

CHAPTER SIX

Addressing STIs / HIV / AIDS

Sexually transmitted infections (STIs) represent a major public health problem in developing countries, including Bangladesh. Millions of individuals, especially women and girls in these countries suffer from STIs and reproductive tract infections (RTIs) and in most cases do not receive proper care. RTIs /STIs are a significant cause of morbidity and mortality in both men and women, especially in women of the reproductive age.

Prevalence of STIs / RTIs

Though the prevalence of RTIs /STIs is still underestimated, these diseases are emerging as a growing public health problem in Bangladesh. Amid lack of literacy, the conservative environment associated with various religious, cultural and social taboos acts as major obstacles to obtaining information about the actual situation of RTIs and STIs. As a consequence, widespread RTI/STI transmission continues due to risky sexual behavior, gender and power imbalance, shame and stigma, and weakness in the health care system. (Khan R F and Akhter H H, 2001)

The actual incidence and prevalence of RTIs / STIs are difficult to measure because many of the patients suffering from RTIs / STIs conceal their diseases. Female commercial sex workers (CSWs) are considered to be an important source of STIs and a high-risk population for STIs and HIV. In Bangladesh, there are approximately 100,000 CSWs who are distributed over urban, semi urban and rural areas. They are either organized in brothels or work as independent sex workers (Choudhury M R, et al., 1997). An etiological study of STIs was conducted among female commercial sex workers in 1998 in Dhaka, which showed that 84% were positive for the STI pathogens studied. Among the STI positives 35.5% were positive for *N. gonorrhoeae*, 25% were positive for *C. trachomatis*, 45.5% were positive for *T. vaginalis*, 32.6% were seropositive for *T. pallidum*, 62.5% were seropositive for HSV-2, and 51% had infections with two or more pathogens (Rahman M et al., 2000).

However, the prevalence of these STIs is relatively low in the general population. *N. gonorrhoeae*, *C. trachomatis*, and *T. vaginalis* infections constituted only a minority of the RTI among married women attending a basic healthcare clinic in Dhaka. The overall prevalence rate of *N. gonorrhoeae*, *C. trachomatis*, *T. vaginalis* and *T. pallidum* was 0.5%, 1.9%,

STI accounts for 15% of the total disease burden worldwide (WHO) and affect both men and women. It is estimated that there are 333 million new cases of STIs per annum and that 10 to 15 million people are infected with human immunodeficiency virus worldwide every year. Southeast Asia is an important area for STIs, with an estimated 150 million new cases in 1995 (WHO, 1995).

2.0%, and 2.9%, respectively. Overall, 35% of the women had antibodies to Hepatitis B core antigen, 0.9% had HCV, and 12% HSV-2 infection. Repeated serological examination indicated that only 32% of women with serological evidence of syphilis had active disease. Risk factors for *N. gonorrhoeae*/*C. trachomatis* infection were husband not living at home or suspected of being unfaithful. HSV-2 infection was associated with the same risk factors and with a polygamous marriage (J Bogaerts et al., 2001). A population based survey of RTIs/STIs prevalence which was conducted in a rural area also showed low prevalence of STIs, with only 3% of married women having a current infection (including 1% with chlamydial infection or gonorrhoea), and 1% of men having either chlamydial infection or recent/untreated syphilis infection (Hawkers S et al., 2002). Under a hospital based study when the blood samples of 800 pregnant women who came for antenatal check-up were analyzed by the Rapid Plasma Reagin (RPR) method and by ELISA, they indicated a low prevalence of syphilis (3%) and high levels of HBsAg positive (5.5%), and anti-HCV positive (3.4%), respectively. None of them was HIV positive (Hussain M et al., 1997).

Bangladesh, like many other developing countries in the world, is undergoing rapid urbanization accompanied by high rates of internal and external migration. Male out-migrants are mostly young, less educated, single, and seek job opportunities abroad, mainly in Asian countries. A medical screening of 43,213 Bangladeshi job seekers was carried out during the period 1994 to 1996. Serological tests revealed that 4.4% of individuals were positive for hepatitis B surface antigen (HbsAg), 1.7% for *Treponema pallidum* hemagglutination (TPHA) and only 0.2% for antibody to human immunodeficiency virus (anti-HIV). These results may represent a cross-sectional view of the prevalence of different infectious diseases and abuse of drugs among the young adult population of Bangladesh (Rumi MAK et al., 2000).

Truck drivers have been identified as having high-risk life styles for STDs. As elsewhere, work conditions in Bangladesh for truck drivers and helpers are conducive to high-risk sexual activity (frequent absences from home and easy access to sex workers located near truck stops). The high prevalence of HSV-2 (25.8%), and to a lesser extent syphilis (5.7%), and the lower levels of condom use (73% never using) despite high numbers of casual sexual partners (54%), illustrate the importance of promoting condom use, particularly in commercial sexual encounters, to men in Bangladesh's trucking industry (Gibney L et al., 2002). The level of HSV-2 (32%), syphilis (5.7%) and gonorrhoea (6.3%) infections among the women living in close proximity to truck stands was very similar to the rate in a cross sectional population based study conducted between January and December 1998 at

Reproductive tract infections (RTIs) are a group of diseases that cause infection of the genital tract and include sexually transmitted infections (STIs), non-sexually transmitted infections like endogenous infections caused by the overgrowth of the organisms normally present in the reproductive tract, and iatrogenic infections caused by improperly performed procedures. RTIs are distinct from STIs as the former include all infections of the reproductive tract, whether transmitted sexually or not. On the other hand, pathogens, which are commonly transmitted by sexual contact (human immunodeficiency virus (HIV), hepatitis-B, C, D, etc.), do not necessarily cause an infection of the reproductive tract. These RTIs / STIs expose individuals to serious consequences such as enhanced HIV transmission, ectopic pregnancy, infertility, adverse outcomes of pregnancy, cancer, and even death. RTIs / STIs include infections or diseases such as syphilis, gonorrhoea, chancroid, granuloma inguinale, lymphogranuloma venereum, chlamydial infections, herpes genitalia, ano-rectal herpes, warts, trichomoniasis, genital candidiasis, molluscum contagiosum, pediculosis, scabies and AIDS.

at the Tejgaon truck stand in Dhaka (Gibney L et al., 2001).

As in the developing world, drug addiction is increasing in Bangladesh. The sexual life of addicts is in a vulnerable state where risky sex behaviour is common. A found that seven percent of the addicts were found to be bisexual, where 87% of them had multiple sex partners of either commercial or residential category. Most of the drug addicts (72%) did not use condoms and 57% of them were observed to have sexual diseases. The drug addicts (38.7%), who used mostly injection (87%) shared needles. Young adults (79%), secondary educated (46%), low-mid income (60%), businessmen (46%) and married people (60%) were found to be highly involved in addiction. Curiosity and friend's incitements (50.2%) were revealed as the most important influencing factors for taking drugs. Frustration, poverty, family breakdown or instability, etc., are also found to influence addiction (Islam Sk N et al., 2000).

Table-6.1 compares the RTI/STI prevalence (including Syphilis, Gonorrhoea, Chlamydia, Herpes Simplex 2, Hepatitis B, Trichomoniasis, Bacterial Vaginosis) rates for different population groups identified from a collection of nearly 70 RTI/STI related studies other than the National Surveillance surveys.

Table-6.1

RTI/STI prevalence information for Different Population Groups reported by Various Studies other than the National Surveillance surveys

Study Population	Percent	Number
Brothel based female sex workers	6.8-57	296
Street based female sex workers	84	269
IDU	4-28.6	241
Pregnant women	3-5.5	800
Women (non-sex worker)	1.6-32	384
Female patient	2.3-54	1534
Female patients with vaginal discharge	2.3-47	345
Truck driver and helper	0.8-25.8	388

Source: Rob U et al., 2002.

In the studies reviewed, the RTI/STI prevalence rate for street based female sex workers was 84%, while it was between 6.8% and 57% for brothel based sex workers. Among the injecting drug users (IDUs) the RTI/STI prevalence rate was between 4 and 28.6%. The range of RTI/STI prevalence rates varied mostly for female general patients, female patients with

vaginal discharge, and truck drivers including helpers. RTI/STI prevalence rates varied between 2.3% and 54% for female patients, between 2.3% and 47% for females with vaginal discharge, and between 0.8% and 25.8% for truck drivers and their helpers (Rob U et al., 2002).

Knowledge and behavioral indicators related to RTIs / STIs

In Bangladesh, the majority of men still do not use condoms in commercial sex encounters, and the female sex workers report the lowest condom usage in the region. The alarming reality is that about two-thirds of the rickshaw pullers and truck drivers surveyed during 4th round (2002) of national HIV and behavioral surveillance, had never used a condom even once and very few even realized that they were at risk of exposure to HIV. About 36% of the brothel based sex workers used condom at last commercial sex with new clients and only 27.2% used condom with regular clients. The percentage of condom use at last commercial sex with female among truckers was 23.4% and among students 35.3% in 2001-2002 (MOHFW, June 2003). At an average of 18.8 clients a week, sex workers in Bangladesh brothels report among the highest turnover of partners anywhere in Asia, and among hotel based sex workers it is higher still, averaging 44 clients a week (FHI, 2001).

There is also a trade in sex between males. Hijras and other males sell sex to a wide range of clients, and men have sex with one another without payment, too. In Central Bangladesh, among the truckers and rickshaw pullers 9.8% and among MSM 24.9% used condom at last commercial sex with male/hijra (MOHFW, June 2003). It is worth nothing that current levels of condom use are low by any standards. Almost everyone buying sex in Bangladesh is having unprotected sex some of the time, and a large majority are having unprotected sex most of the time.

General people having STIs initially keep it secret and when they start facing problems they would first discuss with their friends, relatives or elders. At the primary stage they go to the traditional (kobiraj/hekim) and faith healers, quacks and roadside medicine vendors. They go to the qualified doctors only when the condition becomes severe. In the clinic-based RTI study it was found that 6% of clients attending Health and Family Welfare Centres (H&FWCs) and Satellite Clinics (SCs) sought services for RTI symptoms (e.g., white discharge, genital itching/burning, etc.); half of the RTI clients did not know the causes, modes of transmission, or means of prevention of RTIs; and one-third of the female RTI clients reported that their husband had some kind of genital problem (Khan R F et al., 2001). In a study among 540 street based

The Government of Bangladesh set up a surveillance system in 1998 to track sexual and drug taking behaviors that carry the risk of STIs / HIV infection. The serological and behavioral surveillance was carried out among groups of men who are clients of sex workers, male and female sex workers and transgenders, men having sex with men (MSM) as well as injecting drug users.

The country has been divided into 5 areas for the purpose of this survey: Central, Northeast, Northwest, Southeast and Southwest. The 3rd and the 4th rounds of national HIV and behavioral surveillance showed high prevalence of ulcerative STIs especially in the IDUs which indicate the increased risk of HIV spreading in the country. Among the IDUs the syphilis prevalence rate changed from 18.2% in 2000-2001 to 19.4% in 2001-2002 at a site in Central Bangladesh. The 4th surveillance also showed that the IDUs also had very high rates of Hepatitis C (ranging from 59.8% to 79.5%). But the reported level of syphilis among the brothel based sex workers decreased from 43.2% in 2000-2001 to 40% in 2001-2002 and at the same time for street based sex workers, syphilis prevalence rate decreased from 42.7% in 2000-2001 to 29.8% in 2001-2002.

The syphilis rate among male sex workers decreased from 18.2% to 14.2% and among MSM from 5.3% to 3.7% in 2000-2001 and 2001-2002 accordingly. Hotel based sex workers, many of whom are new to the trade, had the lowest syphilis rates (11.4%) among the female sex workers in 4th surveillance. Among the male clients of sex workers, *babus* (permanent customer) had the highest rates (23.0%) of syphilis as might be expected. Truckers (7.0%) and launch workers (5.0%) also had higher rates of syphilis at a site in Central Bangladesh in 2001-2002 (MOHFW, 2001 and 2003).

CSWs in Dhaka, 29% of these women were not treating their symptoms and the highest proportion (48%) had bought medicine at pharmacies or medicine shops, followed by traditional practitioners at 36% (Wasserheit J N, 1998).

Table 6.2 show the percent distribution of the ever-married women and currently married men by knowledge of signs and symptoms associated with sexually transmitted infections (STIs) other than HIV / AIDS, according to background characteristics. Eighty-nine percent of women and 81% of men did not know of any STI other than AIDS. Although about 6% of respondents knew about STIs, they were not aware of any symptoms of STIs. Nine percent of men and 2% of women were able to cite two or more symptoms of STIs.

Table 6.2
Knowledge of specific signs or symptoms among ever-married women and currently married men

Background Characteristics		Knowledge of specific signs or symptoms			
		Ever married women (%)		Currently married men (%)	
		No knowledge of STI	Knows one symptom only	No knowledge of STI	Knows one symptom only
Residence	Urban	82.8	4.0	73.4	3.9
	Rural	90.7	2.3	83.1	3.8
Division	Barishal	88.2	1.9	85.1	1.5
	Chittagong	91.6	1.9	79.5	3.2
	Dhaka	85.1	3.7	77.1	5.7
	Khulna	87.4	2.6	78.9	4.1
	Rajshahi	92.7	2.3	85.6	2.6
	Sylhet	91.6	1.7	90.1	1.5
Education	No education	92.8	2.2	91.0	2.8
	Primary incomplete	90.0	2.3	90.1	2.4
	Primary complete	90.0	3.0	87.0	2.0
	Secondary+	81.5	3.6	64.0	6.1
Total		89.1	2.7	81.2	3.8

Source: Mitra and Associates, and ORC Macro, 2001.

Initiatives taken for the prevention and treatment of STIs

In both urban and rural areas there are limitations, particularly in government facilities, to provide quality and comprehensive services for RTIs/STIs. By 2002, about 5,000 health personnel had been trained. This number is however quite small compared to the need. It is estimated that only about 18% of all doctors, 15% of nurses, about half of the lab

technicians and almost all the managers received training on syndromic management of RTIs/STIs (Haider S J, 2002). There are also limitations in the availability of necessary logistics (drugs and instruments) of the syndromic approach. Besides, providers of these facilities are not skilled in risk assessment, physical assessment, physical examination, counseling and partner management. There are also constraints with privacy and confidentiality. Therefore, in the government facilities, particularly at the rural level this approach has not been organized till date (MOHFW, 1999). However, following the training the reported number of STIs cases being managed at different levels of government facilities has increased, although there is absence of a comprehensive Management Information System (MIS).

In Bangladesh like other developing countries the centers for disease control have recommended a first-line therapeutic regimen based on fluoroquinolones and cephalosporin. Despite a sharp decline in the incidence of gonococcal infection during the last decade, antimicrobial resistance in *N. gonorrhoeae* has become a major public health problem.

A study concerning the prevalence of gonococcal infection among CSWs was conducted in Bangladesh. Some 66% of the isolates were resistant to penicillin, and 34% were moderately susceptible to penicillin. Among the resistance isolates, 23.4% were penicillinase producing *N. gonorrhoeae* (PPNG). Sixty-one percent of the isolates were resistant and 38.3% were moderately susceptible to tetracycline, 17.5% were tetracycline resistant *N. gonorrhoeae*, 11.7% were resistant and 26.6% had reduced susceptibility to ciprofloxacin, 2.1% were resistant and 11.7% had reduced susceptibility to cefuroxime, and 1% were resistant to ceftriaxone. Since quinolones such as ciprofloxacin are recommended as the first line of therapy for gonorrhoea, the emergence of significant resistance to ciprofloxacin will limit the usefulness of this drug for treatment of gonorrhoea in Bangladesh (Bhuiyan B U et al., 1999). Again the positive predictive value of the algorithm for cervicitis was extremely low (about 5%). The syndromic approach for vaginal or cervical discharge at the primary health care level in Bangladesh should focus on vaginal infections and not on cervicitis (Bogaerts J et al., 1999).

The advantages of syndromic management include immediate care, treatment at the first visit, cost saving for not using expensive laboratory tests, and an increased client satisfaction. The main disadvantage of syndromic management is the cost of over-diagnosis and over treatment when multiple antimicrobials are given to a patient with no or only one infection. The high rate of over treatment in the population studied carries both financial and social costs.

There are three approaches for the treatment of any disease including of RTIs/STIs: clinical, etiological and syndromic. Clinical and etiological approaches are only possible in selected urban facilities where the services of expert clinicians and expert pathologists together with facilities are available. The World Health Organization/Global Prevention of AIDS (WHO/GPA) has developed a set of standard syndromic flowcharts that take into account the most common etiologies for each syndrome. The NIPHP of the Ministry of Health and Family Welfare has developed a technical standard and service-delivery protocol for the management of RTIs/STIs. This protocol is used by the providers at the primary-level health facilities. In developing countries, laboratory diagnosis of most conditions can be difficult, and is often unavailable in the setting of primary health care (PHC) clinics. The Syndromic management of RTIs/STIs in low-resource settings is a practical tool of diagnosis and treatment for health workers. The syndromic approach is thought to be simple, feasible and cost effective.

There is a social cost in potentially exposing women misdiagnosed as having an STI to threats of domestic disruption or even violence (Hawkes S et al., 1999). A recently conducted validation exercise showed that the flowchart in the syndromic management protocol (with and without speculum) needed further modifications and should put emphasis on the specificity and sensitivity for cervical infections by using the speculum. The study result may put additional contribution to the efforts of standardization and improvement of the management of vaginal and cervical infections (Rahman S et al., 2002). NGOs are an important source of RTI/STI service delivery particularly in the urban areas as a part of the ESP programme in the field of reproductive health.

RTI/STI related interventions implemented by NGOs are of two kinds: communication related and provision of services. The NGO Service Delivery Programme (NSDP), a countrywide programme funded by USAID and implemented by 42 NGOs, is a large urban-based NGO programme covering 14 districts, and interventions by a number of other small NGOs include strong components of RTI/STI services. The STI/AIDS network that has a membership of 103 NGOs, mostly at the grassroots level, and includes NGOs who have interventions in the area of RTI/STI related communication and BCC.

In Bangladesh, the private sector providers are the first point of contact of patients in more than two-third cases. In rural areas, where the government has a well laid out infrastructure, only about 18% of service recipients accessed the government sector (Hawkes S et al. 2002). Though a significant proportion of the doctors in private practice are government employees, the knowledge of the syndromic approach has also remained confined to a handful of trained doctors in the government and NGO sectors, and has not been disseminated to the private sector.

HIV /AIDS

Estimated rates

The first HIV-positive case in Bangladesh was detected in 1998. According to Government sources, a total of 248 HIV positive cases have been reported mostly among males. So far 26 of these HIV infected patients have developed AIDS, among whom 20 have died (MOHFW, 2002). Thus, in 2002 a total of 60 new HIV/AIDS cases were detected by confirmatory tests: 37 (29 males and 8 females) at the Department of Virology, Bangabandhu Sheikh Mujib Medical University (BSMMU); 7 (6 males and 1 female) at BIRDEM; 6 (5 males and 1 female) Armed Forces Institute of Pathology

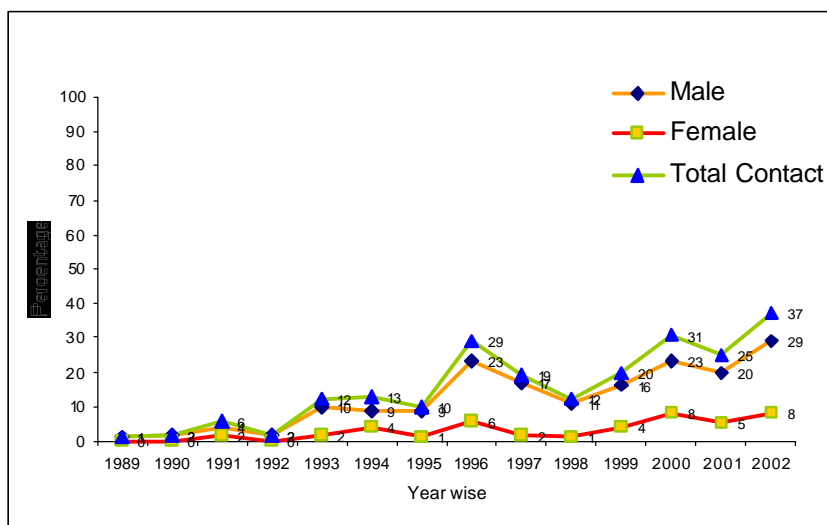
Acquired Immunodeficiency Syndrome (AIDS) caused by the HIV has created a major global health crisis. The number of people living with HIV in the world today has risen to 42 million from 40 million at the end of 2001. According to a new UNAIDS and WHO update on the global HIV/AIDS epidemic, five million people were newly infected and 3.1 million people were killed by the disease in 2002.

In South and Southeast Asia, 6 million adults and children are estimated to be living with HIV/AIDS. In this region the largest number of people, about 4 million, are infected with HIV/AIDS in India. HIV infection was first detected in this region in Thailand in 1984 and in India in 1985. More than 95% of people infected with HIV live in developing countries (Population Reference Bureau, 2002). The impact of HIV/AIDS on a nation is tremendous. AIDS kills million of adults in their prime, thus weakening the workforce, fracturing and impoverishing families, and leaving millions of children orphaned, with concomitant effects on the whole political, social and economic fabric of a country (UNAIDS, 2002).

(AFIP); and 10 (7 males and 3 females) at ICDDR,B (UNAIDS, 2002). The Department of Virology, BSMMU, reported the detection of 219 HIV-positive cases on the basis of confirmatory tests up to December 2002 (Figure 6.3).

Figure 6.1

HIV/AIDS cases detected in Bangladesh at BSMMU as of 1 December 2002



Source: Department of Virology, BSMMU, 2002

AIDS was first recognized as a disease among the homosexuals in USA in 1981. In 2001, the world marked the 20 years of AIDS. Now it has become the most devastating disease that mankind has ever faced (MOHFW, December 2002). HIV/AIDS can be transmitted by many ways. Sexual transmission occurs more frequently from male to female than female to male. Higher rate of transmission of HIV also occurs when a man has sex with another man. STIs aggravate the possibility of the transmission of HIV. The important means for HIV transmission are blood and blood product transfusion, contaminated syringe, needle and dental instruments, barber's razor, ear piercing, etc. HIV transmission also occurs from mother to baby during intra-uterine period and delivery. A baby can be infected by breast-feeding. The important infection materials, among others, are blood, semen, vaginal fluid and breast milk (South-South Centre, 2000).

Modes of Transmission

The reason for great concern in Bangladesh is the increased mobility of the economically productive people, particularly men within and outside the country during the last two decades. Most of these migrated people live alone keeping their spouses at village homes. The adult people who remain away from families are among the high risk groups who go for unsafe sex leading to infections like Reproductive Tract Infections (RTIs) / Sexually Transmitted Diseases (STDs) and Human Immunodeficiency Viruses (HIV). (South-South Centre, December 2000)

Table: 6.3

Prevalence and estimated number of HIV/AIDS cases in SAARC countries

Countries	Adult prevalence rate (15-49 years), end-2001	Estimated number of people living with HIV/AIDS, end-2001		Children orphaned by AIDS (0-14 years), 2001
		Adults and children (0-49 years)	Children (0-14 years)	
Bangladesh	<0.1	13,000	310	2,100
Bhutan	<0.1	<100	-	-
India	0.8	3,970,000	170,000	-
Maldives	-	-	-	-
Nepal	0.5	58,000	1,500	13,000
Pakistan	0.11	-	-	-
Sri Lanka	<0.1	4,800	<100	2,000

Source: The State of The World's Children 2003, UNICEF.

(Note: - Data not available)

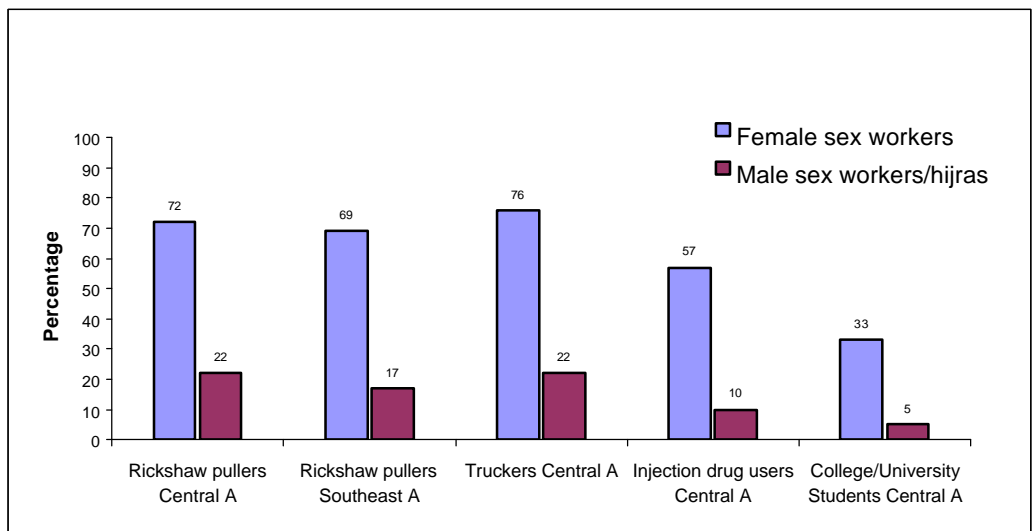
All of the known HIV-risk behaviors and factors – Commercial Sex Workers (CSWs), Men who have sex with Men (MSM),

Injecting Drug Users (IDUs) and high rates of STI – are acknowledged to be present in Bangladesh. As a result, there is an increasing concern that a marked epidemic of HIV might occur in a manner similar to that witnessed in the neighboring countries. Predictions that HIV would reach epidemic proportions in Bangladesh if the high-risk behavior continued have come true. The 4th surveillance has detected 4% HIV infection among IDUs in Central Bangladesh – just short of the 5% mark of a concentrated epidemic. The number of IDUs is also increasing and needle sharing continues to be routine among them.

In the past five years, every year roughly 10 to 20% of the drug users were new injectors. In the Southeast part of Bangladesh this is even worse. Sixty percent of all injectors started injecting in the last two years. Evidence shows that some of this influx to injection drugs is due to drug users switching to injecting after taking other drugs for four to five years. IDUs are not isolated, rather they are linked in with the rest of society – they have regular sex partners, they buy sex from women, as well as other men, they sell blood, and they also move between cities (MOHFW, June 2003).

Commercial sex is still very widespread in Bangladesh. Women work in brothels, in hotels and in their own homes, they meet clients on the streets or at massage parlours, beauty parlours, or over the telephone. The clients are equally diverse. They range from the unemployed, laborers and transportation workers to students, civil servants and businessmen. Some are married, and many have very high number of sex partners, both paid and unpaid.

Figure 6.2
Men reporting commercial sex in 2002



Source: MOHFW, June 2003.

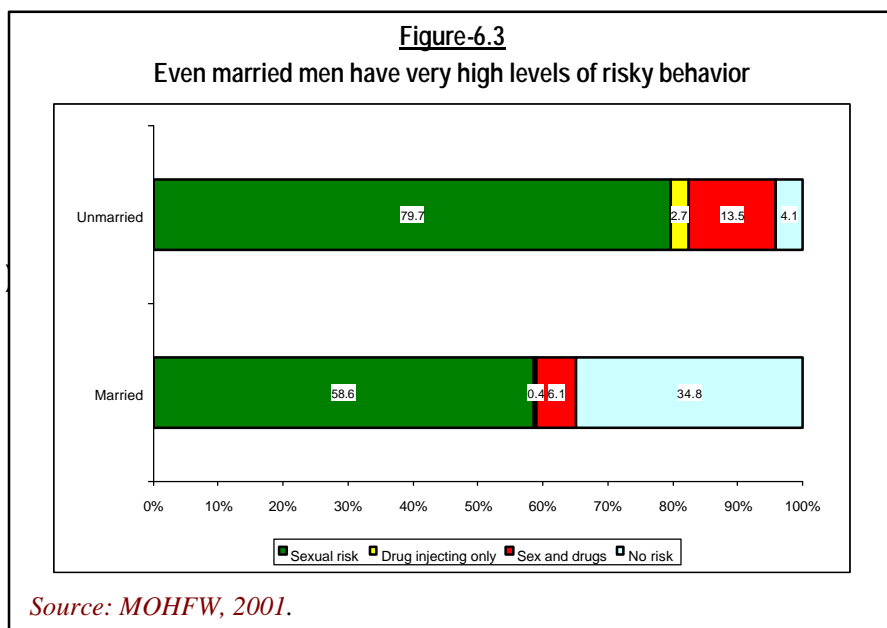
As Figure 6.2 shows, about three-quarters of truck drivers and rickshaw pullers, and 60% of male injecting drug users reported sex with female commercial sex workers in the past year. A significant percentage of these male groups also buy sex from male sex workers. There has been almost no change observed in this behaviour since it was measured previously in 3rd surveillance where 69.4% of truck drivers and 68.6% rickshaw pullers reported sex with female CSWs in the last month. The prevalence of this type of behaviour among IDUs in 2000-2001 was 32.8% that was far less than recent. The daily client turnover of female sex workers in Central Bangladesh is among the highest in Asia. Hotel based sex workers average as many as 44 clients per week, and nearly one in five report having clients who inject drugs.

With regard to the other risky behavior among the IDUs, i.e., needle-sharing – despite the presence of a large number of NGOs offering needle exchange services, and fairly high coverage through programmes in Central (46%) and Northwest (88%) Bangladesh, drug injectors still routinely share needles (Guinness et al., 2002).

The 4th round of behavioral surveillance revealed that about 15% rickshaw-pullers in Central Bangladesh and 14.4% in South-eastern Bangladesh and 15.9% truckers and 9.7% IDUs in Central Bangladesh had sex with a hijra or other male in the last month.

Conversely, many people may be exposed to high-risk behavior even when they themselves do not engage in it. As Figure-6.3 shows, a majority of married men reported unprotected sex with a sex worker, street girl, a hijra or another man in the past month, and several also reported injecting drugs. Almost all of these men had had sex with their wives in the last week. Even if none of these women have any risk behaviours besides having sex with their husbands, a total of two thirds are exposed to the risk of STDs, HIV and Hepatitis through their husband's behaviour (MOHFW, Nov 2001)

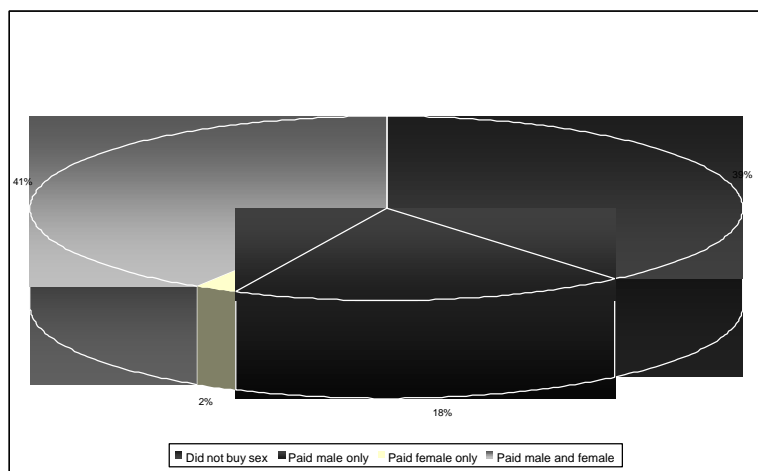
Virtually all male sex workers used a condom occasionally when selling anal sex, but almost none used condoms all the time. Anal sex – the most common



sexual practice between males – carries a large risk of membrane trauma, which helps HIV to spread easily. If HIV begins to spread rapidly among men who have sex with men, as Figure-6.4 suggests it may also spread rapidly into the population of female sex workers. Most of these women probably do not know that their clients are also having sex with men (ibid.).

Figure-6.4

Many men who have sex with men also go to female sex workers



Source: MOHFW, 2001.

Table 6.4 presents the prevalence rates for syphilis and HIV in high-risk groups tracked by the 3rd and the 4th round of national HIV and behavioural surveillance in Central Bangladesh. The data reveal low prevalence of HIV and high prevalence of ulcerative STIs which indicate an increasing risk of HIV spreading in the country.

The prevalence of HIV among the brothel based female sex workers was found in 2000-2001 to be between 0.3 and 0.5%. As for street based sex workers, the HIV prevalence rate went down from 0.5% in 2002-2001 to 0.2% in 2001-2002. For IDUs, the HIV rate increased from 1.7%

Table 6.4
Prevalence rate of syphilis and HIV in Central Bangladesh in 3rd and 4th round of national HIV and behavioral surveillance

Study Population	Syphilis (percent)		HIV (percent)	
	2000-2001 (3 rd)	2001-2002 (4 th)	2000-2001 (3 rd)	2001-2002 (4 th)
IDUs	18.2	19.4	1.7	4.0
Heroin smokers	-	13.9	-	0
Brothel based sex workers	32.2-43.2	-	0.3-0.5	-
Street based sex workers	42.7	29.8	0.5	0.2
Hotel based sex workers	-	11.4	-	0.2
Truckers	5.7	7.0	0	0
Male sex workers	18.2	14.2	0	0
Hijra	-	34.9	-	0.8
Men having sex with men	5.3	3.7	0	0.2
Babus	-	23.0	-	-

Source: MOHFW, 2001 and MOHFW, June 2003.

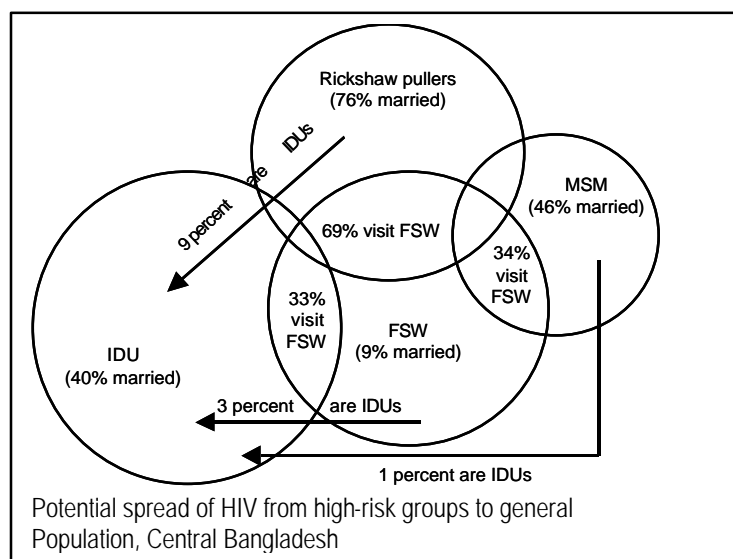
in 2000-2001 to 4.0% in 2001-2002. No case of HIV was found in both these rounds for truckers. Only a small percentage of MSM (0.2%) and hijra (0.8%) were reported to be HIV positive in 2001-2002, but none in 2000-2001.

Even though condom is widely available and despite the AIDS awareness and condom promotion programmes being conducted by several NGOs, the level of condom use is still low among the high-risk population. The high-risk subpopulation using condom at last commercial sex with females were IDUs (29.3%), rickshaw pullers (12.2%), truckers (23.4%), and students (35.5%). Only 12.7% of IDUs, 1.2% of rickshaw pullers, 11.2% of truckers, and 30.2% of students consistently used condom with female commercial partners in the past year (MOHFW, June 2003). The findings clearly indicate that condom use is infrequent. In Bangladesh, condom is widely known as a contraceptive method, but unless it is regularly used, the risk of RTI/STI as well as HIV/AIDS infection will rise greatly.

The potential of spread of HIV from high-risk groups to the general population in Central Bangladesh is depicted in figure 6.5 which shows that the clients of female sex workers include rickshaw-pullers, men who have sex with men, and injecting drug users. Many of these client groups are married. Therefore, once HIV enters any one of these communities, it has the potential to spread rapidly into the general population.

Monitoring the AIDS Pandemic (MAP), in their Provisional Report on the Status and Trends of HIV/AIDS/STIs Epidemics in Asia and the Pacific, explained how risk behaviours among vulnerable groups of population in an area with apparently low prevalence of HIV can accelerate the transmission of the disease to reach an epidemic level within a short time.

Figure 6.5
Potential spread of HIV from high-risk groups to general population, Central Bangladesh



Source: ICDDR,B, 2001

A safe and effective blood transfusion service is an essential component of the infrastructure required for providing

adequate health services. The GoB is committed to ensuring that all patients have access whenever needed to adequate, appropriate and safe blood. Despite the initiatives, policy guideline and legislation, blood transfusion practices in the country are complex, and conducive to transmission of RTI/STI infections.

According to a Population Council report, almost no rules are followed by the private blood banks for the collection, testing, processing, storage and distribution of blood. Medical histories and a history of risk behaviour, drug use or blood donations are not obtained routinely, and donated blood is not screened for HIV, hepatitis B or C. As of 1996, approximately 200,000 units of blood were reportedly used for transfusions every year in Bangladeshi hospitals and clinics. Most of the blood is donated by professional blood donors (PBDs) who representing an estimated 65-90% of the supply (Hossain S M I et al., 1996). Sandhani, an organization of medical students that campaigns for voluntary blood donation, reported that 65% of the annual blood donations came from 1000 repeating professional donors (Gibney L et al., 1999). These donors had been selling blood for varying time periods, from one week to 40 years. When queried about the maximum number of units they had sold in a single day, it was reported that 0.7% had sold 5 units, 12.2% had sold 4 units, 16.3% had sold 3 units, 32.3% had sold 2 units, and 38.5% had sold one unit. Particularly alarming with respect to their potential as carriers of HIV is the lifestyle of many of these PBDs. Sixty one percent of the PBDs in a study were found to be addicted or habituated to some drug or substance. Of this 61%, as many as 82% used marijuana, 39% liquor, 15% heroin (smoked), 14% sedatives, and over 2% intravenous pethidine. Thirty three percent and 73% of the PBDs reported that they had engaged in extramarital and premarital sex respectively, with CSWs being the primary partners in extramarital sex. Over 30% of the donors interviewed had suffered from penile ulcers or purulent urethral discharge. Ten percent of the PBDs had risky sexual behavior. Of them, 24.1% reported oral and anal sex, 82.8% men who have sex with men, and 17.2% bisexual relationships (Hossain S M I et al., 1996).

Sexual intercourse during menstruation, a practice associated with increased risk of transmission and acquisition of the HIV virus is also not culturally sanctioned, though it may exist in these PBDs. But there is a protective factor present in Bangladesh. As a predominantly Muslim nation the men are generally circumcised. While evidence of a relationship between circumcision and HIV infection is not consistent, many studies have found significant associations or evidence of trends between being uncircumcised and HIV seroconversion (Gibney L et al., 1999.)

Adolescents and HIV/AIDS

In Bangladesh, extramarital and premarital sexual activity, especially among younger males, is on the rise. It has been found in a study that with the exception of married and unmarried adolescent women in rural areas, all categories of respondents had increasing prevalence of premarital sexual intercourse with increasing age or age at marriage (Haider et al., 1997). The majority of the urban unmarried males (88%) had already experienced premarital sexual intercourse at all ages and large minorities of urban unmarried women (47%) had already experienced sexual intercourse by their late teens if they had not yet married.

Husbands of adolescent women were enquired if they had had extramarital sexual experience. For both in urban and rural locations at least one in six men married for five or more years acknowledged having extramarital experience. Of those who had sex with partners outside of marriage, 71% mentioned CSWs, 40% mentioned girlfriends and 15% mentioned other partners. As in the case of premarital sexual experience, very few women admitted to have extramarital experience. The female adolescents demonstrated better knowledge about the process of transmission of RTI compared to their knowledge on STDs. On the other hand, the male adolescents and the husbands showed better knowledge on the process of transmission of STDs than that on RTIs. Unmarried adolescents, males or females, and husbands demonstrated better knowledge on the process of transmission of AIDS than the female married adolescents (Ibid.).

There is much evidence that HIV infection among drug users does not remain confined to the persons. An increasing cross over is being observed in some countries as in India, Thailand and Bangladesh, between IDUs and CSWs, which contributes to the spread of the virus to the clients. This together with the sexual networks among the drug users and the sharing of injecting equipment, increases the risk of HIV infection not only among the drug users but also facilitates the transmission of the virus to their partners, wives, and to their children (UNICEF, March 2002). The majority of the drug users (79%) are young adults (Islam Sk N et al., 2000) and prevalence of HIV was found to be 2.5% among the IDUs (Azim T et al., 2000). This is a great concern for Bangladesh. The major factors which increase the vulnerability of young people to both drug use and to HIV infection are closely linked to rising poverty and decreasing vocational training, employment options accompanied by changes in values and breakdown of communication within families.

Though many of the adolescents have heard about HIV/AIDS, most of them live in a traditional context, with few discussions regarding reproductive health in the family, community,

Adolescence represents a window of opportunity to prepare for a healthy adult life. Adolescents lack information and understanding about their own sexuality. Both the male and female adolescents are found to be almost equally vulnerable, the girls being especially more vulnerable. Boys suffer from peer pressure to indulge in early sexual activities, smoking and drug abuse to prove that they are men. As they mature and become sexually active, know little about STI/AIDS, and cannot identify diseased partners, they are vulnerable to contracting RTIs/STIs/HIV. In early initiation of sex, adolescents are more likely to have multiple sexual partners. In addition, STD pathogens can more easily penetrate the cervical mucus of adolescents than that of older women (Hossain et al., 1998). Although some adolescents appear to weigh the pros and cons of engaging in certain behaviors, not all decisions are made rationally. Much of adolescent participation in unprotected sexual intercourse may, in fact, be due to a simple failure to make a decision (or the making of default decisions) because of ambivalence about pregnancy or STIs, particularly among younger adolescents. As part of their decision-making process, adolescents often look to their teachers, peers, and school environment for clues regarding various aspects of sexual behavior and to evaluate the degree, to which their beliefs agree or disagree with group norms (Shahriar A et al., 1999).

school, and the media. They are bound by traditional values, but are increasingly exposed to alternative cultural norms. They also engage in premarital and extramarital sexual activities. Studies indicate that many children and adolescents are victims of sexual exploitation and abuse and are forced into unsafe sex. Sexual molestation does take place within the home and immediate community (Kabir R. 2001).

However, current government policies and cultural norms still limit the ability of healthcare providers to provide services such as condoms to unmarried young people. At the same time, unmarried adolescents rarely visit reproductive health services for fear of social stigma. Very few health interventions involve young people in decision-making and programming. Adolescent Family Life Education (AFLE) and Life Skills Education are the key interventions supported by donors for NGOs and civil society partners to improve reproductive health awareness, including HIV/AIDS. Some of the lead agencies working in Bangladesh in this area are: BRAC, CMES, CAAP, Save the Children Alliance, Aparajeyo Bangladesh, NSDP, Plan International, and FHI. Bangladesh Girl Guide Association supported by UNICEF, Bangladesh Centre for Communication Programme supported by USAID, Population Services and Training Centre (PSTC), Nari Maitree, ARISE- a programme for street children, etc., are also working for the adolescents. But their efforts are faced with many constraints. The change in behavior takes time, and involves several intermediate stages. When working on prevention of HIV/AIDS, parents, teachers, community leaders and religious leaders can act as gatekeepers to protect the new generations.

Human Rights and STIs / HIV / AIDS

In Bangladesh discrimination, stigmatization and relatively low access to human rights increase vulnerability to HIV infection and AIDS. Fear of discrimination often prevents people from seeking treatment for AIDS or admitting their HIV status publicly. People with HIV or those suspected of having HIV, may be denied employment, evicted from home by their families and rejected by their friends and colleagues. Generally people who are socio economically disadvantaged and deprived of their rights have little or no access to HIV/STD prevention programs.

Such human rights violation adds to stigmatization of persons having the highest risk of infection. They urgently need information, protection and preventive treatment. In Bangladesh such vulnerable groups include sex workers and their clients, injecting drug users, MSMs etc. Some data however suggest that therapeutic practices such as unsterile

The Bangladesh National AIDS policy acknowledges that persons most at risk of HIV transmission – such as sex workers, men who have sex with men, and injecting drug users – are essential partners in any successful fight against AIDS. Both sex workers and men who have sex with men are regularly abducted, raped, gang-raped, beaten, and subject to extortion by the police and by powerful thugs termed mastans. And even when rape is not part of the abuse, harassment of HIV/AIDS outreach workers directly interferes with efforts to disseminate information and build awareness of HIV and to distribute condoms and clean needles. More generally, the abuses faced by sex workers, men who have sex with men, and injecting drug users further alienate these already marginalized persons from society and decrease the degree of control they have over their own lives. They become more difficult to reach with prevention and care information and services and they are in less of a position to protect their own health and the health of others (HRW, August 2003).

injections and blood transfusions with tainted blood may also be risk factors (Gibney L et al., 2001). For many in rural Bangladesh appropriate treatment for STDs has not been obtained early due to the fact that medical personnel are not adequately trained in STD management. As a consequence, poorly informed health – care workers are uncomfortable discussing sexuality with patients. High rates of STDs and existing risk behaviors among CSWs in Bangladesh set the stage for an epidemic spread of HIV. The situation calls for implementing prevention program involving effective treatment of STD, condom and sexual health promotion for CSWs and other high-risk populations in Bangladesh. Actions should therefore aim at prevention of spread of HIV epidemic in Bangladesh (Sarker S et al., 1998)

In the recent past there have been some reports of violation of the rights of sex workers in Bangladesh. In 1997 sex workers were evicted from Kandupatti brothel in the old town of Dhaka. In December 2002, the century old brothel in Magura was demolished. In 1999 the largest brothel in the country in Tanbazar, Narayanganj, and another at Nimtoli were closed and the sex workers evicted (Shirhir M and Philip G, 2003). Nearly 30% of all brothel based sex workers of the country lived in these brothels where the HIV prevalence is 15 per 1000 persons and syphilis prevalence in about 50 percent (HRV-2). Besides violation of human rights such mass eviction of sex workers is in contravention of the HIV and STD reduction policies of the WHO and UNAIDS as impact of dispersal of these sex workers will result in spread of the HIV epidemic all over the country. Naripokkho (a feminist NGO) along with 23 other organizations has expressed its solidarity in support of the sex workers (ILGA 1999).

Bangladesh is vulnerable to HIV/AIDS

In the context of a conservative society such as Bangladesh, the issues surrounding sexuality and STDs are stifled, stigmatized and hence hidden. Economic inequality, inequity and endemic poverty in Bangladeshi society also facilitate the transmission of viruses like HIV and make people vulnerable to infection. Adolescents who are the most vulnerable segment of the population have access to little or no information and services for sexual and reproductive health issues in Bangladesh. There are some internal and external factors that make Bangladesh more vulnerable to HIV/AIDS.

Internal factors:

- Lack of awareness: Only 37% of unmarried adolescent boys and 29% of unmarried adolescent girls know about HIV/AIDS and STD (MOHFW, 2002).

- High-risk behaviours: There are around 100,000 CSWs in the country most of whom are highly infected who entertain five times as many clients mostly with unsafe sex. An increasing number of IDUs practise needle sharing. Moreover, unsafe blood transfusion services, over 250,000 truckers plying all over the country, unknown number of men who have sex with men (MSM), low use of condom etc. all combine to make the country vulnerable to HIV/AIDS.
- Lack of knowledge on reproductive health and sex education.
- Rapid urbanization: Increasing mobility of people from village to urban slums leading to vulnerability to HIV infection through high-risk behavior.
- Reluctance and inability of people to seek health care services.
- Lack of empowerment of women: Unaware and unemployed women are more vulnerable to HIV infection than men.
- Existence of promiscuity: Increasing trend of practice of extramarital and premarital sexual relationship in Bangladeshi society.

External factors:

- High prevalence of HIV in neighboring countries: Bangladesh is surrounded by countries with high prevalence of HIV and has highly permeable international borders.
- High mobility of economically active people: Around 75,000 job seekers, unaware of HIV/AIDS, go abroad every year as migrant workers and many of them come back after being infected by HIV (South-South Centre, Dec 2000).

The current coverage of interventions is less than 20% for high-risk populations (MOHFW, 2002). Currently Bangladesh is a low prevalent country but worldwide evidence suggests that if the risk behaviours in Bangladesh worsen, it is only a matter of time before HIV spreads far and wide.

Areas for action

- The prognosis of people infected with HIV is bleak. There is no cure, no vaccine. Death is often preceded by a series of long illness and suffering with high treatment costs since AIDS is a combination of several infections including tuberculosis. The life expectancy and quality of life of many people with HIV or AIDS can be increased

through the use of low-cost essential drugs including antiretroviral, anti-tubercular and others.

- No other disease increases human suffering to the extent that AIDS does. It threatens basic human rights and affects human dignity through blame, stigma and discrimination. Ending the stigma that still surrounds STDs and HIV/AIDS and promoting safe sexual behaviour are critical to reducing infection rates. STD and HIV/AIDS awareness campaign need to be strengthened at national and local levels through partnerships among governments, donors, the media, the private sector, and NGOs to speak out openly on HIV/AIDS, to reduce stigma, prevent discrimination and to protect the rights of people living with AIDS.
- There is a lack of skilled technical manpower like trained doctors especially in syndromic management of STIs, pathologist and technician to carry out RTIs/STIs/HIV tests and nurses in the healthcare facilities. An effective policy along with the periodic supervision of the pathology centers by the concerned authority, training of the doctors, technicians and finally external quality assurance programmes, are urgently needed for providing quality services in Bangladesh.
- Strong political commitment and the support of parents and communities is required to prioritize policies and interventions that will address the needs of youth for reproductive health and HIV/AIDS related information, rights and services, leading to concrete behaviour change. Interventions must elicit contributions from young people in decision-making and programming, as worldwide evidence indicates that this does make a difference in the effectiveness of strategies.
- Before the situation worsens, the Government, NGOs, members of civil society and development partners should join hands and act in a concerted manner to combat the HIV/AIDS epidemic and prevent its spread. For example, better quality and larger epidemiological and behavioural research studies on HIV/AIDS and STDs can be undertaken especially on adolescent behaviour and needs. More studies on drug use and sexual behaviour among people throughout Bangladesh need to be conducted and closely monitored.
- All out efforts need to be taken to mobilize the community and raise awareness with regard to the danger of HIV/AIDS epidemic and take preventive steps. Mass media including electronic and print media can be effective channels for increasing knowledge and awareness and even influencing attitudes, behaviours

The Syndromic approach:

The syndromic management of RTI/STI endorsed by WHO is based on identifying the various syndromes and managing the patient by using the respective flowcharts and algorithms. The Syndromic Approach has been shown to be valid, feasible and cost effective in most settings and has been applied successfully in different countries throughout the world.

Early and effective diagnosis and treatment of STIs is one of the major components for an effective HIV infection prevention program.

In Bangladesh, the Technical Standard and Service Delivery Protocol for Management of RTIs and STIs has recently been developed based on the Syndromic Approach for STI case management adapted from WHO guidelines. This protocol is approved by the Technical Review Committee and is to be followed by all levels of health care providers.

In Syndromic management of RTI/STI, four basic health education messages, known as the four 'C's, are used for educating and counseling patients and /or their partners(s):

The Four 'C's:

Compliance with treatment;

Counselling for prevention;

Condoms with demonstration of correct use;

Contact tracing and treatment.

and political will to launch an aggressive action programme on HIV/AIDS.

Male and Female condoms are the only technology available that can prevent sexual transmission of HIV and other STDs. Persons exposing themselves to the risk of sexual transmission of HIV should have consistent access to high quality condoms. The activities of AIDS Programmes to increase both availability of and access to condoms should be monitored and resources mobilized to problem areas.

- A set of health care indicators may help to identify the general strengths and weaknesses of the country's health system. Specific indicators, such as access to testing and blood screening for HIV help to measure the capacity of health services to respond to HIV/AIDS related issues.
- Monitoring different components of STD control can provide information on HIV prevention within the country. Clinical services offering STD care are an important access point for people at high risk for both AIDS and STDs, not only for diagnosis and treatment but also for information and education.

The areas of action may include (but not necessarily be limited to) the following:

- Comprehensive prevention programmes to reduce the dangers of injecting drugs and commercial sex should be designed and implemented.
- Condom promotion especially among the commercial sex workers and their clients should be strengthened.
- The issue of safer sex should be addressed in interventions as high proportions of injecting drug users have unprotected sex with a number of partners including female, male and hijra sex workers.
- Behavioral communication messages need to be developed that focus on increasing the risk perception not only of the at-risk population but also the context in which the risks take place. The programme should also take into account the low literacy of the people including the drug users.

The efforts should aim at:

- Preventing the spread of HIV.
- Providing care and support for those infected and affected by the disease.

- Reducing the vulnerability of individuals and communities to HIV/AIDS; and
- Easing the socio-economic and human impact of the epidemic.

National policies and objectives

Realizing the gravity of the HIV/AIDS situation in Bangladesh, the GoB undertook a project on 'Prevention and Control of Sexually Transmitted Diseases' in 1996. Later, in 1997, the National Policy on HIV/AIDS and STD-related issues was approved. The National AIDS Policy is a landmark document, which outlines the various aspects of HIV/AIDS prevention and care and covers public health aspects like surveillance, HIV/AIDS counseling and testing, diagnosis and treatment of sexually transmitted diseases. The GoB also developed in May 1997 a strategic plan for the National AIDS Programme of Bangladesh (1997-2002) for HIV/AIDS prevention and care. A National AIDS Committee was also formed in 1995 to suggest ways and means for preventing HIV/AIDS.

Furthermore, in order to address all social, ethical and personal issues related to HIV/AIDS infection, the GoB has adopted policy guidelines for the National AIDS Programme (NAP). These technical policy guidelines refer in particular to the following areas:

- Surveillance and reporting of AIDS cases
- Testing guidelines
- Management of AIDS and HIV infection to include special groups, e.g., TB
- Behaviour Change Communication
- Counseling of HIV/AIDS patients and confidentiality
- National blood transfusion services
- HIV/AIDS and women, men, children, adolescents, sex workers, IUDs, people staying away from their partners, prisoners, minority populations, etc.
- Human rights issues
- HIV/AIDS education in and out of school
- Maternal and child health
- HIV/AIDS and the work place
- Relationship of the NAP with other programme areas
- Legal/ethical aspects
- Social/behavioural/clinical research

Prime Minister's Initiative

An initiative aimed at addressing violence against women in general that could potentially help sex workers is Prime Minister Khaleda Zia's plan, announced in March 2003, to create twenty-four-hour crisis centers in all divisional hospitals to provide treatment and legal aid to women survivors of violence. A survivor would be able to file an FIR at the center itself. One such center is already active in Dhaka. In its first year, the center has investigated 100 cases. Seventy-two were in criminal proceedings as of March 2003, and five had resulted in convictions (HRW, August 2003).

As programme needs continue to develop, the National STD/AIDS Policy needs to be reviewed (and possibly amended) to ensure consistency.

Strategies

The major strategies adopted by the Government are to prevent HIV transmission, reduce the impact of HIV/AIDS on individuals and the community, prevent STD transmission and provide STD management.

The following strategies need to be considered for implementing specific programmes related to HIV/AIDS.

- Advocacy and Epidemiological Surveillance;
- Behaviour change support and IEC;
- Promotion of condom use;
- STD management;
- Safe and appropriate use of blood transfusion adhering to universal safety regulations;
- HIV/AIDS counseling, care and legislation.

Behaviour change support in the context of HIV/AIDS is a package of intensive activities and services aimed at assisting and monitoring changes in behaviour to safer practices. These are to be provided through GoB, NGOs and CBOs on an emergency basis to those practising high-risk behaviors as a cost-effective means to reduce or avert the consequences of HIV/AIDS for the general population. Technical competence needs to be developed at the institutional level through provision of training to different categories of personnel. The surveillance mechanism needs to be strengthened and adequate logistic support ensured for establishing laboratory facilities. Mobilization of political commitment and multi-sectoral response to prevention/control of HIV/AIDS has a critical strategic importance in the successful implementation of the programme.

Prevention services

The activities undertaken for the prevention of HIV/AIDS are:

- Formation of a high-level multi-sectoral National AIDS Committee with three sub-committees, such as; i) Technical Committee, ii) Motivation-cum Publicity Committee, and iii) Monitoring and Evaluation Committee.
- Approval of a Safe Blood Transfusion Act. Ninety seven blood transfusion centers have been established throughout the country under the Safe Blood Transfusion Programme by the Ministry of Health and Family Welfare and with the financial assistance of UNDP under the guidance of the Blood Transfusion Sub-committee of the

The basic strategies of successful prevention are communication (including sexual health education) and behaviour change, the creation of an environment that enables people to protect themselves against the virus, condom promotion, HIV counseling and testing and the

In the area of political commitment, the GoB recognizes that AIDS is a priority health and development problem in Bangladesh and expresses its commitment to allocate adequate financial and human resources to effectively address the growing HIV/AIDS problem. The Government has urged all its ministries, as well as the NGO and private sectors to get more

National AIDS Committee. Screening tests are being carried out in these centers for five important infections transmitted through blood transfusion (HBV, HCV, HIV, Malaria and Syphilis).

- Third round of sero and behavioural surveillance has been completed and 4th round is underway.
- Completion of a Geographical Information System (GIS) on brothels in Bangladesh
- Orientation of 55 thousand health and family welfare workers on HIV/AIDS and STDs.
- Observation of the World AIDS Day every year throughout the country.
- Community orientation about HIV/AIDS:
 - a) Ward Commissioners/members of city corporations and municipalities.
 - b) Teachers/students of schools and colleges.
 - c) Religious leaders including imams of mosques.
- Billboards with specific messages on HIV/AIDS at division, district and upazila levels.
- Regular broadcasts of TV spots.
- Dissemination of messages through the print media.
- Messages on double-decker buses.
- Plans chalked out for multi-sectoral collaboration:
 - a) Ministry of Health and Family Welfare is the lead Ministry for the prevention of HIV/AIDS and STDs in Bangladesh.
 - b) Other relevant ministries like, Home, Women and Children, Youth and Sports, Education, Religious Affairs and Local Government are involved in the programmes.
 - c) The private sector, NGOs and CBOs are also involved in the programs.
- ICDDR,B has set up a center for pre-test and post-test counseling in collaboration with the Government and UNAIDS.
- Some NGOs like CARE Bangladesh and ASHAR ALO are working on care and support of people living with HIV/AIDS (PLWHA).
- Home-based care and management of PLWHA are encouraged. At present the number the of PLWHA is insignificant in Bangladesh. There is provision in the

To prevent/control the HIV/AIDS epidemic in Bangladesh, the National AIDS/STD Programme is currently implementing separate packages for preventing HIV/AIDS among:
Vulnerable youth, vulnerable women (other than female sex workers), drug users, brothel-based female sex workers, street based and “floating” female sex workers in major urban areas, hotel and residence based high-risk groups, and vulnerable males (MSM, hijras and transgender) Transport and other key male sectors, internal and external migrant labourers
STD services and Technical Support on Condom Promotion among Vulnerable Populations
Capacity building in project management with NGOs and services for a pilot project on social marketing of female condoms and lubricants, a pilot project on training health workers in STI management in selected urban areas and development of HIV Voluntary Counseling and Testing (VCT) Services at national and divisional levels.

- programme for training of doctors and nurses together with development of facilities for care and management of the PLWHA.
- *IDA/DFID funded activities*: 19 packages for goods and 58 packages for services have been approved by the Government and the World Bank.
- Issuance of invitation to NGOs and other organizations for various programme packages.
- The application for second round of Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) has been duly sent.

The Government implements HIV/AIDS prevention projects with funding from the International Development Association (IDA) and DFID.