Report from Expert Seminar
ATS and Harm Reduction
Experiences from China, Myanmar and Thailand

Kunming (Yunnan, China), 26 and 27 November, 2010

This report captures the main outcomes from an informal expert seminar on harm reduction in relation to the rising problems with the use of Amphetamine Type Stimulants (ATS) in Southeast and East Asia, organized by the Transnational Institute, with the support of the Western Australian Substance Users Association (WASUA). The aim of the meeting was to have an open-minded exchange of opinions and experiences about the situation in Myanmar, Thailand, and Yunnan Province (China). Problematic use of ATS has become a significant health and social problem in the region. The repressive response of national governments, consisting of arresting and incarcerating ATS users, has further aggravated the situation and put a burden on the criminal justice system. At the same time little is known about the methamphetamine market in the region, and treatment as well as harm reduction strategies are in its initial phases. The situation seems to deteriorate: the substances are getting stronger (from yaba pills to crystal methamphetamine or ‘ice’) and methods of use are getting more harmful (from swallowing pills to injecting), and the number of ATS users – especially among youth – keeps increasing.

The seminar in Kunming, the capital of Yunnan Province, and was held under Chatham House Rule to ensure confidentiality and to allow participants a free exchange of ideas. When a meeting is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed. A total of 21 people attended from Burma, Thailand and Yunnan as well as five international experts. Participants comprised a mixture of outreach workers and representatives from self-help user groups, health and harm reduction associations, and academics. The ideas expressed were those of individuals in their capacity as experts and should not be interpreted as reflecting consensus among the group, or endorsement by the organizers. In preparation, background papers which clarified technical matters were sent to all participants. Each session started with an introduction by key participants in order to stimulate reflection and dialogue, followed by a frank debate.

1. The World Health Organisation (WHO) defines Amphetamine-type stimulants (ATS) as a group of drugs whose principal members include amphetamine and methamphetamine. However, a range of other substances also fall into this group, such as methcathinone, fenetylline, ephedrine, pseudoephedrine, methylphenidate and MDMA or ‘Ecstasy’ – an amphetamine-type derivative with hallucinogenic properties. http://www.who.int/substance_abuse/facts/ATS/en/index.html

2. Harm reduction refers to policies and practices aimed to reduce adverse health and social consequences for drug users, their families and society as a whole, without necessarily ending drug consumption.

The agenda on the first day focused on two main items: (1) **Overview of ATS market and latest trends**; and (2) **Experiences with harm reduction measures and self-help strategies among methamphetamine users**. On the morning of the second day the participants visited a Drop-In Centre (DIC) in Jincheng, a small town located just outside Kunming. In the afternoon the agenda focused on **The way forward: possible harm reduction strategies for ATS**. Participants broke up in working groups according to country and into an international working group. The seminar ended with **Reports from the working groups & conclusions and recommendations on the way forward**.

The information in the report is based on the informal presentations and discussions during the seminar. While the participants are all well-informed on the issue, a word of caution is necessary on the facts presented, due to the lack of substantiated data in general.

**Friday – November 26, 2010**

The first session on the first day was dedicated to overviews of the general situation and latest trends of the ATS market in the region and in Burma, Thailand, and Yunnan, in particular in relation to methamphetamine, the most potent amphetamine derivative.

**Session 1: Overview of ATS market and latest trends**

**Regional overview**

In East and Southeast Asia the **main type of ATS** is methamphetamine in the form of tablets (popularly known as ‘yaba’ (‘crazy-medicine’) or ‘yama’ (‘horse-medicine’) pills in Myanmar and Thailand; ands as ‘ma-huang-su’ in China) and high purity crystal methamphetamine or ‘ice’ (rock-like crystals resembling frozen water; called ‘bingdu’ in China). Less common are ecstasy type ATS or psychedelic amphetamines (‘ya-E’ in Thailand; yao-tou-wan or “head-shaking pills” in China). Moreover, ecstasy type ATS in the region is most likely methamphetamine mixed with ketamine with little if any MDMA (‘real ecstasy’ primarily produced in Europe), or else MDMA imported from Europe mixed with caffeine, heroin or ketamine in labs in China. A third popular ATS is ketamine (‘ya-K’ in Myanmar and Thailand; ‘k-feng’ or ‘k-powder’ in China), an anaesthetic that has hallucinatory effects; is also used in pure form. In fact ketamine does not really belong to ATS group, but its hallucinatory effects, mixture with methamphetamine, and use in the same set and setting makes it a very corresponding substance.

The **main trends regarding use patterns** are a shift from opiates (opium/heroin) to ATS and a shift from work-related use of methamphetamine to recreational use. Substances are getting stronger (from yaba pills to ‘ice’ or crystal methamphetamine) and methods of use are getting more harmful: from swallowing pills to smoking (‘chasing the dragon’) to

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injecting. Long-term use of ATS can result in dopamine reduction, which can cause severe mood disorders as well as paranoia, violent behaviour, depression, psychosis, and cardiopulmonary damage.

The ATS boom in the region is an example of what can be described as ‘displacement’: a campaign against one drug (opium and heroin) can lead to the rise of an equally or potentially even more harmful substitute (methamphetamine). International pressure and national opium eradication campaigns led to a decline in opium cultivation and heroin production in the Golden Triangle. At the same time, a methamphetamine market in East and Southeast Asia developed, and resulted in the rise of meth manufacturing facilities in what was traditionally a heroin area. Adding to the displacement were rising opiate prices. The surrender of Khun Sa and his Mong Tai Army (MTA) in 1996, the largest player in the Burmese opium market, disrupted the regional heroin trade and caused price instability. The MTA had begun production of and trade in ATS in the early 1990s. MTA breakaway groups also became heavily involved in large-scale methamphetamine production, flooding the Thai market.

While the reduction in the availability of opium and heroin during the mid- to late 1990s resulted in opiate users shifting to methamphetamine, this alone cannot account for the significant increase of ATS. Although there is some overlap and interaction in opium and methamphetamine use, the methamphetamine market has its own distinct dynamics. The increase in the use of methamphetamine and other ATS has been driven by both demand and supply, as well as profound socio-economic changes in the countries affected, which have moved from rural agricultural based economies to urban, industrial and market based societies. Stimulants fit better in the new competitive and industrious cultures of rising Asian economies (Japan 1950s, South Korea and Taiwan 1970s and then Thailand and China) and the changes in work habits and work pace. Methamphetamines give ambitious, upwardly-mobile, urban people the energy to succeed and the urban and rural labour forces a necessary stimulant to work more and longer hours needed in competitive economies with poor labour conditions.

The rise of ATS also reflects generational differences and fashions of drug use. Opium and heroin use more associated with older generations. ATS are becoming popular among urban youth and are consumed in entertainment facilities, such as bars, karaoke clubs, and nightclubs. ATS are considered to be non-habit forming and more ‘fun’ to use, while opium and heroin are considered a thing of the past, and seen as dangerous and addictive.

**ATS in Thailand**

In Thailand opium and heroin were the major drugs of use in the 1980s, but since the mid-1990s methamphetamine use steadily increased, while heroin use has stabilized. By 2003, an estimated 3.5 million Thais had ever used methamphetamines. Thailand crimi-
nalized the trafficking, possession, and use of methamphetamines in 1996, treating the offences associated with methamphetamines with the same severity as heroin-related offences. In 2003 the government began a ‘war on drugs’ in an attempt to control the epidemic. This resulted in extra-judicial killings of those suspected of involvement in the drug trade and led to a doubling in the number of incarcerated individuals between 1996 and 2004. In 2005, 64% of Thai inmates were drug offenders, and in 2006 some 75% of drug-related arrests and charges were related to methamphetamines. Evidence-based drug treatment is limited in Thailand and there has been a tendency towards forcing drug users into rehabilitation centres, military-style boot camps, compulsory drug treatment centres, and prisons. Incarceration has been associated with negative health consequences, including sexually transmitted infections (STIs) and blood-borne viruses such as HIV, hepatitis b (HBV), and HCV.

Methamphetamine is now the major drug of use and the main illicit drug seized in Thailand: of the 90,000 people arrested in 2009, 88% were methamphetamine users, according to the 2009 Thailand Narcotics Control Annual Report. The majority of methamphetamine users are young people aged 15-19. Methamphetamine is also used by migrant workers as a stimulant to enhance their working potential, and they are the main users in Northeast and East Thailand. The Thai Office of the Narcotics Control Board (ONCB) considers that the drug situation in Thailand is worsening. Crystallized methamphetamine ‘ice’ has been introduced to Thailand a few years ago and is rapidly expanding to cover all parts of the country. The first clandestine lab producing ‘ice’ was seized near Bangkok in July 2008.


Source: Vichai Poshychinda: MOPH Drug treatment statistics

The price of methamphetamine is about 250-300 baht/tablet (~29 Baht = 1 USD), but the wholesale price is around 80 bath/tablet, according to the 2009 Thailand Narcotics

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Control Annual Report. In comparison, the price of other club drugs is significantly higher:

- Ecstasy 600-1,000 Baht/tablet
- Ice 2,500-4,000 Baht/gram
- Ketamine 2,000-3,000 Baht/bottle

The price is lower at border areas with Myanmar than in the big cities. Brands are mainly with WY logo, but a new brand is emerging TT (Tiger). However, brands do not always guarantee quality. The only way for consumers to test quality is by using. Methamphetamine markets (both in tablet and crystallized forms) tend to expand and this drug is spreading to more countries in and out of the region.

**Methamphetamine tablets are prevalent** in Thailand and neighbouring countries. Smoking is a major route of administration with high exposure to injection in some areas. Harms among the users include mental illnesses (methamphetamine psychosis, alcohol dependence and depression) and sexually transmitted infections (STI). From surveys there is no clear evidence that methamphetamine injection is increasing. Prevalence of HIV is the same as in the general population, but among younger users it is still below the national average. However, sexual risk among young users is higher than among the general population. Methamphetamine users are often also heavy alcohol drinkers. They tend to have a higher number of lifetime sex partners (average is 4 but for this group is 9) and 100% condom use is very low among users and their sex partners (17-20%). The percentage of those having sex without a condom at least once in the last 30 days among users and their sex partners is around 75%. There are high rates of Chlamydia amongst female respondents.

The aggressive ‘war on drugs’ that started under Thaksin in 2003 with the aim of eradicating methamphetamine in three months, did not have significant results in terms of reducing use of and trade in ATS. The campaign resulted in the arbitrary inclusion of drug suspects on poorly-prepared government ‘blacklists’ or ‘watchlists’, the intimidation of human rights defenders, violence, arbitrary arrest, coerced or mandatory drug treatment, and extrajudicial killings. The campaign focused on targeting small traders and users, and an estimated 2,819 people had been killed between February-April 2003. In the 3 years following the war on drugs there were less drug offences committed but now numbers are rising again. The repression has not resulted in a sustainable change in drug use. Arrests increased significantly since 2005, when they were at their lowest level since the 2003 drug war. Treatment admissions showed a significant decline after a nearly 10-fold increase in 2003 when tens of thousands were detained in compulsory centres. The situation stabilized throughout 2005 and 2006, but increases were noted in 2007.

**ATS in Yunnan**

In China there are no specific data for ATS use. There are some 1.3 million registered drug users in China (2009), and 97 percent are injecting drug users (IDUs). The trend in Yunnan is that drug use is shifting from traditional opium to heroin and now ATS, mainly yaba. According to a peer educator there are more ATS users than traditional opium and heroin users in Yunnan. There are many negative health effects, but there is no research organisation working on ATS and drug use trends.

In Yunnan methamphetamine is mostly smoked, injection is rare. In villages near the border with Myanmar there is a lot of methamphetamine use. At weddings and funerals young people come together and use yaba. Young people use together under influence from other peers. Some users also use heroin to calm down after ATS use. They combine methamphetamine with heroin and this mixture is smoked. According to drug users it feels like ecstasy: ‘the head is heavy and wind can blow them away’.

Methamphetamine use is work-related, for instance by people polishing jewellery at night, but also recreational among the more affluent younger generation that constitute a high risk mobile population. ATS is mostly used in groups, while heroin is mostly used alone. The younger generation is using ATS in different surroundings, and unlike heroin users they are not as marginalised in society and are not seen as a nuisance. Generally, the risks of ATS use are not known and users feel that ATS is not addictive. Tablets are available in many colours and with different logos; price varies a lot 16-30/40 Yuan per tablet (~ 6.5 Yuan = 1 USD).

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7. After Thaksin was ousted by a coup in September 2006, an independent special committee, formed by the temporary military government, investigated the unlawful deaths and found that 2,819 people had been killed between February-April 2003. Many of the dead had been blacklisted by police or local authorities as suspected drug dealers. Of those deaths, 1,370 were related to drug dealing, while 878 of them were not. Another 571 people were killed without apparent reason. Police officers were suspected to have been involved in many of the attacks, particularly as many people died soon after being taken to police stations for questioning. Despite many promises to bring those responsible for the murders to justice, by 2008 the committee had still not laid any charges. See: ‘War on Drugs’ probe draws a blank, The Nation, January 16, 2008; **Thailand: New Anti-Drug Campaign Risks Abuses**, Human Rights Watch, November 12, 2008
In China the police generally do **not arrest ATS users but only impose fines** (300 Yuan); heroin users risk being arrested and put in compulsory treatment for two years. The fines for ATS are official, but police do not enter ATS offences into their surveillance databases. There are no orders from above or requests from community leaders to arrest ATS users as is the case with heroin users. Heroin users are much more stigmatized than ATS users – there are few complaints about stealing etc., in relation to ATS. ATS is seen as less harmful (from law enforcement perspective) than heroin. ATS is not seen as a major problem in China – it is not considered a ‘real’ drug in the same way as heroin. However, emergency room doctors report major issues with problematic ATS use by young men, in particular about aggression among ATS users. There are no institutions providing services for ATS users specifically; there are only general detox centres.

**There is limited research about poly-drug use** among methadone maintenance treatment (MMT) clients in 68 MMT clinics (mostly out patients) in Yunnan. One research project wanted to understand ATS use among MMT clients and help to improve services from the clinics. Clients had to sign an agreement to be subjected to urine testing for heroin (morphine) and methamphetamine. Research in 2008 among 1935 clients from 12 counties in Yunnan Province showed that 27.9% tested positive for heroin and 12.4% tested positive for methamphetamine. There seems to be no difference in HIV status among heroin and methamphetamine users. During the 3 months period of urine testing 42% had used methamphetamine more than three times. In-depth interviews showed the following reasons for ATS use:

- People wanted to try something new, to “change taste”
- Use ATS more in groups (with girls) and heroin alone
- Poly drug use to help with sleeping – different drugs for different issues

**ATS in Burma (Myanmar)**

Methamphetamine (yaba) in Burma started in 1995-1996, when opium production decreased heavily due to pressure from the international community – especially China – to eradicate opium crops. The main decrease in opium cultivation is due to the strict implementation of opium bans by cease-fire groups in the Wa and Kokang regions, bordering China. Clever businessmen, many of them ethnic Chinese from Thailand and Myanmar, realised that opium was on the way out and moved to methamphetamine production in the Wa and Kokang cease-fire areas in the border region. In the beginning, law enforcement in Myanmar was unaware of these developments. Most information was coming from Thailand. Thailand advised that lots of methamphetamine was coming in from the Wa region. Myanmar officials also did not think they had a problem, because the market was in Thailand.

The Thai ONCB provided lots of information and yaba samples, so the Burmese police knew what to look for. In 1996, the first seizures amounted to six million yaba tablets that year. In 1997, 16 million; 1998, 28 million; 1999 26 million; and in 2001 32 million tablets. Then seizures dropped; in 2002 nine million and less from that year onwards. In 2006 20 million tablets were seized because they couldn’t be sold on Thai market due to poor quality the drugs were dumped. In 2007-2009, two million pills were seized. Most seizures were in Shan State, Mandalay, Kokang, and at the borders with Thailand. The
market dispersed from Thailand to Yunnan and India. Seizures have dropped but not necessarily production.

Among the registered users in Myanmar, 60% use opium and 40% heroin, mostly in urban areas. There are no data on ATS. Although use is increasing, very little research and surveys have been carried out. Methamphetamine use could well be around 30%, but that is a guesstimate. There is also poly-drug use of pharmaceuticals and raw opium mixed with cough syrup, called ‘formula’. The use of ketamine is also reported. Difference in social class of users is reflected in use of different types of drugs. Ecstasy is very rare and is not locally made, and imported ecstasy is very expensive. Only wealthy users can afford it. Middle class users mainly use methamphetamine tablets and ice. Lower class people will also engage in glue sniffing.

Average yaba use is around 3-4 tablets/day (drug users say that when you use only two tablets “you don’t get high you get lost”), middle usage is 10/day, and high usage is more than 20-30 tablets/day. Tablets are inhaled, smoked, injected and ingested. ATS is used in nightclubs and entertainment places. Staff in these places also tend to use and often act as middle men for dealers and receive commission. In night clubs and among commercial sex workers it is used to get stamina. There is also work-related use among truck drivers and sailors etc., as well as motorcycle traffickers at the borders. Mining areas also have high prevalence of drug use but not necessarily methamphetamine.

The use of methamphetamine among students is even more alarming – especially at high school age. Police do not go into universities; there are a lot of demonstrations – therefore universities are like a free haven. Young people tend to use in groups and at funerals and weddings people often take drugs to stay up all night. Yaba is sometimes provided by the hosts at these gatherings. Methamphetamine use is easier to hide than other types of drug use, and parents are often not aware. Drug use is seen as cool. There is increasing use among women/girls. Some use it as a medicine to stay slim; they are not aware of the dangers. There is no preventive education, and often young users do not know their limits. Some users mix methamphetamine with alcohol because this helps to be able to sleep.

ATS use is an emerging problem in Shan State and Mandalay. There is a need to create a network of counsellors to share knowledge and experience. Another problem is that in some case project managers of don’t have time to support the counsellors, and as a result they are leaving the projects. Physical problems resulting from ATS use in Burma include psychological problems and sleep deprivation. ATS users are said to be aware of the risks of psychosis. Provision of information is just starting also among female users. There seems to be an awareness of health risks when using methamphetamine, but users are willing to take the risks. Although to some extend users seem to be aware of psychosis and other problems, ATS is still not perceived as an addictive drug. There is an urgent need to do better surveys, scale up awareness raising programmes, and target current users. Intervention programmes need to be tailored to specific conditions of different geographical areas.

There has been an increase in seizures of precursor chemicals from China and India. This has led to illicit trafficking in licit pharmaceutical ephedrine and pseudo-ephedrine (cold medicine). Methamphetamine is now less in demand because of the increase in price.
heroin fix costs 1000 kyat (~ 815 kyat = 1 USD as of May 2011), so that is more popular among the miners. Methamphetamine prices in Burma increased from 150 kyat in 1996, depending on source area (300 kyat in Mandalay). In 2002, a tablet sold for 1000 kyat. In 2008, prices were 5-6000 kyat per tablet. Regionally produced ecstasy costs 35,000 kyat, but imported costs 70,000 kyat. Quality of drugs is falling because of the difficulty of getting precursors such as ephedrine and pseudo-ephedrine.

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Session 2: Experience with harm reduction measures and self-help strategies among methamphetamine users

Treatment and harm reduction in Southeast and East Asia mainly focuses on opiate users. Some of these measures are useful for problematic methamphetamine use (in particular in the case of injecting drug use), but do not cover the whole range of specific problems associated with problematic methamphetamine use. The development, evaluation and expansion of harm reduction interventions specific to amphetamines, should be the first priority for the international harm reduction community, according to the Global State of Harm Reduction report of 2010.8

ATS harm reduction programmes in several countries have shown positive results. However, these programmes are limited to Australia and North America. As the effectiveness of pharmacological and psychosocial interventions for stimulant users is limited, interventions to stabilise and minimise the negative consequences of ongoing methamphetamine use are of paramount importance. A wide range of health and social problems associated with stimulant use are largely unaddressed by current services.9 Consequently, there is a need to develop harm reduction measures that fit the cultural and socio-economic circumstances in Southeast and East Asia.

Scientific literature is overwhelmingly weighted toward the harms of stimulants (cocaine and ATS), with minimal literature on harm reduction interventions. Among the ill health effects associated with ATS, some are mediated by mode of administration (such as infections, overdose, and pulmonary damage) while others are independent thereof (such as neurologic, cardiovascular and mental health problems). But the distinction between the two categories of harm is subtle and contingent on the broader risk environment. Adverse (health) consequences and recommendations to address them include:10

- Problem use is associated with poverty, unemployment, homelessness or unstable housing, lower socio-economic status, a variety of other social problems, as well as legal problems and incarceration.
- Adulterants and use of caustic chemicals in drug preparation are stipulated by market conditions beyond the control of individual users.

10. The fast and furious, op. cit.
• Traditional harm reduction programmes may fail to reach problem stimulant users due to opiate-centred services and social barriers to young or female users.
• Innovative service development paired with critical evaluation is necessary in translating the successes of harm reduction for opiates to stimulants.
• There is an important and unmet need for services that enhance the ability of stimulant users to control their intake levels, chaotic behaviour and mental health problems, as well as limit pulmonary, cardiovascular and neurological harms.
• Stimulant-related harms are aggravated by external factors, such as selected aspects of international drug legislation, policing and public policies.

Experiences in Western Australia

In Australia, the only illicit drug used more than (meth)amphetamine is cannabis. Surveys indicate that more than 10% of the population have tried ‘speed’ – the street name for amphetamines. According to current WHO statistics, Australia has the largest per-capita rate of speed and ecstasy use in the world. About 4% of Australians reported regular methamphetamine use since 1980. During the Vietnam War soldiers were introduced to dexamphetamine\(^{11}\) as a functional drug. This period saw a huge increase in per-capita consumption of amphetamines in Australia, usually attributed to the effect of returned servicemen and American forces on leave. In the late 1980s, high purity methamphetamine became much more available on the Australian black market.\(^{12}\)

The methamphetamine market in Australia has undergone radical changes since the late 1990s with the emergence of new, more pure forms of freebase, base\(^{13}\) and ice. The advent of ice on the Australian illicit drug market has been associated with smoking the drug, a route of administration that yields a very rapid and intense drug effect akin to injection. This trend is a particular concern as it provides a very addictive means of taking methamphetamine that is accessible to non-injecting ‘party’ drug users. As precursors for traditional methods of producing powdered dexamphetamine became difficult to source, black market chemists increasingly turned to methamphetamine.

Throughout the 1990s, methamphetamine, known then mostly as ‘speed’, was waning in its significance in the face of an emerging heroin epidemic, and the market for the drug had stagnated. ‘Crystal meth’ gained dominance of this market during the early 1990s. By 1994 there was a slump in the availability of meth, roughly coinciding with greatly increased availability and purity of imported heroin. Throughout the late 1990’s high-

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11. Dextroamphetamine or dexamphetamine is a pharmaceutical amphetamine analogue. Dexamphetamine and crystal methamphetamine belong to the same pharmaceutical family but the illegal version is stronger, unpredictable and quick-acting.
12. This summary is largely based on Everything You Ever Wanted To Know About Methamphetamine, (but were too paranoid to ask), by Paul Dessauer, Outreach Coordinator of the Western Australian Substance Users’ Association (WASUA); http://www.wasua.com.au/
13. Freebase methamphetamine is unrefined methamphetamine oil, usually about the consistency and colour of Vaseline, (known as ‘base’ or ‘putty’), or poorly refined freebase, presenting as coarse sludgy yellow crystals, (known as ‘base’ or ‘paste’). Low quality crystal may contain precursors, solvents and reagents from production, (including mildly toxic substances like chlorephedrine). It is generally of a lower purity (10%-55%) than clear crystals. Freebase is generally of a higher purity (75-80%).
purity heroin was widely available in Australia. Heroin overdose rates soared and to a large extent attention was diverted from ongoing problematic amphetamine use. Meanwhile several major syndicates developed the more sophisticated chemistry required to manufacture methamphetamine. In Western Australia several syndicates began producing powdered, freebase, and crystalline forms of meth. During 1999/2000 very pure crystalline methamphetamine became increasingly common on the black market. It became apparent that large, transparent crystals of salts of methamphetamine were being imported in large amounts from South-east Asia.

The precursor pseudoephedrine is smuggled from China to Australia. In 2009, some 300 methamphetamine labs were seized in Australia. High purity methamphetamine, (whether in the form of ‘ice’ or ‘crystal meth’, freebase, powder or an alleged ‘e’ pill), has come to dominate the festival, rave, club and party drug scenes, as well as the traditional ‘powder speed’, (dexamphetamine or amphetamine sulphate) markets. In February of 2001 the so-called ‘heroin drought’ struck Western Australia, and the local illicit drug market has been increasingly dynamic and unpredictable ever since.

Since 2002 there have been regular seasonal waves (peaks and troughs both generally lasting 2-3 months) in the availability of high potency crystalline methylamphetamine, especially of ‘ice’. During slumps in the availability, demand is met by a variety of lower-quality crystalline, freebase, or powdered methamphetamine. Both crystalline and freebase forms may have high levels of purity (75-90%). However, many street-deals are adulterated, with some composed of less than 15% methamphetamine. The most common adulterant in crystal methamphetamine in Western Australia is MSM (dimethylsulphone). MSM is used because its crystals are visually indistinguishable from methamphetamine, and because it has much the same vaporisation temperature and solubility.

At times when high purity crystalline forms are not widely available, most ‘vaporising-route’ consumers report using ‘ice’ that is 80% or more MSM, while most injecting users opt for poorly manufactured crystal meth (evidenced by crystals that are damp, oily, and discoloured), or freebase methamphetamine. Freebase is unrefined methamphetamine oil, usually about the consistency and colour of Vaseline (known as ‘base’ or ‘putty’). Poorly refined freebase look like coarse sludgy yellow crystals (known as ‘base’ or ‘paste’). Low quality crystal may contain precursors, solvents and reagents from production, including mildly toxic substances like chlorphenedrine. It is generally of a lower purity (10%-55%) than clear crystals. Freebase is generally of a higher purity (75-80%), although some samples appear to have been adulterated by distributors with partially dissolved ‘cutting’ agents. The strength of powdered methamphetamine varies widely, from 4 or 5% up to 50% or more. Most tests between 10 and 15%.

Australia has a long experience with harm reduction measures to counter the harms of drug use in the country. Needle and Syringe Exchange Programmes (NSEP) were introduced in 1985. However, as elsewhere most harm reduction programmes were directed to injection heroin users. Nevertheless, NSEP is very important as ‘bait’, to get in touch with injecting methamphetamine users. The exchange programme will make people return to outreach programmes, and enable outreach workers to build a relationship with users. NSEP is a good entry point for engaging a hard-to-reach population group, which often come to NSEP as first port of call for other problems.
Methamphetamine users are a notoriously difficult set of clients for drug treatment agencies. Outreach workers frequently describe them as more emotionally labile, more labour intensive, and less willing to engage in treatment, and say that amphetamine users frequently relapse on discharge. Amphetamine users from their side frequently complain that there are no appropriate treatment options available. While great progress has been made in this regard over the last five years, there are a number of factors that make treating amphetamine dependence difficult.

The treatment sector has problems to connect with methamphetamine users. Most services are not designed to deal with them but instead focus on people who are dependent on other substances, such as alcohol, benzodiazepines, or opiates. Doctors, health workers, and policy makers have different view of users than users do. One has to be aware that the negative effects of ATS are sometimes perceived as positive consequences by the users. Illicit drug users in general are suspicious of information from authority figures. The nature of amphetamine compounds this problem. Effectively targeted information can do a lot more to make sure the message gets across. Creating trust is essential, which can best be done by peer workers who are current or ex-users. Establishing low thresholds is also crucial.

Intelligently targeted peer education may prove a more effective tool to modify the frequency and patterns of methamphetamine use than mass media campaigns. Some useful knowledge includes:

- **Less is more with methamphetamine.** Diminishing returns from taking too much – taking smaller doses is more enjoyable (law of diminishing returns). Speed tricks the body into modifying brain chemistry and releasing reserves in a manner that naturally occurs in response to stress. When this response is triggered naturally it lasts a very short time. Speed in functional doses keeps you awake and increases endurance, by releasing adrenalin and stimulating the body’s internal emergency system, (the “fight-or-flight” response). High purity methamphetamine can keep the user’s body in this state for up to 21 hours. While regular use of dexamphetamine can provoke the same problems, the greater potency and longer action of methamphetamine means that both dependence and problems with physical or mental health are much more likely to occur. Higher doses can release too much adrenalin. This sometimes dangerously over-stimulates the heart, or can precipitate a stroke.

- **Using regularly reduces the physical effects of speed, due in part to tolerance, but mainly because it burns up your body’s reserves of energy and vitamins** (by making your body work harder while making you eat and sleep less). Some of the psychological symptoms such as hallucinations, delusions (false beliefs), and extreme paranoia (methamphetamine-induced psychosis), can be caused by exhaustion, dehydration and malnutrition. If you are “fried” it may be that you have starved your brain for so long that it just can’t work properly. If you have lots of problems with concentration and memory, or persistent skin infections, or sores that take ages to heal, this may indicate that you are badly malnourished and over-tired and it might be a good idea to have break from speed, get plenty of rest and eat well for a couple of weeks.
- **Methamphetamine use is not always problematic.** Speed may be used in functional ways; by long distance truck drivers, labourers, nurses or doctors on long shifts, couriers, taxi drivers, or students. Speed may be used recreationally, occasionally or experimentally; it can be used in runs or binges, in cyclic patterns or in weekly, twice weekly or daily routines of dependence. The picture is of lots of different people, using lots of different forms of speed, in lots of different ways, for many diverse reasons. Without an understanding of how amphetamine use fits into an individual’s life, of what function the drug serves, it is impossible to offer credible or useful advice.

- **The better informed a person is, the better their chances of exercising control over their drug use.** Many people use meth in once or twice weekly patterns. This is frequent enough to develop and maintain a dependence and to be physically debilitating over time. However, to the user, weekend use is often perceived as social rather than habitual use. Use in this sort of pattern means that the individual alternates between being highly elevated and being in withdrawal. In contrast to health workers’ experience, most users identify the down cycle of this pattern as most problematic. They frequently report withdrawal symptoms, exhaustion, and related problems with energy and concentration, as well as mood swings or irritability, as the most significant adverse effects of their regular meth use.

- **Many regular speed users experience symptoms of depression and anxiety at different points in their trajectory.** Most regular users report problems with energy, concentration, memory, and mood. These may be understood as side effects of an over-stimulated or exhausted nervous system. The effects of methamphetamine on brain chemistry (especially on dopamine regulation), combined with malnutrition, sleep deprivation, and dehydration typically associated with regular stimulant use, can provoke these sorts of problems in otherwise healthy individuals. Peripheral auditory, visual (and sometimes tactile) hallucinations, odd beliefs, and delusions can be provoked in most healthy individuals within 7 days of fasting and sleep deprivation. Human studies have demonstrated that regular or high dose use of amphetamine can provoke similar symptoms, even in well fed, hydrated and rested individuals. These typically resolve within 24-48 hours, (as plasma levels of methamphetamine decline).

- **Regular users state that “some people can’t handle their speed”, indicating that vulnerability to mental health problems is highly variable from individual to individual.** Regular users differentiate between true aggression and “getting a bit revy”. The consensus of opinion amongst regular users is that true aggression and violence provoked by intoxication are largely confined to individuals who would react in a similar way to large doses of alcohol. (That is, they are aggressive or violent people to begin with).

- **An acute psychotic episode can start suddenly out-of-the-blue, for example after taking a single dose of methamphetamine (especially if it is a larger amount than usual).** There are three types of psychotic episodes: (1) pre-existing mental illness – very likely to have psychotic episode; (2) acute toxicity – psychosis due to too much dopamine even from re-uptake in the brain that is released again – will last 20 to 48 hours, and; (3) prolonged sustained use – large amounts used regularly. This can take a week or two to calm down. If psychosis persists, there probably was a pre-existing mental illness. Low-level
signs of psychosis can also appear slowly over a long period of use and then flare up as acute psychosis in response to things like emotional stress or conflict. Some of these early warning signs are commonly experienced by people who take speed regularly but, if these symptoms cause problems, and especially if they worsen, then it might be time to do something about it. Some of these early warning signs might include: difficulty concentrating, difficulty thinking clearly or remembering, concentrating obsessively on one activity for a long time, depression, anxiety, mood swings, irritability, and outbursts of anger.

- **‘Ice’ can be smoked.** The crystals are heated to vaporisation point on glass or aluminium foil, and the resulting fumes inhaled. In terms of transmission of blood-borne viruses’ (BBV), this means of administration is obviously much less risky than injecting. However, the vaporisation route of administration is just as immediate, and almost as efficient, as injecting the drug. Individuals who regularly smoke ‘ice’ are at just as much risk of developing dependence, and of most of the other various physical and mental health problems common to regular injecting use. They are also just as much at risk of acute toxic effects and accidental overdose. Users typically perceive these risks to be much lower with this means of administration, and smoking is more widely acceptable socially, and may be indulged in more casually, than injecting.

Withdrawal symptoms from methamphetamine dependence can be very protracted. Regular users who attempt abstinence abruptly will typically experience a 5-7 day period during which they rest and eat more than usual. (This is more a case of their body taking the opportunity to recharge than the withdrawal syndrome proper). It is typically after this time that urge to relapse is strongest. Many regular users think they are not dependent because they can go without the drug for several days. In dependent users, reducing both frequency and dose for a period of weeks before total abstinence greatly reduces the severity and duration of reported withdrawal symptoms.

During long-term recovery, the person typically reports a lack of energy and enthusiasm. Physical exertion may be very difficult. They experience dysthymia, nothing feels pleasurable, appetite and sleep are disturbed, and they find it hard to concentrate on, or get excited about, anything. In people who have used heavily or on a daily basis, this may persist for six to nine months. Relapse is very common during this period. People who use methamphetamine functionally (truck drivers and manual labourers) are often trapped in a cycle of functional use and cannot find enough leave to break the cycle.

Many regular users employ alcohol and/or cannabis to regulate their level of intoxication. Alcohol or cannabis are often used to reduce undesired over-stimulation. Cannabis contains CBD (cannabidiol), a substance which closely mimics the effects of the neurotransmitter anandamide, down-regulating excess dopamine. Alcohol, cannabis and benzodiazepines are also frequently used to ameliorate symptoms of “coming down”. Prescription of oral doses of sustained-release dexamphetamine\(^1\) (just like heroin prescription

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\(^1\) Dexamphetamine and Ritalin are medications used to treat Attention Deficit Disorder (ADD). A legal form of methamphetamine (Adderrall) is prescribed to treat ADD, narcolepsy, and obesity. Modafinil (marketed under the name “Provigil”), a mild non-amphetamine stimulant originally approved as a medication for narcolepsy, is being tested as a potential treatment in methamphetamine addiction. Unfortunately, many studies on the use of dextroamphetamine to treat stimulant abuse have been limited by their small
programmes or giving nicotine to people who are trying to stop smoking) might help with getting people off methamphetamine, but this is still controversial among some policy makers (giving speed to speed users). However, it could help to prevent relapse. (For example, dexamphetamine substitute treatment for amphetamine dependence shows promising results and appears to be effective and safe. But research has been much more limited than for methadone treatment for heroin users. More research is required before dexamphetamine substitute treatment can become a routine treatment.\footnote{Demand reduction and harm reduction, by Alex Wodak, Working Paper prepared for the First Meeting of the Commission, Geneva, 24-25 January 2011; http://www.globalcommissionondrugs.org/Arquivos/Global_Com_Alex_Wodak.pdf})

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\textbf{Saturday – November 27}

\textbf{Visit to Drop-In Centre in Yunnan province}

In the morning the participants visited a Drop-In Centre (DIC) in the township of Jincheng, located just outside of Kunming. The centre was set up in 2004 and runs a Needle and Syringe Exchange Programme (NSEP) and Methadone Maintenance Treatment (MMT) programme for injecting heroin users. There are currently 68 MMT clinics in Yunnan. In the six years that the centre has been running 294,000 clean needles have been exchanged. There are now 600 users registered at the centre. Currently there are 8 outreach workers and peer educators on staff, which are all former or current users. Each outreach worker is on methadone and has been assigned to support 10-40 injecting drug users. They provide information about safe injecting, condom use and information about HIV-AIDS as well as STI. There are currently no services for ATS users.

Most clients are heroin users but some also use ATS. Users are registered at hospitals and by the police by the DIC. Due to past harassment of users by the police the DIC has established better liaison with the police. Users have outreach ID cards and when they are hassled by the police they can contact the DIC where things can be explained. In the township heroin cost 340 Yuan/gram and a methamphetamine tablet 50 Yuan. Pills are mostly pink coloured and are smoked. There is no ‘ice’ available in the township. A methadone shot cost 5 Yuan per day. The city council sometimes supports methadone users financially. Most users stay with their family and there are practically no users on the street. Users are tested two times per year (urine testing for opiates). If people test positive too often they can be excluded from the programme.

sample sizes and lack of controlled randomization. More studies are needed on these issues. In the United Kingdom dextroamphetamine is used to treat stimulant abuse. In a 2001 study, researchers found that prescribing dextroamphetamine decreased their clients’ consumption of street methamphetamine and amphetamine and reduced the frequency of intravenous drug use. The UK’s Department of Health recommends limited prescription of dextroamphetamine to patients who use street amphetamine in order to reduce craving, minimalize withdrawal, and stabilize them as part of drug treatment. British doctors prescribe dextroamphetamine to amphetamine abusers on an ongoing basis to reduce criminality and legal problems, discourage injection drug use and improve the health of their patients. See: \textit{Substitution therapy for amphetamine users}, by James Shearer, John Sherman, Alex Wodak & Ingrid Van Beek, Drug and Alcohol Review (2002) 21, 179-185; \textit{Four-Pillars Approach to Methamphetamine. Policies for Effective Drug Prevention, Treatment, Policing and Harm Reduction}, by Bill Piper, The Drug Policy Alliance, March 2008; 15. Demand reduction and harm reduction, by Alex Wodak, Working Paper prepared for the First Meeting of the Commission, Geneva, 24-25 January 2011; http://www.globalcommissionondrugs.org/Arquivos/Global_Com_Alex_Wodak.pdf
Session 3: The way forward: possible harm reduction strategies for ATS

For this session participants broke up in working groups by country (Myanmar, Thailand, and Yunnan) and one international group. The main questions the participants were asked to address were: **What is harm reduction for ATS? and How will we get there?** The working groups reported back on their findings and included recommendations.

**Myanmar Group**

In Myanmar, the younger the generation prefers ATS over heroin. ATS use has been recorded for more than 10 years. The generation who is now around 25 years old is probably the last one that used heroin. However, all policy in the country is aimed at IDUs and heroin. Users don’t consider ATS as a drug. It is a considered a party drug – seen as ‘cool’. We should get out the message that ATS can be harmful and can be addictive.

**Possible Harm Reduction strategies on ATS:**

**Advocacy**

- Advocacy to educate policy makers, law enforcement, health care providers, donor agencies, civil society and community on ATS.
- Information and data – magnitude of ATS use is unknown. More research and a survey on use are needed. However, research permission has to be applied for from government, and this is a barrier to getting the data needed. All data is based on information in heroin injecting drug use but the picture for ATS use could be quite different. We need to know this information if we are going to combine services.
- Best practice exchange and capacity building among self-help groups and health and harm reduction associations.

**Awareness Raising**

- Awareness raising with drug users – how to use more safely. In particular with vulnerable groups (youth, migrants) to educate them of the risks and possible harms of ATS use. Awareness on sexual transmission of HIV and HCV: in addition to unsafe injecting, risky sexual practices can also lead to the spread of blood borne viruses and are possibly even more unsafe.

**Harm reduction Services**

- Preventive measures: distribute condoms and lubricants, NSEP, and provision of IEC (information, education and communication) materials for drug users, their sexual partners and their families. UNAIDS and WHO need to bring attention to this issue particularly looking at the increased sexual risk through non-injected ATS use.
- Health care measures: primary health care, STI diagnosis and treatment, psycho-social support and personal hygiene.
- Psycho-social support: voluntary counselling and testing (VCT), nutrition support, ATS counselling.
Thailand Group

In Thailand ATS use is mostly prevalent among youth and the average age of initiation is getting lower. Peer driven and occasional use may become regular use which can lead to petty crime such small-scale dealing to support dependency. Problematic dependency can lead to higher levels of involvement in the drug trade. To prevent such escalation is vital: if users get through initial use and reach 20 years old without getting too deep into ATS use, they are more likely to stop using. Consequently, the objective is how to reduce harms during regular use. Harm reduction programmes should be a youth-centred and community based in order to be sustainable. There is some local resource for this (60% of tax money has to go to local authorities). The main harms are STIs, HIV, Hepatitis C and B, and methamphetamine induced psychosis.

Harm reduction policies in Thailand and its neighbouring countries should not focus only on opiates. If methamphetamine use is more prevalent, harm reduction programmes should also reach out to methamphetamine users and provide proper harm reduction services according to their needs. Apart from the peer based education, other effective harm reduction measures e.g. outreach program and NSEP should be also explored for their efficacy against methamphetamine use and related harms.

A randomized study to evaluate the efficacy of a network-oriented peer intervention for STI/HIV prevention among young methamphetamine users and their network members in Chiang Mai showed promising results. Such an approach can reduce methamphetamine use by using peer networking and also can increase condom use so some gains can be made. One DIC was set up for this study that provided counselling in a safe-space where group sessions took place. Within one year, 1000 young methamphetamine users were reached (user definition is at least 3 times use in 3 months). Clients were provided with a psycho-social programme (‘Life Skills’ programme) and drug users were recruited in a group – network-based recruitment so they can bring in friends. Organised group education for participants was also provided. Frequency of use decreased after they joined the project. Levels of use stabilised over time at much lower level for those reached by the project. Condom use increased due to this intervention. The facilitator for the project built a coalition within the community around preventing ATS use and Chiang Mai University conducted baseline study for the coalition, but extra funds have to be raised to implement interventions. Chiang Mai University will then conduct a follow-up survey.

Recommendations for harm reduction strategies should include:

- Develop psychosocial and peer-based intervention and peer driven activities. Users of same age need to reach out to other users; this will have greater impact. Studies have shown that this works to engage others. Need to organize packages for education that it is engaging for the clients. Short films can be engaging for example.
- Develop strategies for regular contact with users and provide information packages on STI, HIV, and risk of psychosis and harms of injecting. Screening for STIs, HIV and HCV – connected to STI clinic (this has been tried in Thailand but used research money that was not sustainable).
• Develop community-based programmes as they are more sustainable. Ensure community participation in the planning stage of programmes. Currently programmes are mainly aimed at primary prevention. They should include harm reduction measures.

• Community mobilization to prevent drug use is currently being piloted where communities contribute resources to support the programme. Communities don’t know how to deal with drug-using youth – they have tried many strategies but with limited impact so they are willing to consider new approaches. Introducing harm reduction strategies and approaches into the communities where the primary prevention programme is being implemented is critical.

• STI clinics and condom distribution programmes are good entry points for reaching methamphetamine users. Drug education should be integrated with condom distribution.

• Drug stores should participate in preventive care

• Test strategies in Chiang Mai first and then consider scale up.

Yunnan group

ATS use in Yunnan is unclear and receives little attention. The National Narcotic Commission (NNCC) has no data or consistent information on ATS use. Heroin is still considered a much bigger problem. ATS is considered not serious at the moment and advocacy towards the government might be too early and sensitive when clear proposals to address the problem are not available yet. There are no campaigns in China because ATS appeared as a problem some 5 years ago.

Recommendations:

• The most important step is a needs assessment in China: Research on harm of ATS – need assessment, current situation data (who, where?)

• Awareness raising and health education

• Intervention – prevention of HIV, STIs…

• Providing comprehensive services – psychosocial, counselling for HIV, testing for HIV, HIV treatment.

• Advocacy towards NNCC.

The Ephedra plant could be a possible substitution treatment for ATS. Ephedra is strictly controlled in China so there first needs to be some data collection on this. Ephedra substitution treatment must then be ‘sold’ as a possible intervention to the policy makers in China and the idea should come from outside China with evidence-base for its use. Replacement agonist-pharmacotherapy for ATS use has not yet been tried – no one is willing to be the first it seems.

International group

The main issues identified during the seminar were:

• There is a big information gap; more research is needed on ATS use and harmful practices, ATS market trends.

• Need to start making all the linkages of ATS use with HIV, sex work.
• Perhaps devise basic questionnaire for people working in country to capture data on risky behaviours and measures to prevent them, as well as possible self-help strategies that are being used.
• Connect with TreatNet, UNAIDS, WHO.
• Don’t get trapped in a ‘one size fits all approach’ – need to know drug use patterns, per country epidemiology.
• Commercial sex workers are a high risk vulnerable group – urgent need for ATS self help strategies and harm reduction messages.

What is harm reduction for ATS:

• For injectors, this is the same for other (heroin) injecting drug use and HIV harm reduction measures but need to think about non-viral infections as well.
• For pill injection – problems with pill-base being injected and risk of endocarditic issues.
• For smoking – long term consequences unknown. Harm reduction measures could be based on safer crack use kits introduced in Canada for people how smoke crack (a smokeable derivate of cocaine). These kits contain mouthpieces, glass stems and screens, lip balm, as well as condoms and referral information for other health and support services.¹⁶
• Safest way of taking it is orally (swallowing).
• For debilitating health risks simple education messages around healthy eating and keeping hydrated. Dental health – methamphetamine is not acidic and is alkaline but users get a ‘dry mouth’ which encourages bacteria and also lack of calcium leads to dental problems. This is cheap to do and can make an enormous difference.
• Agonist¹⁷ approach for substitution therapy on prescription. Introducing lysine dexamphetamine (has a slower onset and its route of administration is limited to being taken orally); sustained release amphetamine; and Modafinil (stimulant used to treat narcolepsy – a chronic sleep disorder).
• Possible use of mild plant-based stimulants as substitution treatment (kratom¹⁸ in Thailand and Burma; ephedra in China).

How do we get there?

• Many people don’t see problem with ATS – governments, donors, and users still are not fully aware of the problems associated with ATS use, and the rapid increase of ATS use in particular among youth. Awareness raising has to start at the ‘user-level’, and then NGOs can raise it with donors and multi-lateral agencies.

¹⁷. Agonists mimic the action of a substance, whereas an antagonist blocks the action of a substance.
• Get education resources out there in the local languages to support peer outreach – need to translate these resource to the local and regional context to make them relevant.
• Research into market trends and problematic ATS use. More research on possible substitution therapy (e.g. plant-based stimulants and substitution amphetamines).
• Looking at the linkages to commercial sex workers and migrant workers with HIV, HCV, STIs.
• Desk review of literature on ATS issues.
• Web-based resources on ATS – make all resources available.
• Understand the local dynamics of drug use – poly-drug use, is it injected, is it smoked? It cannot be assumed that young people only use ATS and old people only inject heroin; a substantial but overlap seems to exist.
• Not one size fits all approach – need to know local drug use patterns and epidemiology.
• Commercial sex workers groups urgently need self help strategies and harm reduction information for ATS use.

Concluding comments

In the final discussion the following concluding comments were made. Participants stressed the need to distinguish between problematic and non-problematic ATS use. One major concern was not to criminalize ATS users in awareness raising campaigns and advocacy towards donors and government agencies. Another comment was that the distinction between heroin and ATS users has become blurred in Australia as well as other countries in the region and now most injectors are poly-drug users, using methamphetamines and heroin. More research on use patterns is necessary to detect new trends at an earlier stage in order improve proper responses.

Donors need to be alerted on why it is important to address problems related to ATS use, because until now they almost only fund services based on heroin injecting drug use. A compelling ‘hook’ is needed for donors. HIV could be useful or ‘youth’ or other key things have to be emphasized. In Thailand the ‘hook’ has been alcohol – kids use ATS, and drink and create problems, which has focused some attention on the issue. Many problematic methamphetamine users have poor nutrition patterns and poor hygiene – if they get HIV they can get sicker more easily due to poor immune systems.

The information gap is still substantial. How do we get data? National household surveys can be done but not so easy to get to figures for ATS use – people have to admit to use. Mental health statistics and drug treatment statistics could be used to get more information on ATS use. Exchange of experiences in treatment and harm reduction measures were recommended. There are some quite simple measures on personal hygiene and nutrition that could be introduced easily at low costs, such as the availability of water and fruits at DICs as well as toothpaste and brushes.

An important conclusion is that there is a need to raise awareness with donors and governments about the urgency to introduce harm reduction measures to counter the harmful effects of rising methamphetamine use. Both donors as well as governments are still focused on heroin as the main problem and have little to offer in treatment and harm reduction for methamphetamine. The earlier a comprehensive package of harm reduction measures for methamphetamine are introduced the better.