HIV AND AIDS IN BANGLADESH
What is HIV/AIDS?

• HIV stands for the *Human Immuno-Deficiency Virus*.

• *HIV is the cause of the Acquired Immune Deficiency Syndrome (AIDS)*.

• *HIV attacks and slowly destroys the immune system by entering and destroying important cells of the immune system (the T helper lymphocytes)*.
End-2006 global estimates children and adults

- Adults and children living with HIV/AIDS  39.5 million
- New HIV infections in 2006  4.3 million
- Deaths due to HIV/AIDS in 2006  2.9 million
The Bangladesh HIV Scenario, 2006

Overall HIV prevalence rates among population groups most vulnerable to HIV infection <1%

Estimated number of cases ~7500

Reported number of HIV cases 874
Number of AIDS cases 240
No. of deaths 109
How is HIV transmitted?

- Unprotected sex
- Via contaminated blood
- From an infected mother to her child
Issues around the blood borne route of transmission

Injection Safety and Universal Precautions

Blood Safety

Injecting Drug Users
Estimated 12 Billion Injections Administered Annually
Worldwide
40 million injections are administered daily

Therapeutic injections
Most medications used in primary care can be administered orally

Immunization injections
Most vaccines are administered by injections

Measles elimination?
BLOOD SAFETY

• 75% transfused blood is from commercial blood donors
• Hepatitis B (HBV) prevalence rate in professional donors is ~21%
• Hepatitis C (HCV) prevalence rate is ~3%

Blood Transfusion Programme:
• 97 centres in the country
• Testing for HIV (1&2), HBV, HCV, syphilis, malarial parasite
Injecting Drug Users in Bangladesh

• Estimated numbers - 20,000 - 40,000
A concentrated epidemic in Bangladesh

18 cities sampled for IDU, HIV found in four cities only

Concentrated epidemic in Central city A

Surveillance data

Surveillance, NASP

Lending or borrowing

Central A: 77.2%
NW A: 15.8%
NW B: 58.4%
NW B1: 7.1%
SE D: 68.8%

Surveillance, NASP
Conceptions about safe injection practices

• If I share with my family member it is not a problem.
• My sharing partner is very healthy, therefore there is no chance for HIV transmission.
• I use a used syringe but changed the needle - this is not sharing.
• I inject into muscle not into vein; so there is no chance of spreading germs.
• If blood does not appear in the used needle/syringe - then it is no problem.
• I jerk the used needle/syringe strongly before using.
The typical pattern of HIV among injection drug users is “low and slow”, followed by a rapid burst of infection.
No one is isolated

Those most vulnerable

Their partners

The regular partners “general population”
Sexual partners last year

Consistent condom use last year with different types of partners

Surveillance, NASP
Female IDU

In 135 female IDU enrolled, 63.1% were sex workers
SEXUAL TRANSMISSION

commercial and non-commercial sex

- Heterosexual sex
- Same sex

Sex workers
- Males
- Females
- Hijras
Sex workers (surveillance)

Females – Brothels (all 14), streets (2 cities), hotels (2 cities), casual (5 cities)
Males – streets (1 city)
Hijra (transgender) – street (one city)

HIV <1% in all
Prevalence of sexually transmitted infection (STI) among different population groups in Bangladesh

- N. gonorrhoeae
- C. trachomatis
- T. vaginalis
- Syphilis

High risk behavior

General population

Hawkes et al, 99: Maternal and child health centre, Matlab
Sabin et al, 97: Slum dwellers, Dhaka
Bogaerts et al, 99: Health clinic, Dhaka
Islam et al, 99: Brohel, Jessore
Rahman et al, 98: Floating SWS, Dhaka
Female Sex Workers:
Clients (New or Regular) in the Last Week

Surveillance data
Surveillance, NASP

Brothels
Street Central A
Street SE A
Street SW A
Hotel Central A
Hotel SE A

More than 20 clients/week
FEMALE SEX WORKERS: PROPORTIONS USING CONDOMS IN THE LAST WEEK

Proportion using condoms consistently with new clients

- **Brothels**: 5.2%
- **Street Central A**: 12%
- **Street SE A**: 3.9%
- **Street SW A**: 3.4%
- **Hotel Central A**: 3.9%
- **Hotel SE A**: 0%

Surveillance, NASP
Consistent condom use among female sex workers in Bangladesh is much less than in other countries in the region.

Source: Bangladesh BSS IV, Indonesia – HAPP, Nepal – New Era, Cambodia - NCHADS, Project, India – FHI/USAID
MEN
Mobile men: Reported sex last year by partner types

Consistent condom use in the last year: 0-4%

Surveillance data and Gazi et al
Sex with female sex workers reported by men in two rural areas of Bangladesh, by migration status

- **Significantly higher than control group**

- Mercer et al, 2006, Sex Transm Dis
Boatmen’s mobility to Myanmar

17% visited sex workers

42%

58%

Mean # night stayed = 3
Significant association between duration of stay and sex with SW

Visited Myanmar
Did not visit Myanmar

Gazi et al, HSID, ICDDR.B
College/University students living in dormitories in central Bangladesh

- Regular
- Female sex workers
- Male/Hijra sex workers
- Girl friend

Had sex last yr
- Regular: 9.6%
- Female sex workers: 32.8%
- Male/Hijra sex workers: 25.9%
- Girl friend: 4.5%

Used condoms consistently last yr
- Regular: 30.6%
- Female sex workers: 30.2%
- Male/Hijra sex workers: 8.6%
- Girl friend: 24.5%
Percentage of male (18-49 years) had pre- or extra-marital sex in last one year with different types of partners

Face-to-face

- Sex worker: 8.1%
- Casual female partner: 8.5%
- Male/transgender/boy: 1.4%
- Any partner: 15.9%

n=3623

Chowdhury et al, 2006, ICDDR,B
PRE-MARITAL SEX

Unmarried male (N=3035) and female (N=3067)

Larson et al, GFATM survey, 2006, ICDDR,B
MSM and male sex workers
MSM networks: Recruitment Chain of Seed  (N=141)

RDS MSM, Azim et al, ICDDR,B
MSM and their female sex partners

I am not Gay, why should I not marry? I think I have to stop sex with men. I believe this is bad behaviour. My parents want me to get married and have children. This is very natural, parents want to see their children happy and they want to be grandparents. I believe a man should marry a girl and become a successful husband. He should be able to satisfy his wife sexually. He has to be a responsible father, he has to earn good money and maintain his family. I am not an exception.

Khan et al, Culture, Health and Sexuality, 2005
**HIV AND ACTIVE SYPHILIS IN MSM FROM DHAKA: 2006**

<table>
<thead>
<tr>
<th>HIV, (%)</th>
<th>Active syphilis, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>2.7</td>
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</table>

RDS MSM, Azim et al, ICDDR,B
CAN WE DO ANYTHING TO PREVENT AN EPIDEMIC?

YES!!!!!
ALL OF US CAN
HARM REDUCTION PROGRAMMES

- Needle/syringe exchange
- Primary health care and abscess management
- Detoxification
- Supportive environment for working with drug injectors
  - Law enforcers and drug agencies
  - Communities
  - Families
- Care and support for positive IDUs
Making sex safer

- Condom promotion
- Avoiding unsafe sex
- Access to correct knowledge
- Access to friendly services
Pattern of condom use during the last sex act amongst those who claimed to use condoms

3 patterns of claimed condom use:

# Late wearing of condom (after sex began)

# Sex began with condom but was removed before ejaculation

# Consistent condom use (safe sex)

These patterns have contextual meanings:
1. Low risk perception
2. Sense of masculinity
3. Perceived pleasure & desire
BARRIERS TO CONDOM USE
(Qualitative study conducted in Dhaka among men aged 18-58 yrs)

• Initially I began to use condoms but both of us found that sex with condoms interfered with our emotional intimacy. We do not have any barrier in our emotions and love, so why should we place a ‘barricade’ in our sexual relationship?

• If I use condoms, this may indicate that I am concerned about *jouno rog* (STI) which would suggest that either one of us may be promiscuous. The meaning of love and trust will disappear.

• Form my appearance it is obvious that I am unmarried and you know very well how negatively our society views extra marital sex. Being unmarried, how can I ask for condoms from a shopkeeper? I will be labelled a 'bad boy,' who wants that image?
Group Attitudes: Overall Scores

Larson et al, GFATM survey, 2006, ICDDR,B
MAJOR FACTOR INTERFERING WITH PREVENTION ACTIVITIES IN VULNERABLE POPULATIONS

STIGMA
LACK OF COMPLETE KNOWLEDGE

OUR ATTITUDES
2-3 months ago this was a shooting spot
Poster: congratulating Narcotics Department for eradication drugs from Noyabazar area
To escape harassment IDU hide in dustbins and other areas
RISK FACTOR FOR HIV INFECTION IN IDU

HIV Positive IDU were five times more likely to be homeless than HIV negative IDU

Azim et al, ICDDR,B
Violence against Sex Workers and Hijra

[Bar chart showing the percentage of incidents of beaten and raped across different categories of sex workers and Hijra.]
Dealing with marginalised populations

Testing – voluntary, NOT forced

Confidentiality
Jagori
Voluntary Counselling
and Testing (VCT) Units

Dhaka
Chandpur
Sylhet
Chittagong
Bay of Bengal
THANK YOU