazil, needle-exchange programmes were legalized and financially supported.

The commitment and involvement of mass media in communicating with young people on HIV/AIDS in some parts of the world deserves mention. Music Television International (MTV), during the last few years, has made special efforts to provide AIDS education and condom promotion in their programmes to reach young people. For example, MTV, the World Bank and UNAIDS have produced a special international television programme, aired for the first time worldwide on 1 December 1998. In Uganda, Straight Talk, initially funded by UNICEF and now with other partners as well, is a popular newspaper among young people that openly discusses relationships and sexuality.
The Past Five Years have seen some exciting breakthroughs and impressive progress in reducing transmission of HIV to babies and young people. However, there are clear and formidable challenges ahead in achieving the goals set by the Cairo conference. Many gaps remain in our basic knowledge of HIV, as well as in the policies and programmes developed to fight the epidemic.

Questions of science
Challenges for scientific research in the immediate future include:

- developing affordable, simple and non-invasive tests for the early detection of STIs in both symptomatic and asymptomatic women and men;
- developing new technologies for HIV prevention, with much greater commitment to the search for women-controlled methods including safe and effective microbicides;
- developing a range of clinical interventions for the reduction of MTCT, including simpler and more widely affordable antiretroviral (ARV) regimens;
- establishing the effects of breastfeeding in conjunction with ARV regimens on MTCT of HIV.

Issues of policy
There is a pressing need for countries to create an enabling environment for the reduction of MTCT and the reduction of HIV/AIDS among young people. This requires, inter alia, ensuring that national laws and the policy framework at national and community level are non-discriminatory and supportive of women and young people. A comprehensive review of existing laws and policies for their effect on women and young people is the first step, to be followed by active measures to improve the status of women and their economic independence, and to give them a genuine role in shaping policies that affect them. Governments need to adopt into law universal human rights instruments and ensure they are reflected in policies, with special attention to reproductive rights, the rights of the child, and the rights of young people. In addition, measures should be taken to ensure that all policies on HIV/AIDS are gender-sensitive and sensitive to the needs of young people.

With scope for protecting babies from perinatal transmission of HIV increasing all the time, governments need urgently to develop national policies on MTCT that provide for equitable access to interventions, and address also the complex and sensitive issues of infant feeding and the supply of infant formula. In many places, more studies will be needed to determine the best ways of minimizing the risks associated with replacement feeding.

Programme issues
The immediate challenge for most countries is to
strengthen primary health care — particularly mother and child, family planning, and STI services — as the necessary foundation for HIV/AIDS interventions. The quality of care is a vital consideration, and special attention is needed also to making services user-friendly to women and young people, and accessible to all. In addition, countries need to identify what is required to introduce interventions such as voluntary counselling and testing (VCT) and programmes to reduce MTCT, and to ensure equity of access. Where services already exist but are underutilized, research should be carried out to identify the factors — psychological as well as practical — that inhibit potential clients. Much more research is needed also at the national and international levels, to understand how best to integrate services for STIs and HIV/AIDS into mainstream reproductive and primary health care services, and how to make them user-friendly. A common criticism is that too often these are stated as ideals without practical guidance on how they should be accomplished or due recognition of the constraints.

In many places, civil society could be playing a greater role in AIDS prevention and care and in meeting reproductive health needs. This should be actively encouraged everywhere. In addition, strategies are needed to ensure that men share responsibility for sexual and reproductive health, including family planning and the prevention and control of STIs and HIV. And efforts should be made to improve understanding of, and demand for female-controlled methods of disease prevention.

As far as young people are concerned, it is now possible, with the knowledge we have of what works, to formulate policies and programmes which deal directly with their vulnerability to HIV/AIDS. These are policies and programmes aimed at ensuring that young people:

- live in a safe environment which fosters their health and overall development to reduce their vulnerability to HIV, and provides assistance and support in times of crisis through family members, peers and concerned adults in the community;
- acquire the information and develop the skills necessary for healthy development and to become responsible adults, as well as to manage specific situations in which HIV poses a risk;
- have access to HIV-related services that are accessible, affordable and confidential, and include education, diagnosis and treatment of STIs, HIV and AIDS, as well as counselling, referral, and commodities such as contraceptives including condoms;
- have opportunities for genuine participation in developing and defining policies and programmes that affect their lives, including those related to HIV.

Widening the net: advocacy and partnerships

The role of advocacy in fighting the epidemic is as important today as it has ever been, for the threat posed by AIDS is still greatly underestimated by many decision-makers. Denial and lack of commitment at national level remain serious problems: unwillingness to confront the often sensitive and controversial issues raised by AIDS — such as teenage sexuality, prostitution, drug-taking behaviour and homosexuality — is common in the developed as well as the developing world. And the issues that most concern women in the epidemic, including the threat of passing on HIV to their children, have been widely neglected by
researchers and policy-makers alike. Moreover, despite much lip service paid to human rights, their direct relevance to the AIDS epidemic is poorly understood by many people. Violation of human rights, including prejudice and discrimination, remain major barriers to effective campaigns for women and young people. Every opportunity should be taken to fight discrimination so that individuals and communities can openly acknowledge HIV/AIDS, and the epidemic can be addressed without shame or fear.

Strong advocacy is needed, also, to guard against the constant threat of waning public interest in a catastrophe in slow motion, for success in the future depends on increased commitment and a greatly expanded response to AIDS. This means, among other things, strengthening existing partnerships, and recruiting new partners from all walks of life who will bring additional expertise and resources as well as new perspectives to the global campaign against AIDS.

Ultimately, however, what is needed most is sustained commitment. HIV has lost none of its virulence, none of its ability to tear at the fabric of our societies. But given imagination, solidarity and the unflagging will to act, we know enough already to turn the tide on AIDS and save millions of lives.

Suggested further reading

| Report from a Consultation on the Socio-Economic Impact of HIV/AIDS on Households | Technical Update: Counselling and HIV/AIDS |
| HIV and Infant Feeding:  
  ▪ Guidelines for Decision Makers  
  ▪ A Guide for Health Care Managers and Supervisors  
  ▪ A Review of HIV Transmission through Breastfeeding | Technical Update: Gender and HIV/AIDS |
| Impact of HIV and Sexual Health Education on the Sexual Behaviour of Young People: a Review Update | Technical Update: Learning and Teaching about AIDS in Schools |
| UNAIDS Policy on HIV Testing and Counselling | Technical Update: Microbicides for HIV Prevention |
| Point of View: Women and AIDS | Technical Update: Mother-to-Child Transmission of HIV |

These UNAIDS publications may be requested from the UNAIDS Information Centre, Geneva, Switzerland.
Since the pandemic began, a total of 47 million people have contracted HIV, and 14 million have died of AIDS. Today there are more than 33 million people living with the virus worldwide.

In 1998 alone there were nearly 6 million new infections.

Every minute of every day, around 11 people become newly infected with HIV.

Globally, one in ten of those who became newly infected during 1998 was a child under the age of 15 years. The vast majority were in sub-Saharan Africa, while some were infected through blood or sexual abuse, and most are believed to have acquired the virus from their mothers.

Today about half of all new infections past infancy are in young people below the age of 25 years, very many of them still teenagers.

By the end of 1998 a cumulative total of 18.5 million women had been infected with HIV worldwide, and nearly five million women had died of AIDS.

90% of infected women currently live in developing countries.

However, the risk is increasing for women everywhere — in developed and developing countries alike. In France, women’s share of reported AIDS cases increased from 12% in 1985 to 20% ten years later. In Spain female AIDS cases rose from 7% to 19% of all AIDS cases during the same period. And in Brazil the proportion rose from just 1% in 1984 to 25% ten years later.

Recent surveys from India indicate that HIV is no longer concentrated in certain high risk groups, such as urban sex workers and their clients, and drug injectors, but now has a firm foothold in the general population. More than 1% of pregnant women in some cities are now HIV-positive.

In African countries worst affected by the epidemic, AIDS accounts up to 70% of deaths of women aged 20-44 years.

AIDS may already have doubled the mortality rate in children under 5 in regions most affected by the virus.

In African countries with an adult HIV prevalence of 10% or more, life expectancy is projected to drop by about 17 years for generations born early in the next century.