HIV Prevention Needs and Successes:
a tale of three countries

An update on HIV prevention success in Senegal, Thailand and Uganda

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KEY MATERIAL

A revised version of a speech delivered by Werasit Sittitrai, Associate Director, Department of Policy, Strategy and Research, UNAIDS, to a meeting of the Office of AIDS Research Advisory Council, National Institutes of Health, Bethesda, MD, USA, 28 April 1999

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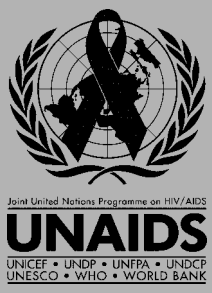

Geneva, Switzerland
April 2001

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Introduction

In recent years we have learned a number of things about HIV prevention around the world.

In industrialized countries where success has been achieved, HIV prevention efforts need to be sustained among the general public and strengthened among such groups as ethnic minorities.

HIV prevention is necessary even in the presence of advanced antiretroviral therapies. The cost of the drugs, the limited access to these therapies (and to drugs for opportunistic infections in general), and the development of drug resistance remain important issues, even in the wealthiest countries. In many areas, prevention programmes and information need to be strengthened as many people mistakenly view antiretroviral therapies as a cure and therefore continue to engage in risky behaviour.

Success is not limited to industrialized countries. In developing countries, prevention activities aimed at changing behaviour and associated social norms can and do work, not only on a large scale but also at national level. Examples of changes include increase in condom use, reduction in visits to sex workers, postponement of first sex and reduction in the sharing of injecting equipment among drug users.

To demonstrate this, data and experiences from three countries with differing cultures and different levels of the epidemic are reported here. Uganda was hard hit throughout the 1980s, and has had almost two million cumulative deaths to date. Senegal, on the other hand, has not been seriously affected by the epidemic. In Thailand, the epidemic became prominent only at the end of the 1980s but spread rapidly once it took hold. These are three different situations, but behavioural change and some containment of the epidemic were achieved in all three.

What are some essential features of effective programmes which are shared by the three countries? In each one, national AIDS programmes share a package of common features that UNAIDS regards as “best practice”, namely:

- strong political commitment at the highest level to dealing with the epidemic (this ensures policies and funding to address the epidemic);
- multisectoral approaches to prevention and care and, at government level, involvement by multiple ministries;
- multilevel responses (at national, provincial, district and community levels);
- effective monitoring of the epidemic and risk behaviours, and dissemination of the findings both to improve policies and programmes and to sustain awareness;
- a combination of efforts aimed at the general population and focused on groups at high risk, at the same time;
- implementation on a large scale;
- integrated prevention and care.

Uganda

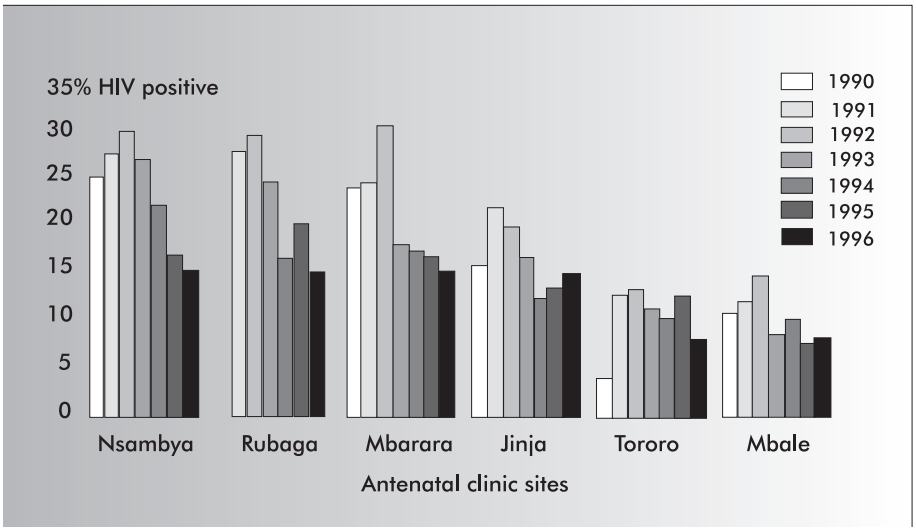
Uganda is one of the world's poorer countries and one of the most severely affected by the epidemic. Uganda has 21 million people, with less than 14% living in cities. The gross national product per capita is equivalent to about US$ 240. Total prevalence among adults is over 8%.

Fortunately, Uganda is also one of the African countries where the HIV epidemic was recognized relatively early and so prevention efforts were started on a national level.[1]

- In 1986, the President publicly acknowledged the country's HIV/AIDS problem and made a commitment to mobilizing efforts against it. A national budget for the AIDS programme was established early in the epidemic.
- The country adopted a multisectoral approach. The Uganda AIDS Commission was set up in the President's office, and HIV/AIDS control programmes were established in several government ministries, including the Ministry of Health.
- Persons at different levels of society were involved, such as political, community and religious leaders. The Islamic Medical Association of Uganda has supported community education on HIV/AIDS throughout the country, including the distribution of condoms.[2] Radio messages on HIV/AIDS were broadcast very widely.
- Condom social marketing services, backed by USAID, were implemented countrywide.
- HIV voluntary counselling and testing was made available extensively and outside the formal health-care service.

In Uganda the best option for tracking the epidemic was sentinel surveillance among pregnant women, with samples of blood taken routinely at antenatal clinics. Surveillance started in 1989 at six sites in major cities and has since covered the whole country. The results are shown in Fig.1.

Fig. 1: HIV prevalence among pregnant women. ***Selected sentinel sites, Uganda, 1990-1996***



[1] For more detailed information, see *A measure of success in Uganda: the value of monitoring both HIV prevalence and sexual behaviour*, Case Study UNAIDS/98.8, Geneva, May 1998.

[2] For further information, see *AIDS education through Imams: a spiritually motivated community effort in Uganda,* Case Study UNAIDS/98.33, Geneva, October 1998.

All these urban sentinel sites showed a significant decline in HIV infection during the first half of the 1990s. In some cases, the percentage of mothers testing HIV-positive almost halved.

This evidence is strengthened when the analysis is focused on the youngest women—those aged 15–19 years. This limits distortions caused by ageing and by infertility, and will actually be much closer to the incidence among the young.

Fig. 2: HIV prevalence by age group, Nsambya

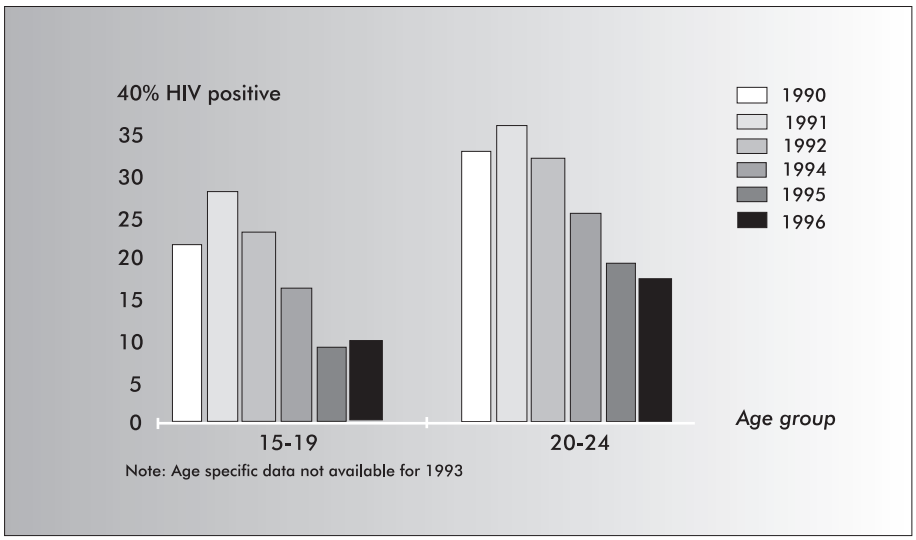
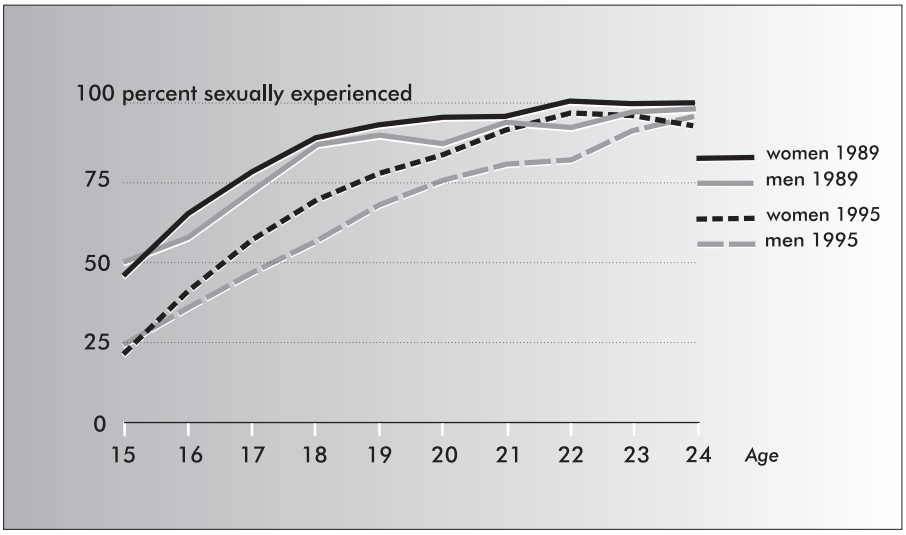


Fig. 2 focuses on Nsambya, a hospital in Kampala. Prevalence among pregnant women aged 15–19 dropped from 22% in 1990 to 10% in 1996, after reaching a peak of 28% in 1991. The steady drop for the youngest women suggests a real fall not just in HIV prevalence but also in incidence.

Uganda conducted two large population-based surveys in 1989 and 1995 that permit comparisons. Both surveys covered two urban areas—Kampala and Jinja—where HIV surveillance was carried out over this period.

Very encouraging data arose from questions about behavioural change among young people in 1995 when compared with their predecessors of the same age in 1989.

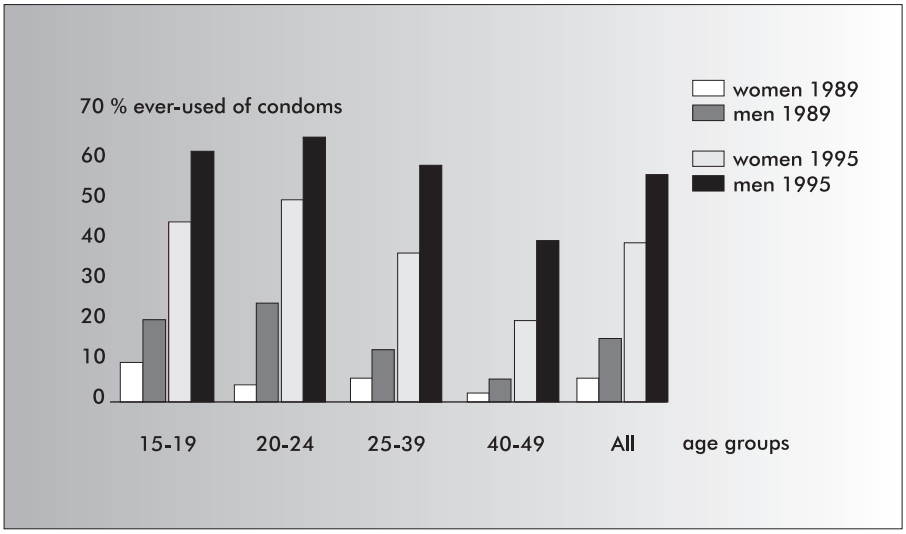
Fig. 3: Percentage sexually experienced by current age (15–24 years old) in 1989 and 1995



The first finding related to delayed age of first sexual experience, as shown in Fig. 3.

The clearest difference between 1989 and 1995 can be seen at the left of the figure. For the youngest, the 15-year-olds, the proportion of boys or girls reporting that they had never had sex rose from around 20% to around 50%. Overall, age of sexual initiation shifted upward.

Fig. 4: Percentage of sexually active men and women who have ever used a condom. *Urban Uganda, 1989 and 1995*



The second finding related to the increase in condom use (Fig. 4).

Between 1989 and 1995, the percentage of sexually active men and women who reported using condoms increased significantly. If the numbers are merged, the proportion of men who said that they had ever used a condom rose from 15% to 55%. Among women, the total rose from 6% to 39%.

This steep increase in condom use occurred in all age groups.

In addition to these two large surveys, there have been numerous quantitative and qualitative investigations into behavioural change in recent years, although on a smaller scale.

In rural areas, the number of new infections is still high even among the younger age groups. Obviously, a review of strategies and implementation for rural areas is needed. However, even with this troubling situation a great deal has clearly been accomplished.

Uganda's experience can be summed up as follows:

- First, sentinel surveillance indicates that the prevalence, and probably the incidence, of HIV infection has fallen among pregnant women in urban areas. Other studies show falling prevalence for other groups, although not as strongly as this one.
- Second, surveys of sexual behaviour suggest that increasing condom use and/or a delay in starting sexual activity play a key role in the decline of incidence.

Senegal

Much has been written about the need to intervene early to stop the spread of HIV before it gets a grip on a population. Obviously, however, if a country intervenes early and HIV infection rates stay low, it is difficult to say that the low rates were definitely the consequence of the intervention.

Nevertheless, Senegal's HIV prevention programme has been extensive and contains the elements of an effective programme. There is good evidence that Senegal has maintained one of the lowest rates of infection in sub-Saharan Africa by changing the behaviour of many of its citizens.[3]

Like Uganda, Senegal is not a rich country. It has 9 million people, with 44% living in towns. Per capita income is below US$ 600 a year. Total HIV prevalence among adults is estimated at about 1.8%.

Senegal has long emphasized prevention and primary health care. Reproductive health and child health are well-established priorities. In addition, registered sex workers are required to have regular health checks, and are treated for any curable sexually transmitted infections (STIs) that are found.

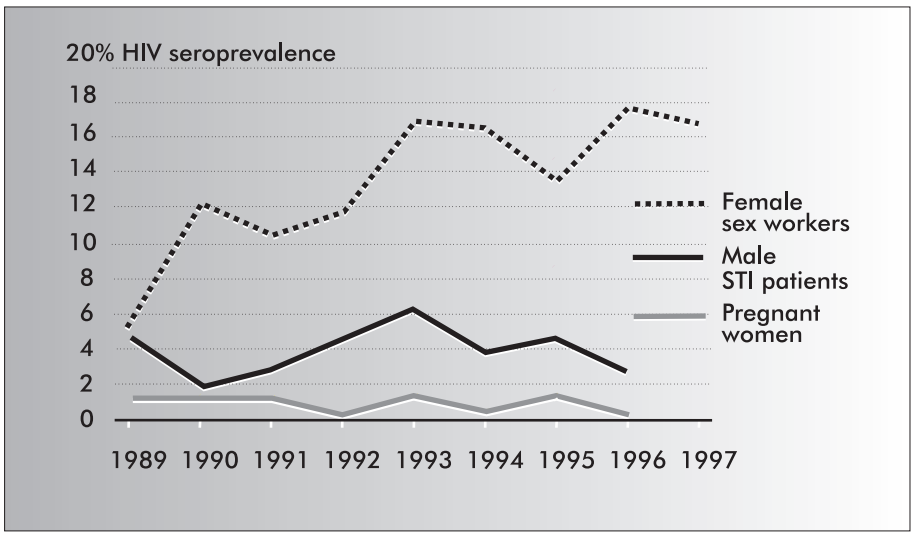
What was the response in Senegal?

- As in Uganda, politicians in Senegal were quick to move against the epidemic once the first cases appeared in the second half of the 1980s.
- Since 93% of Senegalese are Muslims, the government made efforts to involve religious leaders. HIV/AIDS became a regular topic in Friday sermons in mosques, and senior religious figures talked about it on television and radio.
- Many other levels of Senegalese society joined in. By 1995, 200 NGOs were active in the response, as were women's groups with about half a million members.
- HIV prevention was included when sex education was introduced in schools. Parallel efforts reached out to young people who are not in school.
- HIV voluntary and confidential counselling and testing were made available.
- Programmes were immediately put in place to support sex workers to persuade their clients to use condoms.
- STIs moved up the list of health priorities. Senegal was one of the first countries in Africa to establish a national STI control programme that integrated STI care into regular primary health services.

[3] For more detailed information, see *Acting early to prevent AIDS: the case of Senegal.* UNAIDS Key Material, June 1999.

Those were the actions. What happened in epidemiological terms?

Fig. 5: HIV seroprevalence trends in different populations in Dakar, Senegal, 1989–1997



Again, sentinel surveillance was the best option for monitoring the disease, but with more groups than in Uganda. In Fig. 5, the bottom line shows that HIV prevalence among pregnant women was just over 1.4% at the end of 1996, with no significant trend over time.

The next line represents male STI patients. Their HIV infection rates are higher, but remained under 6%.

Female sex workers are probably at highest risk. The top line shows their HIV prevalence levels rising significantly after 1989. Since 1993, however, especially in the capital Dakar, they have remained stable at around 17%.

Some changes in behaviours resemble the changes seen in Uganda.

Fig. 6: Median age at first sex for women in six African countries, 1997

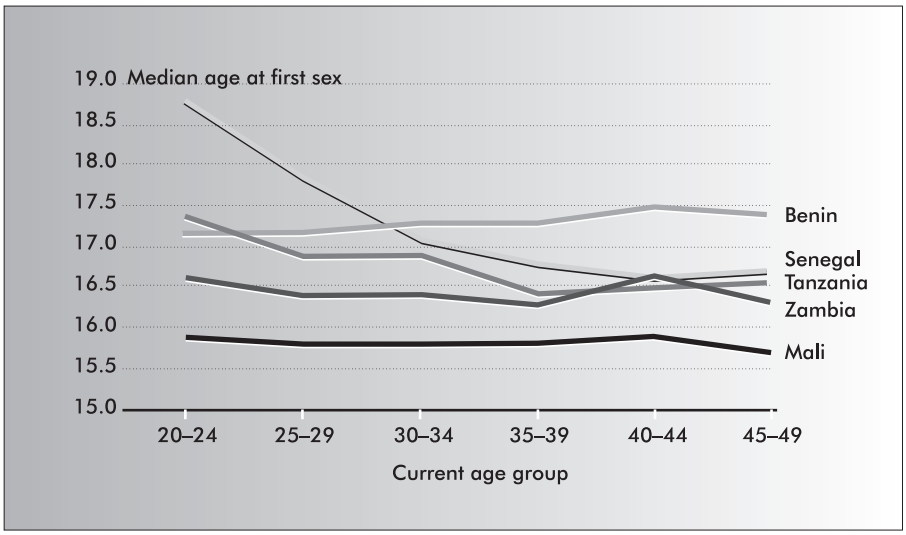
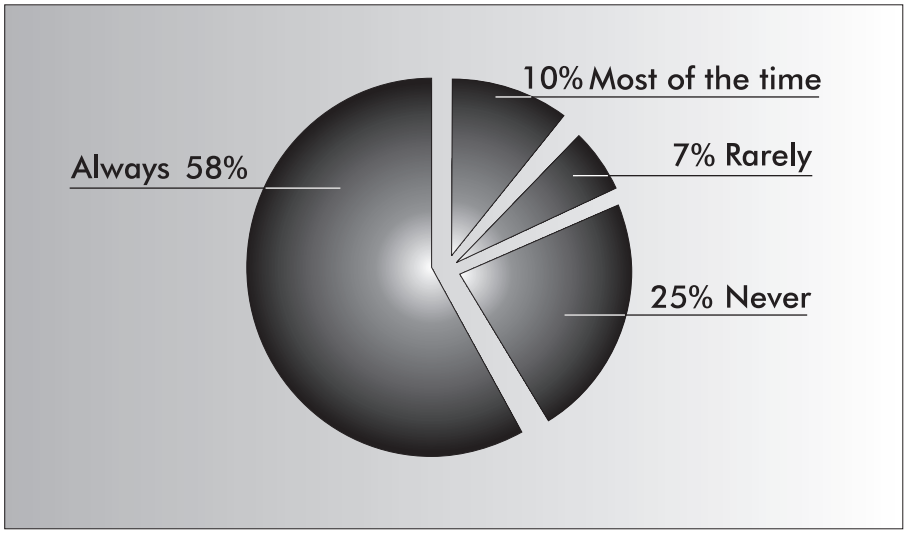


Fig. 6 tracks age at first sexual experience for women in five African countries. The line that falls most steeply is that representing women in Senegal. In 1997, most

Senegalese women in their early 20s did not have sex until they were almost 19 or older. For their mother's generation—the women who were between 40 and 49 in 1997—the median age was closer to 16.

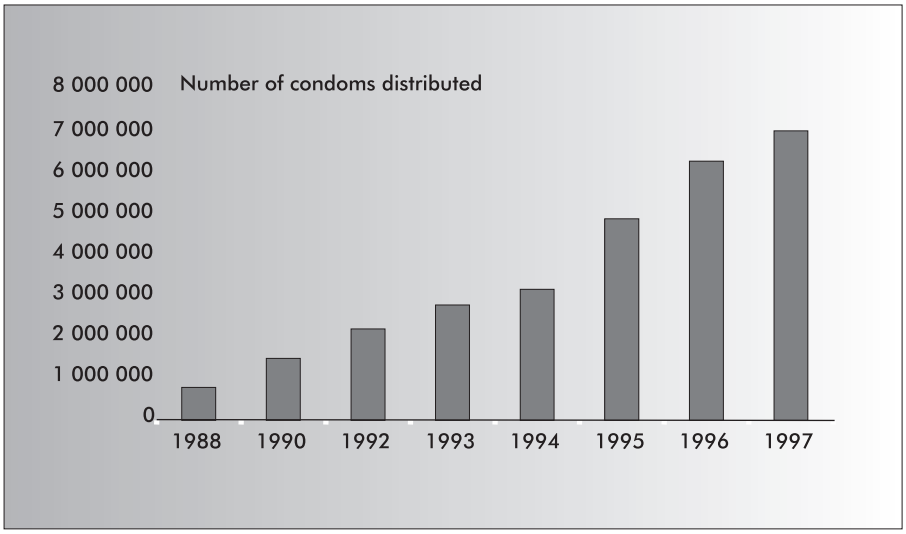
What about condom use? From virtually zero before the HIV/AIDS epidemic, consistent condom use with casual partners in Senegal rose to 68% among men having casual sex in 1997 (Fig. 7).

Fig. 7: Condom use with casual partners, reported by men, Dakar, 1997



The national HIV/AIDS programme has overcome the checks posed by some traditional religious teachings. The programme achieved a dramatic rise in condom sales and distribution.

Fig. 8: Condom distribution in Senegal by the National AIDS Programme, family planning services, and the condom social marketing programme, 1988–1997



Annual condom distribution rose from 800,000 in 1988 to 7 million in 1997 (Fig. 8). Most were distributed free but some were sold at a social marketing price.

It is unlikely that this rise would have happened without the education and condom promotion campaigns to which men were exposed.

Fig. 9: Rates of STIs among women in Dakar, Senegal, 1991-1996

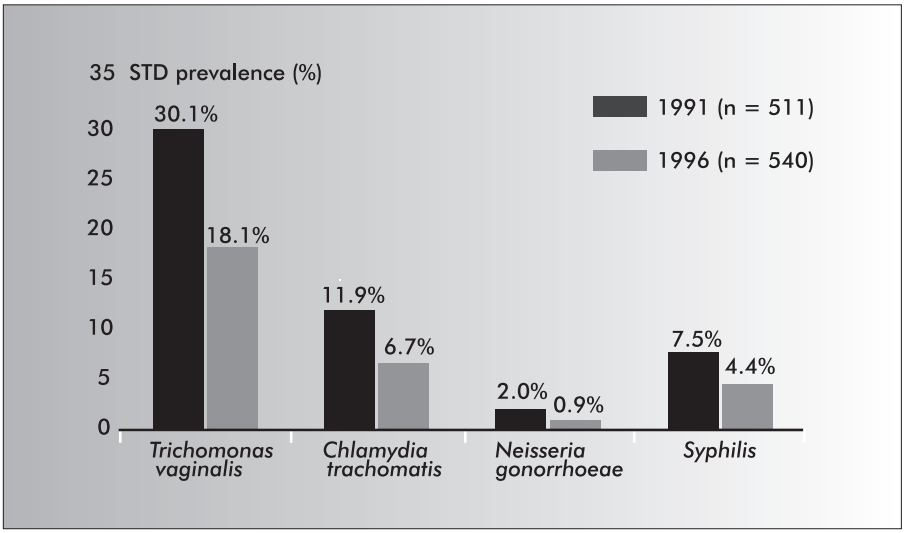


Fig. 9 is from a study of STIs among pregnant women in 1991 and 1996. It shows big falls in infection rates for all STIs measured, especially trichomoniasis, from 30% down to 18%.

This shows that HIV infection has remained low in Senegal since the start of the epidemic and shows no signs of an upwards trend. But why?

Three major factors can be identified, namely:

- People are choosing to have their first sexual experience at a later age (there is also evidence that extramarital sex is relatively limited).
- Condom use during extramarital sex, and especially during commercial sex, is high.
- STI control programmes are apparently quite effective.

The first two factors are strongly linked to the country's HIV/AIDS prevention efforts. And the change in social norms, which is evident in delayed sexual activity, is probably being reinforced by the AIDS prevention programme.

Clearly, much in the social structure and health services of Senegal before AIDS favoured a successful response. In addition, strong political commitment and the implementation of effective prevention activities helped keep Senegal's rates of HIV infection among the lowest in sub-Saharan Africa.

Thailand

Few countries show the link between behaviour and HIV infection as clearly as Thailand.[4] Overall, behavioural changes have reduced the number of new HIV infections each year from almost 143,000 in 1991 to 29,000 in 2000.[5]

Thailand has a little over 60 million people, about 20% of whom live in cities. The gross national product per capita is equivalent to about US$ 2700. HIV prevalence among adults is estimated at about 1.9%, with higher prevalence in certain geographical areas and among certain groups. Thailand's HIV prevalence is lower than that of Uganda, but it means a similar number of people living with HIV/AIDS.

Until the end of 1987, ad hoc testing in men having sex with men, in female sex workers and in injecting drug users (IDUs) revealed few HIV infections. Then in 1988, rapid growth of HIV infections among IDUs first gave the Thai authorities a clue that a problem was emerging. The prevention programme in the 1980s focused on knowledge and fear; it was sporadic, lacked continuity and was aimed only at the so-called "high risk" groups.

After the rise in prevalence among IDUs, Thailand quickly set up a national sentinel system. In the first round of testing in June 1989, high infection levels were detected among sex workers in the country's northern provinces. By June 1990, HIV prevalence among brothel-based sex workers had risen to 15% nationwide. Prevalence was also growing rapidly among young men.

In addition to the research for monitoring the epidemic, Thailand has conducted three rounds of a national survey on sexual risk behaviours using a similar methodology (in 1990 funded by WHO/GPA; in 1993 funded by the office of the Prime Minister; and in 1997 funded by Ministry of Public Health and UNAIDS). The preliminary results of the first national survey were presented rapidly to policy-makers, community leaders and the mass media. The level of risk behaviours among groups of the Thai population was strikingly high and made Thai society open its eyes to the HIV situation. This helped reinforce a push for multisectoral, intensive and extensive prevention efforts.

In 1991, some key government officials, politicians, academics and AIDS activists managed to increase government commitment. The strategies of the 1980s were replaced by a new approach—the so-called intensive and extensive prevention programme for rapid nationwide implementation using combined actions by the mass media and the community. Some of the guiding principles for the programme's implementation, again based on the lessons learned during the 1980s, were that:

- Focusing on populations with high risk behaviour, such as sex workers and injecting

[4] For more information, see *Relationships of HIV and STD declines in Thailand to behavioural change: a synthesis of existing studies*, Key Material, UNAIDS/98.2, 1998. See also *Collecting lower HIV infection rates with changes in sexual behaviour in Thailand: data collection and comparison*, Case Study, UNAIDS/98.15, June 1998, and *The success of the 100% Condom Promotion Programme in Thailand: evaluation of the 100% Condom Promotion Programme and the validation of the decline in trends for selected STDs*, Institute for Population & Social Research, Mahidol University, Thailand (funded by the Thai Ministry of Public Health and UNAIDS, February 2000).

[5] *Projections for HIV/AIDS in Thailand: 2000-2020*. The Thai Working Group on HIV/AIDS Projection. Bangkok, June 2000.

drug users (IDUs), is important but not enough—the general population and young people are also critical. Emphasis was placed on the risk behaviour and vulnerability of young people as well as on the more specific risk behaviour of particular groups.

- It is necessary to reach the population both extensively (on a broad level) and intensively (through many channels at the same time).
- Knowledge and awareness are important but are not sufficient; life skills training (e.g. decision-making and negotiation), condom promotion and long-term approaches such as changing social norms are also necessary.
- Socioeconomic interventions were introduced to reduce vulnerability to HIV infection; for example, increasing the opportunity for girls to continue their schooling and to receive vocational training so that they are less likely to become sex workers.[6]
- Rapid implementation aimed at extensive coverage in a short time, with intensive efforts between 1991 and 1993, created both a programmatic momentum that was carried on by subsequent Thai administrations and a societal momentum by which all regions of the country felt they had a part to play.

The effective nationwide prevention programme, which began in 1991, included several elements:

- The Prime Minister chaired the National AIDS Programme.
- The Office of the Prime Minister took an active role in policy discussion, led the national public education effort using government-run mass media (that is, public, not private), and took part in monitoring.
- The Parliament established a sub-committee on AIDS.
- The National Economic and Social Development Board worked closely with the Ministry of Public Health to integrate the National AIDS Plan into the five-year National Development Plan.
- The government AIDS budget increased drastically during the following years.
- Each key ministry had its own AIDS plan and budget as well as a person as the AIDS focal point.
- All provincial governors led the AIDS programme in their respective provinces through the provincial development planning system.
- The business community, people living with HIV/AIDS, religious leaders and other community leaders became very involved in contributing to policy dialogue, resource mobilization and the local implementation of activities.
- In Thailand, 1991 was the turning point on human rights protection for people living with HIV/AIDS. HIV was removed from the list of diseases that required notification to the health authority. The ban on entry to Thailand of people with HIV/AIDS was lifted. A set of national policy guidelines to protect the rights of people living with HIV/AIDS was issued.[7]

One of the most striking effects of the national programme was shown in the number of visits to sex workers. This is the behaviour most closely associated with HIV infection in Thai studies.

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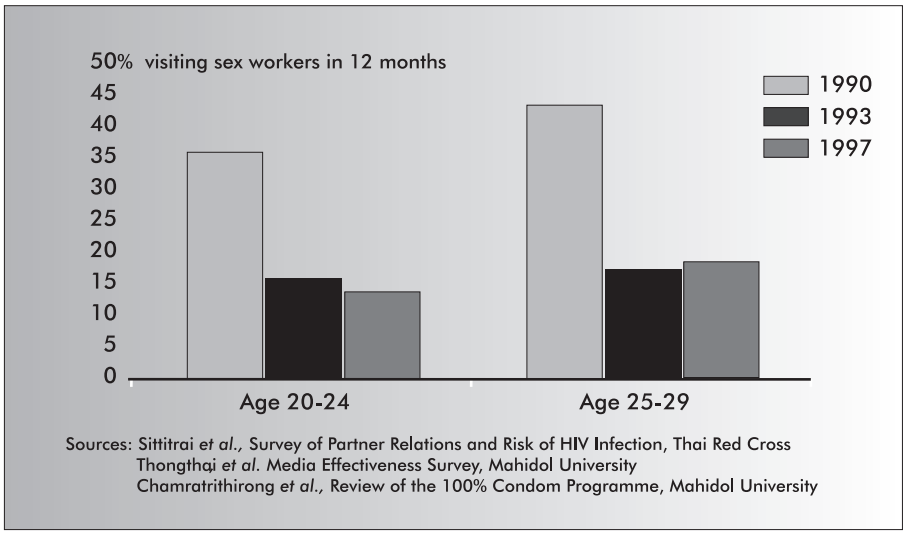
[6] For further information, see the Case Study UNAIDS/99.34E, *Reducing girls' vulnerability to HIV/AIDS: The Thai approach, June 1999).*

[7] Jon Ungphakorn and Werasit Sittitrai. The Thai response to the HIV/AIDS epidemic, *AIDS* 1994, 8 (Supplement), pp./S155-S163.

Fig. 10 shows the figures for urban men aged 20–24 and 25–29 who visited sex workers. The proportion of the younger group who said they had visited a sex worker in the past year fell to about 17% in 1993 from over 35% in 1990. It fell even

Fig. 10: Substantial and sustained risk reduction in urban males visiting sex workers 1990-1997



more sharply among those aged 25-29. Men aged 15–49 visiting sex workers dropped from approximately 19% in 1990 to 9% in 1993.[8] The proportion has changed little since 1993, but the lower levels have been sustained according to the 1997 survey.

An effect of this nationwide intensive and extensive prevention programme can be seen in the drastic reduction in the number of Thai men having commercial sex not only in Bangkok but also in all other regions.

Sustained increase in condom use is a major indicator of success in the Thai prevention effort. Between 1990 and 1993, data from national surveys show a sharp increase in consistent condom use among men who visited sex workers. This increase occurred in Bangkok and in all four regions of the country.

[8] Thai Working Group on HIV/AIDS Projection. *Projections for HIV/AIDS in Thailand: 2000-2020.* Bangkok, June 2000.

Another study in Bangkok (Fig. 11) shows that the percentage of males visiting sex workers declined according to the data of 1993, 1994 and 1996 among all three groups (STI clinic attendees, service workers and students).

Fig. 11: Risk reduction continues

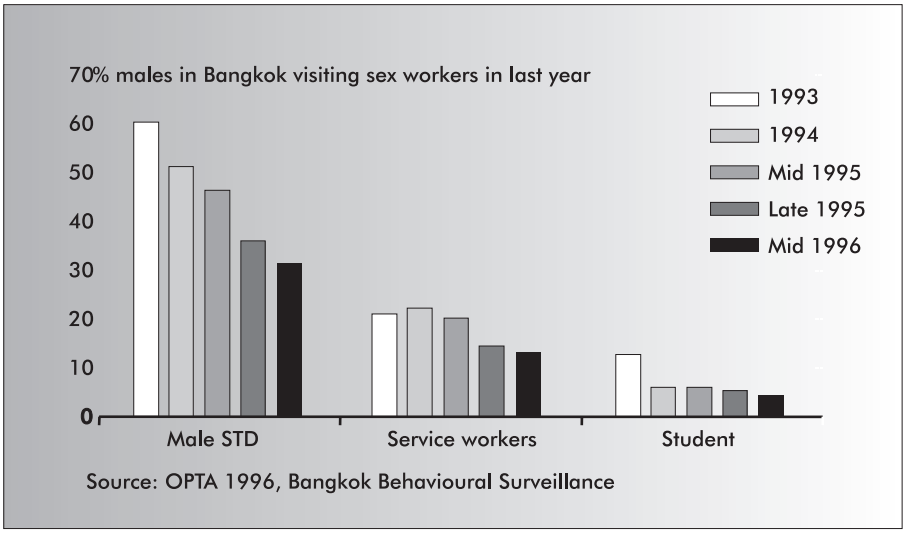
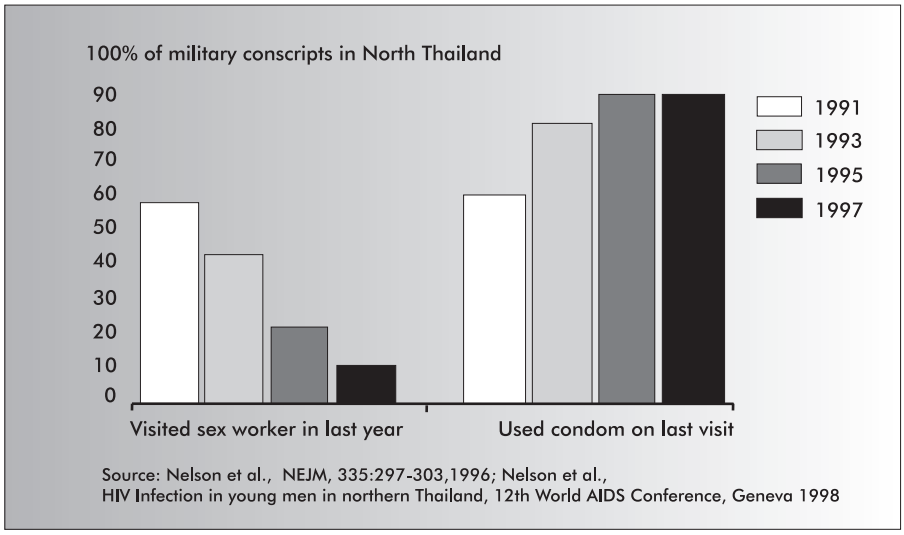
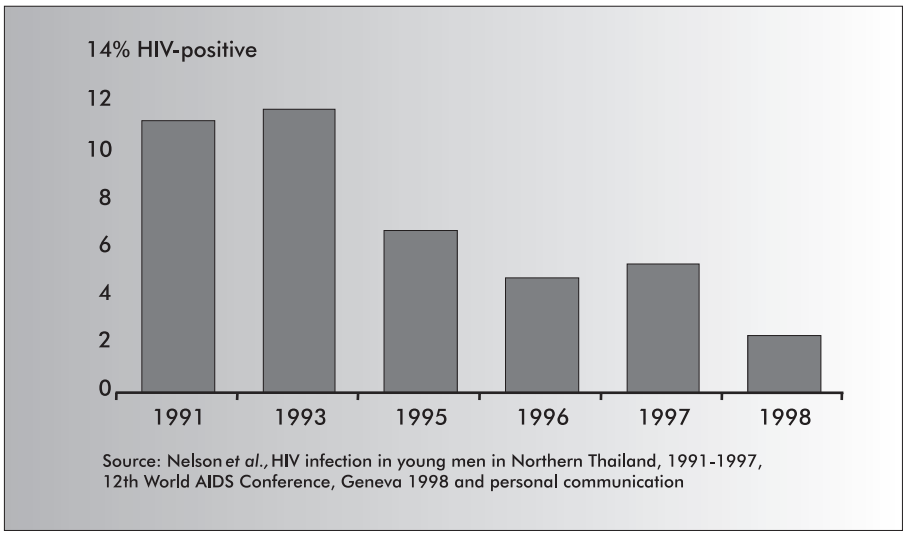


Fig. 12a: Risk reduction still continues



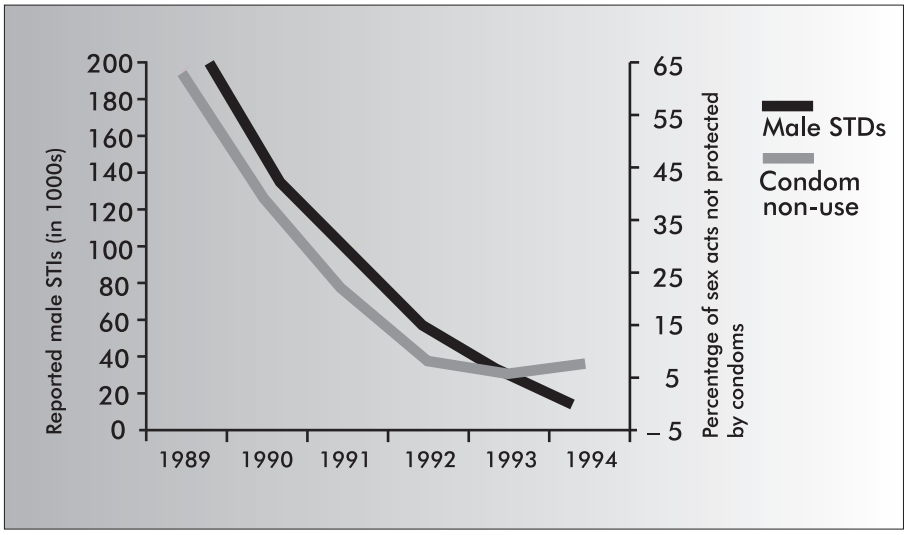
How does behavioural change correlate with the prevalence of HIV and STIs? Between 1991 and 1998, researchers found among military conscripts of northern Thailand a reduction in visits to sex workers, lifetime history of visiting sex workers, and HIV prevalence, while at the same time condom use with sex workers increased dramatically (Fig. 12a and 12b).

Fig. 12b: HIV prevalence in northern Thai military conscripts, 1991–1998



How do we link the epidemiological patterns with these behavioural changes? The patterns of other STIs are independently related both to commercial sex and to HIV infection. Logic suggests that condom use would be associated with lower rates of STIs. That logic is borne out in Thailand (Fig. 13).

Fig. 13: Comparison of increase in condom use with decline in reported male STIs on a national scale, Thailand 1989 to 1994



At the time of the study shown in Fig. 13, the intensive and extensive prevention programme had been in effect nationally for six years. During that time, reported STI rates in the country fell by over 90%, as did condom "non-use", which tends to change in step with STI prevalence.

Major prevention packages were implemented side by side and each one reinforced the achievement of the other. These were intensive media campaigns, peer education, workplace AIDS programmes, life-skills training for young people, non-discrimination campaigns, and the famous 100% condom programme in all commercial sex establishments

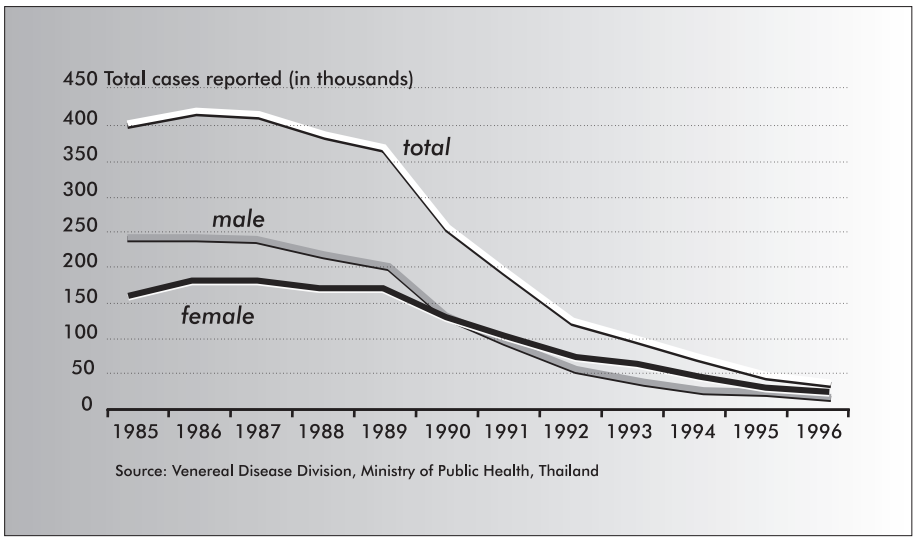
(which was accompanied by the distribution of free condoms and the campaign for condom use among the general male population).

In this context, what happened to HIV prevalence on a national scale? Evidence shows that it declined substantially.

Fig. 14: Trend in HIV prevalence in 21-year-old Thai military conscripts

When military conscripts from all regions of Thailand were tested in 1999, a considerably lower proportion of 21-year-old conscripts were found to be infected than in the peak years of 1992–93 (Fig. 14). This indicates that very significant changes in behaviour among young Thais have continued. A recent study shows that HIV prevalence among 21-year-old conscripts had fallen to 1% by 1991 from a peak of 3.5% in 1992.[9]

Fig. 15: Reduction in male, female, and total STIs reported at government clinics between 1985 and 1996



[9] The Armed Forces Research Institute of Medical Sciences

As in Senegal, the number of reported cases of new STIs may be an indicator of recent sexual risk behaviour.

Thai government clinic data here suggest strongly that unprotected sex with high-risk partners continues to decline (Fig. 15). In 1985, about 400,000 people were diagnosed with STIs, with men much more represented. The numbers began to fall sharply around the time that the national AIDS strategy got under way. By 1996, the total was under 50,000.[10] An independent evaluation review in 1997 confirmed this decline through data from population and drugstore surveys on self-reporting of STIs and sales of antibiotics. The 1997 survey also showed that over 70% of sex workers in a range of establishments (brothels, hotels, bars, massage parlours, restaurants) had STI checks at least once a week (Fig. 16). STIs among sex workers were roughly at 25% in 1989 and fell steadily to 1.6% in 1999.[11]

Fig. 16: Percentage distribution of frequency of STI checks of sex workers by sector of employment – 1997

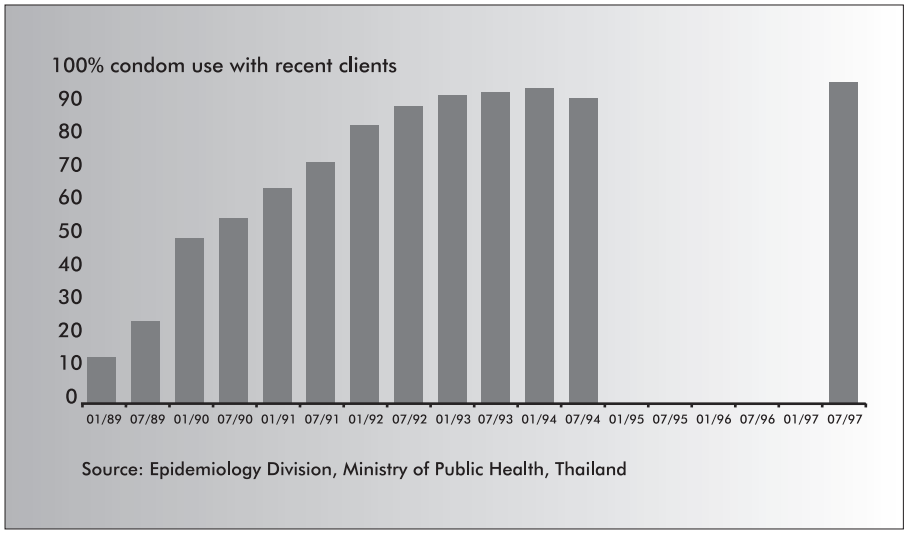
Frequency of STI checks	SEX INDUSTRY SECTOR				
	brothel	hotel	bar/ karaoke	massage parlour	restaurant and other
More than 1 week	0.0	8.3	0.0	22.6	1.6
Once a week	73.3	66.7	75.9	54.8	82.5
2–3 times a month	18.3	0.0	17.2	0.0	12.7
Once a month	8.3	16.7	6.9	6.5	3.2
Less than 1 month	0.0	8.3	0.0	12.9	0.0
Not sure	0.0	0.0	0.0	3.2	0.0
TOTAL (N)*	100% (60)	100% (12)	100% (29)	100% (31)	100% (63)

* N: number of sex establishments
Source: Institute for Population and Social Research, Thailand, 1997

[10] In Thailand, STI prevalence data are available only for people who seek treatment at government clinics. There is a sizeable private sector client base that is not included in these figures.

[11] Thai Working Group on HIV/AIDS Projection. *Projections for HIV/AIDS in Thailand: 2000-2020*. Bangkok, June 2000.

Fig. 17: Increase in condom use with recent clients as reported by sex workers at direct sex establishments, 1989–1997 (data from 1995 to early 1997 are not available)



The 1997 survey shows that consistent condom use among sex workers increased from over 50% in 1990 to almost 90% in 1996 (Figs. 17, 18, 19).

Fig. 18: Percentage distribution of reported regularity of condom use with *casual* customers by type of SE—1997

Type of sex establishment	REGULARITY OF USE: never used	almost never used	sometimes used	almost always used	always used
Brothel	0.0	0.3	1.9	1.1	96.7
Hotel	0.0	0.0	1.4	2.8	95.8
Bar/Karaoke	0.0	0.0	2.2	2.2	95.7
Massage parlour	0.0	0.0	0.3	0.3	99.4
Restaurant/other	0.2	0.0	1.2	2.2	96.5

Source: Institute for Population and Social Research, Mahidol University, Thailand, 1997

The news is not uniformly good, however. Condom use appears to be lower among men from rural areas, and among men with limited formal education. National behavioural surveillance in the provinces revealed that only half the men reporting commercial sex said they had always used a condom. As in the case of Uganda, different or more intensive strategies appear to be necessary for rural populations.

The 100% condom programme was remarkably successful in expanding condom use between sex workers and clients. Other complementary programmes aimed at young people and the general population also increased condom use in non-commercial sexual relationships. This is especially important because of a shift in sexual behaviour away from commercial sex towards more casual sex.

Fig. 19: Percentage distribution of reported regularity of condom use with ***regular*** customers by type of sex establishment—1997

Type of sex establishment	REGULARITY OF USE: never used	almost never used	sometimes used	almost always used	always used
Brothel	0.7	0.3	4.5	2.1	92.4
Hotel	3.7	0.0	5.6	5.6	85.2
Bar/Karaoke	1.4	0.0	4.6	4.1	89.9
Massage parlour	0.3	0.2	0.5	1.0	97.9
Restaurant/other	1.2	1.0	3.8	5.7	88.4

Source: Institute for Population and Social Research, Mahidol University, Thailand, 1997

The figures for condom use with minor wives (that is, mistresses), girl-friends and friends are between 40% and 60% according to the 1997 survey (Fig. 20). The figures were much lower in the 1990 survey. That represents a major change in behaviour between 1990 and 1997. There is a misconception that if people know someone who has AIDS this will increase their level of consistent condom use. This does not, however, seem to be the case in many African countries where HIV prevalence is very high and condom use remains low. Successes in increasing condom use seem rather to be the result of intensive intervention programmes.

Fig. 20: Percentage of men using condoms every time by type of partner in the past 12 months – 1997

Partner	Percentage of use every time*
Wife	11.5
Minor wife (mistress)	66.7
Fiancée	37.9
Girl friend	40.3
Friend	66.2
Other woman	78.4
Direct regular sex worker	89.0
Indirect regular sex worker	84.6
Direct temporary sex worker	94.3
Indirect temporary sex worker	93.9
Male	57.1
Male sex worker	2 of 3

* *compared with all those who ever used condoms*

Source: Institute for Population and Social Research, Thailand, 1997

In Thailand, condom use during commercial sex increased rapidly between 1991 and 1993, during the first two years of the extensive and intensive prevention programme. These increases in condom use occurred uniformly across the country, both in regions where there were many people living with AIDS, such as the upper north, and in regions were there were few, such as the north-east. Thus, during that time, most people did not know anyone with AIDS but condom use increased anyway.

Later, according to the 1997 survey, an equal percentage of two groups of sex workers (those who knew and those who did not know someone with AIDS) always used condoms with their clients (Fig. 21). According to the Thai Working Group on HIV/AIDS Projection, condom use in brothels nationwide rose from 15% in 1989 to 85% in 1999.

Fig. 21: Percentage distribution of risk status related to condom use by sex workers who know somebody who has AIDS – 1997

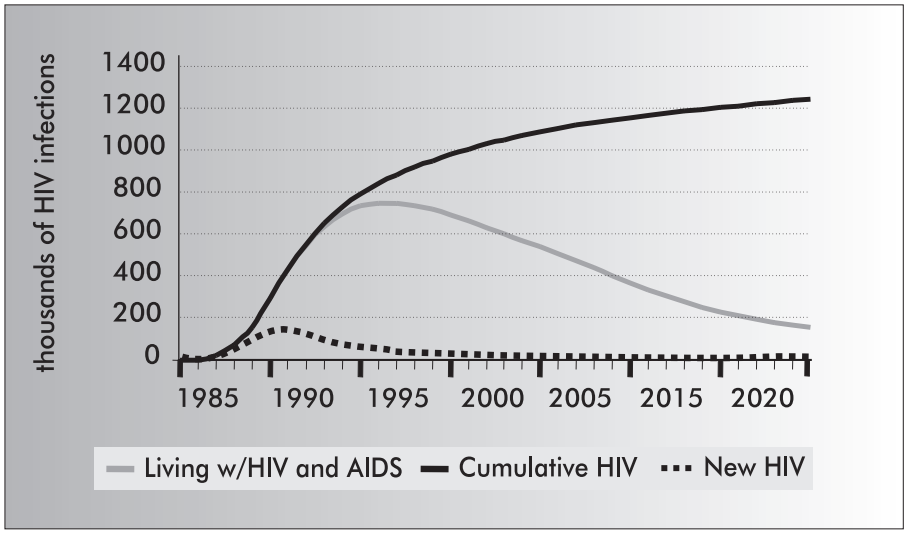
Risk status	KNOWLEDGE OF SOMEBODY WITH AIDS	
	know	do not know
Always use condom with all sex partners	63.3	61.8
Always use condom with all commercial sex partners but not all others	29.5	30.1
Do not always use condom with all commercial sex partners	7.2	8.1
Total (N)*	100.0 (782)	100.0 (1212)

* N: number of women
Source: Institute for Population and Social Research, Mahidol University, Thailand, 1997

In summarizing Thailand's experience, two implications are clear:

- A national effort to promote safe behaviour and to change norms was followed by a drop in visits to sex workers and an increase in condom use during both commercial sex and casual sex.
- Those changes in behaviour have been rewarded by a rapid decline in STIs and new HIV infections.

Fig. 22: Total number of people living with HIV and AIDS, new HIV infections, and cumulative HIV infections over time in Thailand - Baseline Scenario



According to the Thai Working Group on HIV/AIDS Projection, "the baseline scenario (Fig. 22) shows the number of HIV infections over the course of the epidemic and the fall in the number of new infections over the course. Since the start of the epidemic, 984,000 people (951,000 adults and 33,000 children) have been infected with HIV in Thailand. Of these, 289,000 people have died of AIDS. There are currently 695,000 people living with HIV/AIDS in the country. It is predicted that within the next year, there will be 29,000 new infections and 55,000 Thais will develop serious AIDS related illnesses requiring medical care and approximately the same number will die of AIDS complications".

The evidence gathered by Thailand's epidemiological and behavioural information systems has had many benefits. Perhaps the most important was to demonstrate convincingly that adopting safe behaviours can change the course of the epidemic on a national scale. These changes in behaviours, norms and the course of the epidemic can be achieved on a national scale in a few years—and these efforts need to continue. According to the Thai Working Group on HIV/AIDS Projection, projections show that unless prevention levels are sustained at a high level, the epidemic could quickly gain momentum and start to increase rapidly. So the successes so far must not lead to complacency.

Summary

Prevention activities to achieve behavioural change at national level can, and do, work, if they are properly carried out. Monitoring and research are needed to feed into the development or revision of policies and programmes, and to keep the public aware of the situation.

Policy-makers, the general public, the international community and local communities affected by the epidemic need to see that investment in promoting behavioural change has paid off.

It is UNAIDS' hope that the cases of Senegal, Thailand and Uganda are good examples of prevention needs and of successes in meeting those needs. UNAIDS believes that the link between behavioural change and declining infection rates will translate into strong support for prevention efforts where they exist, and for the creation of new ones where they are currently lacking.

The Joint United Nations Programme on HIV/AIDS (UNAIDS) is the leading advocate for global action on HIV/AIDS. It brings together seven UN agencies in a common effort to fight the epidemic: the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA), the United Nations International Drug Control Programme (UNDCP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO) and the World Bank.

UNAIDS both mobilizes the responses to the epidemic of its seven cosponsoring organizations and supplements these efforts with special initiatives. Its purpose is to lead and assist an expansion of the international response to HIV on all fronts: medical, public health, social, economic, cultural, political and human rights. UNAIDS works with a broad range of partners – governmental and NGO, business, scientific and lay – to share knowledge, skills and best practice across boundaries.

Produced with environment-friendly materials

Worldwide there is a growing body of knowledge about succesful interventions to reduce the spread of HIV/AIDS. Success is certainly not limited to industrialized countries. In developing countries, prevention activities aimed at changing behaviours and associated social norms can and do work, not only on a large scale but also at national level. To demonstrate this, data and experiences from three countries – Senegal, Thailand and Uganda – with differing cultures and different levels of the epidemic, are presented in this booklet.

Joint United Nations Programme on HIV/AIDS

UNAIDS

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