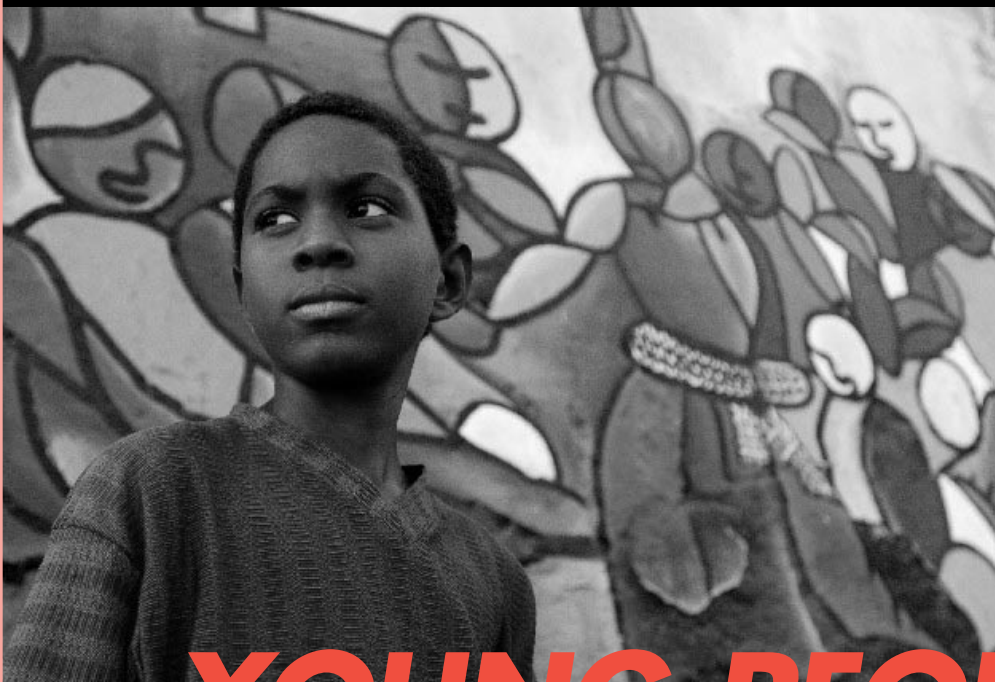


**Chapter 13.**

***HIV/AIDS***



**and *YOUNG PEOPLE***

***Familiarizing the reader with the current thinking and data on the HIV/AIDS epidemic as it relates to young people is the primary goal of this chapter. To the extent possible, an unbiased, fact-based description of the problem has been presented; the conclusions are largely left for the reader to make. Most of the data incorporated here come from published papers or recently released data sets produced by researchers already widely published in the field of AIDS. The chapter provides information on the number of young people living with HIV/AIDS, who they are, where they live, and why they were infected. It also addresses the short- and long-term impact of AIDS on young people, and examines strategies to help prevent infection among youth, to mitigate the impact of the epidemic, and to prepare young people to survive in a world with AIDS.***

## **THE STATE OF THE AIDS EPIDEMIC AMONG YOUNG PEOPLE**

### **Young people infected with HIV/AIDS**

In the mid-1980s AIDS was recognized as a global crisis.<sup>1</sup> At that time there were 100,000 cases of AIDS worldwide, and between 5 million and 10 million people were infected with HIV. Researchers predicted that the annual number of deaths from AIDS would peak at 1.7 million in 2006,<sup>2</sup> vastly underestimating the impact the disease would have. In 2001, over 40 million people were believed to be living with HIV/AIDS; 5 million were newly infected, and 3 million died.<sup>3</sup> HIV/AIDS is now the fourth largest cause of death globally and the leading cause of death in Africa.<sup>4</sup>

Although the impact of AIDS has been most severe in sub-Saharan Africa, the disease has transformed the lives of children and youth all over the world. More than 60 million people have been infected since the epidemic began over 20 years ago. An estimated 22 million have died of AIDS,<sup>5</sup> and half became infected between the ages of 15 and 24.<sup>6</sup>

Every day an average of between 6,000 and 7,000 young people become infected with HIV; at present 11.8 million are living with HIV/AIDS (see table 13.1).<sup>7</sup> At the onset of the epidemic few would have predicted that young people would constitute the group most seriously affected by the spread of the disease.

**Table 13.1**  
**Estimated number of women and men aged 15-24 years living with HIV/AIDS, December 2001 (thousands)**

Region	Young women	Young men	Young people
Sub-Saharan Africa	5,700	2,800	8,500
Middle East and North Africa	101	46	156
East Asia and the Pacific	340	400	740
South Asia	670	390	1,060
Central Asia and Eastern Europe	85	340	425
Latin America and the Caribbean	240	320	560
Industrialized countries	83	160	243
The World	7,300	4,500	11,800

Source: UNICEF, UNAIDS and WHO, *Young People and HIV/AIDS: Opportunity in Crisis* (New York, UNICEF, June 2002), available at <http://www.unicef.org/aids/publications.htm>.

Note: Figures are rounded.

## National and regional differences

The impact of AIDS has been most serious in sub-Saharan Africa. The region contains almost three-quarters of all young people living with HIV/AIDS, even though only 10 per cent of the world's youth live there.<sup>8</sup> Some 8.6 million of the 28.5 million Africans living with HIV/AIDS are young people. The majority of new infections in the region are among those 15-24 years of age. AIDS has become generalized<sup>9</sup> among youth in almost half of the sub-Saharan African nations. In nearly 20 countries in the region, it is estimated that at least 5 per cent of young women aged 15-24 years are infected with HIV.<sup>10</sup>

Substantial differences exist in HIV prevalence among African nations. Southern Africa has the worst epidemic, especially among young girls. Many researchers assumed that the high prevalence rates in some countries would have reached a plateau, but this has not yet occurred. In Botswana, median HIV prevalence among pregnant women was 38.5 per cent in 1997 and has risen to 44.9 per cent since. These prevalence rates, as devastating as they are, do not entirely reflect the actual toll AIDS is taking on certain population groups. Women 25-29 years old receiving antenatal care in urban areas of Botswana had a prevalence rate of 55.6 per cent, and for those in Zimbabwe, the rate was 40.1 per cent.<sup>11</sup>

Until recently, HIV prevalence remained low in most western and central African countries. However, rapid increases in infection rates are now being reported in Cameroon and Nigeria. Other countries in the region, including Côte d'Ivoire, Senegal and Togo, have thus far been able to keep their rates steady.

In the Middle East and North Africa HIV infection among young people exists, but the numbers are small. According to statistics published by the Organization of Islamic Conference, 0.3 per cent of females and 0.1 per cent of males in the region were living with HIV/AIDS at the end of 2001. Sexual interaction remains the dominant

route of transmission in the region, though new research indicates that injecting drug use is on the rise.<sup>12</sup> All countries in the region except Sudan and Yemen have reported HIV transmission through injecting drug use. This may soon beget a wave of infection that could increase overall HIV rates among young people.

In East Asia and the Pacific, Cambodia, Myanmar and Thailand have the highest infection rates and are the only countries in the region with HIV prevalence greater than 1 per cent among youth. Drug injection is leading to the explosive growth of HIV infection in several areas including Kathmandu, Nepal, where over half the injecting drug users (IDUs) have HIV, up from less than 1 per cent in the early 1990s.<sup>13</sup> In Asia, sexual transmission of HIV is predominantly through men having sex with other men (MSM), though high rates among sex workers have been noted for many years.

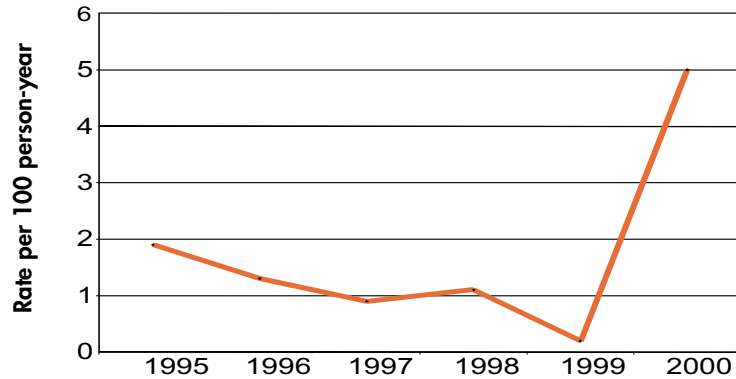
While HIV prevalence in Central Asia and Eastern Europe is relatively low, this region is experiencing the fastest-growing rate of infection worldwide. There were an estimated 250,000 new infections in 2001, bringing the total number living with HIV/AIDS in the region to 1 million. In the Russian Federation, increases in HIV infection continue, with new reported diagnoses nearly doubling annually since 1998.<sup>14</sup> In Ukraine, more than 1 per cent of young men aged 15-24 years are currently infected. The epidemic is spreading most rapidly among young men because of unsafe drug injection practices. There is also evidence that young males and females in several of the region's countries are becoming sexually active at an earlier age.

In Latin America and the Caribbean HIV prevalence continues to vary widely. The Caribbean is the second most affected region after sub-Saharan Africa, with 2.3 per cent of 15- to 49-year-olds infected. In the Bahamas, Dominican Republic, Guyana, Haiti, and Trinidad and Tobago, at least 2 per cent of young women are infected with HIV, and transmission is predominantly through heterosexual contact. In contrast, Central and South America continue to report epidemics driven by sexual transmission of HIV between MSM. For instance, although adult prevalence in Mexico is under 1 per cent, prevalence among MSM is 15 per cent. Drug injection is a growing social phenomenon in the region, affecting Argentina, Brazil and Uruguay in particular.

Only a few industrialized countries/areas<sup>15</sup> have infection rates of 0.5 per cent or higher. These countries and territories had a combined total of about 243,000 youth living with HIV/AIDS in 2001, representing approximately 2 per cent of the world total.<sup>16</sup> There is cause for concern, however, as a rise in sexually transmitted infections (STIs) has been observed, signalling a rise in unsafe sex, particularly among young people in many of the industrialized countries<sup>17</sup> In the industrialized world the number of young men infected is twice that of young women because sexual transmission of HIV is predominantly through MSM, and injecting drug use, the second most important mode of transmission, is more prevalent among young men than among young women.<sup>18</sup> In 1999, half of the AIDS cases in young men aged 13-24 years in the United States were among those who had had sex with other men.<sup>19</sup> Figure 13.1 shows corresponding figures for Vancouver, Canada, for the period 1995-2000.

Table 13.2 provides an overview of HIV/AIDS prevalence among 15- to 24-year-olds worldwide in 2001.

**Figure 13.1**  
**Increase in new HIV infections among young males who have sex with males, Vancouver, 1995-2000**



Source: Robert S. Hog and others, "Increasing incidence of HIV infections among young gay and bisexual men in Vancouver", *AIDS 2001*, vol. 15, No. 10, Research Letters, pp. 1,321-1,322.

## Intracountry differences

National HIV/AIDS statistics for the general population often conceal dramatic variations within countries. Cities generally have higher HIV prevalence than rural areas, and disadvantaged people have been shown to be at greater risk than others.<sup>20</sup> Among youth as well, HIV disproportionately affects the poor and the marginalized.<sup>21</sup>

General population statistics also conceal significant gender differences in HIV infection. Where heterosexual transmission of HIV is dominant, generally more young women are infected than young men. Where the HIV epidemic is widespread among IDUs, most cases occur among young men.<sup>22</sup> In epidemics that are driven primarily through MSM, more men are at risk, though numerous studies have confirmed that many men who have unprotected sex with other men also have unprotected sex with women.<sup>23</sup>

**Table 13.2**  
**Percentage of young people (aged 15-24 years) living with HIV/AIDS, end-2001**

(see opposite page)

Source: UNICEF, UNAIDS and WHO, *Young People and HIV/AIDS: Opportunity in Crisis* (New York, UNICEF, June 2002), available at <http://www.unicef.org/aids/publications.htm>.

Note: The proportions of young people (aged 15-24 years) living with HIV/AIDS were derived by dividing the estimated numbers of young people living with HIV/AIDS at the end of 2001 by the total numbers of young people 15-24 years of age.

Region and country	Females	Males	Region and country	Females	Males
<b><i>Africa</i></b>			<b><i>Asia and the Pacific</i></b>		
Angola	4.1-7.3	1.6-2.8	Cambodia	2.0-3.0	0.8-1.2
Benin	3.0-4.5	0.9-1.4	India	0.5-1.0	0.2-0.5
Botswana	30.0-45.0	12.9-19.3	Malaysia	0.09-0.14	0.56-0.84
Burkina Faso	7.8-11.7	3.2-4.8	Thailand	1.3-2.0	0.9-1.3
Burundi	8.0-14.1	3.6-6.3	<b><i>Latin America and the Caribbean</i></b>		
Cameroon	0.1-15.2	4.3-6.5	Argentina	0.27-0.40	0.7-1.0
Central African Republic	10.8-16.2	4.7-7.0	Bahamas	2.0-4.1	1.7-3.6
Chad	2.8-5.8	1.5-3.2	Belize	1.6-2.4	0.9-1.3
Democratic Republic of the Congo	4.3-7.5	2.1-3.7	Brazil	0.38-0.58	0.51-0.77
Republic of Congo	5.1-10.5	2.1-4.4	Chile	0.08-0.17	0.23-0.48
Côte d'Ivoire	6.7-10.0	2.3-3.5	Colombia	0.12-0.25	0.55-1.2
Equatorial Guinea	1.8-3.7	0.9-1.9	Costa Rica	0.18-0.36	0.38-0.79
Ethiopia	5.6-10.0	3.2-5.6	Dominican Republic	2.2-3.3	1.7-2.5
Gambia	0.88-1.8	0.34-0.71	El Salvador	0.23-0.48	0.5-1.0
Ghana	2.1-3.9	0.9-1.8	Guatemala	0.55-1.1	0.6-1.2
Guinea-Bissau	1.9-4.0	0.7-1.4	Guyana	2.6-5.4	2.1-4.4
Kenya	12.4-18.7	4.8-7.2	Haiti	3.2-6.7	2.6-5.5
Lesotho	24.8-51.4	11.3-23.5	Honduras	1.2-1.8	0.96-1.4
Malawi	11.9-17.9	5.1-7.6	Jamaica	0.69-1.0	0.66-0.98
Mali	1.4-2.8	0.9-1.8	Mexico	0.06-0.12	0.26-0.47
Mozambique	10.6-18.8	4.4-7.8	Panama	0.9-1.6	1.4-2.4
Namibia	19.4-29.1	8.9-13.3	Peru	0.13-0.23	0.30-0.53
Nigeria	4.7-7.0	2.4-3.6	Suriname	1.0-2.1	0.8-1.6
Rwanda	9.0-13.4	3.9-5.9	Trinidad and Tobago	2.1-4.4	1.6-3.3
Senegal	0.4-0.7	0.1-0.2	Uruguay	0.16-0.24	0.42-0.63
Sierra Leone	4.9-10.2	1.6-3.4	<b><i>Eastern Europe and Central Asia</i></b>		
South Africa	20.5-30.8	8.5-12.8	Belarus	0.13-0.26	0.38-0.79
Swaziland	31.6-47.4	12.2-18.3	Russian Federation	0.53-0.79	1.5-2.2
Sudan	2.0-4.2	0.7-1.5	Ukraine	0.6-1.1	1.4-2.5
Tanzania	6.4-9.7	2.8-4.3	<b><i>Industrialized countries</i></b>		
Togo	4.7-7.1	1.6-2.5	United States	0.18-0.27	0.38-0.57
Uganda	3.7-5.6	1.6-2.4	Portugal	0.15-0.22	0.33-0.49
Zambia	16.8-25.2	6.5-9.7	Spain	0.19-0.29	0.41-0.62
Zimbabwe	26.4-39.6	9.9-14.9	Switzerland	0.32-0.47	0.37-0.55

## How young people become infected

Young people, like adults, contract HIV primarily in three ways: through injecting drug use; through unprotected sexual activity between men and women; and through unprotected sexual activity between men (MSM).<sup>24</sup>

HIV can also be transmitted via blood transfusions, through the sharing of non-sterile equipment that breaks the skin,<sup>25</sup> and from a woman to her baby during pregnancy, birth or breastfeeding. While the first generation of babies infected by mother-to-child transmission would now be adolescents, the proportion of such children still living is small.<sup>26</sup>

### Blood transfusions

Transfusion with contaminated blood readily transmits HIV since large quantities of the virus are directly infused into a person's body.<sup>27</sup> In most high-and middle-income countries, routine screening of donated blood for HIV antibodies has greatly reduced the risk of infection from blood transfusions or blood products. However, youth living in low-income countries, where donated blood is not always tested for HIV, are more vulnerable to infection.<sup>28</sup> Where such tests are not routinely conducted, young women may be particularly at risk of infection if they receive transfusions during childbirth.<sup>29</sup>

### Injecting drug use

Injection of drugs using needles contaminated with HIV is playing a major role in the spread of AIDS among young people, especially young men. By the end of 1999, injecting drug use was reported in 136 countries, and 114 of them had recorded cases of HIV infection via intravenous drug injection.<sup>30</sup>

Youth who share drug-injecting supplies are at high risk of HIV infection, as the virus is introduced directly into the bloodstream. This is one of the main reasons why HIV tends to rise very rapidly among injectors. In some countries, including Argentina, Bahrain, Georgia, the Islamic Republic of Iran, Italy, Kazakhstan, Portugal and Spain, over half of all AIDS cases are linked to drug use. In Canada, China, Latvia, Malaysia, Moldova, the Russian Federation, Ukraine, and Viet Nam, more than half of all new infections during the period 1998-1999 were among IDUs.<sup>31</sup>

Importantly, epidemics deriving from injecting drug use do not remain limited to the IDU population, since most IDUs are young males who are sexually active and not married. In Ukraine, the male-female ratio of reported HIV infection dropped from 12 to 1 in 1993 to 6 to 1 in 2000, reflecting both the increasing importance of sexual transmission in the spread of the epidemic and an increase in the number of female drug injectors.<sup>32</sup>

Injecting drug use is often linked to the sex trade, with users selling sex to finance their drug habits.<sup>33</sup>

Although many IDUs are already relatively young, the average age for starting drug use is declining further in several countries.<sup>34</sup> The number of adolescents attending a drug outreach programme in St. Petersburg, Russian Federation, more than tripled in two years.<sup>35</sup> By 1996, over half of the IDUs interviewed in Odessa were under 25 years old. In Buenos Aires, two-thirds of such users said they had begun injecting before the age of 18.

A person’s first drug injection can be extremely risky. New drug users often lack equipment and need help with the injection process. Such individuals are more likely to share potentially contaminated equipment with other IDUs.<sup>36</sup>

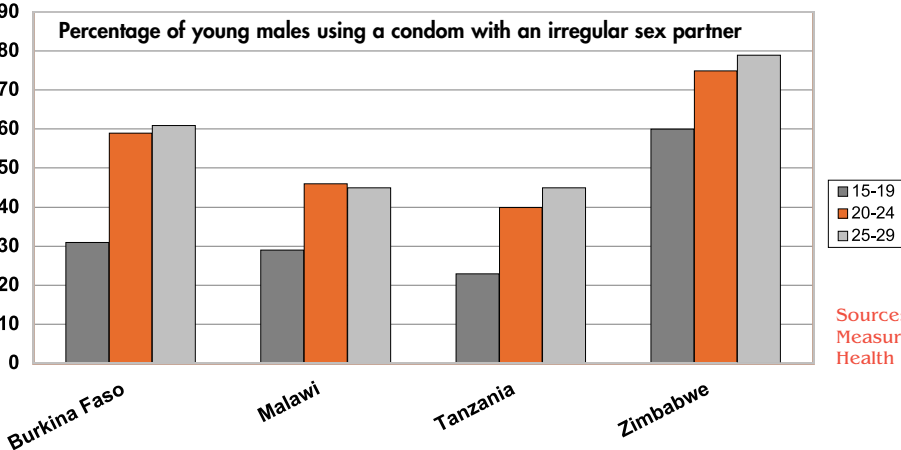
Another issue to take into account is that “occasional” injectors are becoming more common in Eastern Europe. Many young people fall into this category, and programme planners must be aware that these individuals will not respond to outreach targeting dependent IDUs because most do not readily identify themselves as such. These young people are at tremendous risk because, like first-time users, they frequently lack their own equipment and may need to share with others. In addition, as the sexual networks of these youth are not likely to be limited to the IDU population, the crossover from one high-risk group to the general population of young people should be expected.

### Unprotected sexual activity

It is not having sex, but rather having unprotected sex, that places young people at serious risk of HIV infection. Because high levels of sexual activity among adolescents have not been accompanied by the consistent use of condoms, this population group faces a high risk of infection. In surveyed countries of sub-Saharan Africa, the proportions of unmarried, sexually active women aged 15-19 years who reported the use of condoms in their most recent sexual encounter ranged from 2 to 18 per cent. Studies have found that even among adolescents who report recent condom use, less than half used condoms for each episode of sexual activity.

Younger adolescents are even less likely to use condoms (see figure 13.2). A survey in Burkina Faso indicated that 64 per cent of young men in their twenties used condoms, while only 45 per cent of younger adolescent males did so; for Malawi, the respective figures were 47 and 29 per cent. In Colombia, Kazakhstan and Peru a mere one-fifth to one-third reported using condoms. Among young men in Peru who identified themselves as homosexual, 40 per cent reported having recently engaged in unprotected anal intercourse.<sup>37</sup> These low rates of condom use are particularly troubling if one considers that in a number of countries with generalized epidemics, over two-thirds of young people have sex while in their teens.

**Figure 13.2**  
**The relatively low prevalence of condom use among younger males in four African countries**

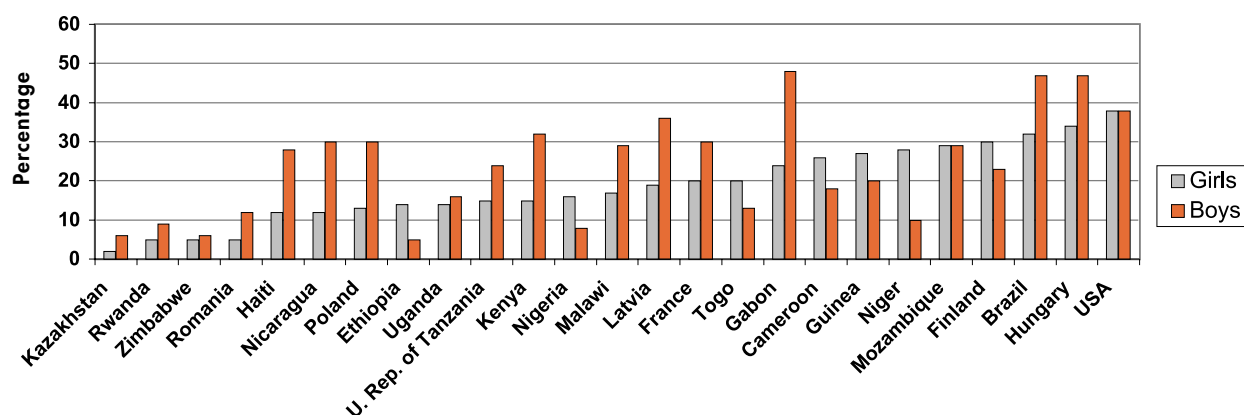


Source: UNICEF/MICS, Measure Demographic and Health Surveys, 1999-2001.



Sexual activity among both male and female adolescents is a contemporary reality. Although the systematic collection of information has been difficult, some broad patterns of adolescent sexual behaviour have been identified. Many adolescents are sexually active at a very young age. In several countries, unmarried girls and boys become sexually active before the age of 15 (see figure 13.3). Recent surveys of boys aged 15-19 years in Hungary and Kenya reveal that over a quarter of boys are having sexual relations before their fifteenth birthday, and the proportion is about 40 per cent for teens in Brazil and El Salvador.<sup>38</sup> In North America, 40 to 60 per cent of adolescents have initiated sexual activity by age 16.

**Figure 13.3**  
**Percentage of adolescents (aged 15-19 years) engaging in sexual activity before age 15, 1998-2001**



Source: UNICEF/MICS, Measure Demographic and Health Surveys, 1998-2001.

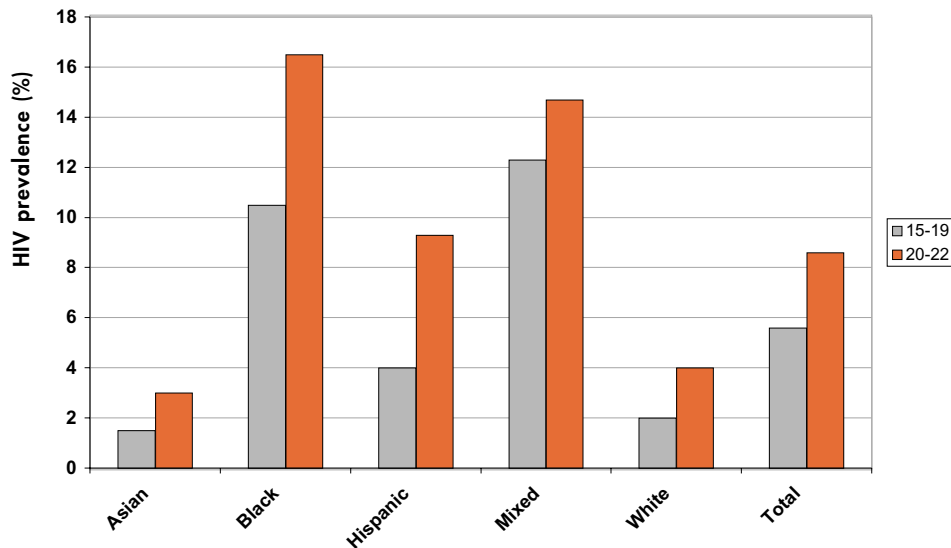
A number of young girls in various countries are sexually active because of early marriage. In Niger, 76 per cent of girls are married by the age of 18; in India and Nepal the proportions are 50 and 60 per cent respectively.<sup>39</sup> Overall, however, more sexual activity and a higher incidence of multiple relationships are reported among young men than among young women.<sup>40</sup> A study in Bangladesh found that 88 per cent of unmarried boys, compared with 35 per cent of unmarried girls, were engaging in sexual activity.<sup>41</sup>

The number of young men who engage in sexual activity with other men, young or old, is not yet known, but the risks are clear. In the industrialized world an estimated 70 per cent of HIV transmission occurs through MSM; worldwide, the range is 5-10 per cent.<sup>42</sup>

Data from the United States suggest that young men in same-sex relationships are at substantial risk. According to the Centers for Disease Control and Prevention (CDC), 50 per cent of all AIDS cases reported in the country among young males aged 13-24 years in 1999 involved MSM.<sup>43</sup> Although national rates of HIV infection appear to have declined among adult males in this category, infection rates for young MSM are rising, especially among minorities (see figure 13.4).<sup>44</sup>

**Figure 13.4**

**HIV Prevalence among men who have sex with men (aged 15-22 years) by race/ethnicity and age group in selected United States cities, 1994-1998**



Source: United States, Centers for Disease Control and Prevention, Department of Health and Human Services, "HIV incidence among young men who have sex with men—seven U.S. cities, 1994-2000", *Morbidity and Mortality Weekly*, vol. 50, No. 21 (1 June 2001), pp. 440-444.

Knowing how much sexual activity among young people is unprotected can provide a better understanding of the risks they face. Towards this end, adolescent pregnancy and STI rates may be examined, as such statistics provide an indication of the extent of unprotected sex among youth. Demographic Health Surveys conducted in sub-Saharan Africa between 1990 and 1996 showed that nearly 70 per cent of women in Burkina Faso, Guinea and Uganda were pregnant by age 19, and over half of the women in Benin, Cameroon, Namibia, Tanzania and Zambia became pregnant as adolescents.

The under-25 population accounts for approximately one-third of the 333 million new STI cases per year. Increases are being reported in several countries, and in many, young people have the highest STI rates of any age group.<sup>45</sup> For example, STI cases reported in China rose from 430,000 in 1997 to 860,000 in 2000, suggesting that unprotected sex with non-monogamous partners is growing.<sup>46</sup> If these infections are left untreated—as tends to happen with many young people owing to the lack of access to or information about youth-friendly health services—the risk of acquiring HIV during intercourse increases by as much as tenfold.

Unprotected sexual activity among young people is also very risky because members of this group often carry HIV for years without knowing they are infected.

An added risk relates to the fact that HIV-positive youth, having recently acquired the virus, are extremely infectious. HIV is most infectious when viral loads in the blood are high, resulting in HIV shedding in many body fluids. Normally, there are two such periods. The first period, or primary stage, occurs immediately after HIV infection and lasts a few months. The second period is at the end, when HIV infection progresses to AIDS.<sup>47 48</sup>

## Why young people engage in unprotected sex

### Lack of information

Studies from around the globe have established that the vast majority of young people remain uninformed about HIV/AIDS. For more than 15 years the need to communicate prevention messages related to HIV/AIDS has been internationally recognized; however, young people today still have only limited opportunities to learn about the disease.

Some adults believe that sex education encourages sexual experimentation. Consequently, programmes and campaigns have been, and continue to be, limited in terms of what they can discuss.<sup>49</sup> Reviews of programme evaluations indicate that HIV/AIDS education does not hasten the start of sexual activity, nor does it increase the frequency of sex or the number of sex partners. In fact, some programmes that have included discussion of contraception have delayed the debut of sexual activity and increased the likelihood of condom use.<sup>50</sup>

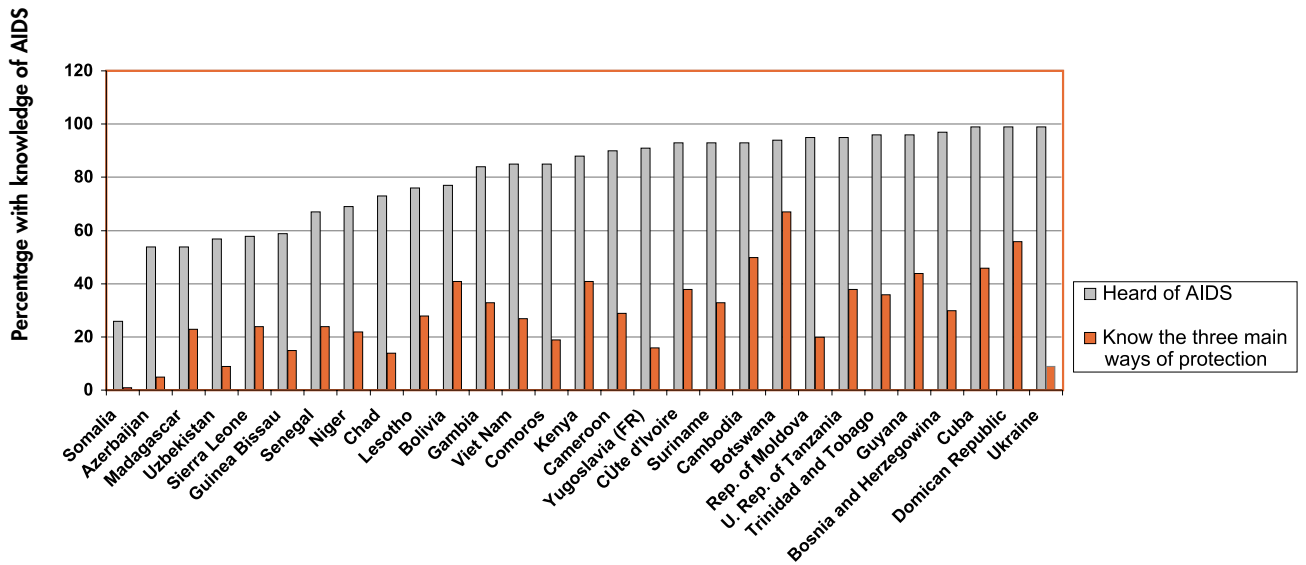
While the importance of informing young people about HIV/AIDS is widely recognized, 44 of 107 countries recently evaluated did not include AIDS education in their school curricula.<sup>51</sup> In interviews with 277 secondary school principals in South Africa, 60 per cent acknowledged that their students were at moderate or high risk of acquiring HIV/AIDS, but only 18 per cent of the schools offered a full sex-education curriculum.<sup>52</sup>

Studies researching young people's understanding of AIDS-related issues found that while both sexes were vastly uninformed, the level of unawareness was particularly high for girls aged 15-19 years (see figure 13.5). In countries with generalized epidemics, such as Cameroon, Equatorial Guinea and Sierra Leone, more than 80 per cent of young women aged 15-24 years did not have sufficient knowledge about HIV. Half of the girls in this age group in Tanzania and more than a quarter in Nicaragua (27 per cent) did not know how to protect themselves from the virus.

Although a large percentage of young people have some knowledge about AIDS, their understanding often lacks depth. For example, when students in Papua New Guinea were asked how to protect against HIV, 27 per cent said it was enough to get to know a partner first or to make sure their partner had not had sex in the previous six months.<sup>53</sup> In Ukraine, 99 per cent of young women had heard of AIDS, but only 9 per cent could correctly identify the three primary ways of avoiding sexual transmission.<sup>54</sup>

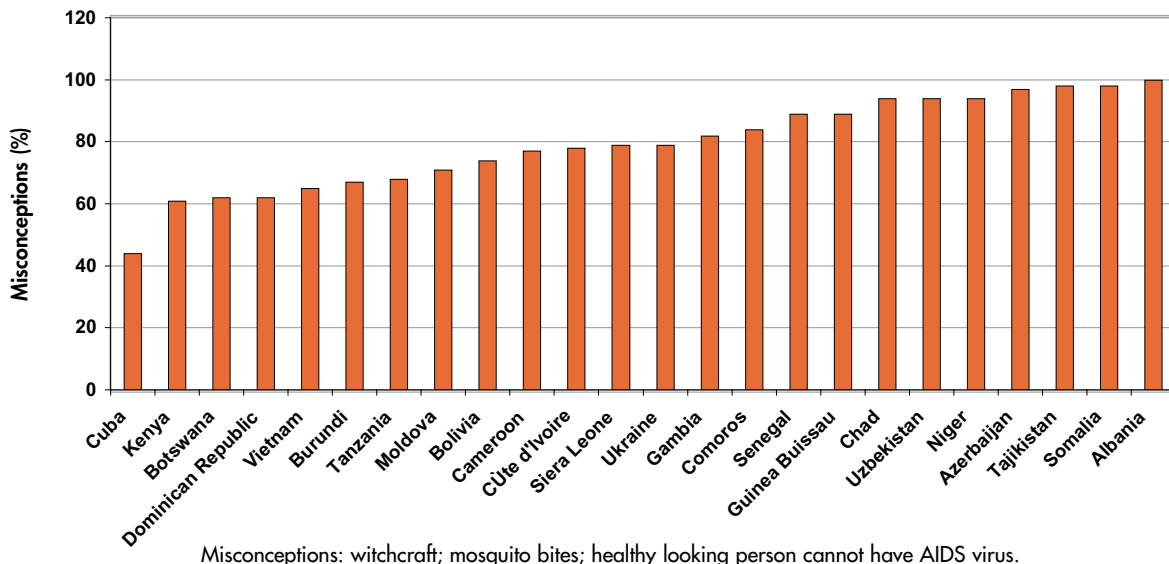
Misconceptions are widespread among young people and persist alongside accurate knowledge, potentially undermining the protective value of that knowledge where it does exist. Surveys from 40 countries indicate that over 50 per cent of young people harbour serious misconceptions about HIV transmission; figure 13.6 illustrates the extent of this problem among young women living in different parts of the world.<sup>55</sup> In Lesotho and South Africa, for example, 50 to 75 per cent of females aged 15-19 years do not know that a person with HIV may look healthy.<sup>56</sup>

**Figure 13.5**  
**Percentage of girls aged 15-19 years who have heard of AIDS and percentage who know the three primary ways of avoiding infection, 1999-2001**



Source: UNICEF/MICS, Measure Demographic Health Surveys, 1999-2001.

**Figure 13.6**  
**Proportion of girls with at least one misconception about HIV/AIDS**



Misconceptions: witchcraft; mosquito bites; healthy looking person cannot have AIDS virus.

Source: UNICEF/MICS, Measure Demographic Health Surveys, 1999-2001.

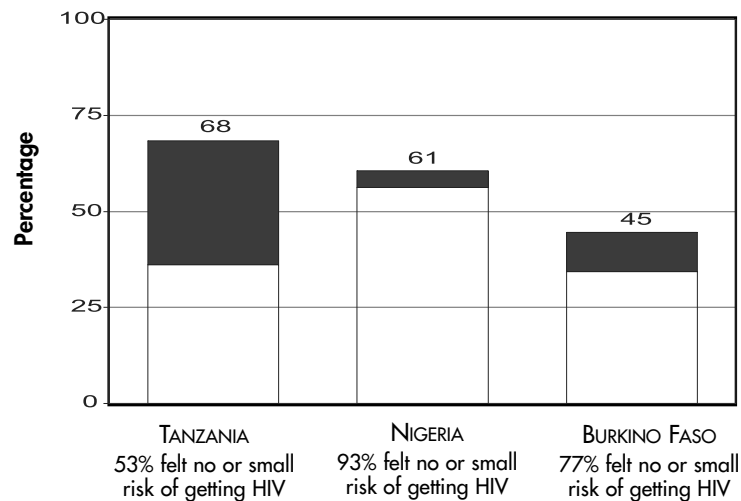
Correct knowledge does not always translate into appropriate behaviour. A study in Kenya including a survey of boys aged 15-19 years revealed that among those who mentioned abstinence as a protective measure against HIV, 40 per cent were themselves sexually active. Adolescents' difficulty in understanding and integrating information that is not immediately relevant to them may partially explain such findings.<sup>57</sup>

## Inability to calculate risk

Despite the devastation caused by AIDS, young people may not change their risky behaviour because the consequences of their actions are not immediately apparent owing to the long incubation period between infection and disease onset.

The inability of adolescents to fully comprehend the extent of their exposure to risk and the potentially dangerous results makes them vulnerable. Lacking the judgement that comes from experience, adolescents often cannot appreciate the adverse consequences of their behaviour. Younger adolescents in particular may lack the ability to use abstract thought to predict how their actions may relate to the future or to understand the consequences of certain acts. A survey conducted in 1999 indicated that a significant proportion of sexually active young men in Burkina Faso, Nigeria and Tanzania did not feel at risk of contracting HIV (see figure 13.7).

**Figure 13.7**  
**Percentage of young, unmarried, sexually active men aged 15-24 years who did not use a condom at last sexual intercourse, selected countries, 1999**



Source: UNICEF/MICS, Measure Demographic Health Surveys, 1999.

Even when youth know the risks, however, many believe themselves invulnerable. In Zimbabwe, over 50 per cent of young women interviewed said they were not at risk for HIV/AIDS.<sup>58</sup> In Nigeria, 95 per cent of girls aged 15-19 years perceived their risk of HIV infection to be minimal.<sup>59</sup>

Emotional factors, particularly for young people, can strongly influence risk calculation. An eight-country study in sub-Saharan Africa found that both men and women avoided using condoms with their marital or regular partners because of "trust".<sup>60</sup>

Faulty risk assessment can also occur at a more intellectual level; in addition to not feeling at risk, young people often do not think they are at risk because they are not properly educated. For example, one study reported that youth felt more comfortable having sex with partners who did not suggest condom use because they thought them less likely to have a sexually transmitted infection, including HIV.<sup>61</sup>

Sometimes, when young people are educated about AIDS, they are rightly taught that the three best ways of avoiding infection are abstinence, monogamy and condom use. However, this education is frequently superficial, and many youth are left without a full understanding of concepts such as abstinence and monogamy. Various surveys have indicated that young people believe abstinence refers only to vaginal intercourse. Other studies have shown that for many young people, practicing monogamy (having one partner at the same time), which is correctly seen as preventing HIV/AIDS, does not necessarily lead to preventing them from having frequent changes of sexual partners. For example, in the 1998 Demographic Health Survey from Kenya, 30 per cent of young men and 37 per cent of young women said that they were “sticking to one partner”; however, a third of those young men also reported having had sexual relations with two or more women in the past year.

Internalizing risk may be difficult for young people, who, as mentioned previously, tend to feel invulnerable. In Tanzania only 26 per cent of the male students interviewed felt they were at high risk for HIV/AIDS, though 48 per cent felt that their friends were at high risk.<sup>62</sup> Adolescents who deny their personal risk of contracting HIV/AIDS often ignore AIDS prevention messages, dismissing their relevance,<sup>63</sup> and their failure to take precautions places them at a higher risk of infection.<sup>64</sup>

## Willingness to take calculated risks

Even when the risk of infection is understood, some young people ignore it. Young women may intentionally engage in risky sexual behaviour, especially in cultures where marriage is highly valued and a woman’s status is linked to finding a husband and having children.<sup>65</sup> Many young people purposely downplay or overlook the risks because they are afraid to ask about a partner’s sexual history or that a condom be used, for fear it might endanger the relationship.<sup>66</sup> Others engage in risky sex for money, which may seem, or indeed be, a more urgent priority.

At times, adolescents cannot calculate the risks of their behaviour because they are under the influence of mind-altering drugs and/or alcohol. The lack of inhibition associated with high alcohol consumption and some drug use may result in unprotected sex. Furthermore, intoxication can complicate condom use and the ability to negotiate safer sex with another person. Promiscuity, rape and coerced sex are also associated with drug and alcohol use.

## Intoxication

## Other factors influencing decision-making among youth

Most young people are keenly sensitive to peer opinion:

*“Especially among older adolescents, perceptions of what peers think often has a greater influence on sexual and other risk-taking behaviour than the opinions of parents and other adults.”<sup>67</sup>*

Several studies have shown that the sexual behaviour of friends influences young people’s own sexual behaviour. When adolescents believe that their peers think unprotected sex is not risky, they are more likely to have unprotected sex as well.<sup>68</sup> In Kenya, for example, adolescent men whose friends were sexually active were seven times more likely to be sexually active themselves.<sup>69</sup>

Another developmental aspect that may affect the use of condoms among youth involves the influence of parental values and expectations. When young people know that their parents or other adults in the community disapprove of adolescent sexual activity, they may be less likely to obtain contraception beforehand since that would be an admission of their intention to do something perceived as wrong.

## Limited condom availability

Condoms are the only technology available for protection from sexually transmitted HIV and are vital to controlling the spread of the disease. This is true for both young people and adults. Despite the growing need, and the increasing education of young people regarding their necessity, worldwide donor support for condom purchases declined from about \$68 million in 1996 to \$38 million in 1999.<sup>70</sup>

Where condoms are generally available, limited distribution systems have made access problematic. The few government outlets available tend to be widely dispersed, and private sector sources are frequently limited to urban areas, resulting in uneven availability throughout countries.

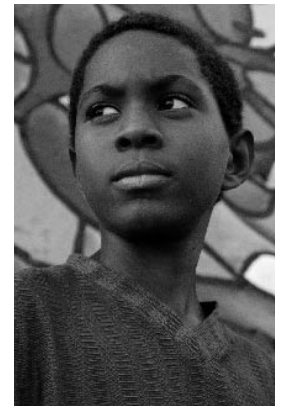
To date, there has been no donor-government-private sector coordination or streamlining of condom supply and distribution systems, often resulting in a system breakdown and wasted resources.

On an individual basis, many young people face difficulties obtaining condoms because of the cost and limited accessibility for young adolescents. Condoms have not been made sufficiently available in places young people frequent, such as schools.

## Why infection rates among girls are increasing

At the global level more men than women are infected with HIV (20.6 million men, compared with 16.5 million women). However, a demographic shift is taking place. Young women today are becoming infected at a much faster rate than young men, and younger adolescents are being exposed to the virus with increasing frequency.<sup>71</sup> In 2001, an estimated 7.3 million young women and 4.5 million young men were believed to be living with HIV/AIDS.

Women are, on average, 10 years younger than men when they contract HIV; consequently, many will die of AIDS at an earlier age than will men in the same circumstances. This shift will dramatically change the face of AIDS in years to come. The United States Census Bureau projects that there will be more men than women of reproductive age by 2020.



In most African countries, infection rates among young women are at least twice as high as those for young men.<sup>72</sup> In Ethiopia, Malawi, Tanzania and Zimbabwe, there are five to six girls aged 15-19 years infected for every one boy infected in the same age group. In some parts of Kenya and Zambia, teenage women have HIV prevalence rates of around 25 per cent, compared with 4 per cent among teenage men.<sup>73</sup> Epidemiological studies have shown that in major urban areas of eastern and southern Africa, 17 to 22 per cent of girls aged 15-19 years are already infected with HIV, compared with 3 to 7 per cent of boys of similar age. This derives largely from frequent age-mixing—older men having sex with younger girls, with or without the latter's consent. A broad range of issues highlighting the gender-differentiated impact of HIV/AIDS are addressed below.

## Biological susceptibility

Females are biologically more susceptible to infection by HIV than are males. It is now well documented that the risk of becoming infected with HIV during unprotected sex is two to four times greater for a woman than for a man.<sup>74</sup> Male-to-female transmission is more likely during vaginal intercourse because a woman's genital tract has a larger surface area exposed to her partner's sexual secretions than does that of a man. HIV concentration is also generally higher in a man's semen than in a woman's sexual secretions.<sup>75</sup>

Adolescent women are at greater risk than adult women, because the vagina and cervix of young women are less mature and less resistant to HIV and other STIs such as chlamydia and gonorrhoea. Changes in the reproductive tract during puberty make the tissue more susceptible to penetration by HIV. In addition, hormonal changes associated with the menstrual cycle are often accompanied by a thinning of the mucus plug, the protective sealant covering the cervix. Such thinning can allow HIV to pass more easily. Young women produce only scant vaginal secretions, increasing the likelihood of HIV transmission.<sup>76</sup>

STIs are more likely to be asymptomatic in women than in men. Between 50 and 80 per cent of women with gonorrhoea or syphilis experience no symptoms and are therefore unlikely to seek treatment, increasing their risk of HIV infection if exposed. Early acquisition of a sexually transmitted infection increases the probability of recurrent infection because of the longer exposure to sexual opportunities and the likelihood of a greater number of partners over a lifetime. Recurrence can exacerbate the health consequences of STIs. For example, repeat chlamydial infection is more likely than primary infection to be associated with fallopian tube damage. Pelvic inflammatory disease (PID), typically resulting from lower genital tract infections such as chlamydia or gonorrhoea, is more common among sexually active female adolescents than among older women.

Damage to the female genital tract can also increase the risk of HIV infection, and this can be linked to other reproductive tract infections (RTIs). Factors contributing to the most common types of vaginal infections, vaginitis and cervicitis, include unfavourable hygienic conditions frequently associated with poor living conditions, genital mutilation, and trauma related to the insertion of foreign objects for contraception or abortion.<sup>77</sup>



For both young men and young women, STIs greatly increase the risk of HIV infection. People who have other STIs are two to eight times more likely to contract HIV/AIDS during sex with an infected person.<sup>78</sup> The presence of another STI makes an HIV-positive person more infectious and also makes an HIV-negative person more susceptible to infection. Some STIs increase the replication of HIV.<sup>79</sup> Those that cause lesions and ulcers provide openings through which HIV can pass from person to person.<sup>80</sup> The presence of STIs also increases the presence of CD4 lymphocyte cells in the genital tract. These lymphocytes carry HIV in seropositive persons.<sup>81</sup> STIs can increase the amount of HIV shed into genital secretions by more than 100 times,<sup>82</sup> raising the probability that the secretions will contain enough HIV to cause infection.<sup>83</sup> Thus, while there is normally a greater risk of HIV transmission from men to women, in the presence of an STI in either partner HIV transmission is equally likely in both directions.<sup>84</sup>

Another factor that may heighten young women's susceptibility to infection is currently being researched. Some studies have recently suggested that, for reasons still unknown, women require lower viral load levels to become ill than do men.<sup>85</sup>

## Women's lack of financial security

In many countries, young women lacking income-earning opportunities seek support from men, at times trading sex for economic security. In countries where economic conditions make it difficult for girls and young women to cover school fees and other living expenses, some may acquire a "sugar daddy", an older man who offers compensation in cash or in kind in exchange for sexual favours.<sup>86</sup> Recent studies from South Africa reveal that many young women have sexual relationships in exchange for favours, gifts and cash.<sup>87</sup>

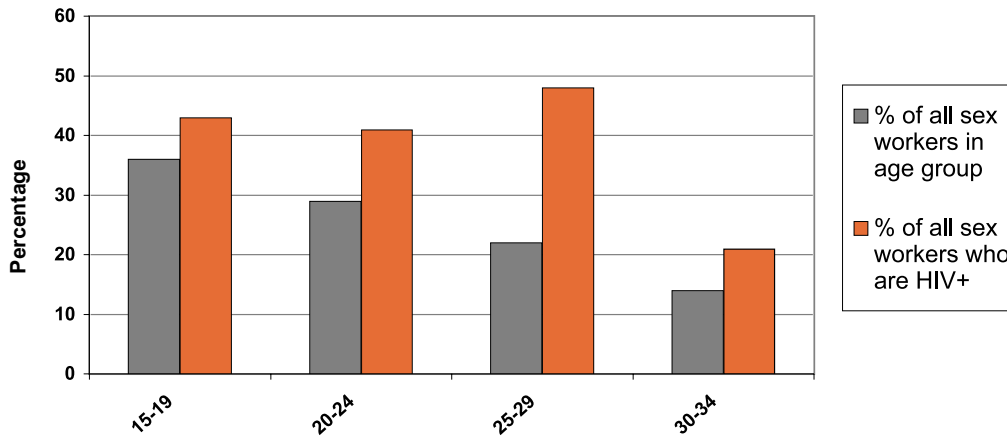
Engaging in transactional sex—the occasional exchange of sex for money or goods—may be instigated by periods of financial hardship or temporary displacement in, for example, refugee or IDP camps.

## Survival

Poverty and the scarcity of employment opportunities are the principal reasons why young people enter into sex work.<sup>88</sup> Of the estimated 2 million sex workers in India, 20 per cent are under the age of 15 and nearly 50 per cent are not yet 18. Some girls become sex workers to pay for school or to support their families. In certain Asian countries, young women join the sex trade with their parents' approval in order to make money to send home.<sup>89</sup> The unfortunate reality is that young women often become sex workers because they make more money from prostitution than they would in other occupations.<sup>90</sup>

Sex work carries a tremendous risk of infection. In Abidjan, Côte d'Ivoire, as many as 70 per cent of adolescent sex workers are HIV-positive. A study in Jakarta, Indonesia, found that one in seven street children, many of them sex workers, had a history of STIs.<sup>91</sup> In Cambodia, over 25 per cent of the sex workers aged 15-19 years are infected with HIV.<sup>92</sup> Figure 13.8 illustrates the situation in Myanmar in the year 2000.

**Figure 13.8**  
**High HIV prevalence among young sex workers in Myanmar, 2000**



Source: Myanmar, Department of Health, AIDS Prevention and Control Project, Sentinel surveillance data for March-April 2000.

Note: Most are female sex workers in the age group 15-24.

Tragically, many girls and women are forced into sexual relations with older men through marriage, as a result of abuse, rape or incest, or because they are sold or abducted into the sex trade. Economic hardship and civil unrest have pushed more and more young people away from home and into towns and cities to look for work. Female migrant workers, many of them unmarried girls seeking domestic or seasonal work, are often sexually exploited.<sup>95</sup>

## Forced and early marriage

In certain cultures, the premium placed on having children often leads to childhood marriage and early childbearing. Girls as young as ten are wed to older men to cement friendships and economic ties between families. When girls are married to older men, they may be vulnerable to HIV infection because their husbands have generally already had a number of sexual partners. They may also remain vulnerable within their marriages, as many husbands continue to have other sexual encounters.<sup>94</sup> A study in Pune, India, found that 25 per cent of women visiting an antenatal clinic had a sexually transmitted infection and 14 per cent were HIV-positive; 93 per cent of these women were married, and 91 per cent had never had sex with anyone other than their husbands.<sup>95</sup>

In some societies a man must pay a sum of money to the family of the woman he marries. Once the marriage is sealed with the bride price, the woman is considered “paid for” and often cannot leave her husband even if his behaviour places her at risk of HIV infection.<sup>96</sup> Other cultural and legal norms, including the lack of divorce laws, also consign women to similarly desperate situations.

Polygamy, the practice of having multiple spouses,<sup>97</sup> occurs in various countries. A husband may have sexual contact with a number of women in the process of seeking a new wife, potentially bringing HIV home.<sup>98</sup> In many regions, men look for wives by dating several women, frequently engaging in premarital sex with some or all of them.

Wife inheritance, a tradition in which a woman is given to her brother-in-law upon her husband's death, is practised in some cultures. Either partner may be at risk of HIV infection if the other is infected. Younger widows are particularly at risk because they are more likely to be sought.<sup>99</sup>

## Rape and sexual abuse

Far too often, adolescent girls endure sexual coercion and abuse. Societal attitudes towards women and girls contribute to a higher incidence of violence against them. In addition to the pain and trauma caused by violence, forced sex can injure the genital tract, increasing the odds of acquiring HIV and other STIs. Reports of partner violence are 10 times higher among young HIV-positive women in Tanzania than among HIV-negative women.<sup>100</sup>

The extent of sexual coercion is alarming. In Cameroon 40 per cent of female adolescents reported that their first intercourse had been forced.<sup>101</sup> In Kenya 40 per cent of sexually active female secondary school students said that they had been forced or tricked into having sex.<sup>102</sup> In Peru, a study found 90 per cent of young mothers aged 12-16 years to be victims of rape, often by a family member.<sup>103</sup>

South Africa, one of the countries in which the epidemic is growing fastest, has reported a significant increase in the rape and sexual abuse of girls. Girls aged 17 and under constitute approximately 40 per cent of the reported victims of rape and attempted rape nationally.<sup>104</sup> Some researchers have attributed the increase in rape among young girls to a belief gaining credence in some communities that sexual intercourse with a virgin can "cleanse" a man of HIV or AIDS.<sup>105</sup> Others have suggested that child rape is being committed as a preventive measure to avoid contracting HIV from older women.

A Gauteng area study in South Africa indicated that eight in ten men believed women were responsible for causing sexual violence, and two in ten thought women enjoyed being raped. Nearly 50 per cent of male youth said they believed a girl who said "no" to sex meant "yes". Although the majority of men thought "jack-rolling" (gang rape) was "bad", many young men aged 15-19 years said it was "just a game", and 11 per cent said it was "cool".

The pressures and dangers for young girls in this society are numerous. At the same time that virgins are being targeted for sexual assault, the practice of confirming the virginity of girls has continued, predominantly in KwaZulu-Natal.<sup>106</sup> To avoid failing these tests, some young women adopt extremely risky sexual practices such as unprotected anal sex, which can increase the likelihood of acquiring HIV or other STIs.

Early sexual victimization of young women can leave them less skilled at protecting themselves, unsure of their worth and their personal boundaries, and more apt to accept victimization as a part of being female. These effects increase the chances of future victimization.<sup>107</sup> Studies have also related early sexual victimization with high-risk behaviours in adolescence and adulthood, including excessive drug and alcohol use, unprotected sex with multiple partners, prostitution, and unwanted pregnancy.<sup>108</sup>

The Tenth United Nations Congress on the Prevention of Crime and Treatment of Offenders, held in Vienna from 10 to 17 April 2000, stated that the trafficking of young women had skyrocketed in recent years because of the huge profit potential, weak laws, and inadequate prosecution of traffickers.<sup>109</sup> Parents desperate for survival sometimes sell their sons or daughters, and traffickers may also kidnap children, especially from orphanages, and then sell them to brothels. Young children are being “recruited” from rural villages in poor countries and sold as slaves in neighbouring nations. Street children in urban areas are being used by pimps, who force these children to become addicted to inhalants in order to control them. Reports of girls as young as 15 being transported across Eastern Europe through well-established criminal networks and sold at auctions have also been documented.<sup>110</sup>

## The environment of young people at risk

### Armed conflict

Political strife, war and conflict greatly exacerbate the magnitude of sexual violence, rape and forced sex, and often lead to reliance on sex for economic survival, interruptions in schooling, the destruction of secure family life, the disruption of basic services, violations of basic human rights, psychological trauma, and heightened fears regarding threats to life and safety. War offers a fertile breeding ground for HIV/AIDS owing to the mobilization of young men (already a high-risk group for STIs) and the displacement of refugees. The use of rape and sexual violence as an instrument of war and repression adds another serious dimension. Young people in conflict situations are especially vulnerable to HIV/AIDS owing to the higher risk of sexual abuse, forced military recruitment and prostitution.

At the beginning of the new millennium, 35 million people worldwide were considered refugees or internally displaced; 80 per cent were women and children.<sup>111</sup> Countries in conflict have documented increases in HIV infection rates. In Angola, 8.6 per cent of women visiting antenatal clinics in Luanda were infected with HIV in 2001, compared with 1.2 per cent in 1995. It is suspected that once surveillance can be conducted in war-torn areas, rises in infection will also be reported in other countries such as Burundi, the Democratic Republic of the Congo and Rwanda.

After war, soldiers usually return to their towns and villages. Military men, who are predominantly young and unmarried, are at above-average risk for STIs, including HIV/AIDS.<sup>112</sup> It is estimated that the prevalence of STIs is two to five times higher in the military than in the general population in peacetime and as much as 50 times higher during conflicts.<sup>113</sup> Military boys and men who have been infected with HIV may transmit the disease to their girlfriends, partners and wives.

As Louis Pasteur stated, “The microbe is nothing, the terrain everything.” HIV spreads fastest and farthest in conditions of poverty—conditions in which many young people live.<sup>114</sup> Worldwide, the AIDS epidemic is most severe in the poorest countries.<sup>115</sup> Poverty both creates the conditions for greater susceptibility to infectious diseases and substantially limits treatment options.

## Poverty

There is ample evidence indicating that poverty is the greatest threat to the health and well-being of any child. However, analysis of the myriad factors that influence HIV transmission among poor young people has been limited.

The environment in which any infection is transmitted in poor countries is very different from that of more developed countries. The development, spread and impact of HIV/AIDS, tuberculosis, pneumonia, and nearly all other infectious diseases is different in rich and poor nations.

It is well documented that pre-existing health conditions play a role in susceptibility to disease. Research now indicates that biological susceptibility resulting from poverty may play a determining role in the high rates of HIV transmission. Populations living in poverty are often characterized by malnutrition and parasite infection, factors that increase vulnerability to infection.

## Malnutrition

Between 1970 and 1997, sub-Saharan Africa was the only world region to experience a decrease in per capita food production, calorie supply and protein supply. In 10 countries, including Kenya, Malawi, Uganda, Zambia and Zimbabwe, the protein supply fell by more than 15 per cent. Eighteen of the nineteen famines worldwide from 1975 to 1998 were in Africa, and 30 per cent of the region's total population was considered malnourished. Refugees from internal and external conflicts crowded into unsanitary camps where food rations were deficient in necessary nutrients.

Protein-energy malnutrition (general calorie deficit) and specific micronutrient deficiencies such as vitamin-A deficiency weaken every part of the body's immune system, including the skin and mucous membranes. These are particularly important in protecting a young person from STIs, including HIV.

## Parasite infection

Almost all of sub-Saharan Africa is tropical, with a very high prevalence of parasite infection including malaria, schistosomiasis and various intestinal and skin ailments. Parasite infestation plays a dual role in suppressing immune response. It aggravates malnutrition by robbing the body of essential nutrients while increasing calorie demand. In addition, the presence of parasites chronically triggers the immune system, impairing its ability to fight infection from other pathogens.

## Access to services

Populations in poverty tend to have limited access to preventive and curative care. In Africa, Latin America and South Asia, even when health care is available to the poor, the clinics may have no antibiotics. This means bacterial STIs that act as co-factors for infection go untreated, as do other infectious diseases such as tuberculosis, the leading cause of death among people who are HIV-positive. Each of these diseases speeds up the progress of the other, and when treatment is not available, people with compromised immune systems can fall ill and die.

Youth-friendly health services that offer access to STI diagnosis and treatment, family planning services, antenatal and obstetric care, counselling, and condoms are not commonly found in poverty-stricken areas. These services are essential for ensuring health and reducing the vulnerability of youth to infection.

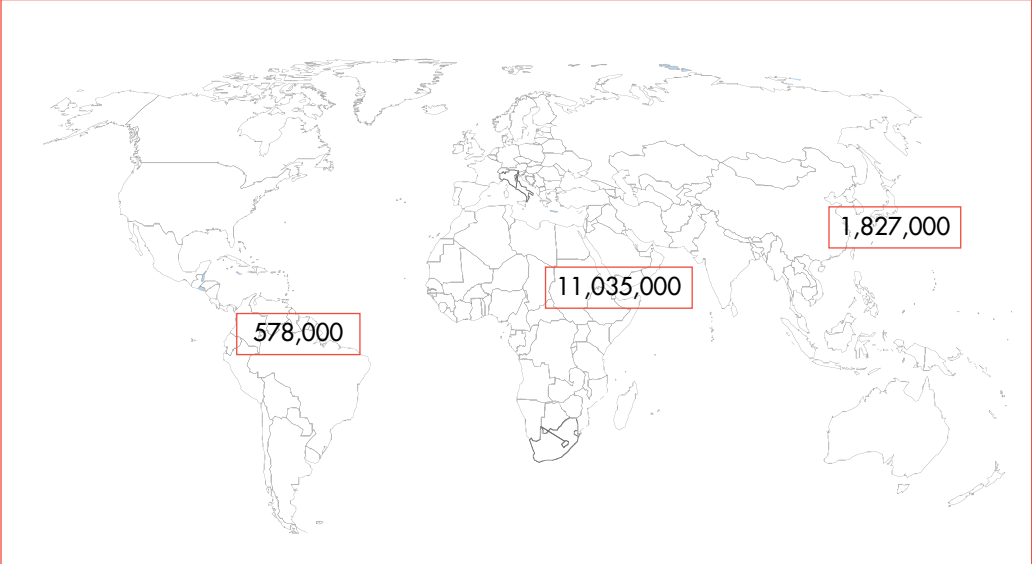
In sum, young people living in poverty have an increased risk of infection because they are more likely to be malnourished and in poor general health, to leave STIs and other infectious diseases untreated, and to have limited access to health and social services.

Acknowledging the synergistic relationship between malnutrition, parasite infestation and infectious disease does not deny that HIV is sexually transmitted. The fact is, however, that the sexual transmission of HIV has diverted attention from the broader epidemiological environment in which heterosexual epidemics have developed in sub-Saharan Africa and may further develop in other regions of the world. Plans and programmes have largely failed to address these problems and take action that could have helped increase young people’s resistance to infection from the virus. Serious consideration must be given to these fundamental health issues in future prevention planning efforts.

## THE IMPACT OF HIV/AIDS ON YOUNG PEOPLE Orphans

One of the most serious consequences of the AIDS epidemic has been the death of parents. A total of 13.4 million children have been orphaned by AIDS since the epidemic began (see figure 13.9),<sup>116</sup> and this number is projected to increase to 25 million by 2010.<sup>117</sup> Africa has the highest proportion of young orphans. In 2001, a third of the 34 million orphans in sub-Saharan Africa were the children of AIDS casualties. Almost 1 million children under the age of 15 have been orphaned by AIDS in Ethiopia and Nigeria. In South Africa, an estimated 660,000 children have lost their parents to the disease. Asia, with its large population, has the greatest number of orphans; in 2001, there were 65 million, with approximately 2 million orphaned as a result of AIDS. Even a relatively small increase in HIV prevalence in Asia could lead to a significant rise in the number of orphans from AIDS in that region.

**Figure 13.9**  
Estimates of children orphaned as a result of AIDS, by region, 2001



Source: UNICEF, UNAIDS and WHO, *Young People and HIV/AIDS: Opportunity in Crisis* (New York, UNICEF, June 2002), available at <http://www.unicef.org/aids/publications.htm>.

Illness and death brought about by AIDS can have a devastating impact on household income. In AIDS-affected households, the disease interferes with parents' ability to earn money, and what funds there are tend to be diverted to cover the cost of medical treatment. When parents die, the economic repercussions can be serious. In Zambia, monthly disposable income dropped by more than 80 per cent in two-thirds of families in which the father had died.

Diminishing family income has resulted in young people being withdrawn from school and/or forced to seek work to help support the household economy. A survey conducted a few years ago indicated that 15 per cent of rural families affected by AIDS in Thailand had taken a child out of school. In Benin, a mere 17 per cent of children whose parents had died attended school, compared with 50 per cent of those whose parents were both still living.<sup>118</sup> According to the World Bank, the number of primary school pupils will shrink by 24 per cent in Zimbabwe, 14 per cent in Kenya and 12 per cent in Uganda by 2010.

Young people may be separated from their families when their parents die. As orphans, some are sent to foster homes, orphanages or church-run facilities, while others take to the streets.<sup>119</sup> Many, however, are left as heads of households, with the difficult responsibility of supporting themselves and their siblings.<sup>120</sup>

Studies have found that orphaned youth tend to be in poorer health than youth living with their families. Their health situation has been attributed to poverty, inadequate access to needed health services, and repeated exposure to infections commonly associated with HIV such as tuberculosis, pneumonia, diarrhoeal diseases, and respiratory infections from having resided in AIDS-affected households.

The psychological impact of the long-term care of sick parents and relatives and the escalating number of AIDS deaths in the family and wider community are problems unique to young people affected by HIV/AIDS and remain difficult to assess. School performance studies, however, have provided some indication of the debilitating impact that grief and depression have on young people's ability to carry out their normal tasks.

## **Higher mortality rates and lower life expectancy**

AIDS has increased mortality rates and reduced life expectancy. The mortality rates for those under age five in seven countries of sub-Saharan Africa have risen by 20 to 40 per cent as a result of the disease. The number of AIDS-related deaths among South Africans aged 15-34 years is projected to peak between 2010 and 2015, with an estimated 17 times as many deaths as there would have been in the absence of AIDS.<sup>121</sup>

The onslaught of AIDS and its impact on people of reproductive age has resulted in an overall decline in life expectancy in eight countries in sub-Saharan Africa. Because of the high mortality from AIDS, populations in some of this region's countries will begin to shrink within the next three years. This will continue to affect the labour supply and national productivity.

## Diminishing productivity

The trend in most developing countries has been towards older people outnumbering younger people. However, by 2020 there will be 12 times as many children under age 15 as adults over age 64 in sub-Saharan Africa.<sup>122</sup>

The vast majority of people living with HIV/AIDS worldwide are in the prime of their economically productive lives. By 2005, Zimbabwe will have lost 19 per cent of its workforce to AIDS; Botswana, 17 per cent; South Africa, 11 per cent; Tanzania, 9 per cent; and Côte d'Ivoire, 8 per cent. As an increasing number of adults die of AIDS, younger adults will become responsible for managing government, including such key services as civil security, the justice system, education and health care. They will also be responsible for producing and manufacturing goods.<sup>123</sup> Some regions are already reporting diminished cultivation of food crops. Youth who lack experience as farmers are unlikely to know much about irrigation, soil enhancement or effective livestock management. This could result in a shift away from cash crops and towards subsistence farming, as young people would be able to grow only what they could manage by themselves.<sup>124</sup> These trends could jeopardize food security.<sup>125</sup>

## Teacher shortages

The supply of teachers is diminishing as teachers die or stop working because of illness or to care for family members. The impact of teacher shortages on the future of young people is likely to be felt in many ways, including lost opportunities for schooling and larger class sizes. In rural communities where schools depend heavily on only one or two teachers, the loss could be especially devastating.

In the Central African Republic 107 schools have already closed because of teacher shortages, largely owing to HIV/AIDS.<sup>126</sup> In 1999 alone, an estimated 860,000 children in sub-Saharan Africa lost their teachers to AIDS.

Currently, over 30 per cent of teachers in Malawi and Zambia are believed to be infected with HIV. Although the effect is difficult to quantify, the presence in the classroom of a teacher who gradually succumbs to AIDS is likely to have a debilitating psychological impact on students.<sup>127</sup>

## The loss of traditional skills

With the death of family and older community members, youth have fewer opportunities to learn skills and practices traditionally passed down from one generation to the next. Production methods and survival techniques in particular form a valuable part of a young person's education, and this loss is likely to adversely affect their ability to fend for themselves when they lose their parents or leave their homes.

## The lack of sufficient health services

AIDS is placing incredible pressure on the health sector in many countries. In areas where per capita health expenditure is low, health budgets are seriously strained as facilities try to provide STI treatment programmes, voluntary counselling and testing (VCT), mother-to-child-transmission (MTCT) services, and HIV treatment and care. The increase in hospitalizations related to HIV/AIDS has resulted in a shortage of beds for people with other illnesses as well as a decline in the quality of care in some



hospitals operating above capacity. Young people, who generally suffer less morbidity than other age groups, are likely to miss out on needed preventive services as the sector focuses its limited resources on curative and palliative interventions.

## The vicious cycle

Numerous factors—including the cost of medical care to treat infections, the reduction in wages owing to illness-related work absences, the loss in family income from the death of a parent, and funeral expenses—make the possibility of an AIDS-affected family becoming impoverished extremely likely. Poverty, as explained throughout the chapter, renders young people vulnerable to infection. Infection can, in turn, lead to poverty. This vicious cycle may persist for generations to come if action is not taken now to prevent infection among young people and mitigate the impact of AIDS on children and youth.

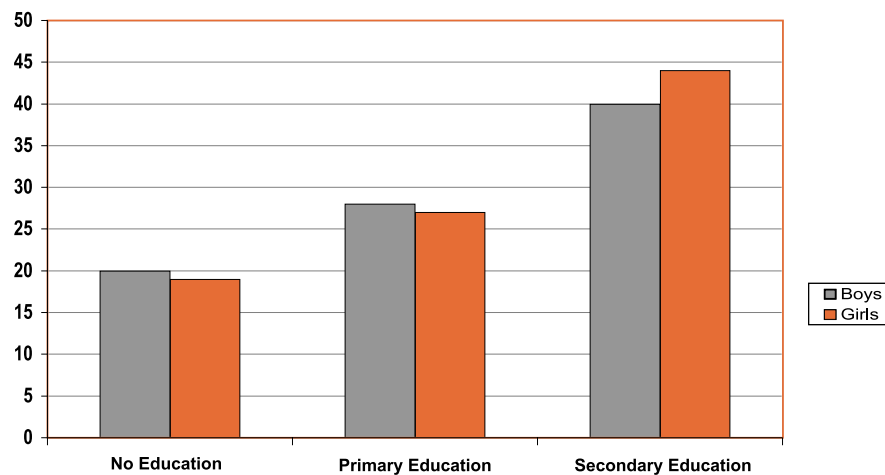
## MITIGATING THE IMPACT OF AIDS ON YOUTH

### Care and support for young people living with or affected by HIV/AIDS

Assessments of the needs of young people in AIDS-affected families indicate that education, general health and food security, along with social welfare, protection and emotional health, are the priority issues requiring immediate action to lessen the impact of HIV/AIDS on this very vulnerable population.

Education can play a key role in both preventing HIV infection and moderating the impact of AIDS (see figure 13.10). Efforts should be made to strengthen education systems that are collapsing as a result of HIV/AIDS. Teachers who have died need to be replaced with qualified personnel that are trained and well prepared to deal with the new reality. Recruitment can be accelerated by creating new incentives to enter teacher training, establishing policies for teacher retention, and facilitating more flexible approaches to part-time work and job-sharing among teachers.

**Figure 13.10**  
**Percentage of adolescent boys and girls (aged 15-19 years) reporting condom use during last sex, by educational level, Côte d'Ivoire, 1998**



Source: UNICEF/MCIS, Measure Demographic Health Survey, 1998.

Young people who need to drop out of school to help at home or because of diminished household income ought to be provided with other opportunities to study, as well as vouchers to help cover school fees and uniform costs. In addition, making informal education available for working youth would help many acquire numeracy and literacy skills and possibly reduce their reluctance to enrol in school once they are again able to do so.



For older children who have missed out on schooling and need to support themselves and possibly their families, vocational training and apprenticeships may offer a solution. Vocational education and job training can prepare young people for specific careers; such programmes are particularly effective when they incorporate strong labour market links and job placement components.

## Food security and nutrition

HIV/AIDS poses a major threat to food security and adequate nutrition, principally by diminishing the availability of food<sup>128</sup> and reducing access to food for households with less disposable income. Efforts to ensure food and nutritional sufficiency for children and young people are essential for their basic survival and may also help reduce their susceptibility to HIV infection. School-based meal programmes are one option. In communities seriously affected by AIDS, broader feeding programmes may be necessary.

Strengthening the immune system helps protect people from a number of infectious diseases and from some of the consequences of unsafe sex. Vitamin A plays a vital role in supporting the immune system and keeping mucous membranes functioning. Vitamin A supplementation sufficient to prevent blindness and other deficiency-related diseases for one person for an entire year costs less than one condom. Fortifying the food supply with iron to prevent anaemia and increase disease resistance and work capacity costs about 20 cents per person per year.

## Treatment for people with HIV/AIDS

AIDS-related care is a vital and powerful investment that directly benefits people living with HIV/AIDS, reduces the social and economic impact of the epidemic, and enhances prevention efforts. Treatment for those with HIV/AIDS is both compassionate and cost-effective. The cost of not treating AIDS includes the burden of opportunistic infections in, and the early death of, 25 to 35 per cent of the workforce in Africa over the next 10 years.

Only a fraction of those in need—roughly 730,000 people worldwide, including 500,000 living in high-income countries—were receiving antiretroviral treatment in mid-2002. Although the price of highly active antiretroviral therapy (HAART) for one patient dropped from \$10,000-\$12,000 per year in 2000 to \$500-\$800 in 2001, covering the cost of treatment remains a challenge in most low-income countries. Significant external financing is needed to provide antiretrovirals to all HIV-infected persons.

Treatment can also help keep parents alive, and this benefits children and young people directly, as they are allowed to remain at home and are not forced into adult roles prematurely.

## STEPS TO PREVENT HIV INFECTION AMONG YOUNG PEOPLE

Preventing young people from acquiring HIV and properly caring for those living with the virus are the only ways to manage and eventually halt the HIV/AIDS epidemic.

The key to a good prevention programme is understanding the dynamics of disease transmission. The approach adopted in each country should reflect the epidemiological patterns of infection there.

All countries, however, should ensure that adolescents have access to a full range of services fundamental to their healthy development and to reducing their risk of contracting HIV. Principally, they need schooling, youth-friendly health services and counselling, access to a distinct juvenile justice system, and opportunities for livelihood that are appropriate for evolving capacities, contribute to their development and offer adequate remuneration. Reducing HIV transmission among young people will also require prevention education, condom availability, and a broad assault on malnutrition and multiple infectious diseases.

Below are a number of recommendations focusing on the establishment of policies and programmes aimed at controlling the spread of HIV/AIDS.

### National policy recommendations to promote young people's rights and reduce their vulnerability to HIV/AIDS

#### **Recommendation**

*Implement national policies to protect children and young people from all forms of abuse, violence, exploitation, discrimination, trafficking and loss of inheritance.*

Adolescents need opportunities to develop their individual capacities in safe and enabling environments that promote their participation in and contribution to society. Action is required to strengthen national legislation focusing on protection issues in order to prohibit discrimination related to HIV serostatus, to protect property rights, to ensure access to information and services, and to reduce the abuse, exploitation and trafficking of young people. Governments should be required to enact and enforce laws that protect young people from all forms of sexual violence, and to impose severe criminal penalties on their abusers.

## Youth-friendly health services

### **Recommendation**

*Ensure the implementation of a standard package of youth-friendly health services both in and beyond the health system.*

Action should be taken to strengthen the capacity of public and private health and social support facilities to provide youth-friendly services and health promotion activities. Efforts should also be made to ensure that these services are accessible to young people who are especially vulnerable, including displaced adolescents and street youth. Forms of assistance that can have a direct impact on AIDS such as STI services, antenatal care and VCT are critical, as are meaningful drug rehabilitation programmes and facilities.

### **Recommendation**

*Treat sexually transmitted infections.<sup>129</sup>*

Because STIs greatly increase the risk of contracting HIV, treating youth with such infections must be a priority. The four most common STIs—syphilis, gonorrhoea, chlamydia and trichomoniasis—can all be cured fairly easily with antibiotics. Ensuring correct diagnosis and the availability of appropriate medications could reduce infection rates.<sup>130</sup>

### **Recommendation**

*Promote and establish voluntary counselling and testing services.*

Nine out of ten people infected with HIV do not know they are carrying the virus. Because young people are highly contagious, and because they are likely to have been recently infected and not very likely to be using condoms, implementing VCT services for this population is essential. Educating young people who test positive and convincing them to protect themselves and their partners has been shown to be an effective strategy for controlling the epidemic. Referring youth who test positive to treatment programmes can decrease their infectivity, as treatment can help lower their viral load. For those young people who test negative, as most will, VCT provides an opportunity to educate them on how to reduce their future risk of contracting the virus.

### **Recommendation**

*Support the supply and distribution of condoms.*

Male and female condoms are an essential component of any AIDS prevention campaign. Condoms are a simple and affordable lifesaving technology. They are easy to use, do not require medical supervision, can be distributed just about anywhere, and are highly cost-effective. Therefore, condoms should be widely accessible, and their use promoted among sexually active people of all ages.

Promoting condom use among young people has been shown to be a very effective prevention strategy. In Brazil, the percentage of young men who reported using condoms during their first sexual encounter rose from 5 per cent in 1986 to 50 per cent in 1999.<sup>131</sup> This coincides with a significant price reduction in condoms in the early 1990s.

Condoms should be made more accessible to young people—affordable or, if necessary, free of charge and available at a variety of locations where young men and women can obtain them. Diversifying points of distribution can maximize the reach of prevention programmes.

In addition to offering protection from HIV, condoms are effective in preventing STIs and can reduce current and future morbidity resulting from these infections, allow youth to avoid treatment costs, and lower their susceptibility to HIV infection.

### **Recommendation**

*Improve outreach to IDUs by implementing awareness and information programmes and by providing access to sterile needles and syringes as well as age-appropriate drug dependency treatment and rehabilitative services.*

It has been shown that a comprehensive response before prevalence reaches 5 per cent can curtail the spread of HIV via injecting drug use. If attention and resources are not directed at monitoring this form of transmission, the consequences can be serious. Evidence exists that HIV can explode to include over 40 per cent of the IDU population within 6-12 months.

### **Recommendation**

*Ensure blood safety.*

Young people are overrepresented in statistics on trauma and complications of pregnancy that may require the transfusion of blood or blood products. Ensuring the safety of blood and blood products is necessary for young people as well as the rest of the general population.

## **Education**

### **Recommendation**

*Provide basic education for all young people.*

The pursuit of an education in itself offers a measure of protection against HIV/AIDS, reducing the levels of risk and vulnerability to the disease by providing information and skills, increasing young people's connectedness and security, facilitating access to a trusted adult, and increasing literacy.

Some education planners are calling for new approaches such as distance learning for teachers and students, as well as enhanced on-the-job training and the expansion of teacher-training facilities, in order to improve the quality of instruction and the provision of education. They are also proposing efforts to help teachers learn how to avoid AIDS and to communicate appropriate prevention messages to their students.

Action to provide education to those young people outside the formal school system is urgently needed, as out-of-school youth are generally at higher risk of HIV infection. Introducing specific measures such as subsidies, scholarships, and the provision of educational alternatives, including vocational training, may help young people to complete their schooling.

## **Recommendation**

*Strengthen life skills education in both schools and out-of-school programmes.*

For AIDS prevention, life skills are as important as information about disease, as they enable young people to act on that information, to increase their autonomy in sexual encounters, and to exercise good judgement and responsible behaviour. Life skills are those skills that enhance psychosocial development. They include skills for effective decision-making and problem solving, creative and critical thinking, strengthening communication and interpersonal relations, raising self-awareness, and coping with emotions and causes of stress.

Studies have shown that skills-based education can have a significant and sustainable impact. A global assessment of school-based programmes found that education about sexuality and AIDS prevention incorporated into programmes administered with schools not only delayed the start of sexual activity, but also reduced the number of sexual partners and increased contraceptive use among those who became sexually active.

Because the risks young people are exposed to often cannot be predicted, HIV/AIDS education should begin early, that is, before they become sexually active. In addition, the ever-changing context of young people's lives today requires that they learn to think, not just receive information.

## **Information, education and communication**

### **Recommendation**

*Devise youth-oriented information, education and communication (IEC) campaigns with measurable objectives, focusing on key messages to which every young person should be exposed.*

Young people cannot protect themselves if they do not know the facts about HIV/AIDS. They need to learn these facts before they become sexually active or engage in drug use, and the information they receive needs to be regularly reinforced and augmented.

Programmes should promote the ABCs of prevention – abstinence, being faithful to one's partner (or limiting the number of partners), and consistent and correct condom use – and not just isolated or selected parts.

Communication programmes must inform youth about the risks of unsafe sex and drug use, making the reality of these risks very clear to them. Such programmes should promote a range of safer sex behaviours and options. It is extremely important for young people that promotion strategies reinforce the idea that condom use is responsible, not promiscuous, behaviour. Mass media can play a key role in this respect, and should be decisively engaged to achieve critical goals.

## Mobilization of young people, families and communities

### **Recommendation**

*Mobilize youth, families and communities in the campaign to fight HIV/AIDS.*

Young people are increasingly being recognized as a key resource for changing the course of the HIV epidemic. Studies have shown that they can be both responsive to HIV prevention programmes and effective promoters of action to control the spread of the disease.

There are special reasons why young people's involvement is essential for action on HIV/AIDS. Their understanding of life is developed both with and among their peers. Friends shape young people's understanding of social relationships and the acquisition of negotiation skills, and enable them to develop a sense of personal competence and responsibility. This kind of peer support is invaluable for AIDS action, as it can be used to channel correct information about HIV prevention. It can also draw young people into productive activities that contribute to increased competence and confidence.

Training and support of parents and adults responsible for working with and for young people may be required to enhance their ability to interact more effectively with youth.

## Measurement

### **Recommendation**

*Conduct situation analyses at the country level, reviewing the current status of young people's health and development, with a focus on HIV/AIDS.*

The availability of data is crucial. Surveillance programmes must be expanded to include the collection of data by age, sex and year. Such data are critical to achieving an accurate understanding of the extent of the epidemic among young people, identifying those most affected, and ascertaining patterns of transmission.

Monitoring the impact of HIV/AIDS will better allow organizations to take appropriate, targeted action. In addition to improving and expanding surveillance measures, it is critical that there be monitoring and evaluation of interventions in order to assist leaders and programmers in formulating decisions with regard to human and financial resource allocation. Such data will be especially meaningful as Governments prepare to bring programmes to scale at the national level.

### **Recommendation**

*Provide countries with technical support to establish and strengthen their HIV/AIDS/STI surveillance capacity.*

Capacity-building at the country level will be necessary for the collection and analysis of data at national and communal levels to measure HIV/AIDS and other adolescent health and development indicators.

## CONCLUSION

The likelihood that a young person will become infected with HIV is influenced by a host of factors relating to the individual and his or her environment. Today all young people are at risk for HIV, though that risk is not shared equally among them. It is evident that education, poverty, employment, geography, and social isolation both shape and limit young people's choices and vulnerabilities.

Interventions to prevent HIV among youth require a broad focus that encompasses, but is not limited to, behaviour change among young people. Social and economic development strategies for poverty reduction are necessary and should be geared towards reducing inequalities, increasing public expenditure on essential services for children and youth (including health and education), and developing employment opportunities. Though these are by no means new necessities, the AIDS pandemic has made realizing them all the more urgent.

This chapter has failed to find evidence to validate sexual behaviour as the single explanation for HIV prevalence as high as 25 per cent of the adult population in some African countries and less than 1 per cent in developed countries. An assault on the biological, socio-economic and sociocultural factors that make youth vulnerable is necessary, and programming for young people ought to reflect this reality more concretely.

For the time being, however, abstaining from sex, mutual monogamy between uninfected partners, and the correct and consistent use of condoms are the only options that can be presented to young people for avoiding the sexual transmission of HIV. In order to decrease their risk of HIV infection today, it is essential that youth receive education about HIV, obtain condoms and clean needles when needed, and have access to health and rehabilitative services.

For those designing prevention programmes for youth, it is also very important to remember that whatever the initial point of entry into a population, HIV eventually spreads through sexual transmission. Therefore, all young people need information on the risks of sexual transmission and means of protection, even if the region is not currently experiencing a sexually driven epidemic. Young people must be prepared to survive in the world's fast-changing contexts. ■

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