

Module 1

Drug Use and HIV in Asia

Treatment and Care for
HIV-Positive Injecting Drug Users



Module 1

Drug use and HIV in Asia

Participant Manual

2007



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and

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Module 2: Comprehensive services for injecting drug users – participant manual

Module 3: Initial patient assessment – participant manual

Module 4: Managing opioid dependence – participant manual

Module 5: Managing non-opioid drug dependence – participant manual

Module 6: Managing ART in injecting drug users – participant manual

Module 7: Adherence counselling for injecting drug users – participant manual

Module 8: Drug interactions – participant manual

Module 9: Management of coinfections in HIV-positive injecting drug users – participant manual

Module 10: Managing pain in HIV-infected injecting drug users – participant manual

Module 11: Psychiatric illness, psychosocial care and sexual health – participant manual

Module 12: Continuing medical education – participant manual

Trainer manual: Treatment and care for HIV-positive injecting drug users

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Foreword

There is a high risk of widespread transmission of HIV in Asia, not only because of the large size of the population and the high burden of sexually transmitted infections but also due to the prevailing risk behaviours and vulnerabilities. The use of heroin and opium as well as cannabis and *hashish* are quite common throughout Asia. Heroin is most commonly used in various countries of the Mekong Basin region, and the favoured method of administration is by injecting. The proportion of those injecting heroin does, however, vary from place to place and in different cultural and social settings. Data suggest that about 50% of heroin users take to injecting once they get over the initial phase of consumption through smoking or inhalation. In the late 1990s, amphetamine-type stimulants had increasingly become a drug of choice in Cambodia, China, Indonesia, Japan, Lao PDR, Myanmar, the Philippines, the Republic of Korea and Thailand.

HIV spreads most rapidly among injecting drug users (IDUs) when injecting equipment is shared between many people – a widespread practice in many countries. In places with a drug culture where IDUs gather at one place to inject, the sharing of one needle between three to even 50 participants can be common. It is not the drug use or even the actual injecting of the drug that causes HIV infection; it is the sharing of contaminated injecting equipment that transmits the virus. In Asia, studies have shown an overlap between sex work and injecting drug use with a substantial proportion of male IDUs buying sex, male and female IDUs selling sex, and sex workers injecting drugs. HIV transmission through injecting drug use has kickstarted the epidemic in many countries of Asia. Half the number of all IDUs in Asia today are infected with HIV and in need of care, support and antiretroviral therapy programmes. However, health-care providers, carers and families often have limited knowledge and skills in managing the health problems of IDUs and, in particular, of those who are already HIV-infected. Therefore, the ASEAN Task Force on AIDS, in collaboration with Family Health International and the World Health Organization Regional Office for South-East Asia developed this set of training modules for clinicians who provide treatment and care, including antiretroviral therapy, for HIV-positive IDUs.

I am confident that physicians in Member countries will find this set of training modules both relevant and useful.



Samlee Plianbangchang, MD, Dr PH
Regional Director

A Message from the Secretary-General of ASEAN

ASEAN is committed to preventing the further transmission of HIV and mitigating the impact of HIV and AIDS, by improving regional responses and enhancing Member Countries' development of people-centred programmes. An important focus of ASEAN's efforts has been in increasing access to treatment and care for HIV-positive injecting drug users (IDUs), who by far are the group most at risk in the transmission of HIV.

As part of this initiative, the ASEAN Task Force on AIDS (ATFOA) has been working closely with the US Government under the ASEAN-USAID HIV and AIDS Cooperation Framework to develop a curriculum to train doctors and health givers in dealing with health problems experienced by HIV-positive IDUs such as hepatitis B, hepatitis C and tuberculosis. Overall, the curriculum identifies critical skills that will be needed by health givers and clinicians in ensuring that HIV-positive IDUs are provided with high-quality treatment.

I would like to congratulate the ATFOA, USAID and all those who had contributed to this outstanding endeavour. This collaboration has put in place a milestone document which will enable ASEAN to carry out its task of preventing HIV and AIDS more effectively. I thank all involved for helping ASEAN forge a caring and sharing community.



Ong Keng Yong
Secretary-General of ASEAN

Abbreviations and acronyms

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
ARV	antiretroviral
ASEAN	Association of Southeast Asian Nations
ATS	amphetamine-type stimulants
CDC	Centers for Disease Control and Prevention (US Government)
DALY	disability-adjusted life year
FHI	Family Health International
HIV	human immunodeficiency virus
IDU	injecting drug user
LSD	lysergic acid diethylamide
MDMA	methylenedioxyamphetamine
MSM	men who have sex with men
OTC	over the counter
PLWHA	people living with HIV and AIDS
SP	spasmoproxyvon
SW	sex worker
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
WHO	World Health Organization

How to use this curriculum

What you should know before the course

This course is designed for clinicians who provide care and treatment, including ART, for HIV-positive IDUs. As a participant, you should have clinical experience in providing ART before taking the course. It is expected that you will provide care and treatment to HIV-positive IDUs once you have completed this course.

Module structure

The training course consists of 12 participant modules with PowerPoint presentations, a trainer manual and one CD-ROM which contains key references. Most modules are divided into sub-modules. The modules are structured in such a way that they can be used as individual blocks for a single training session and can be combined as needed for training requirements.

This curriculum is not recommended for self-study but for training by trainers.

Training methodology

The overall training approach used in these modules is based on adult learning theory and is a combination of lectures, discussions, small group work, interactive practical exercises and role-plays. It is recommended that this curriculum be delivered by trainers with extensive experience in the content of each specific module. It is acknowledged that this will limit the number of trainers able to deliver individual sessions.

Adaptation by countries and adoption as a national curriculum

Technical writers from across Asia contributed to the curriculum. Countries should seriously consider adopting the curriculum for use in country-level training programmes. Countries are also encouraged to undertake any adaptation they feel is required for in-country use.

Additions, corrections, suggestions

Do you want to suggest changes to this module? Is there additional information you would like us to include? Please write or e-mail us. We will collect your letters and e-mails, and consider your comments in the next update to this module.

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Drug use and HIV in Asia

OVERVIEW



Objectives:

By the end of the session participants will be able:

- To understand which drugs are used globally and their contribution to mortality and morbidity
- To understand the distinction between licit and illicit drug use
- To be familiar with the patterns of drug use in Asia
- To understand the connection between a change in the pattern of drug use and HIV transmission
- To be familiar with the regional epidemiology of drug use and HIV.



Time to complete session:

1 hour



Session content:

- What are drugs?
- Global drug use
- Drug use in Asia
- Drug production and trafficking in Asia
- How people take drugs
- Drugs that are commonly injected in Asia



Training materials:

- PowerPoint presentation 1: Drug use and HIV in Asia
- Evaluation form

WHAT ARE DRUGS?

It is important to know what is meant by the word “drugs.” People often have a different understanding of what drugs are and how they are classified. According to the *Lexicon of alcohol and drug terms* published by the World Health Organization:

Drug: *A term of varied usage. In medicine, it refers to any substance with the potential to prevent or cure disease or enhance physical or mental welfare, and in pharmacology to any chemical agent that alters the biochemical physiological processes of tissues or organisms. Hence, a drug is a substance that is, or could be, listed in a pharmacopoeia.*

In common usage, the term often refers specifically to psychoactive drugs, and often, even more specifically, to illicit drugs, of which there is non-medical use in addition to any medical use.

Psychoactive drug or substance: *A substance that, when ingested, affects mental processes, e.g. cognition or affect. This term and its equivalent, psychotropic drug, are the most neutral and descriptive terms for the whole class of substances, licit and illicit, of interest to drug policy. “Psychoactive” does not necessarily imply dependence-producing and, in common parlance, the term is often left unstated, as in “drug use” or “substance use”.*

Common usage distinguishes between licit and illicit drugs:

- (1) *Legal (licit) drugs such as medications, tobacco, alcohol and coffee/tea*
- (2) *Illegal (illicit) drugs such as opium, heroin, cocaine, amphetamine-type stimulants (ATS), and cannabis (note: cannabis is an illicit drug in most countries in Asia but is a licit [legal] drug in countries such as Italy, Luxembourg, Portugal and Spain where personal cannabis use has been decriminalized).*

Mortality related to illicit drug use

Estimating the contribution of alcohol, tobacco and illicit substance use to the global burden of disease is gaining attention. Based on a standard of measurement known as disability-adjusted life years (DALYs), estimates of the burden imposed on society due to premature death and years lived with disability have been assessed. The global burden of disease findings by WHO show that tobacco and alcohol are major causes of mortality and disability worldwide, with the impact of tobacco expected to increase in many parts of the world. There is ample evidence to show that the burden of ill-health from the use of psychoactive substances, taken together, is substantial.

GLOBAL DRUG USE

It is estimated that 2 billion people globally use alcohol; approximately 1.3 billion smoke tobacco; and approximately 200 million people (5% of the adult population) use illicit drugs (2005). Cannabis is the most widely used illicit drug in the world with 158.8 million users (3.8% of the adult population), followed by ATS with 24.9 million using amphetamines and 8.6 million using ecstasy. Cocaine is reportedly used by 14.3 million (0.3% of the adult population), whereas opiates are used by 15.6 million (0.4% of the adult population) of whom 11.1 million (0.3% of the adult population) use heroin.

The content of this handout has been drawn largely from Module 2: Drug use and HIV/AIDS: Global and regional perspective, in: Reid G and Dorabjee J. *Resource modules for trainers: Basic principles and practices of drug use related HIV/AIDS prevention and care in the Mekong region*. Melbourne, Centre for Harm Reduction, 2005.

DRUG USE IN ASIA

Heroin and opium use as well as cannabis and *hashish* use have been common throughout Asia. In the late 1990s, ATS have increasingly become a drug of choice in Thailand, South Korea, the Philippines, Taiwan, China, Japan, Cambodia, Lao PDR and Indonesia. Ecstasy (methylenedioxymethamphetamine [MDMA]), a type of ATS, is commonly used in the Asian dance party scene. Buprenorphine, a type of drug that provides sedative effects, is reportedly used in India, Pakistan, Bangladesh, Nepal, Iran and China (to a lesser extent). Dextropropoxyphene (known as spasmoproxyvon) is widely used in the north-eastern Indian states. Most countries in Asia reported using mixed pharmaceuticals such as analgesics and tranquillizers. Solvents and glues are used by youth in India, Lao PDR, Indonesia, Mongolia, Viet Nam, the Philippines and Thailand (Reid and Costigan, 2002).

DRUG PRODUCTION AND TRAFFICKING IN ASIA

The main drug-producing areas in Asia are known as the Golden Crescent (covering Afghanistan, Iran, Turkey and Pakistan) and the Golden Triangle (covering Myanmar, Thailand and Lao PDR). Many countries in the Region are criss-crossed by trafficking and transiting routes linking drug-production zones to lucrative consumer markets. Iran is a major bridge for opium and heroin en route to the Persian Gulf, Turkey, Russia and Europe, and it is estimated that 32% of heroin seized in India has its origins in Afghanistan or Pakistan.

Myanmar is the main producer of opium, heroin and ATS in the South-East Asia Region. While its production of opium has diminished in recent years, it remains the second-largest producer globally, surpassed only by Afghanistan (UNODC, 2006). Most heroin produced in Myanmar is now trafficked through China, rather than through Thailand; China is now the most important transshipment route for the international market (National Narcotic Control Commission China, 2004). Many nations in the Mekong Region have borders that are porous, remote, inaccessible, mountainous, some with extensive waterways and coastlines, and often undermanned and with inadequate customs services to monitor the heavy volume of people crossing certain land boundaries.

China has recently become a major producer of methamphetamines for domestic use and has an established record of supplying to international markets, primarily Japan, South Korea, the Philippines and Taiwan. The production of methamphetamines in China appears to have accelerated with 1608 kg of the drug seized in 1999, increasing to 20000 kg by 2000. India still remains a transit route for heroin, *hashish* and morphine-base from Afghanistan, Pakistan, Myanmar and, to a smaller extent, Nepal.

HIV infection has been shown to follow drug trafficking routes. In South-East Asia, HIV epidemics among injecting drug users (IDUs) started or spread rapidly on drug trafficking routes through Myanmar, China, Viet Nam, India, Thailand and Malaysia.

HOW PEOPLE TAKE DRUGS

Drugs can be taken by smoking, snorting, ingesting (eating, drinking) or injecting. Not all drugs can be taken by all routes.

- *Drugs that are commonly smoked or inhaled* include tobacco, marijuana, opium, heroin, ATS and glue.
- *Drugs that are commonly ingested or swallowed* (as in drinking) include alcohol, opium, marijuana, sedatives (e.g. diazepam), buprenorphine and heroin (rarely).
- *Drugs that are commonly injected* include heroin, sedatives, ATS and buprenorphine.
- Cocaine is commonly snorted (inhaling into the nostril).

It is important to know that some people switch from one way of taking drugs to another (e.g. from smoking to injecting heroin). Some people also take a number of different drugs by different routes over a period of time (e.g. drinking alcohol, smoking tobacco, swallowing Ecstasy, or injecting heroin).

Chasing the dragon

Chasing the dragon is a way of smoking heroin. The drug user puts powdered heroin on a piece of foil and heats it from below with a flame. The heroin turns to a sticky liquid and wriggles around like a Chinese dragon. Fumes are given off and are inhaled through a tube, or a rolled-up newspaper or magazine.

Injecting

HIV spreads most rapidly among IDUs when equipment is shared between many people – a widespread practice in many countries. In places with a drug culture where IDUs gather to inject, the sharing of one needle between 3 and 50 participants can be common. It is not the drug use that causes HIV infection; it is not even drug injecting; it is the sharing of contaminated injecting equipment that transmits HIV infection.

Pooling of money to purchase drugs and sharing of needles is common in Asia (Reid, 2002; Bezziccheri, 2004). There has been a marked increase in poly-drug use, for several reasons. When particular commonly used drugs are more difficult to access (often because drug seizures result in price increases), it is common for drug users to seek and use a range of alternatives to achieve the desired effect.

Professional injectors (those who receive payment for injecting a client with an illicit drug) operate in Myanmar, Pakistan, India, Bangladesh, Nepal, Viet Nam and Malaysia (UNODC, 2006). Professional injectors rarely employ hygienic practices, and consequently HIV transmission among IDUs is inevitable. In Bangladesh, it has been shown that a professional injector will often use the same needle for 20–50 people with a needle changed only when blunt.

Profile of drug users

Historically, opium smoking was a male phenomenon; this is still the case and the majority of drug users throughout South and South-East Asia are male. There has, however, been a rise in the number of female drug users in countries in recent years. This increase has particularly been recognized in association with female sex work in parts of China and Viet Nam. Cambodia, Lao PDR and Viet Nam all have substantial populations of street children who increasingly consume drugs, living precariously with little or no family support or guardians. A substantial proportion of illicit drug users are unemployed or underemployed and, while educational standards vary, large proportions have achieved a lower secondary education at best.

Women injecting drug users

Drug use among women in Asia is often considered a minor problem largely because the number of women classified as IDUs is estimated at 10% or less (Reid, 2002). It has been suggested, however, that this figure will increase and that monitoring of the situation needs to improve. In the developed world, such as the United States of America, United Kingdom and Australia, the proportion of IDUs who are women is often as high as 25%. In China, most drug users are men but the number of women using drugs is increasing. In Yunnan and Guangxi provinces women make up 16–25% of all drug users in treatment and tend to be younger than male drug users. Other countries in Asia where there are significant numbers of women IDUs include Nepal, India, Pakistan, Bangladesh, Indonesia, Viet Nam, Thailand, Sri Lanka, the Philippines, Taiwan, Japan and Malaysia.

In general:

- Women drug users are likely to have a male sexual partner who injects drugs.
- Women tend to be introduced to drugs by a husband/boyfriend or male member of their family.
- Access to drugs usually occurs through the male sexual partner.
- Women are more likely to share needles and to be injected by someone else.
- Women experience difficulty in avoiding drug use/abstaining/accessing drug treatment if the male partner is an active drug user.

Female sex workers and injecting drug use

In Asia studies have shown an overlap between sex work and injecting drug use with approximately half of female IDUs estimated to be sex workers (MAP, 2005; Tuan et al. 2004). In Guangxi province in China, 80% of female drug users are sex workers.

- Female IDUs may become involved in sex work to pay for their drugs.
- Female sex workers may use drugs. In some situations, brothel owners introduce sex workers to drugs. Also, women who are coerced or sold into sex work may resort to drug use.

DRUGS THAT ARE COMMONLY INJECTED IN ASIA

Heroin

Where heroin is the drug of choice in various countries of the Mekong Region, the favoured method of administration is injecting. The rate of heroin injecting does, however, vary from place to place and in different cultural and social settings: once the initial phase of smoking and inhalation of heroin has generally passed, data suggest that around 50–60% of heroin users inject (Reid, 2002; Garten et al. 2004; Hammett et al. 2005; Mith Samlanh, 2002).

Buprenorphine

Injecting buprenorphine is common in South Asia. Buprenorphine is produced in India and diverted to the illicit drug market. A study of drug sharing and injecting networks in Bangladesh found that most IDUs in Bangladesh inject buprenorphine, with sharing of equipment and drugs. Poorer users tended to report larger, more open drug-sharing networks (Rahman et al. 2004).

Amphetamine-type stimulants (ATS)

Amphetamine-type stimulants (ATS) are generally ingested or smoked, but injecting of ATS, albeit in smaller numbers, has been identified in Thailand, China, Lao PDR and Cambodia (Lewis, 2003; Liu, 2002). As a street drug, amphetamines are usually sold as a powder that contains amphetamine mixed with other powders or drugs.

Dextropropoxyphene/Proxyvon

These are synthetic opiates that are produced legally and sold over the counter. Spasmaproxyvon (SP) is the trade name for dextropropoxyphene. It costs approximately one tenth of the price of heroin and is therefore used as a substitute. Proxyvon is commonly used by IDUs in north-east India (Mizoram, Manipur and Nagaland).

Midazolam tablets

Midazolam, a fast-acting benzodiazepine, is increasingly used as a drug of injection in Bangkok. Midazolam tablets are crushed, dissolved in water, filtered and injected. Sharing of equipment is common. Abscesses, gangrene and vein degradation are common (Kiatying-Angsulee et al. 2004).

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Presentation 1: Drug use and HIV in Asia

Drug use and HIV in Asia

Session objectives

- Understand what drugs are used globally and their contribution to mortality and morbidity
- Understand the distinction between licit and illicit drug use
- Be familiar with patterns of drug use in Asia
- Understand the connection between a change in pattern of drug use and HIV transmission
- Be familiar with the regional epidemiology of drug use and HIV

What are drugs?

Definition: WHO

In pharmacology: any chemical agent that alters the biochemical physiological processes of tissues or organisms

http://www.who.int/substanceabuse/terminology/who_lexicon/en/index.html

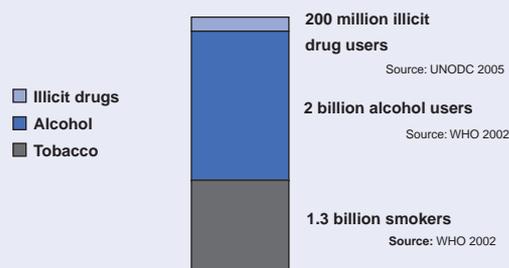
Legal = Licit

- ◆ Medications, tobacco, alcohol, coffee/tea

Illegal = Illicit

- ◆ Opium, heroin, cocaine, ATS, cannabis

How much of a global problem is illicit drug use?



Source: www.who.int/substance_abuse/facts/global_burden/en/index.html
www.unodc.org/pdf/research/wdr07/WDR_2007.pdf

Of the 200 million people who use illicit drugs ...

	People (millions)	% Global pop.
All illicit drugs	200.0	5.0%
Cannabis	158.8	3.8%
ATS		
▪ Amphetamine	24.9	0.6%
▪ Ecstasy	8.6	0.2%
Cocaine	14.3	0.3%
Opiate	15.6	0.4%
▪ Heroin	11.1	0.3%

Source: www.unodc.org/pdf/research/wdr07/WDR_2007.pdf

Drugs and their effects – 1

- **Stimulants** – coffee, nicotine, cocaine, ketamine, amphetamines, ecstasy
 - ◆ Physiological arousal
 - ◆ Exhilaration
 - ◆ Anxiety
 - ◆ Feeling of well-being
 - ◆ Decreased hunger, weight loss
 - ◆ Indifference to pain and fatigue
 - ◆ Unpredictability:
 - Irritability / restlessness / panic / paranoia
 - Decreased / increased concentration
 - Enlarged pupils
 - Sexual arousal / affectionate
 - Feelings of strength / prowess / violence
 - Myocardial infarction / cardiac arrest / stroke



Photo: Centre for Harm Reduction.

Drugs and their effects – 2

- **Sedatives** – alcohol, benzodiazepines, inhalants (and opioids)
 - ◆ Euphoria, disinhibition
 - ◆ Calm, feeling of well-being
 - ◆ Reduced anxiety / stress / pain
 - ◆ Decreased concentration, coordination
 - ◆ Sedation / drowsiness, respiratory suppression
 - ◆ Variably:
 - Pupils big / small
 - Diminished appetite / nausea
 - Decreased motivation
 - Paranoia / aggressiveness / hallucinations
 - Drug-induced psychosis

Drugs and their effects – 3

- **Hallucinogens** – LSD, magic mushrooms, cannabis
 - ◆ Intense sensory experiences
 - ◆ Mixing of senses
 - ◆ Distorted time and space
 - ◆ Visual hallucinations
 - ◆ Rapid pulse, dilated pupils, nausea, ↑ blood pressure
 - ◆ Variably:
 - Relaxation / well-being
 - Paranoia / confusion / anxiety / psychosis
 - Loss of appetite

Drugs used in Asia

- **Heroin and opium** use throughout Asia
- **Cannabis** (marijuana, *hashish*) common throughout Asia
- **ATS/methamphetamine** ↑ drug of choice:
 - ◆ Thailand, S. Korea, Philippines, Taiwan, China, Japan, Cambodia, Lao PDR, Indonesia
- **Ecstasy (MDMA)** use:
 - ◆ ↑ growth in Asia dance party scene
- **Buprenorphine:**
 - ◆ India, Pakistan, Bangladesh, Nepal, Iran, China
- **Dextropropoxyphene:** NE India
- **Mixed pharmaceuticals:** analgesics/tranquillizers
- **Solvents and glue:**
 - ◆ India, Lao PDR, Indonesia, Mongolia, Viet Nam, Philippines, Thailand, Cambodia

Source: *Basic principles and practices of drug use related HIV/AIDS prevention and care in the Mekong Region*. Melbourne, Burnet Institute Centre for Harm Reduction, 2005.

How do people take drugs?

- **Smoke / inhale:** tobacco, cannabis, opium, heroin, ATS, glue
- **Chase or chasing the dragon:** heroin
- **Ingest:** alcohol, opium, cannabis, sedatives
- **Inject:** heroin, cocaine, sedatives, ATS, buprenorphine
- **Snort:** cocaine, heroin
- **Suppositories:** Ecstasy
- Some people transition from one route to another (from smoking to injecting heroin).
- Some use multiple drugs and multiple routes (e.g. drink alcohol, smoke tobacco and inject heroin).

How people take drugs is important



Injecting carries a high risk of HIV transmission if there is sharing and reusing of injecting equipment.

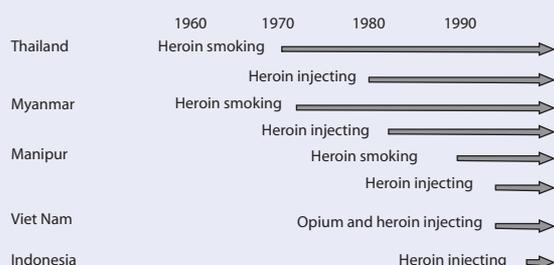
Smoking, snorting, inhaling or swallowing drugs **does not carry a direct risk of HIV** transmission but is often associated with increased risk behaviour.

Source: SubstanceAbusePrevention.org

IDUs in Asia

- 13 million estimated IDUs in the world
- 43% in Asia-Pacific
 - ◆ South and South-East Asia: 3.3 million
 - ◆ East Asia and the Pacific: 2.3 million
- Globally, 5–10% of total HIV infections result from injecting drug use
- 50–70% of HIV infections in some Asian countries are due to injecting drug use

Diffusion of opioid injecting in selected countries in the Asian region



Source: Centre for Research on Drugs and Health Behaviour, 2000.

Diffusion of injecting drug use



Photo: Jimmy Dorabjee

- Typically (but not always) starts with richer groups and shifts to poorer sectors
- Associated with mobility and drug transit routes
- Associated with rapid social and economic change



Photo: Peter Higgs

Beyond the stereotype: diverse life situations

Population groups that include drug users:

- Circumstantial drug users – transport workers (truck and taxi drivers), students
- Occupational groups – fishermen and miners
- Street children
- Middle-class drug users
- Recreational drug users

Profile of an injecting drug user

- Male (but women increasing)
- Education level variable
- Often jobless or underemployed – does odd jobs to support habit
- Poor
- Criminalized, stigmatized, discriminated
- Will beg, borrow or steal to get drugs
- Homeless / lives on the streets
- This often results in:
 - ◆ Low self-esteem
 - ◆ Low awareness of treatment availability and of bloodborne viruses
 - ◆ Low concern for personal health
 - ◆ Low trust level

Source: *Basic principles and practices of drug use related HIV/AIDS prevention and care in the Mekong Region*. Burnet Institute Centre for Harm Reduction, 2005.

Factors that increase HIV transmission associated with injecting drug use

- Sharing of injecting equipment
- Frequency of injection
- Professional injectors
- Shooting galleries
- Sexual behaviour of IDUs
 - ◆ Selling sex to buy drugs
 - Women IDUs selling sex to buy drugs
 - Male IDUs selling male – male sex to buy drugs
 - ◆ Drug injectors buying sex
- Incarceration

Professional injectors and shooting galleries

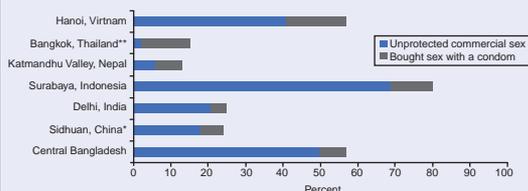
Professional injectors: those selling drugs also do the injecting, using one needle and syringe for many drug users

Shooting galleries: communal places used by IDUs for injecting

Professional injectors and shooting galleries are found in Viet Nam, Indonesia, Myanmar, Malaysia, Pakistan, Nepal and Bangladesh

IDUs and sex

Throughout Asia drug injectors buy sex, Except for Thailand, most of it is unprotected.



Percentage of male IDUs buying sex in various cities, by consistent condom use in commercial sex

*Sichuan: condom use at last commercial sex **Bangkok includes non-injecting drug users

Source: MAP Report 2005

Incarceration

- IDUs have high rates of incarceration
 - ◆ Thailand: 27% of IDUs had been in prison
- Some IDUs are HIV – positive when they are incarcerated
- Others are infected while incarcerated
- Extremely high rates of sharing among IDUs during incarceration

Women injecting

- Are more likely to have a male sexual partner who injects drugs
- Tend to be introduced to drugs by husband/ boyfriend or male member of their family
- Access to drugs usually occurs through male sexual partner



Photos: AHRN Picture Gallery, Photo by A. Backer



Photos: Korsang (anticopyright)

Women injecting

- More likely to share needles
- More likely to use needle after IDU partner
- More likely to be injected by someone else
- If male partner is active drug user, woman IDU experiences difficulty in avoiding drug use/ abstaining/ accessing drug treatment



Photo: Korsang (anticopyright)

Sex workers (SWs) who inject

Ho Chi Minh City, Viet Nam

- 50% of SWs who inject are HIV positive
- 19% of SWs who use drugs but do not inject are HIV positive
- SWs who use drugs are 50% less as likely to use condoms



Photo: A. Backer

Main drugs injected in Asia

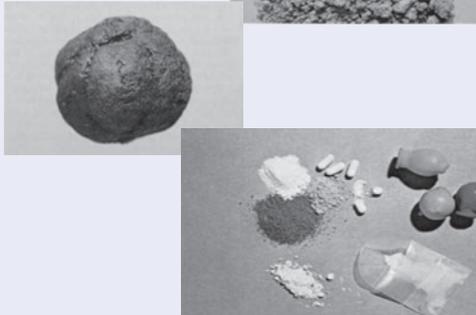


Photos: Jimmy Dorabjee

- **Heroin**
- **ATS** – South Korea, Japan, Thailand, Lao PDR
- **Buprenorphine** – India, Pakistan and Bangladesh
- **Dextropropoxyphere** – NE India

Heroin

- Smoking
- Chasing the dragon
- Injecting



Photos: SubstanceAbusePrevention.org

Injecting buprenorphine

- Synthetic injectable opioid produced legally (India)
- Widely available over the counter in Asia, also smuggled
- Used by IDUs in Iran, Pakistan, India, Bangladesh, Nepal, Sri Lanka and China



Photo: AHRN Picture Gallery. Photo by A. Backer

Injecting Proxyvon



- Dextropropoxyphene = Proxyvon = Spasmaproxyvon = SP
- One tenth the price of heroin
- Legally produced
- Over-the-counter drug
- Injected in NE India – Mizoram, Manipur, Nagaland

Photo: Jimmy Dorabjee

Amphetamines in Asia

- **Instrumental use:**
 - ◆ Second World War – particularly legal in Japan
 - ◆ Long-haul drivers and labourers across the Region
 - ◆ Thai and Cambodian fishermen
- **Epidemic of use:**
 - ◆ Japan 1945–1957, 1970 onwards associated with organized crime
 - ◆ Industrialization associated with growth of middle-class users in Republic of Korea and Thailand, including students and young people
 - ◆ Also perhaps driven by strong work ethic, demanding industries and long work hours – entertainers, sex workers, businessmen
 - ◆ Philippines methamphetamine use reported more than that of cannabis

Amphetamine-type stimulants (ATS)

Amphetamine

- Powder – snorted, mixed in a drink or injected
- Base – swallowed

Methamphetamine

- Powder – snorted
- Crystals (ice) – smoked
- Tablets – swallowed



Photo: SubstanceAbusePrevention.org



Source: www.apaic.org/TRENDS/recentatstrendsnew.htm

MAJOR ATS TRAFFICKING ROUTES
IN THE GREATER MEKONG SUBREGION 2005

Injecting ATS

- Injecting ATS – same risks of HIV, hepatitis, etc. as other forms of injecting drug use
- ATS products often contain substances that do not easily dissolve in water and block small blood vessels, resulting in tissue injury in the kidneys, lungs and possibly the brain

Injecting midazolam tablets

Result 2: MDZ preparing

Prices = 50-100 Baht/tablet
 MDZ tablets were crushed, dissolved (sometimes in tap water), filtered and injected
 Dissolution liquid = drinking water, tap water, canal water.



Photo: Klatying-Angsulee N et al.

Short-acting benzodiazepine

Health risks – swelling of injection areas, abscesses, gangrene, venous degradation

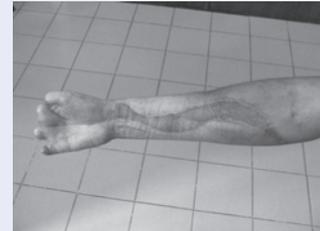
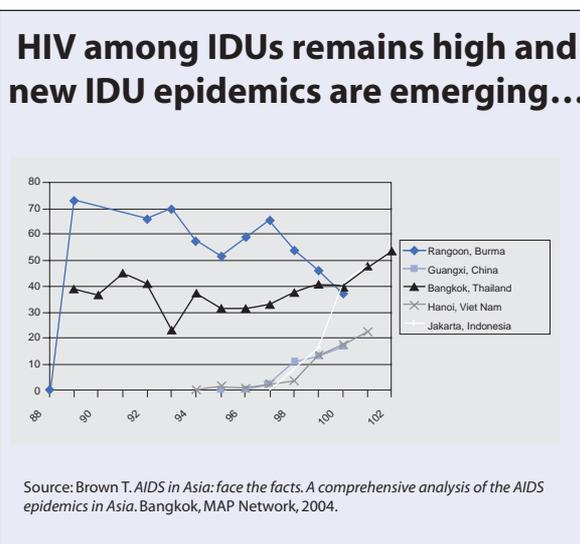
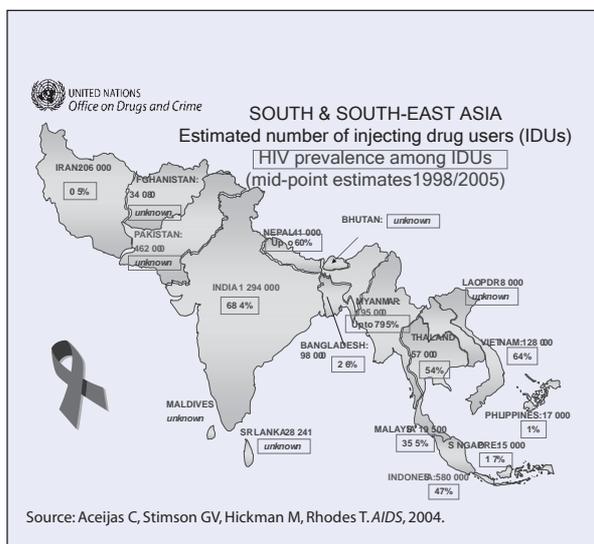
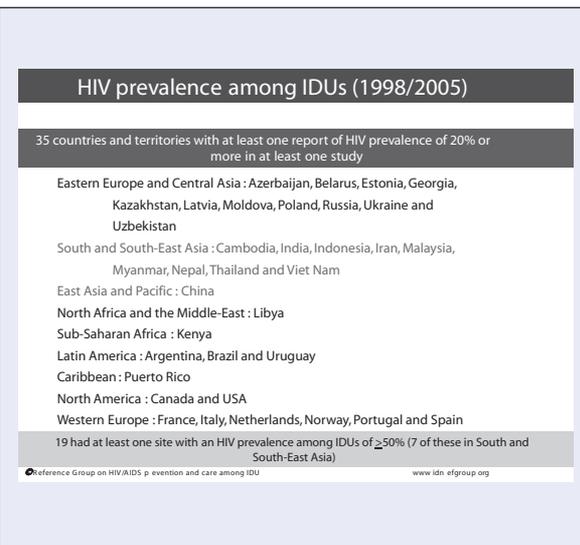
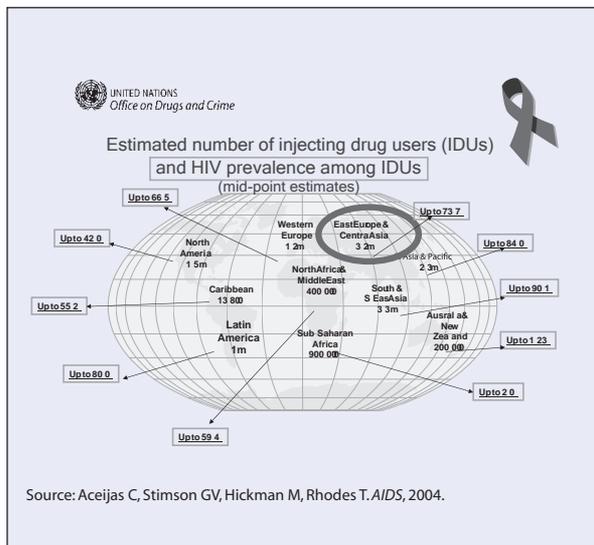
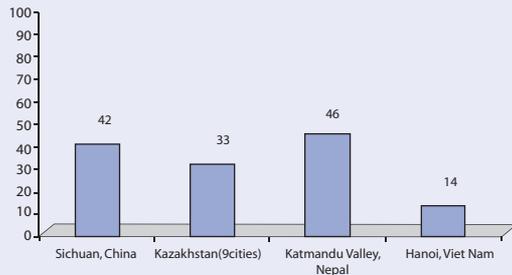


Photo: Weerakit. ART in Injecting Drug Users and HIV/AIDS



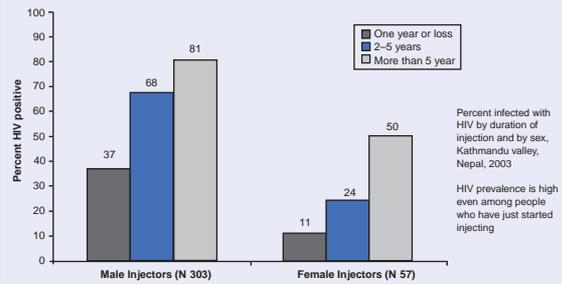
Sharing of needles

Percent age of male injectors reporting sharing needles and syringes in recent injections



Source: Drug injection and HIV/AIDS in Asia. MAP, 2005.

High prevalence among new injectors and increase with duration of injection

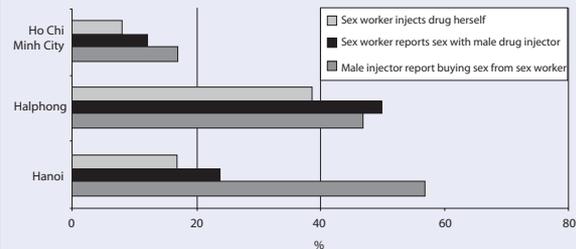


(Source: New Era and STD/ AIDS Counselling and Training Service 2002)

Sex and drugs

- IDUs sell sex to buy drugs
- Male IDUs buy sex
- Sex workers who inject
- IDUs who have sex with men

Percentage of street-based sex workers who inject drugs, who have sex with injectors who report buying sex, three cities, Viet Nam 2000



Source: UNAIDS/WHO AIDS Epidemic Update, Dec 2005.

Sex workers injecting

- Viet Nam
 - ◆ Haiphong – nearly 40% (2000)
- India
 - ◆ Manipur – 20% (2001)
- China
 - ◆ Sichuan province – 2.5%
 - ◆ 5% among street-based SWs
- Bangladesh
 - ◆ <4% SWs injecting

Source: MAP report 2005.

IDUs and sex with men

- **Indonesia** – higher rates of injecting among male sex workers than other groups
- **Cambodia** – 3% of MSM injected in preceding 12 months (2000)
- **Tehran** – 1/3 of male IDUs reported sex with men

Asian epidemics ignited by injecting drug use

- Pakistan, NE India, Nepal, Bangladesh, Indonesia, Viet Nam, parts of China
- IDU kick-starts sexual transmission, amplifying epidemic potential

IDU 'kick-starts' the HIV epidemic in Indonesia

Most sexual infections in Jakarta would never have occurred if there had not been a "seed" infection transmitted through drug injection

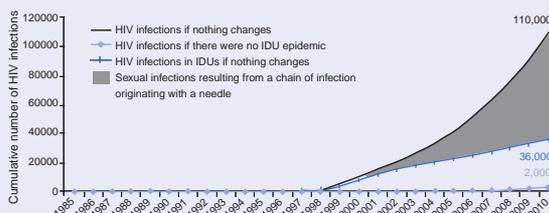
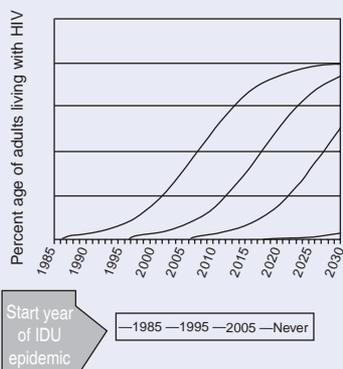


Figure 2 HIV prevalence in Jakarta, Indonesia, with and without IDUs. Actual data to 2003, and projections with behaviour unchanged from 2003 levels

Source: MAP report 2005.

Delaying IDU epidemics buys time to prevent sex work epidemics



Source: Brown T, Walker N. 2005

Iran ... early, taking off

- Early concentrated epidemic
 - ◆ Long history of opium smoking
 - ◆ Recent rise in heroin injecting
 - ◆ Injecting accounts for 67% of HIV infections
 - ◆ 200 000 IDUs
 - ◆ HIV prevalence 0 – 65%
 - ◆ Sharing 30 – 100%

Source: Brown T, Walker N. 2005

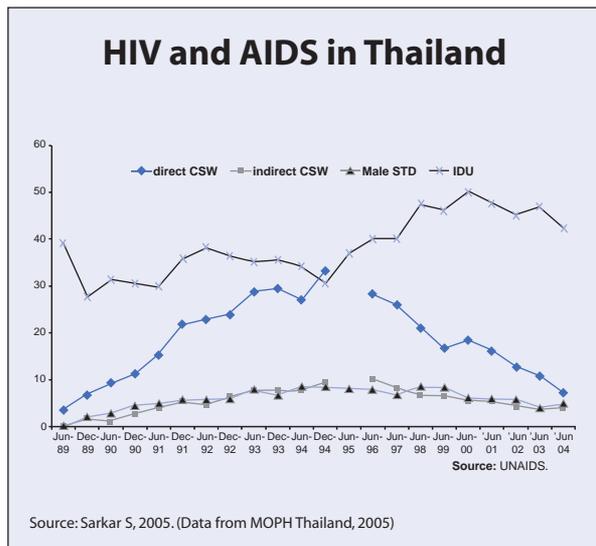
Nepal

- Ongoing conflict
- Early concentrated epidemic driven by:
 - ◆ Migration
 - ◆ Injecting drug use
 - ◆ Sex work
- Estimated 30 000 IDUs* - 40 – 68% HIV
- Sharing common
- High prevalence among new injectors
- Drugs–sex overlap:
 - ◆ 15% male IDUs buy sex. Half use condoms
 - ◆ Small sample 300 FSW, 5% injecting

Myanmar

- One of the most serious epidemics in Asia which has spread to lower-risk populations
- Largely fuelled by injecting drug use
- 90 000–300 000 IDUs
- Two third sharing
- Prevalence of HIV among IDUs 45 – 80%
- HIV prevalence among SWs 31% in 2003

Source: AIDS Project Management Group, 2005
www.afronets.org/files/APMG-OSI-Concentrated-Epidemics-Report.pdf



Treatment and Care for HIV-Positive Injecting Drug Users

The "Treatment and Care for HIV-Positive Injecting Drug Users" training curriculum is designed for clinicians who provide treatment and care, including ART, for HIV-positive injecting drug users. The training curriculum consists of a trainer manual, 12 participant manuals, and a CD-ROM with PowerPoint presentations and reference articles. Topics covered in the curriculum include:

- Module 1: Drug use and HIV in Asia
- Module 2: Comprehensive services for injecting drug users
- Module 3: Initial patient assessment
- Module 4: Managing opioid dependence
- Module 5: Managing non-opioid drug dependence
- Module 6: Managing ART in injecting drug users
- Module 7: Adherence counselling for injecting drug users
- Module 8: Drug interactions
- Module 9: Management of coinfections in HIV-positive injecting drug users
- Module 10: Managing pain in HIV-infected injecting drug users
- Module 11: Psychiatric illness, psychosocial care and sexual health
- Module 12: Continuing medical education
- Trainer manual

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