

Review of Adolescent Substance Use and Responses in the WHO Western Pacific Region

Report prepared for the Western Pacific Region of the World Health
Organization

by

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Executive Summary

Introduction

This desk-based review of adolescent substance use and responses to it was conducted by the National Drug and Alcohol Research Centre. The aim was to provide up to date information to assist the WHO's Western Pacific Regional Office, CHD (Child and Adolescent Health) and MNH (Mental Health) sections in particular, to develop effective programme responses and support for the health sector.

The data come from both white (Peer-reviewed) and grey (non-peer reviewed: including published and unpublished reports) literature. In addition online internet searches using Google and other drug specific websites were conducted to gather relevant information and data for specific countries.

In addition to online searches, key experts in the Western Pacific region were contacted via email and telephone.

However, the feedback received from the key experts was very limited and gathered much less information than originally anticipated by the research team.

Despite extensive searching for data and documentation for this review in the short period of time available, including contacting key informants, useful information was difficult to locate. This was especially so, for prevention and treatment interventions.

It must be stressed that data availability and quality overall are deficient. Within many countries surveys used over time vary considerably, as do populations sampled. Most data are very much 'out of date', do not allow for trends or emerging drugs of concern to be identified. It is extremely difficult to convey a meaningful picture of current, or even recent, prevalence of adolescent substance use across the region, let alone identify details of preventive and treatment interventions.

The Western Pacific Region (WPR) is home to a very youthful population. The region also plays a significant role in the production and manufacture of heroin and Amphetamine Type Stimulants (ATS). Most countries within the region have identified substance use in general, and by young people in particular, as of great concern to the health and wellbeing of their populations and in having a negative impact on economic development. (Burnett Institute, 2010) Alcohol use by adolescents, in particular, is of increasing concern across the region. With the influence of various socio-economic factors, including effects of globalization, unemployment and demographic change - drug use among young people is posing significant problems, both on the individual and communal level.

As substance use is associated with many risky behaviours, broad and comprehensive rather than narrow interventions are required to deal with the range. Specific to substance use, an escalation in injecting has contributed to the rapid spread of HIV, hepatitis and other infections. Now in some communities, when using substances for the first time, young people often choose to inject. Young injectors are also more likely to be involved in riskier behaviours than older injectors. Risky

sexual behaviour while intoxicated increases the risk of unplanned pregnancies and sexually transmitted infections (STIs). Road traffic and other accidents, often associated with alcohol use, are a major cause of mortality and injury among children and young people. To survive, many young people are putting themselves at risk of violence by working in the illicit drug and commercial sex industries. Finally, the troubling increases in suicide and homicide among young people, in developed countries in particular, is seen to be associated with substance use.

The burden of disease and morbidity associated with adolescent substance use tends not to be evenly distributed, but falls more especially among vulnerable adolescents and young people now, often referred to as 'most at risk adolescents' (MARA) and 'most at risk young people' (MARYP). MARA and MARYP tend to be: very young adolescents, same sex-attracted, minority populations/cultures, young sex workers, young workers, young parents, those in juvenile justice/closed settings, and those living in very risky situations and environments.

In many countries in the Western Pacific Region, an increase in illicit drug use, particularly ATS, including Ecstasy (MDMA) and cannabis, and changes in modes of administration, such as injecting, is occurring. Multiple substance use patterns are becoming increasingly common, with young people moving from one substance to another and using drugs in various combinations.

Changing international drug trafficking routes are also of concern, as they bring 'new' drugs into an area for transshipment. Some of these drugs remain, and consequently use of them spreads. This is evident in the Pacific, as is some drug production (e.g. cannabis). There have also been changes in relation to the trade in licit substances, with the targeting of developing countries by the international alcohol and tobacco industries. This can be seen, in part, as a response to declining and changing consumption in more developed countries

While the specific needs of young people are recognized to some extent, they remain largely unmet in many settings. Overly punitive laws, the demonisation of drugs, the criminalisation of drug users, and an apparent disregard for the human rights of drug users of whatever age in many countries in the region continue to work against change. The latter is exemplified by the over use of compulsory residential 'treatment' centres, wherein young people are mostly accommodated within a general population, not-segregated, and their specific developmental needs not given priority; despite countries in the region being signatories to the Convention on the Rights of the Child. In most countries, compulsory treatment is operated by public security, and health plays a minor role - if any. This is despite increased attention to substance dependence being regarded as a 'health issue' by UN and other international bodies, and the increasing call for the recognition of the human rights of drug users (UN General Assembly, Human Rights Council, 2009). In addition, little attention is paid to harm reduction, if it exists and is sanctioned, particularly for young people.

Recommendations

Data

1. **It is recommended that increased attention and resources be devoted to improving data on substance use among young people of the region.**

There is an urgent need for more and better quality data to be routinely collected. It is recommended that countries ensure that available data can be disaggregated for age and sex, and that specific sub-populations of concern, such as MARA, are surveyed.

WHO, in conjunction with others, should review **school and youth surveys** used in the region and implement a study in some countries of special concern within the region to identify 'best questions', 'best survey'. Consequently, there could be benefit in attempting to standardize these, while allowing for country or sub-region/population-specific questions.

The Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (ERDS), well established in Australia provide examples of monitoring and 'early warning' systems to detect drug trends and movement in drug markets. It is recommended that consideration be given to implementing a pilot in some countries of special concern within the region.

In particular, **more details regarding IDU among adolescents in the Pacific Islands be collected.** This is necessary given data reported from school and youth surveys undertaken in a number of the Pacific Island states which indicate alarming rates of IDU. Anecdotally, it is believed that the data are based on misunderstanding or poor translations of questions.

There are three specific drugs of concern within the Western Pacific region- **Alcohol, Cannabis and ATS** – that require some depth research as to their impact on adolescent health and wellbeing.

- For **Alcohol**, areas of concern tend to relate to risk behaviour, violence, accidents and sexual and reproductive health.
- For **cannabis**, there are particular concerns about links between regular, heavy cannabis use and mental health disorders (predominantly psychoses) and violence in the Pacific Island states.
- For **ATS**, there are particular concerns about links between regular, heavy ATS use and mental health disorders (predominantly psychoses) in East and South-East Asia.

Much of the above could be aided by the development of a **regional youth substance use research network** (YSURN) that could link a number of credible research centres within the region to assist in monitoring youth drug use, undertake

specific projects as necessary (e.g. epidemiology, prevention, treatment, substance specific), provide mentoring to emerging research centres and researchers. WHO could convert it into a WHO Collaborating centre if it proves beneficial.

Policy and a facilitating environment

2. It is recommended that there is a need for a more collaborative approach from the UN Family to adolescent substance use and related difficulties in the region

To move forward, there is need for a **collaborative approach from the UN system** to engage with senior policy makers to ensure a supportive legislative, policy and practice environment, and compliance with international treaties and conventions (e.g. the Convention on the Rights of the Child). WHO, UNICEF, UNODC and other UN agencies need to develop a child and health rights-based unified strategy for both the prevention and treatment of substance use-related difficulties in the region and within countries. The CRC can be a useful tool to frame responses.

3. It is recommended that the UN Family advocate for a more facilitating and supportive policy environment to be created to shape and drive a more effective response to adolescent substance use and related difficulties in the region

There is an urgent need for a facilitating and supportive policy environment. It is particularly important for the UN 'family' to encourage dialogue and cooperation between Health, Public Security and Education ministries to develop national adolescent health and drug strategies based on best available evidence.

Capacity Building - Prevention and Treatment

4. It is recommended that WHO/WPRO develop 'knowledge hubs'

WHO/WPRO might consider leading a process with other One UN partners UNICEF and UNODC to **identify both Prevention and Treatment interventions** that could be trialed within the region, a strategy for workforce capacity building and dissemination and support. Target interventions could be identified via a process that might involve developing panels of experts and facilitating regional workshops that propose priority rankings of projects/topics and develop a regional and/or sub-regional approach to developing proposals for funding. Larger projects could be broken down into discrete sequential components, to enable funding to build as earlier developmental activities prove their worth.

The development of 'knowledge hubs' and research centre links and twinning (less experienced centres 'twinned' with more experienced ones), and a similar approach for clinical intervention development should be undertaken.

5. It is recommended that WHO/WPRO develop a strategy to develop and trial preventive interventions

There is a significant lack of evidence informed prevention efforts. There is a need to explore a diversity of evidence informed interventions within the Western Pacific region, and ensure evaluation in relation to impact on substance use among adolescents. It is recommended that interventions that could be most relevant include school-based (with community linkage), web-based, targeted interventions at workplaces and for specific sub-populations (e.g. MARA and MARYP).

MARA and MARYP require special focus as they tend to bear the greater burden of morbidity associated with substance use, in addition to being more likely to be involved with juvenile and criminal justice systems and public security and, thus, need to be promoted.

There is a need to explore **diverse sites for prevention and screening activities** – such as schools, dormitories and other out-of-home accommodation used by students, workplaces that employ young workers (e.g. garment factories in Lao PDR and Viet Nam that employ many young women) and other sites such as seafarer/ marine colleges in the Pacific. Pilot projects could be trialed in one or more key settings. In addition to WHO, UNICEF and UNAIDS, this may involve UN agencies such as ILO and UNESCO.

Given that many MARA and MARYP are often not engaged in formal or informal education, in particular in developing countries, community focused interventions are seen as more useful for such groups.

6. It is recommended that greater attention be given to building the capacity of primary health care to meet the needs of young substance users, especially MARA and MARYP.

There is concern that stand-alone or adolescent/youth specialist services may be too costly or unable to be established. Thus, **there is a need to build the capacity of generalist Primary Health Care workers to screen for and provide brief interventions** which address adolescent substance use-related difficulties. Training in use of the **HEADSS** approach and or use of the **WHO/CAH Orientation Programme** could be beneficial. Twinning and linking countries with greater need in this area, with those with a better-developed and skilled workforce could assist in providing curricula, training methods and mentorship.

7. It is recommended that greater attention be given to the promotion, expansion and strengthening of the adolescent friendly health services initiative, especially in meeting the needs of MARA and MARYP.

There is a need to develop a skilled workforce that can utilize evidence based interventions to respond to adolescent substance use and related difficulties within the region, especially for those most at risk.

Adolescent Friendly Health Services appear to remain poorly understood in some settings. There needs to be a concerted effort to ensure that all health workers are aware of what are the key features of adolescent-friendly health services, and that these features can be incorporated into generalist or adolescent-specific services.

WHO/WPRO might also take a lead in the dissemination of readily available/downloadable resources developed by various UN agencies and organizations that may assist in capacity building.

8. It is recommended that WHO/WPRO develop a strategy to develop and trial treatment interventions

There is a **need to develop and trial brief interventions, especially for Alcohol, Cannabis and ATS use.** Brief interventions have demonstrated efficacy in developed countries, trials of appropriately adapted variants, to ensure cultural and setting relevance, are needed. WHO could develop, lead and/or support a coordinated series of trials in diverse settings, based on evidence informed strategies. It would be possible then to develop guidelines to assist clinicians.

Drug testing in schools

9. Drug testing in schools should not be encouraged, given the lack of an evidence base

The move toward **drug testing in schools in some states of the WP Region** requires consideration of the evidence from developed countries, which tends to be against such a strategy.

Compulsory residential treatment

10. It is recommended that strategies to engage with compulsory/coerced treatment settings require careful consideration

There is **overuse of compulsory residential treatment**, which has high relapse rates and inadequate programming to meet the specific and developmental needs of adolescents. The lack of current capacity for community treatment for young people with problematic drug use, and the current legislation and policies that almost automatically transfer young people identified as drug users to compulsory residential detoxification and/or rehabilitation centres make it extremely difficult to make a significant impact. It is recommended that the 'UN Family' needs to advocate for more developmental stage-specific treatment capacity that in line with the Convention on the Rights of the Child, would favour the least restrictive settings from which to provide necessary treatment.

As **compulsory treatment centres** will remain for some time within the region, there is the need for the health sector and NGOs involved in providing

services to young drug users to develop effective working relationships with them that acknowledge the limitations, and stress adherence to human rights, the Convention on the Rights of the Child and international treaties and covenants related to torture and appropriate use of incarceration.

WHO and UNODC developed Principles of drug dependence treatment in 2008, which guide policy and treatment intervention development and can be used for advocacy and management.

Models for diversion for youth crime exist within the region and nearby. These models need to be considered for young drug users and, as appropriate, recommended to member states. There is a need to explore the role of **pilot drug courts**, and to ensure that there is some **mechanism for formal review** of involuntary admissions to residential detoxification and or treatment, so that young less dependent or experimental drug users are afforded an opportunity to receive community-based treatment as the preferred option. Kunming, China; Malaysia and a larger Pacific Island state may be suitable sites for pilot projects.

In all activities referred to above, particular attention is required to include difficult to reach, but highly vulnerable groups such as most at risk adolescents - MARA (for example, very young adolescents, same sex-attracted, minority populations/cultures, young workers, young parents, those in juvenile justice/closed settings) in research, intervention development and delivery.

Funding

11. It is recommended that adequate funding be available to progress responses to adolescent substance use and related difficulties in the region

Adequate, ongoing funding needs to be provided to better research prevalence and consequences of drug use, and to inform and support initiatives based on appropriate national and local policies, and to ensure that promising 'pilots' get an adequate chance to demonstrate efficacy.

1 Substance Use and Adolescents

1.1 Introduction

Adolescents are diverse. A girl of twelve living on the streets in Manila is likely to have developed essential survival skills beyond those of a girl of similar age who is cared for within a financially comfortable family in Singapore. A 15 year old heroin user in Ha Noi differs significantly in terms of lifestyle, risks and treatment opportunities from one in Sydney. And, a boy aged thirteen attending school in rural China or a Pacific Island, will experience a vastly different array of social and structural influences on his development and exposure to risk than one in a large city such as Shanghai or as an immigrant in a suburb of Auckland.

Likewise, while generally healthy, there are health discrepancies among adolescents globally. For example, 97% of young people aged 10-24 who died in 2004, were from low and middle-income countries and more than a third of the deaths were in Southeast Asia (Patton et al., 2009). Alcohol use was associated with a number of these deaths, particularly those from traffic accidents and violence.

In developing countries, the problems related to the use of alcohol and other psychoactive substances often exist in parallel to and are associated with other enormous health, economic and social problems, thus making it difficult at times to prioritise funding for substance use-related activities and programmes.

In addition, in some developing countries, the 'drug industry' can be a source of income to the poor (WHO, 2000). For example, if a family member becomes involved in drug production, manufacturing, distribution or associated activities he or she can bring much needed money to their family which can be used to obtain better housing, education for children, health care, transport, vacations; in essence a much enhanced lifestyle.

The arrival and spread of HIV/AIDS has exacerbated the situation and added a sense of urgency. This is especially so where injecting drug use (IDU) exists and where sexual safety is compromised by intoxication and other substance use-related events, such as impaired judgment. Young people can be at greater risk as they may have limited access to the requirements for safer substance use and sex: clean injection equipment, sterile water, swabs, condoms and water-based lubricants.

1.2 Substance use in the Western Pacific

In many countries in the Western Pacific Region, an increase in illicit drug use, particularly ATS, including Ecstasy (MDMA) and cannabis, and changes in modes of administration, such as injecting, is occurring. Multiple substance use patterns are becoming increasingly common, with young people moving from one substance to another and using drugs in various combinations (Hong Kong, 2009). In both developed and developing countries, solvent use remains a problem, especially in

marginalised groups, including street children and indigenous young people. (Burnet Institute, 2010; WHO, 1993 and 2000)

Changing international drug trafficking routes are also of concern, as they bring 'new' drugs into an area for transshipment. Some of these drugs remain in transshipment countries, and consequently use of them spreads. This is evident in the Pacific. There have also been changes in relation to the trade in licit substances, with the targeting of developing countries by the international alcohol and tobacco industries. This can be seen, in part, as a response to declining and changing consumption in more developed countries. In addition, drug production exists within the region, for example cannabis.

What is also clear are significant regional variations (e.g. alcohol and cannabis use being of greater concern in the Pacific sub-region, and ATS and opioids in East and South-East Asia, and ATS in Korea, Japan and the Philippines [UNODC, 2009]), within country variations (e.g. Beijing, Wuhan, Hangzhou and Wulumqi in China, and Luzon, Mindanao and Visayas in the Philippines [WHO, 2003b, 2007]), and within country gender-based, age-based and cultural/ethnic variations (e.g. adolescents of Chamorro and 'White' versus Micronesian and Filipino backgrounds in Guam [Guam Department of Mental Health & Substance Abuse, 2008]).

1.3 Adolescence, substance use and consequences

Substance use and dependence are products of a constellation of factors in the personal, social and economic lives of individuals and communities, and are impacted upon by broader geo-political changes, international criminal activity and responses. Adolescent psychoactive substance use and dependence, then, can be seen as complex and dynamic public health issues, usually characterised by changes in the pattern of use, context of use, types of substances used, and related problems in countries worldwide.

Adolescence is a time of experimentation, exploration, curiosity and identity search, and part of such a quest involves some risk taking. By the time of adolescence, young people have also been exposed to many substances, especially those which are easily available and relatively cheap such as glue, petrol, alcohol, tobacco and cannabis. Within a milieu of social and peer influence and expectations, together with easy availability of a wide variety of substances, substance use can become one aspect of the developmental process, and even a part of life. Adolescence is also the time where many patterns of behaviour become more entrenched; including personality disorders, substance use and associated problem behaviours. It appears that early adolescence is the optimal time to intervene.

Substance use is generally not mindless or pathological, but functional. When surveyed, adolescents in developed and developing countries cite boredom, curiosity and wanting to feel good (or better) as the main reasons for use (Howard, 1994; WHO, 1995a). Other functions served by substance use are to relieve hunger, to adopt a rebellious stance, for peer/social acceptance, to relieve pain, keep awake or get to sleep, or to dream. Therefore, substance use is often seen by young people as a solution rather than a problem.

Most young people who try drugs do not continue their use or develop significant problems (Howard, 1994; Rutter and Smith, 1995). Experimentation and a variable pattern of use and cessation are common.

Just as there are diverse patterns of substance use among young people there is a wide range of consequences related to such use. These include harmful health consequences (physical and mental) related to the direct effects of the substances themselves, the ways in which substances are used and the situations in which use occurs. Furthermore, harmful effects of substance use by young people are often felt by families, communities and society at large. (Kirsch, 1995; Rutter and Smith, 1995).

The consequences of such use are determined in large part by the cultural, legal, social and economic context of use. Harm results directly from young people's own substance use as well as from substance use of those around them including use by other young people, family members and other adults. Harm also results from the criminalisation of users, and in particular their incarceration, which can increase their marginalization and decrease their access to and participation in interventions to address any substance use-related harm.

More intensive substance use by younger youth results in younger people with significant substance dependence. The toxic effects of specific substances cause short term and long term health damage, such as acute psychotic reactions and cardiac arrhythmias from psychostimulant use, brain damage from inhalation of volatile solvents, and respiratory and cardio-vascular disease from chronic smoking and alcohol consumption after years of use. (Kirsch, 1995; Rutter and Smith, 1995; WHO, 1995a)

As substance use is associated with many risky behaviours, broad and comprehensive rather than narrow interventions are required to deal with the range. Specific to substance use, an escalation in injecting has contributed to the rapid spread of HIV, hepatitis and other infections. Now in some communities, when using substances for the first time, young people often choose to inject. Young injectors are also more likely to be involved in riskier behaviours than older injectors. Risky sexual behaviour while intoxicated increases the risk of unplanned pregnancies and sexually transmissible infections (STIs). Road traffic and other accidents, often associated with alcohol use, are a major cause of mortality and injury among children and young people. To survive, many young people are putting themselves at risk of violence by working in the illicit drug and commercial sex industries (WHO, 1995a, Patton et al., 2009). Finally, the troubling increase in suicide and homicide among young people, in developed countries in particular, is seen to be associated with substance use.

As substance use spreads through communities, family and social problems are more frequent. Young substance users become alienated within their communities, making them more difficult to reach and more vulnerable to health problems. They find themselves discriminated against and used as scapegoats. Failure at school, early 'drop out' and underachievement are further consequences. These problems translate into reduced opportunities for productive employment and independence.

Alcohol and other substances are intimately inter-related with increasing problems of violence, crime and anti-social behaviour. Substance use by both parents and children often increase family tension, which may result in family breakdown and child abuse. Health consequences may be immediate, or the development of chronic often fatal conditions may begin: for example with tobacco (WHO, 1995a). However, the use of substances brings many rewards, such as escape and status and these perceived benefits can be associated with minimizing or ignoring risks.

Some possible consequences of substance use
Substance dependence
Health difficulties (e.g. respiratory, cancers)
Early departure from school
Impaired capacity to maintain employment – decreased productivity
Family disruption
Homelessness
Delinquency, crime and involvement of public security
Incarceration
Early unwanted pregnancies
Violence
Mental health difficulties
Economic strain on families and communities
Enhancing organized crime and trafficking
Corruption
Marginalisation
Stigma

1.4 Pathways, Connections and Vulnerability:

The age at which initiation and in particular escalation and maintenance of use occurs is crucial. Intensive and/or prolonged use can truncate, interfere with or circumvent essential maturational processes and development, producing 'developmental lags'. Initiation of substance use among very young and most at risk adolescents (MARA) and young people (MARYP) is of special concern. Recent understandings of brain and neurobiological development highlight potential risks of substance use during this developmental period, which is now understood to continue into the mid twenty years of life. (Squeglia, Jacobus and Tapert, 2009).

Risks can then be greater for experimenters with limited access to accurate information, equipment and supports, and for chronic dependent users. Thus, how to delay onset of use, or escalation, and route of administration are important considerations. (Howard, 1994; Newcomb and Bentler, 1989; Trad, 1994).

Those adolescents who develop patterns of regular and problematic or harmful use appear to differ from those who merely experiment, or maintain irregular use. Personality characteristics, individual differences in vulnerability, family difficulties, association with substance using peers, exposure to substances, shared and non-shared environments, and accumulations of social disadvantage, all appear to play a role in the development of substance using behaviour (Howard, 1994; Rutter and

Smith, 1995). The interplay of these variables in particular cultures and situations, or more broadly varying contexts, is crucial. Moreover, many of those who regularly use substances also experience other problems, such as academic failure, mental health problems and criminal behaviour which require attention.

It is clear from a substantial body of research that 'connections' to family, other adults outside the family, school and something 'spiritual' (for example, religion) protect young people as they develop from harm, including adverse substance use outcomes (Resnick et al 1997). Risk and protective factors may vary over time and have differing impacts at differing points or stages of developmental trajectories or pathways (UNESCAP, 2003).

Pathways to problematic or harmful substance use are influenced by the differing contexts within which the adolescent lives; why, how and where substances are used, and other factors such as gender and neurobiology. A recently proposed 'causal pathway' is presented below (Department of Indigenous Affairs, 2005). It draws from research that describes pathways interconnecting cascades of events from key points in life. These pathways identify conditions in the earlier years of life that can cumulatively cause social and economic disadvantage later on in life. Such life pathways may lead either towards resilience and positive outcomes, or negatively towards a reduced capacity to respond to life events, which can lead to adverse social outcomes.

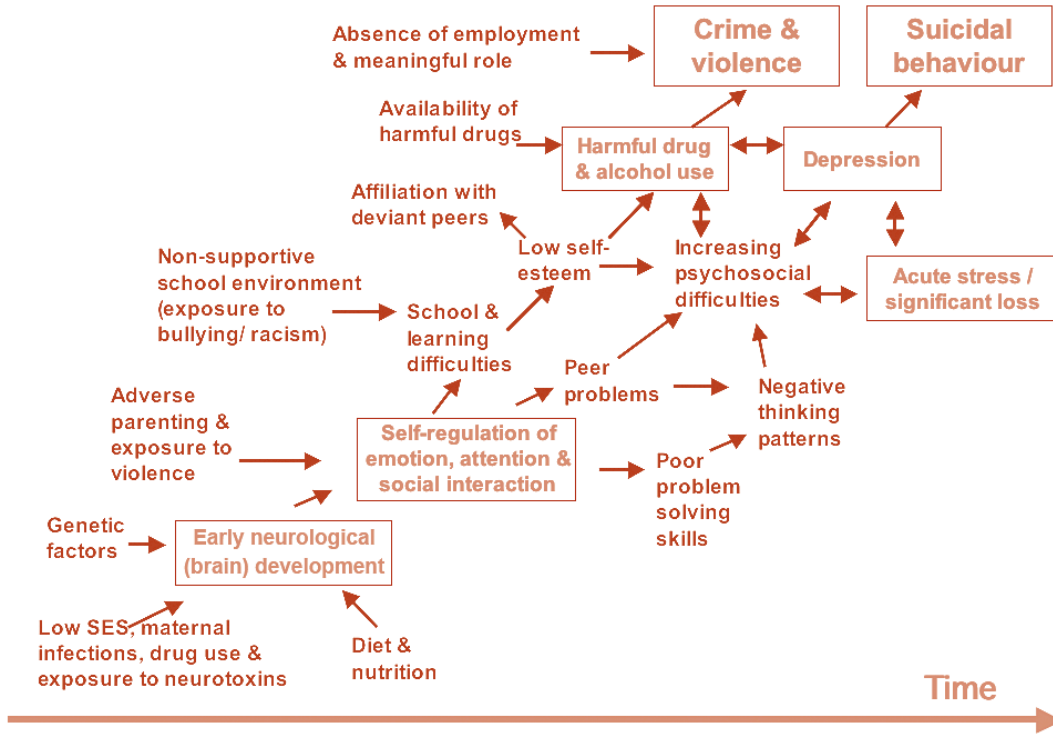
These findings have implications for prevention and treatment, as there has been an undue emphasis on the influence of peers in 'just say no' interventions and compulsory residential treatment. They also identify developmental stages and processes and sites which can become the foci for prevention activities (Department of Indigenous Affairs, 2005).

The figures below summarise research undertaken by the Telethon Institute for Child Health Research, Western Australia, on what is known from longitudinal studies about the typical life-course leading to crime, violence and high-risk suicidal behaviours. It describes the potential long-term outcomes arising from cumulative interactions of economic, environmental (both physical and social) and biological factors. Other related issues such as family violence, alcohol and substance misuse, sexual abuse of children, and other adverse education, health and other social outcomes are also known to develop along similar pathways.

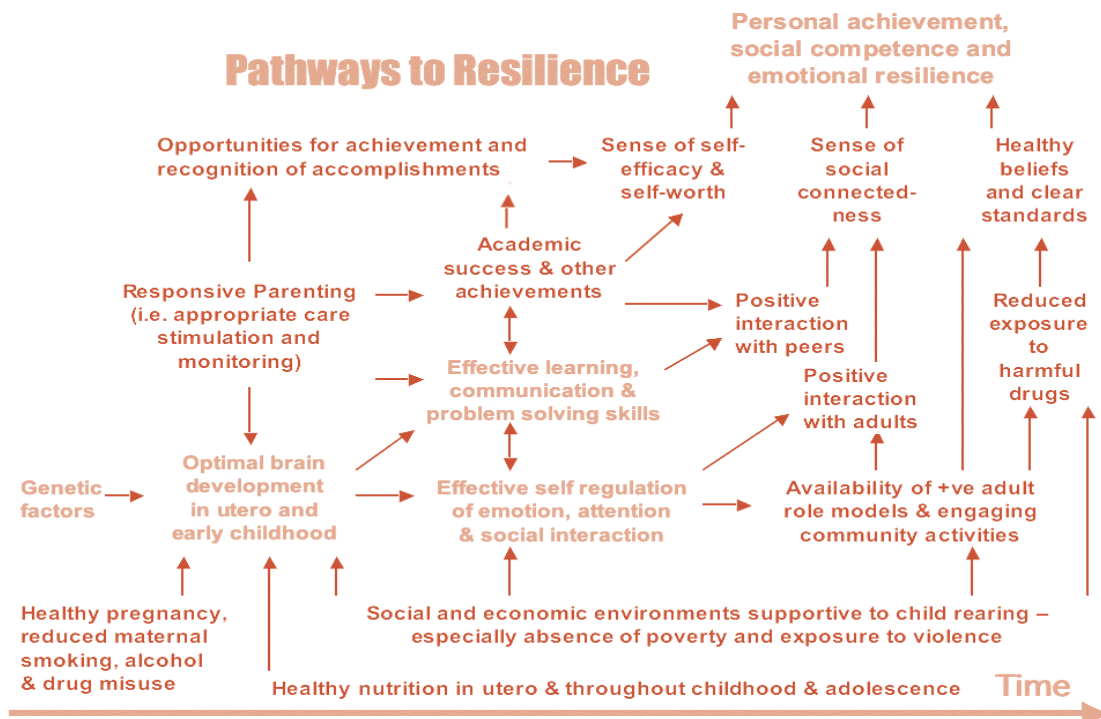
Understanding the causal pathways, enable the development and implementation of effective interventions that could strategically target the critical points in the pathways. The following figure shows that interventions at critical points in the causal pathways can lead to the resilience needed to avoid adverse outcomes later on in life. It focuses on the key points in a person's development where the greatest gains can be achieved, and, hopefully, poor health and social outcomes avoided or minimised – including substance use.

Cumulative Risk Pathways to Suicide, Violence and Crime

Understanding the causal pathways



Pathways to Resilience



Department of Indigenous Affairs (DIA), 2005, 'Overcoming Indigenous Disadvantage in Western Australia Report 2005', Department of Indigenous Affairs, Perth. Available: <http://www.dia.wa.gov.au>

Some groups of young people have been identified as being at greater risk of substance use and associated problems, usually due to a greater number of stressors in their lives, and/or weakened resilience. The burden of disease and morbidity associated with adolescent substance use tends not to be evenly distributed, but all on more vulnerable adolescents and young people now referred to as 'most at risk adolescents' (MARA) and 'most at risk young people' (MARYP). MARA and MARYP tend to be very young adolescents, same sex-attracted, minority populations/cultures, young sex workers, young workers, young parents, those in juvenile justice/closed settings.

Of special concern are especially vulnerable adolescents from ethnic and religious minorities, children from war-torn societies, refugees, immigrants, indigenous young people, street children and other marginalised adolescents, for example same sex-attracted young people, those involved in juvenile justice systems, and adolescent parents. These adolescents may have different patterns of use and harm, and may need specific approaches targeted to their unique needs. Increased risk, of course, results from the interplay of individual, familial, community, societal and broader risk and protective factors.

Young women have particular issues in relation to substance use that require attention. There are, in addition to physiological differences, social and economic ones which impinge on their functioning and their health. Often, young women are introduced to substance use by male partners, and some of this use may be maintained, for some involved in commercial sex work, by their 'pimps'. Sexual assault may be more common for young women than young men, and young women 'on the street' tend to exhibit greater levels of psychosocial distress and negative life events than do the young men. Pregnancy is also a major issue for them, and young women substance users are often viewed more negatively than young males. In addition, in many parts of the world, young females have less economic opportunities and receive less nutritious and smaller quantities of food than their brothers. All of these factors have significant health implications, especially when substance use commences. (WHO, 1995a).

1.5 UN and country responses

Substance use, then, must be seen in context. It is but one behaviour with which young people become involved. Prevention and treatment aim at what has been termed 'demand reduction'. On the other hand, 'harm reduction' aims at reducing impacts of substance use, such as risks of infection with HIV among adolescent IDUs via, for example, provision of sterile injection equipment.

It appears that the UN, the research community and drug users groups now have a shared view of the efficacy of harm reduction, and the wasteful debate, mostly driven by misguided moral and political imperatives, should be laid to rest. (Barett et al., 2009).

The United Nations General Assembly, Human Rights Council adopted a resolution (12/27) on 'The protection of human rights in the context of human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) in October 2009. This

resolution supports harm reduction efforts, and two relevant sections are reproduced below:

“Recognizing the need for the Joint United Nations Programme on HIV/AIDS to expand significantly and strengthen its work with national Governments and to work with all groups of civil society to address the gap in access to services for injecting drug users in all settings, including prisons, to develop comprehensive models of appropriate service delivery for injecting drug users, to tackle the issues of stigmatization and discrimination, and to support increased capacity and resources for the provision of a comprehensive package of services for injecting drug users, including harm-reduction programmes in relation to HIV, as elaborated by the World Health Organization, the United Nations Office on Drugs and Crime and the Joint United Nations Programme on HIV/AIDS in the Technical Guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users, in accordance with relevant national circumstances

Recalls the commitment, as expressed by the General Assembly in its Political Declaration on HIV/AIDS, to intensifying efforts to ensure that a wide range of prevention programmes that take into account local circumstances, ethics and cultural values is available in all countries, particularly the most affected countries, including information, education and communication, in languages most understood by communities and respectful of cultures, aimed at reducing risk-taking behaviours and encouraging responsible sexual behaviour, including abstinence and fidelity, expanded access to essential commodities, including male and female condoms and sterile injecting equipment, harm-reduction efforts related to drug use, expanded access to voluntary and confidential counselling and testing, safe blood supplies, and early and effective treatment of sexually transmitted infections”.

Overly punitive laws, the demonisation of drugs, the criminalisation of drug users, and an apparent disregard for the human rights of drug users of whatever age in many countries in the region continue to work against change and provision of evidence-based harm reduction. There is increasing international critique of the compulsory residential treatment (e.g. Thomson, 2010).

Other approaches have been aimed at 'supply reduction'; attempts to reduce production of raw materials, the manufacture of substances such as heroin, cocaine, amphetamines, and the transportation, trafficking and selling of these products. Young people are involved at all levels in this international trade.

2 The Western Pacific Region: overview and adolescent substance use

2.1 Introduction

The Western Pacific Region (WPR) is home to a very youthful population, and plays a significant role in the production and manufacture of heroin and Amphetamine Type Stimulants (ATS). Alcohol use by adolescents, in particular, is of increasing concern across the region. With the influence of various socio-economic factors, including effects of globalization, unemployment and demographic change - drug use among young people is posing significant problems, both on the individual and communal level. If young people are to be a resource for the future they need to develop to allow their potential to come into effect.

It is a region with a higher than world average population growth rate and proportion of children under 15. (UNESCAP, 2007a). Most countries contain large rural populations, despite rapid urbanisation occurring across Asia. Urbanisation rates were reported by UNESCAP in 2007 for China – 41.3%, Lao PDR – 21%, and Viet Nam – 26.9%.

The Pacific Island states 'are made up of people of Melanesian, Micronesian and Polynesian background. In addition, countries such as Fiji and the Solomon Islands include large later generation populations of Chinese and Indians. Many of the PICTs [Pacific Island States and Territories] are characterised by high rates of unemployment, rural urban drift and very high youth population (in many cases over fifty percent under 20 years of age)' (Burnet Institute, 2010, p. 4).

In relation to poverty, and notwithstanding significant growth and prosperity, a number of countries report percentages of the population living below \$US 1 per day. (UNESCAP, 2007b; Burnet Institute, 2010).

Young people are at the forefront of vulnerability to HIV infection. A substantial proportion is becoming infected via injecting drug use or unsafe sexual behaviour, often while under the influence of drugs or intoxicants. HIV/AIDS prevalence among injecting drug users has reached over 50% and in some cases over 70% of the injecting drug use population, and can do so in a very short time (Mathers, Degenhardt et al., 2008).

The Commission on AIDS in Asia (2008) noted that, 'Preventing an HIV epidemic among drug injectors can be a very effective way of avoiding a wider HIV epidemic. (p.7). Injectors who buy and sell sex were of particular concern. The Commission also noted that, there was a need for meaningful and genuine community involvement and that ... programmes for low-risk youth absorb over 90 % of youth prevention resources, but avert less than 5 % of HIV infections among young people.' (p.146).

Recently reported prevalence of injecting drug use (IDU) (Mathers, Degenhardt et al., 2008) was as follow: China – 0.25 mid estimate; 0.31 in 2005 and Viet Nam –

0.25 mid estimate in 2006. From the same report, the estimated number of IDUs in China was 2,350,000, Malaysia 205,000, Australia 149,591 and Viet Nam 135,305. The mid prevalence rates of HIV among IDUs was 42.5% for China, 1.5% for Australia and 33.8% Viet Nam in 2005, and 10.3% for Malaysia in 2002. For the Pacific, 6.7% of all HIV infections in the Pacific outside PNG were transmitted through IDU (Burnet Institute, 2010).

For first time treatment entrants, methamphetamine use was identified by 14% in China with 11% reporting IDU of methamphetamine (Degenhardt, Mathers et al., 2007).

2.2 Drug Situation in the Western Pacific Region

In 2006 the Australian National Council on Drugs published a commissioned report on drug use in the Asia and Pacific Region (Devaney, Reid & Baldwin, 2006), which has been updated for the Pacific (Burnet Institute, 2010). Both the 2006 and the 2010 reports identified a number of factors common to situations where there have been rises in illicit drug production or use. These include:

- rapid economic growth, with a burgeoning middle class youth population, and with internal migration, and resultant cashed-up migrant labour populations away from their homes;
- inequitable distribution of the benefits of such growth, with increased gaps between rich and poor, and differential ability to participate in the formal economy;
- political upheaval, with resultant external migration, creating both human flows for drug trafficking and disenfranchised populations without access to the formal economy;
- inadvertent results of law enforcement and interdiction operations, moving drug trafficking routes, especially overland cross-border and coastal, to involve new populations;
- corruption, and its role in the maintenance of power among ruling political elites;
- poverty and political disenfranchisement, operating through the above processes or on their own.

The 2006 report noted that the Asia-Pacific region has been undergoing massive change over the last few decades: socially, economically and often politically. It also noted that the extent of rapid urbanisation and resultant internal migration varied, but where they occur such changes often lead to increased inequitable access to new wealth, and substantial strains on urban services. In addition, this was seen as fertile ground for involvement in illicit drugs. For some, trafficking and dealing drugs are ways of accessing the informal economy when access to the formal economy is limited or barred, and using drugs can ease the experience of poverty. Trafficked drugs include heroin, cannabis, cocaine and ATSs and precursors for their manufacture. Production of cannabis and alcohol is spreading, as is manufacture of ATS. While the Devaney et al., 2006 report noted that with rapid economic development, two youth populations were most at risk of illicit drug use— those with money, and those with nothing – it may be now that emerging middle class youth are also increasing participation in drug use.

Like East and South-East Asia, the majority of the island states have more than half of the populations less than 25 years of age. In relation to The Pacific Islands, Buchananan-Aruwafu (2007), in her broad ranging report, has stated that: “In the Pacific, geographies, demographic and population trends, change, and other socio-cultural, economic, political and legal contexts, create situations of heightened vulnerability that are associated with HIV epidemics” (p.5). Vulnerability and risk of exposure to HIV interact together, and circumstances such as those below increase both:

- depressed economies, poverty, increasing un- and underemployment
- a poverty of opportunities for employment and education, particularly for young people and women, in rural and urban areas
- migration and mobility for work and occupations in concentrated development or industrial areas
- increasing urbanization
- gender and status inequalities
- sexual and domestic violence
- drug and alcohol use
- poor governance, political instability, displacement and armed conflict
- socio-cultural traditions, norms, and family structures in change
- legislation that criminalize the exchange of sex for cash and resources and male to male sex, or that does not protect the rights of people living with HIV, and
- stigma and discrimination and human rights infringements.

Buchananan-Aruwafu (2007) has indicated that binge drinking and heavy cannabis use are linked to poor health, accidents and violence, crime, unwanted and unprotected sex, teen pregnancies, STIs, and mental health problems across many Pacific Island countries.

Suicide rates in some island states are of concern, and Buchananan-Aruwafu (2007) comments that “...young people do not have the ability to change the shifting contexts of their lives and social change, and cannot easily resolve the incongruity between their different identities, their own desires, including their sexual desires, and the socio-cultural and familial expectations that they face. Suicide is a salient symbol of the impact of socio-cultural change and transitions from traditional to modern social structures, subsistence to cash economies, and of the intergenerational conflict and pressures that are exerted on younger generations” (p. 32).

2.3 Prevalence of adolescent drug use:

Data Caution: The following must be read with caution. Available data are extremely variable in relation to reliability and generalisability. In addition, data have been collected and edited by various government ministries and departments, NGOs and research centres; with attendant biases. Questions regarding the same substance, means of use and associated behaviours have been asked in different ways, even within the same country and by the same groups. Data also vary as to year of collection. As for Burnet Institute (2010), the accuracy of data in grey literature was difficult to verify. Thus, reliable estimates of the use of illicit drugs are

rare in the Asia-Pacific region, with few being derived by any reasonable systematic and data-driven process.

In addition, there have been recent attempts to utilize some standardised surveys across the Pacific, such as the Youth Risk Behaviour Survey and Second Generation Surveillance surveys, to enable comparisons and trends to be identified. While this represents a large step forward, there may be unexpected errors from using these instruments. For example, data obtained in relation to IDU requires urgent verification, as rates reported are far in excess of those for Australia and, if valid, pose significant threats to HIV prevention activities. Despite these concerns, there is little other available data for the Western Pacific region to inform prevention targets.

There is a diversity of prevalence across region and within countries, as can be seen below.

- **Alcohol use** by young people is of increasing concern throughout the region, especially in small island states and south-east Asia.

Table 1: Weekly/monthly Youth Alcohol use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey	2007	23.0	18.8
China - Beijing	WHO Secondary School Survey	2003	17.7	08.6
China - Hangzhou	WHO Secondary School Survey	2003	20.9	03.5
Guam	School students	2007	36.2	33.4
Marshall Islands	YRBS School students	2007	51.0	33.4
New Caledonia	Second Generation IBBS	2005	39.7	23.6
Northern Mariana Is	YRBS School students	2007	42.6	39.5
Palau	YRBS School students	2007	42.4	29.0
Philippines: Luzon	WHO Secondary School Survey	2007	20.7	15.1
Philippines: Visayas	WHO Secondary School Survey		18.6	12.0
Wallis and Fortuna	School Survey	2006	22.0	19.0

- The use of **Kava** is widespread in a number Pacific Island states.
- **Cannabis** use is generally widespread in the region, often as the most or second most frequently consumed illicit drug, and cannabis is grown in a significant number of South-East Asian countries and Pacific Island states. There is concern within some Pacific Island states about the relationship between cannabis use, mental health and violence.

Table 2: Recent Youth Cannabis use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey	2007	13.1	12.7
Guam	YRBS School students	2007	25.6	20.5
Marshall Islands	YRBS School students	2007	14.1	03.2
Northern Mariana Is	YRBS School students	2007	37.5	26.3
Vanuatu	Second Generation IBBS	2008	43.2	17.1

- **Methamphetamine use is found throughout the region**, as are the main substances associated with treatment admissions of young people in countries such as Lao PDR, Cambodia and the Philippines.

Table 3: Recent Youth ATS use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey	2007	01.0	02.2
Guam	School students:	2007	03.7	07.5
Marshall Islands	YRBS School students	2007	14.1	03.2
Northern Mariana Is	YRBS School students	2007	37.5	26.3

- **Ecstasy (MDMA)** use continues to increase throughout the region, but its retail cost generally appears to make it more confined to urban centres.
- The use of **ketamine** has been identified in some Asian countries, e.g. China, Hong Kong.
- **Cocaine** use overall is minor in the region, largely due to its distance from the source countries and therefore the cost, but it is found in many major urban centres.
- **Heroin** remains the drug of choice among young entrants to drug treatment centres in Malaysia, China and Viet Nam, but ATS use is increasingly common among treatment entrants in China and other countries in the region.
- The **injecting of Amphetamine-Type Stimulants (ATS)** is increasing as these drugs replace heroin as the most popular illicit drugs used.
- **While injecting of drugs** other than heroin is not common in Asia, and where it occurs is usually a secondary phenomenon to injecting of heroin, but is beginning to be reported in some Pacific Island states at levels far higher than Australia. However, the data presented below for various Pacific Island states requires further examination as to validity. In addition to the Island states

included in the table, Buchanan-Aruwafu (2007) indicates presence of IDU in Fiji, Solomon Islands, Tonga, Kirabati and parts of FSM.

Table 4: Youth IDU in selected Pacific Islands (with Australia as a reference point)

Country	Sample	Year	Male % IDU	Female % IDU
Australia	Household survey	2007	0.7	0.8
American Samoa	YRBS School students n=3625	2007	8.0	3.8
Marshall Islands	YRBS School students n=1522	2007	15.8	14.1
New Caledonia	Second Generation IBBS n=292	2005	0.6	0.0
Northern Mariana Is	YRBS School students n=2292	2007	5.5	2.4
Palau	YRBS School students n=732	2007	6.5	3.8
Vanuatu	Second Generation IBBS n=301 Youth n=302 Antenatal women	2008	12.9	1.4 0.1

Note: It **cannot** be assumed that Island states not mentioned above have zero prevalence of IDU

- **The use of pharmaceutical preparations, such as benzodiazepines,** is of increasing concern in Hong Kong
- Use of **solvents and glue** is common among street children and homeless youth in many parts of the region.

As there was more potentially comparable data from the PICTs, these are presented in Appendix I.

2.4 Risks and trends for adolescent substance use:

In many ways not much has changed since the Devaney et al. (2006) report in relation to the profile of drug users, and risks and trends.

- There are indications in some parts of the region that drug users are increasingly becoming **younger**.
- There has been a rise in the number of **female drug** users in Asia in recent years, and increase which has particularly been recognised in association with female sex work in parts of China and in Viet Nam. While drug use is stigmatised, use among women is even more highly stigmatized, and thus gender specific data from drug treatment services does not mirror accurately the gender distribution of drug use in the overall society.
- Studies of illicit drug use among school students report **rising levels of drug use and falling ages of initiation in many countries**.

- **Many young illicit drug users are still living in a family environment** – illicit drug use, in many Asian communities, despite its stigmatisation, has not yet led to complete disruption of social connectedness.
- Lao PDR, Cambodia, Viet Nam and the Philippines all have substantial populations of **street children**, increasingly consuming drugs, living precariously with little or without family support or guardians.
- **Alcohol use** among adolescents in the region is associated with a number of harms; such as mortality (accidental deaths – road and violence) and morbidity (as a result of the sequelae of trauma, sexual violence, unplanned pregnancies, STIs and BBIs associated with behaviour during intoxication) and impacts on participation in education, training and employment). Adolescent workers in certain workplaces may be greater risk of alcohol use-related difficulties, as well as from other drugs. For example, those working in hotels and the hospitality industry, commercial sex workers, in male-dominated settings away from home – e.g. the military, mining, timber – and high school, college and university students living in dormitories and other away from home accommodation.
- Use of heroin often encourages a **transition from smoking or ‘chasing’ of heroin towards its injection** – driven more by economic factors than anything else.
- **The rate of heroin injecting varies from place to place and in different cultural and social settings:** once the initial phase of smoking and inhalation of heroin has generally passed, the data suggest around 50-60% of heroin users inject.
- **ATS are generally ingested or smoked**, but injecting of ATS, albeit in smaller numbers, has begun to be identified in China and Lao PDR.
- **HIV infection and AIDS** are epidemic in many Asian countries; countries with high prevalence of HIV infection among IDUs include China and Viet Nam. Risk behaviours and settings exist across the region, including smaller island states.
- There is a **trend for HIV to move** from the initial core group to the wider community, transmitted sexually from IDU – especially where female sex workers are also IDUs.
- The prevalence of **hepatitis C** virus infection among IDUs is commonly 60% or more across the region – up to 90-100% in many places.
- **Sharing of injecting equipment is widespread**, accompanied by unhygienic preparation and disposal practices.
- **Pooling of money** to purchase drugs and sharing of needles is common: economic necessity drives the social organization of drug use, a major reason for the formation or joining of groups of injectors.
- Common **reasons for the high rates of sharing** needles include ‘situational’ reasons (e.g. incarceration), poor accessibility of clean injecting equipment, the urgency to inject, peer pressures and insufficient knowledge of the associated health risks.
- Drug users in the region tend to have high rates of **multiple sexual partners** and low rates of condom use. Increasing numbers of female IDUs exchange sex for drugs or money to purchase drugs.
- The use of **cleaning techniques** for injecting equipment is often crude, often incomplete and consequently inadequate to prevent the transmission of blood borne viruses. While an increasing number of IDUs are aware of being at risk

of HIV infection through the sharing of contaminated needles, studies generally show this knowledge does not extend to all other drug injecting paraphernalia: sharing of communal water to dilute the drug and/or using a common receptacle to draw up the drug solution is often observed.

- 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 drug users to seek and use a range of alternatives to achieve the desired effect.
- International pressure to conform to international treaties, agreements and border control issues. This has skewed the response to substance use toward law enforcement without the concurrent health interventions to deal with the health related consequences of substance use (Burnet Institute, 2010).
- For a variety of funding concerns, **responses** to substance use-related issues tend to have been connected to HIV prevention, non-communicable diseases and gender and other development programmes (Burnet Institute, 2010).
- **Law enforcement responses** to illicit drug issues predominate, and treatment, if available, is often located within existing **mental health services**.

3 Prevention Interventions

3.1 Toward more effective Prevention:

Undoubtedly, a variety of preventive efforts are being undertaken across the Western Pacific Region – from mass media campaigns, roadside billboards, through school-located activities to comprehensive community level projects. However, few are documented in the available literature, very few are effectively evaluated, especially in relation to ascertaining whether reductions in substance use among young people is correlated with the interventions. This is so even in more resource rich settings where, often, mass media campaigns are evaluated via audience exposure and whether messages are recalled, and not via data on substance use. At times, information of some activities appears on government web-sites, but there were difficult to locate and, if available, translate in many instances. In essence, they often read more as ‘propaganda’ than evidence-informed activities, and virtually no evidence of effectiveness was provided. They were mostly based on the ‘just say NO’ approach, or were warning of dire health consequences and penalties to be imposed on those who used whatever substance(s) of concern.

Much of what could be termed ‘substance use prevention’ is provided via campaigns that address other health issues, such as HIV/AIDS and for the prevention and control of non-communicable disease. The majority of prevention efforts within the Western Pacific Region tend to be mass campaigns, signage, public pledges to be drug free, and a myriad pamphlets and posters which promote abstinence and stress punishments for drug use and or health and social consequences. No substantive evaluations on the impact on subsequent substance use of such approaches were identified. Only two school-based interventions have been rigorously evaluated, as far as the document search revealed, both in Australia and one community-wide intervention in China. These are outlined below.

In addition, there was a paucity of information received or recovered on regional prevention activities of any form. This does not mean that they do not exist, but that information was not provided, accessible or available. Consequently, some general comments are provided from some recent reviews and some examples given of evidence based prevention.

The goal of prevention efforts?

The purpose: can be to prevent any substance use, even experimental, delay onset of use, reduce use, to encourage safer use, or provide harm/risk minimization. It may be seen as an active, assertive process of creating conditions and/or personal attributes that promote the well-being of people.

Goals may vary and include prevention of any use, delaying onset of use and harm minimization. In general they will be determined by legal or moral constraints, vary from culture to culture, and be shaped by concerns over substance use per se or harm associated with use. However, it should be noted that in most cultures young people are exposed to licit and illicit substances, and to assume that they will readily

embrace abstinence is naive. Consequently, attention is required to harm minimization strategies, even if abstinence is the goal.

'Western' notions of independence can be anathema to many developing countries where more emphasis is placed on interdependence. Thus an undue emphasis on individualism and individual responsibility can work against effective interventions in such countries/cultures. It may also be timely to question the usefulness of such notions in western societies as well.

Similarly, the stages of development posited by mainly western developmental psychologists, identity formation, and what is regarded as 'maturity' will differ in other cultures. Likewise, programmes which yield some success in one setting in one country may not do so elsewhere. Naive translocation is not useful, and more developed nations should be wary of promoting their programmes in less developed ones.

Many programmes have focused on variables which are correlated with those populations whose use is seen as problematic or harmful; for example personality deficits. These variables may bear little or no relationship to initiation of use for the majority or for recreational use, where adolescence itself, curiosity and a desire to have more 'fun' may be of greater significance.

In addition, the correlations between supposed antecedent variables and substance use outcomes may not be causal, or, if causal, exert an influence in indirect ways; for example family effects (see Hoffmann, 1993; Rutter and Smith, 1995). We also need to be aware that different factors are most likely to be associated with initiation, escalation and maintenance of substance use. Interventions need to take these into account.

3.2 Range of Prevention activities:

- * mass media campaigns,
- * school-located interventions, where students may receive specific input on drugs and their effects, on-going drug education as part of a life skills/personal development curriculum, or short programmes delivered by persons external to the school-education system, such as mental health professionals or police officers,
- * community-wide interventions
- * projects directed toward 'high risk' out-of-school youth,
- * web-based content, and
- * various activities such as rock concerts and sporting events sponsored by the health promotion sector.

While the involvement of the health sector may not be obvious in the predominately school-located interventions, health professionals have usually been involved in most developments; providing input to intervention planning, sponsorship and/or funding, assisting in delivery of the interventions, or in the actual delivery. In most situations teachers provide the intervention, but police officers are involved in specific projects, such as Project DARE in the USA.

Most available outcome research on these interventions is from English speaking and developed countries. Consequently, any generalising from this research to non-Anglophone and/or developing countries should be cautious. That said, the findings certainly have some relevance; particularly in relation to what appears NOT to work.

Interventions which imply a general deficit among adolescents to resist negative peer influence, and are simply based on a 'just say No' approach tend to miss the point, are naive and simplistic and decontextualize the initiation and maintenance of substance use. They have had very limited success at best or been associated with unintended negative outcomes.

The **outcomes** of reviews of predominantly school-based prevention efforts to date have not generally been seen as cause for enthusiasm. As Wheeler (1990) stated: "The history of drug education has not been one of spectacular success.... This history of failure can be traced to the inability of earlier drug educators to comprehend why people take drugs. Perceiving drug taking to be a totally negative experience, they were forced to conclude that there must be something wrong with drug takers." (p.140).

In addition, school-located programmes can be limited in only being able to address a small range of the complex factors which are associated with the onset, escalation, and maintenance of substance use. Schools do not exist within a social vacuum, but issues of poverty, criminal gangs in various communities, the need for income generation for individuals and families (often to support continued involvement in education), and various elements of family dysfunction and breakdown, are often beyond the reach of schools. Their focus is often, then, more on the individual and negative peer influence resistance.

An additional concern is that many young people who most need an effective intervention are not at school when it is delivered; they are truanting, have been suspended, or are needed by their parents to generate income or provide child/house minding tasks. This is particularly so in some developing countries where only a small percentage of young people enter and remain in secondary education.

The 'first generation' of drug education (the '**information deficit model**') assumed that if people knew the dangers they would not take drugs. Results of this generation of programmes have yielded results which generally indicated no change to an increase in use. (Perry, 1987; USDHHS, 1994)

The 'second generation' of drug education (the '**affective and psycho-social models**') assumed that young people had inadequate personal and social development, and that if people had better self-esteem, communication and decision making skills they would not take drugs. This was a blend of social inoculation, social learning and problem behaviour theory. The approach tended to see peer pressure and advertising as the mediating variables, and low self-esteem and personal competence as significant driving forces. However, the relationship with peers has been questioned; is it peer pressure or self-selection of peers with similar interests?

Interventions which have mainly focused on increases in self-esteem and the capacity to be assertive, have yielded little to no evidence of a decrease in substance initiation or use. It appears that the associations on which many interventions have been based may, at best, be merely correlations and not causal associations (Rutter and Smith, 1995). As for the 'first generation' of drug education, success, if any, has been minimal with these 'second generation' approaches.

Project **DARE** (Drug Abuse Resistance Education) is the most prevalent school-based prevention programme in the United States of America. It is based on the social influence approach - refusal skills. About 17 lessons of about 50 minutes each during a semester, taught by a police officer. Evaluations have not revealed positive outcomes for this approach (Becker, Agopian and Yeh, 1992; Ennett, Rosenbaum, Flewelling, Bieler, Ringwalt, Bailey, 1994).

However, Tobler's (1992) seminal review of a 91 prevention programmes was less pessimistic. While she confirms some of the views presented above ("The knowledge-only programmes replicate the unsuccessful 'scare tactics' of the early 1970s and continue to be ineffective in reducing adolescent drug use. The affective-only programmes, aimed at the psychological factors that place persons at risk, were the least effective." p. 18), Tobler asserted that there have been some successes. She cites peer-led, group interventions, facilitated by mental-health professionals, as showing promise. Interventions also need to be developmentally timed; more highly structured and skills based for younger ages, and less so for older groups.

Hansen (1992), also disputed the negative view of school-based prevention programmes in relation to alcohol. He suggested that while information and 'affective' approaches do not appear to yield positive results, a brief information and resistance education package for 'high-risk' students was effective. The latter package was ineffective for other students. Hansen has included strategies to challenge and change normative beliefs in relation to alcohol consumption in comprehensive programmes for year 7 students and reports promising outcomes. These programmes include information, resistance skills and personal commitment.

Overall, it seems that the sustainability of the putative positive outcomes for most school-located programmes is limited; particularly so for substances other than tobacco. What we tend to see are changes on scales measuring attitudes, intentions or indices of psychological distress, which do not appear to effect behaviour change in relation to initiation, reduction or cessation of substance use. Often there is a 'halo effect' with new programmes which disappears over time (Dorn and Murji, 1992; Kay, 1994). Attention to variables outside the school environment and outside the psyches and personalities of students requires attention as this appears to improve sustained impact. These interventions should be culturally relevant and sensitive.

The recognition of the **contexts** within which school-based programmes operate requires increased recognition:"... we have largely ineffective drug education programmes being taught for a few hours a year in the turbulent lives of teenagers who live in a drug-using world, surrounded by contradictory messages about those drugs. The youths most needing the messages are those least likely to be receptive to them and they may not even be there when the messages are delivered." (Kay, 1994, p.170).

More recent reviews have tended to identify what appears to work better and what appears to not work. [For example, Loxley et al. (2004) and Toumbourou et al. (2007)]

3.3 What do we know about what works?

What do we know about what does NOT work well or at all for most young people?

- Punishment
 - Imprisonment
 - Short, sharp shocks
 - Boot camps
 - Just say 'No' *alone*
 - Scare campaigns
 - Mass media approaches *alone*
 - NA/AA *alone*
 - Medical approaches *alone*
 - Psychotherapeutic approaches *alone*
- The '*alone*' part is important –as substance use is multi-determined and needs to be contextualised

Why don't they work?

- Ignore 'why' young people use drugs
- Assume that reasons for use of any drug are the same
- Ignore 'loss and grief' issues in cessation of drug use
- Target too broad or too narrow
- Are delivered by inappropriate people
- Use inappropriate language/style/media
- Do not involve target young people
- 'Abstinence' based
- Ignore some significant vulnerabilities

What seems to work better?

- Interventions based on best available evidence
- Interventions that target both risk and protective factors
- Early life-stage interventions – e.g. home visiting, parent education, child health services
- Multi-modal interventions that involve the young person, family, school, peers and community
- Cognitive behavioural approaches
- Multi-system and family approaches
- Some school located programmes, especially those with skills development
- Participatory approaches
- Attention to social determinants
- Changing 'cultures' – e.g. around drinking (e.g. sport)

3.4 Some examples of effective evidence informed programmes?

There are some exceptions to the somewhat bleak review above. One example of an evidence-based, and apparently effective school-based alcohol prevention intervention is from Western Australia.

3.4.1 SHAHRP

What is the SHAHRP classroom programme?

SHAHRP is a classroom based programme aimed at reducing alcohol-related harm and risky consumption. SHAHRP is designed to be implemented at a time when local prevalence data indicate that young people are starting to experiment with alcohol.

The programme is evidence-based in that it incorporates findings from a systematic literature review of school drug education research, incorporates the experience of young people, and has been well tested in schools with students and teachers.

The SHAHRP activities incorporate various strategies for interaction including delivery of utility information; skill rehearsal; individual and small group decision making; and discussions based on scenarios suggested by students, with an emphasis on identifying alcohol-related harm and strategies to reduce harm. Interactive involvement is emphasized, with two-thirds of activities being primarily interactive and another 15% requiring some interaction between students. Interactive involvement of students provides important practice in reducing harm associated with alcohol use and is a critical aspect of lessons using an evidence-based approach.

Key Elements:

Timing and Programming

Inoculation: requires that initial lessons be taught immediately prior to students initiating the behaviour of interest, in this case drinking alcohol. Lessons that provide knowledge and skills immediately prior to the behaviour can give students a solid basis as they enter into, for example, alcohol use situations. The use of local prevalence data can also assist in defining the appropriate timing of the initial phase of other health related interventions.

Relevancy: requires that an additional phase of lessons be taught at a time when the students are initiating the behaviour of interest. The immediate relevancy of knowledge and skills during this phase in the students' development makes it more likely that students will apply this new information and skills to their new behaviour.

Transition period between primary and secondary school: practical considerations play an important part in this component. Entry into secondary school also represents a milestone in the maturity of students, however, the prevalence of the behaviour of interest should be a stronger guide to the placement of an intervention.

In the context of developmentally appropriate school health curriculum: drug education should be taught in the context of a developmentally appropriate curriculum, have a sound curriculum basis, be placed alongside other related health issues and have the flexibility to target drug issues as they become pertinent to students. Programmes conducted in isolation, or ad hoc programmes, have limited scope to create change and

can potentially have a negative effect on student drug use behaviour.

Booster sessions over time: in the past the research literature suggested that 30 to 40 hours of classroom lessons were required to impact on students health behaviours. More recent research suggests that booster sessions over a number of years, that develop and reinforce knowledge and skills, can also lead to behaviour change. This means that less classroom time is required to have an impact on behaviour, however, the lessons need to incorporate the following content and teaching methodology components to be effective.

Content and Teaching Methodology

Based on the experiences of young people / young people involved in the development of the intervention: it is very important that the content, scenarios and style of an intervention be based on the experiences and interest of the young people that it is trying to influence. The involvement of young people in the development of an intervention helps to increase its relevancy as well as students' interest and involvement in the programme.

Provides accurate normative information: research suggests that presenting age related usage norms help students to attain realistic understanding of usage rates among peers. Findings suggest that young people often have exaggerated notions of usage rates and presenting accurate normative information can assist in modifying behaviour if these norms are relatively low.

Adopts a harm minimisation approach rather than being based solely on non-use goals: this issue is particularly relevant for alcohol where initiation of use occurs at a young age, where large amounts of alcohol are consumed during drinking occasions and where social rewards are gained from drinking. Risks and harms associated with the use of alcohol can be linked to the student's own use or other peoples use of alcohol. A goal of harm minimisation provides both drinkers and non drinkers with strategies for reducing the chances of harm occurring, and the potential impact of harm after the event, as well as incorporating important non-use and delayed use strategies.

Programmes should be skills and activity based: skills based teaching that involves students in practical activities increases students' interest and learning. Teaching methods that allow students to practice behaviours that are relevant to their experience, in a low risk situation, using realistic scenarios, provide young people with important practice that they can take with them to real life situations. Programmes that are interactive and provide a high level of activity in proportion to other aspects, such as lecture-style teaching, are more effective in gaining students interest and promoting student learning.

Programmes should incorporate utility knowledge: past studies provide strong evidence that knowledge and attitude based programmes have little effect on behaviour change. Nevertheless, the delivery of knowledge as part of a skills-training approach is an important aspect of a programme. The type of knowledge provided, however, needs to be relevant to the students, needs to be applicable to their life experiences and needs to be of immediate practical use to them.

Teacher training

Teachers should be training to teach drug education: research suggests that teachers of health and drug education often lack adequate training and confidence when teaching drug education and other controversial health issues. However, teachers are best placed to know their students' needs and developmental level and are best placed to incorporate

drug education at an appropriate time and level for the students.

Teacher training should involve interactive modelling of activities: research suggests that teacher training that involves the interactive modelling of an intervention's activities increases teachers confidence and ability to teach the programme. This type of training allows teachers to experience and identify classroom management and practical issues associated with the programme as well as providing them with a model of good practice particularly in relation to debriefing and discussion around key issues.

Results

Results indicated an immediate effect in reducing the harm from young people's own drinking, and the harm they experienced from other people's drinking. Over the period of the study (from baseline to final follow-up 32 months later), students who participated in SHAHRP consumed 20% less alcohol, were 19.5% less likely to drink to harmful or hazardous levels, had a 10% greater alcohol related knowledge, experienced 33% less harm associated with their own use of alcohol and 10% less harm associated with other people's use of alcohol than did the control group (who received regular alcohol education).

During the first and second phases, intervention students consumed 31.4% and 31.7% less alcohol. Differences in alcohol use were converging 17 months after the end of the programme. Intervention students were 25.7%, 33.8% and then 4.2% less likely to drink to risky levels from first follow-up onwards. However, the impact on harm reduction was maintained. The intervention reduced harm that young people experienced as a result of their own use of alcohol, with intervention students experiencing 32.7%, 16.7% and 22.9% less harm from first follow-up onwards.

The SHAHRP teacher manual and student workbooks are available free from: <http://ndri.curtin.edu.au/research/shahrp/>

3.4.2 CLIMATE Schools:

CLIAMTE Schools is another promising classroom-based intervention that originally targeted targets alcohol and cannabis use, but now includes a psychostimulant module.

The CLIMATE Schools program, original research conducted by NDARC, has provided important new evidence for the effectiveness of schools-based approaches. For some time, the perceived effectiveness of school-based drug prevention has been contentious, but given that school-based drug prevention is the primary means by which drug prevention education is delivered to adolescents, it is essential to focus on increasing program efficacy. Although skills-based drug prevention programs have shown promise, there is considerable evidence to suggest that the effectiveness of such programs is compromised by implementation failure and a reliance on abstinence-based goals and outcomes. The CLIMATE Schools drug prevention programs have been designed to overcome such concerns. The CLIMATE Schools programs which are based on a harm minimisation approach have two important components; the first component involves students completing an interactive computer-based program, with the second consisting of a variety of individual, small group and class-based activities. Delivering the content and skills by computer is more effective than more traditional styles of delivery as it guarantees complete and consistent delivery on every occasion. Computer delivery ensures that all active ingredients are delivered and there is less risk of program adaptation. The

classroom activities are included to allow students to interact with the content in relation to their own lives. These activities included role plays, small group discussions, decision making and problem solving activities and skill rehearsal, all of which have been identified as being central to program efficacy. The CLIMATE Schools drug prevention programs have been shown to be effective in changing drug use behaviour. Specifically, the CLIMATE Schools: Alcohol Course was more effective than usual classes in increasing alcohol related knowledge of facts that would inform safer drinking choices and decreasing the positive social expectations which students believed alcohol may afford. For females it was effective in decreasing average alcohol consumption, alcohol related harms and the frequency of drinking to excess (> 4 standard drinks; 10g ethanol). For males the behavioural effects were not significant. The CLIMATE Schools: Alcohol and Cannabis Course led to significant increases in alcohol and cannabis knowledge at end of the course and at the six and twelve month follow-ups. In addition, the students who received the CLIMATE course showed a reduction in frequency of cannabis at the six month follow-up, a reduction in average weekly alcohol consumption at the six and twelve month follow-ups, and a reduction in frequency of drinking to excess twelve months after the intervention. Early evidence from the more recently developed CLIMATE Schools: Cannabis and Psychostimulant Course show that this program was effective in increasing cannabis and psychostimulant related knowledge, decreasing pro-drug attitudes towards cannabis and psychostimulant use, delaying the onset and frequency of ecstasy use and decreasing the frequency of cannabis use for females. This program was also effective in decreasing young people's intention to use meth/amphetamine and ecstasy in the future. The mode of delivery offered by the CLIMATE Schools drug prevention programs has been welcomed by both students and teachers; with the latter rating this program as superior to other drug prevention approaches. Clearly the CLIMATE Schools drug prevention programs are both feasible and acceptable within the school setting and have the potential to offer an innovative new platform for the delivery of prevention education in schools.

Newton et al. (2007; 2009a; 2009b), Vogl et al. (2008; 2009)

3.4.3 Making the Link: a school-based programme to *promote helpseeking* or cannabis use and mental health problems.

MAKINGtheLINK is a curriculum-based programme for schools to promote helpseeking for cannabis use and mental health problems, based on evidence-based research and developed in collaboration with teachers and students. By seeking help early, young people are less likely to develop long-term consequences as a result of mental health and substance use issues. However, research indicates young people are reluctant to seek professional help and tend to keep their problems to themselves or turn to their friends, parents or teachers for support – people who often don't know what to do. It is not uncommon for young people to believe that they should be able to sort out their problems on their own, or be too embarrassed to talk about them. They are also worried about the confidentiality of information they give a professional. Existing school resources do not teach students how to overcome these barriers to helpseeking nor focus on improving helpseeking skills for substance use and mental health. MAKINGtheLINK aims to increase staff and students' confidence and intention to facilitate professional helpseeking for young people and reduce barriers to professional helpseeking for cannabis and mental health problems. MAKINGtheLINK was successfully piloted.

Available: <http://ncpic.org.au/workforce/teachers/making-the-link/>

3.4.4 Recent reviews to inform school based prevention targeting cannabis, have also explored the ‘what does and does not work’ dilemma. See below.

Cannabis and other drug prevention: content and delivery features

What works	What doesn't work
<p>Content: Knowledge Short-term effects of drug use Long-term health consequences of drug use</p>	<p>Omission of short-term consequences</p>
<p>Content: Attitude about drug use Feedback from school surveys of peer drug use Analysis of media and social influences that promote pro-drug activities Ethical or moral decision-making</p>	<p>Omission of perceptions of peer drug use Omission of media influences on pro-drug attitudes</p>
<p>Content: Drug refusal-based interpersonal skills Perception adjustment of universal peer substance use Drug refusal skills</p> <p>Assertiveness skills Communication skills</p>	<p>Values teaching</p> <p>Omission of interpersonal skills, particularly drug refusal skills</p>
<p>Content: Intrapersonal skills Safety skills</p> <p>Coping skills</p> <p>Stress reduction skills Goal setting Decision-making/problem solving</p>	<p>Problematic if solely interpersonal focus</p> <p>Problematic if solely self-esteem building exercises</p>
<p>Delivery Everyone actively involved Participation between peers Student-generated role plays Supportive comments from peers Rehearsal of drug refusal skills</p> <p>Sufficient practice time Peer modelling of appropriate behaviour</p> <p>Developmentally appropriate activities to promote bonding between younger adolescents</p>	<p>Passive participation Lectures Teacher-centred class discussions Unstructured dialogue sessions Effective classroom management techniques without an accompanying drug programme</p>
<p>Available: http://ncpic.org.au/assets/downloads/ncpic/publications/bulletins/bulletin-6-cannabis-use-prevention-methods-in-australian-schools.pdf</p>	

3.4.5 Example of community intervention from Yunnan, China (Wu, et al., 2002)

The rationale for conducting an experimental, community-based drug intervention programme was based on several observations. First, drug use is prevalent in all the communities of the area bordering Southeast Asia, which is the epicenter of the HIV epidemic in China. Second, drug use is established in adolescence or early adulthood, and it is costly and difficult to change once established. The prevention of drug use would also subsequently eliminate drug injecting and related deaths and HIV infections. Third, drug abuse is a social behavior, embedded in the larger framework of community norms and social support systems that regulate the occurrence of these behaviors. Fourth, community intervention has proven effective for health problems such as smoking. Fifth, an intervention programme would complement the efforts being made by the government to eliminate the production, distribution, and smuggling of drugs. (p.1952)

Study Design

An unblinded, matched community-based trial to prevent initiation of drug use was implemented in 1997. Thirty-eight villages were selected. The selected villages had a high incidence of new drug users. Nineteen villages and 10 schools in one cluster were allocated randomly to the intervention group and 19 villages and 9 schools to the comparison cluster (control area). Both clusters were close to main roads but were separated by a distance of at least 15 miles; between them were uninvolved villages and mountains. Villages were matched only for the prevalence of drug use and for the number of drug users documented by the Longchuan County Narcotics Control Office in 1996. There were no intervention activities organized in the control villages.

Theoretical Frameworks

Theoretical frameworks used to guide the development of the educational intervention included the community organization model, in which community leadership and local residents are mobilized for social action, and the behavior change model, based on Bandura's social learning theory, which suggests that new behaviors can be induced from exposures to powerful models and are maintained through social reinforcements. The persuasive influences were considered to be community norms, village leaders, parents and grandparents, significant others, and peers.

Figure 1 presents a theoretical model of factors influencing the initiation of drug use, including self-efficacy and youth activities, community service, and instruction on agricultural productivity to increase a sense of self-efficacy. Community involvement in designing and implementing intervention strategies was designed to influence community norms (e.g., smoking, educational attainment, family norms, and peer pressure) that influence the decision to take drugs.

Moral principles, as well as pragmatic principles, were used to encourage preadolescents, adolescents, and young adult males to avoid drugs and thereby contribute to the well-being of both the community and themselves. Rural villages are very conservative and tend to interpret issues as "good" or "bad" (evil). Thus, the villages elected to use these concepts in developing their intervention messages. Social marketing principles were used to guide the design of the educational messages.

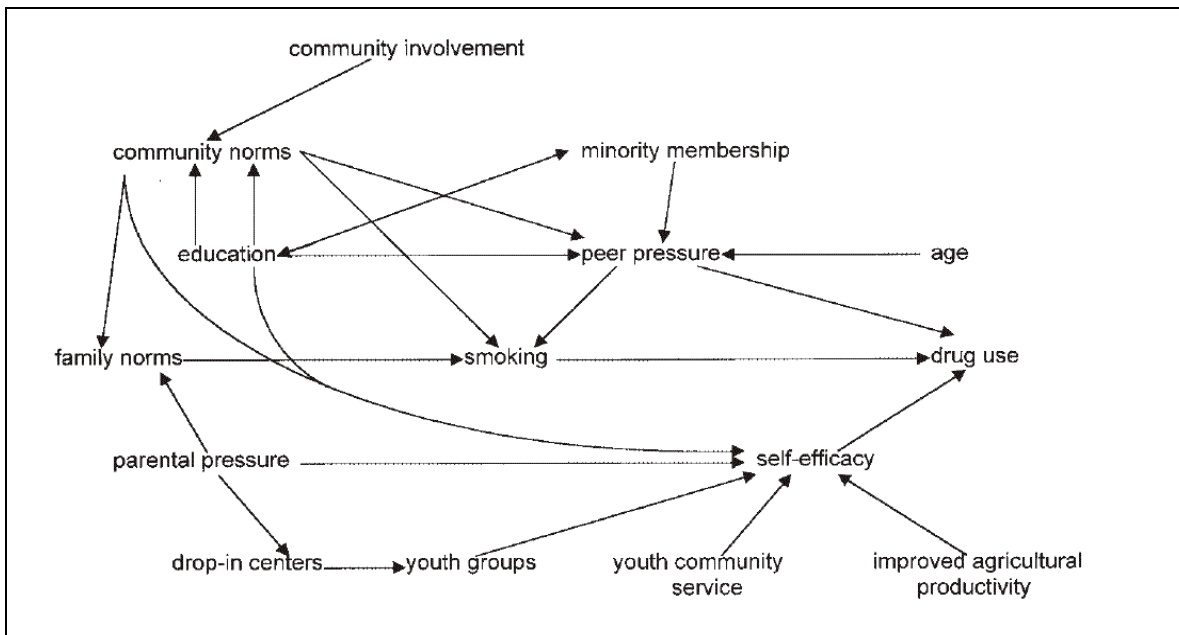


FIGURE 1—Model for factors influencing the initiation of drug use: Yunnan, China.

Strategies

An effort was made to involve everyone in the community in the intervention activities. Certain groups, however, were in a unique position to intervene; these included community leaders, schoolteachers, and village health workers. Other groups recruited included youth leaders, women's groups, parents, grandparents, and former drug users. Four overlapping educational strategies were used to encourage each group to play a significant role in the prevention effort: a school approach, a family approach, a community approach, and a clinic approach.

Interventions

In January 1997, Longchuan government and department leaders, village leaders, health workers, and schoolteachers were involved in the intervention planning. Three meetings were initially organized: the first with leaders from the different county government sectors involved in public health and drug problems, the second with village leaders from all 19 villages in the intervention area, and the third with the director of the Longchuan County Education Department and rectors from schools in the intervention area. Workshops and regular meetings for village leaders and others were organized, games and videos with drug prevention messages were provided, and classes to improve literacy and agricultural yield were conducted. School programmes were implemented, including didactic work, visits to detoxification centers, and participation in drug intervention activities. A detailed description of the specific intervention activities is available at <http://www.ph.ucla.edu/epi/faculty/detels.html>. (p.1953)

Evaluation

In October 1998, all males aged 15 to 49 years in both the intervention and control areas were invited to participate in the evaluation survey. The questionnaire was anonymous. The interviewers were not from the villages and had not been involved in the intervention activities. Information collected included personal background, knowledge of and attitudes toward drugs and AIDS, previous and current drug use, and previous and current sexual behaviors. Additional data about drug use in each village were collected from village heads and youth leaders to verify the survey data.

Results

The incidence of new drug users decreased in the intervention area from 3.47% to 1.88% and in the control area from 2.10% to 1.50%, a 2.7-fold greater decrease in the intervention villages than in the control villages. The attributable risk reduction was 0.99% for the intervention vs control villages ($P=.048$). Major decreases were observed in the 15- to 19-year age groups (attributable risk reduction=4.79%, $P<.001$; a 1.8-fold relative reduction), among single men (attributable risk reduction=2.98%, $P<.001$; a 42.6-fold relative reduction), among the Jingpo ethnic group (attributable risk reduction= 3.01%, $P<.001$; a 2.9-fold relative reduction), and among the illiterate/semiliterate men (attributable risk reduction=6.16%, $P<.001$; a 616-fold relative reduction). For each, the incidence increased in the control villages and decreased in the intervention villages. The incidence dropped to zero among the Han group, the major Chinese ethnicity, in both the intervention and control areas.

DISCUSSION

It is particularly encouraging that the greatest reductions were observed in the youngest age groups, among single individuals, among the Jingpo minority group, and among illiterate and semiliterate individuals, the groups most at risk for initiating drug use. The intervention involved the villagers themselves. No new outside personnel were hired; key individuals, including the village leaders and the village health workers, were trained in the strategies of community intervention. Key groups in the villages, including the women's groups and the youth groups, were given the opportunity to express their concerns and to participate in community activities to improve the quality of life in the village. The cost of this community intervention was thus relatively low. Most importantly, villagers were given the opportunity to "own" the intervention because they played a key role in the development and implementation of the actual intervention activities.

It is probable that the programmes begun in the third grade of school will be helpful in reducing the incidence of new drug users in the future. Although there is some reluctance to initiate drug and sexual behavior programmes in the early grades of school, such education cannot be delayed to the later grades. In most developing countries, most children receive only 6 years of schooling. Interventions introduced beyond grade 6 will not reach most young people, and it is this group of school dropouts, who are poor and relatively uneducated, that are most vulnerable to initiation of drug use.

The relative success of the programme in the Yunnan villages may have been due in part to the small size of the villages (typically 50–100 families), which facilitated implementation of community mobilization. Two other factors may have contributed to the success of the programme: the awareness of community members of the drug problems of many youths in their villages, and China's history of successful community interventions in recent years.

In summary, this community intervention, which was based primarily on mobilization of existing community resources, was successful in reducing the incidence of new drug users, at least in the short term. Such an approach may be useful in other countries in which drug users remain a part of both their family and their community. (Wu et al., 2002, pp1953-1956)

3.4.6 Web-based prevention.

There is an emerging research literature on web-based delivery of prevention, with claims of effectiveness for some. For example, Marsch, (2004, 2007,

2007a) have reported on “The efficacy of computer-based HIV/AIDS education for injection drug users”, “Applying Computer Technology to Substance Abuse Prevention Science”, and “Application of Interactive, Computer Technology to Adolescent Substance Abuse Prevention and Treatment”.

3.5 Drug testing in schools

The move toward **drug testing in schools in some states of the WP Region** is of concern. Overall, the body of evidence examined from developed countries indicates a strong case to be made against drug detection and screening strategies being utilised in the school setting (Roche, A. et al. 2008). In essence, the key findings are:

- Most drug tests are insufficiently reliable for testing in a setting such as schools.
- The cost of testing was found to be very large and would represent a substantial impost on any education system’s budget.
- A wide range of moral and legal issues are serious concerns, if not impediments.
- Prevalence of illicit drug use by school children has been declining for over a decade; current levels of regular use are very low, making detection a technically challenging task.
- Highest prevalence of drug use occurs among high-risk and vulnerable groups of children, including the poorer academic performers and Indigenous students, indicating that punitive and inquisitorial methods of deterrence are ill-advised.
- Evidence indicates that drug testing is an ineffective deterrence mechanism.
- An effective array of school-based prevention interventions is now available to schools — interventions that focus on building positive relations and developing pupils’ sense of connectedness with the school.
- Effective mechanisms exist to target and intervene in appropriate ways with high- risk students and/or their families.

However, this evidence base has not included any data from any trials in developing countries within the region.

3.6 Where/Who to target

* **Schools** provide a 'captive audience', but many are not there who need the intervention; they are either truanting or working to decrease the poverty of their families and themselves. In addition, formal curricula can be undermined by the informal one(s). The evidence, to date, supports school-located interventions which are integrated with community-wide ones.

* **Juvenile justice** settings, and crisis and longer-term supported **accommodation** for young people out-of-home also need greater attention as possible points of intervention delivery to higher risk youth.

* Services working with out of home youth – **street youth**.

* Youth oriented **media** (television, radio, magazines), and media that targets parents and families.

* **Youth organizations**.

* **Youth accommodation** services.

* **Sport and leisure** activities.

* **Religious organizations** and faith based community workers.

- * **Workplaces and workforces**, for example those in military service, factories seafarer/marine colleges.
- * **Policy makers and legislators**, need ready access to easy to digest information on evidence based prevention interventions.
- * **Health workers** – as many may feel unskilled and not confident in working with drug use.

3.7 Who delivers the interventions

While school-located strategies appear to be most appropriately delivered by trained teachers known to the students, there is some evidence that this may be more appropriate in elementary/primary school environments. Appropriate non-teacher mental health professionals appear to be effective, as do trained, supervised and supported peer educators, especially for older adolescents.

There appears to be a limited role for ex-users/recovering persons in the delivery of preventive interventions. However, if not carefully managed there is the risk for both no to negative impact from such interventions, and risk for relapse for the ex-user peer educators.

For out-of-school populations Peer Education (peer to peer) offers promise, via information sharing, connecting adolescent substance users to a range of interventions, or through specific, planned interventions, such as street theatre/drama. Again, peer educators need to be trained, supported and supervised.

The health sector should usually be involved in all of the above, via support, funding, information, consultation, partnerships or direct provision of interventions in any setting.

3.8 Support, capacity building and training

Consideration needs to be given as to how to develop better strategies to use the time, energy and commitment of the 'middle ground' of opinion formation. "This is a middle ground peopled by committee activists and joiners who are found in every community all over the world. They are the sorts of people who become local councilors, are active in churches, political organizations, trade unions, PTAs, Townswomen Guilds, Rotary Clubs, Young Farmers, Lions International, Chambers of Commerce and all sorts of local organizations." (Kay, 1994, p.174). If better educated and aware of the realities and limitations of approaches to date, and if not just sold the rhetoric of the 'prohibitionists' and 'anti-drugs lobby', they can be very useful.

The **health sector** has a major role to play in supporting and offering specialised training to those involved in prevention. In part this should be to ensure that correct, unbiased information is being delivered, health consequences of use, harmful and dependent use, are identified and research evidence on the effectiveness of various interventions is not ignored.

It should be noted that the **health sector** may require training itself in assuming the important roles allocated to it above.

3.9 Conclusions

Interventions need to be much more clearly described. The research literature is most unhelpful in the main in attempts to elicit what the intervention comprised, an adequate description of who provided it, and what actually happened in the delivery. Likewise, it is difficult to ascertain what comprises 'use' of a substance, and levels of such 'use'.

Not all interventions will work with all adolescents and in all countries and sub-regions. There is a need to explore more local, community located prevention, and identify the key elements of 'what works where, for whom and why'.

Any intervention needs to be culturally sensitive, comprehensive, based on assessed local/target need and should involve:

- accurate, unbiased information,
- paying attention to personal variables that may be associated with increased vulnerability to negative peer influence for some individuals or groups,
- teaching skills associated with resistance to negative influences and decision making,
- challenging and changing incorrect normative beliefs about the extent of use in a particular area or among a particular target population,
- improving communication between young people and their parents, teachers, other adults and each other,
- providing harm minimization strategies (e.g. safer using techniques) as appropriate,
- exposing participants to alternative, satisfying and acceptable alternatives to substance use, and,
- ideally, taking a community-wide approach.

Interventions need to be integrated with strategies to target families and the community as a whole for better and sustained impact, and be delivered over time, with 'boosters' provided.

Strategies with **families** could include: family effectiveness training, systematic training for effective parenting, and family therapy and self-help groups.

The **media** offers many opportunities, via specific health promotion campaigns; particularly on youth radio and television programmes. Likewise, the inclusion of substance use issues in adolescent-oriented 'soaps' on television can increase discussion among young people of particular issues. The latter can also be used for teaching purposes in schools.

Health promoters may provide, and elicit, sponsorship of events, such as sporting, music, artistic or other performance activities of young people, which exclude the advertising of harmful substances.

Young people, preferably the target group, should be involved in all stages of the intervention: assessing need, deciding on the strategy, the delivery of the intervention and in monitoring and evaluating impact and outcome.

Based on the findings of this review, particularly those of Tobler et al. (1992), Loxley et al. (2004), and Toumbourou et al. (2007), it is recommended that:

- Programmes should be evidence-based and consistent with a national harm minimisation approach.
- Programmes should be interactive in design and delivery, with a mix of programme components or types of activities
- Consideration should be given, where appropriate, to supplementing school activity with a parent and community component
- Drug education programmes should be an integrated component of a generic health/personal development education programme up until the early secondary school years
- In the middle to late secondary school years, a separate programme or well-differentiated programme components should be offered
- Programmes should be small in scale, or managed in a way that generates ownership among those involved
- Professional training and practical follow-up support should be offered to teachers to assist delivery of programmes without modification and minimise the likelihood of programme breakdown

There is a need to explore **diverse sites for prevention and screening activities** – such as **schools**, dormitories and other out-of-home **accommodation used by students** and workers, **workplaces** that employ young workers (e.g. garment factories in Lao PDR and Viet Nam that employ many young women) and other sites such as **seafarer/ marine colleges** in the Pacific and other vocational training establishments. There are seafaring training institutions in nearly all of the ten countries, including Solomon Islands, Kiribati, Tonga, Tuvalu, Fiji, FSM, Marshall Islands, Samoa, and Vanuatu. They work long hours in mostly all male, exhaustive, stressful, and dangerous working environments, with substantial access to income to spend on alcohol, drugs, and sex when seafarers go into port, with indications that seafarers have between one to 20 partners in a year, including sex workers, that there was low condom use, little monogamy, and anal sex was practiced. Some of these students, trainees and workers could be trained as Peer Educators.

Summary

Substance use, especially heavy use of alcohol and illicit drugs, contributes substantially to the burden of disease in adolescents. Evidence suggests that rates of tobacco use, harmful alcohol use, and illicit drug use in young people can be reduced through the concerted application of a combination of regulatory, early-intervention, and harm-reduction approaches. Reviews have called for a more concerted effort to address harms associated with youth alcohol use through regulatory strategies and improved dissemination of brief intervention approaches. Long-term opportunities exist to reduce pathways to severe patterns of illicit drug use with early developmental prevention frameworks. Although harm reduction approaches such as needle exchange programmes often face political controversy, they have a strong evidence base as interventions that contribute to saving lives and reducing disease in disadvantaged

populations. Medical practitioners, together with other health professionals, have a responsibility to seek balanced policy by advocating for and practicing the best evaluated health interventions. Although great progress has been made over the past 3 decades, many interventions still only have evidence of efficacy, and need to be evaluated in real-world settings to establish effectiveness.

Toumbourou et al. (2007)

4 Treatment Interventions

4.1 Toward more effective Treatment

There was a paucity of information received or recovered on regional treatment interventions of any form. This does not mean that they do not exist, but that information was not provided, accessible or available. There appears to be no randomised control trials or other outcome studies, except for Australia. Consequently, some general comments are provided from some recent reviews and some examples given of some evidence based prevention.

In relation to treatment, most documentation concerned compulsory residential treatment. In the main they comprise descriptions and critique, with virtually no outcome studies despite providing estimates of 'relapse rates'. Even in more resource advantaged setting, there are few available studies on the effectiveness of various treatment approaches for adolescents.

In relation to alcohol, little appears to be available to treat adolescents in the WPR. This may be associated with non-recognition of the alcohol difficulties of adolescents, or that treatment is mostly for the results of behaviours engaged in while intoxicated. Also, alcohol dependence generally emerges after adolescence.

Treatment approaches for illicit drug use across East and South-East Asia often comprise compulsory residential facilities for detoxification and treatment, traditional medicines and military 'boot camp' approaches. Psychological and behavioural counselling is limited, as is effective assistance for drug users to reintegrate into the community following treatment. It is generally agreed that recidivism rates are high. Increasingly the outcomes of current treatment approaches has frustrated some government policy makers, leading to increases in the length of detention in treatment or rehabilitation centres, and increases in the penalties linked to relapse.

Treatment services in some places are free or subsidised, but generally fees are payable by those detained, paid by the detainee or by families and friends, and for those unable to pay, via labour. Private voluntary treatment and rehabilitation centres appear to be flourishing in some Asian countries, but the fees required are beyond the reach of the ordinary drug user and their family. There are few if any youth specific drug services; as a result, young drug users are integrated with the adults.

Many treatment facilities make an attempt to provide skills and/or vocational training, but the sheer number of drug users make it difficult for many to get access to such programmes; the lack of opportunities after release decreases their desired impact.

Young people who have developed substance dependency and substance-related problems are often treated in adult drug use programmes, even though developmental, psychological, social, cognitive and family differences underscore the need for specialized treatment. It is important that young people who experience problematic drug use are provided with treatment and rehabilitation that is suited to

their psychological, social and cognitive developmental needs, rather than being treated in the same settings and with the same approaches that are directed to adults.

A predominant form of treatment in a number of countries in the WPR is the use of incarceration, often called “compulsory treatment”, in large prison-like facilities. Such treatment can be more punitive than rehabilitative, and few comprehensively attend to the developmental needs of adolescents. Enforced work and indoctrination sessions comprise the major part of the programmes offered in most of the CTSCs. The relapse rate is unacceptably high (up to 90%) and positive outcomes rare (UNSCAP, 2009; WHO/WPRO, 2009; Zhu, 2009). There is little attention to the development of life skills to complement treatment and rehabilitation. This approach could also worsen social exclusion and discrimination, making it even harder for rehabilitation (Zhu, 2009). Systems of treatment and care need to be developed in a way that caters for the needs of young people and for this to be possible a solid evidence base, policy reform and workforce development are necessary.

Furthermore, the exposure of young peoples to more hardened, chronic and older drug users greatly increases their vulnerability. Violence is common in such facilities – staff may subject “inmates” to violence and “inmates” inflict violence on each other. Some of this violence is sexual. Exposure to more experienced older drug users in the high-risk environments of institutional settings for adults makes it all the harder for young inmates to free themselves from a vicious cycle drug use. Thus, they face even higher risk of further exposure to BBIs and sexually-transmitted infections (STIs), in addition to psychological and physical damage.

Young people with developmental disability and those with acute or chronic mental illness are poorly served, if at all. Little attention is paid to educational and vocational training. Most of these institutions are for males, but when young females are also incarcerated, their situation can lead to a much higher risk of negative health and other outcomes.

What community treatment exists is usually for those with access to resources. Variable attention is given to increasing the capacity of schools, families, communities and the health and public security sectors to work in collaborative ways for a more comprehensive response involving various members and levels of the community. Likewise, variable attention is paid to thorough assessment and effective referral to an appropriate service, if such services exist, and to the provision of evidence-based interventions. In most situations, any drug use is regarded as requiring “compulsory treatment”, irrespective of what substances are used and the level of use. It is ineffective to place young experimental ATS users, for example, in a facility with long-term heroin injectors.

Where the health sector develops strong, effective and professional links with other sectors, particularly education, public security, social welfare and civil society, a better range of interventions would be more likely.

It is possible to provide young people with interventions that meet their needs, that are less incapacitating and to do so in a more enabling environment, which keeps

them connected with family, school and community. This would reduce stigma and discrimination and strengthen “protective factors”.

4.2 Purpose, Goals and Objectives of Treatment

The purpose of treatment: to provide interventions which address assessed need in relation to problems associated with substance use. The aim may be cessation of use, detoxification, controlled use, and can include broader objectives, such as reduction of criminal activity, increased participation in education, school vocational preparation and employment, improved family functioning, improved interpersonal skills, improved physical and mental health, increased inclusion. Treatment, then, bears many similarities to prevention, in that it aims at prevention of further harm, and/or cessation or reduction of demand.

The **goal** may be more variable than for adults. Insistence on abstinence can place an unnecessary burden on young people and discourage them from continuing treatment. A young person who is just beginning to use alcohol in response to socio-cultural demands may be able to return to moderate drinking if helped to deal more effectively with existing environmental pressures. This possibility is contraindicated when there is evidence of organ damage or a history of other substance use.

A suitable goal for treatment may be: to increase the capacity of the young people involved in treatment to manage their lives more effectively. If so, there may need to be a re-consideration of the traditional abstinence goal in situations other than those which already involve physical or organ damage. Whatever the goal, it needs to be clearly articulated, and take into account various local, national, or broader cultural and religious factors.

The objectives of treatment?

Possible objectives for consideration, whether treatment is residential or not, include:

General:

- increased capacity to recognise any negative consequences of substance use for the individual in treatment, their families and significant others and the community.
- increased motivation to address significant issues in their lives.

Substance use and related behaviour:

- reduction in the number and quantity of substances used and frequency of use.
- reduction in binge use patterns.
- reduction of risky use (i.e. reduced or eliminated equipment sharing and a change to safer modes of administration).
- reduction in the number of problems associated with substance use, particularly criminal activities.
- reduction of the severity of problems associated with substance use.

Health and general functioning:

- improved general health.

- increased involvement in non-substance related activities.
- increased life satisfaction.
- reduced frequency of negative mood states (e.g. depression and anxiety) and an increased capacity to recognize the onset and to better manage the course of any negative mood states which have been assessed to be associated with use.
- increased involvement with non-substance using peers.
- improved family functioning, or satisfactory disengagement from the family if necessary.

Interpersonal and other skills:

- improved interpersonal, communication, problem solving and coping strategies and skills, including those related to self-care and management.
- remediation of any educational deficits and increased skills with relevance to improving employment possibilities.
- increased access to and participation in education, training or employment.

Note: while a comprehensive (holistic) approach is implied, it is not being suggested that all young people who use substances, and all who develop substance-use related difficulties are deficient in intellect, education, interpersonal skills and are psychologically disturbed. Treatment interventions need to build on strengths and identify and address deficits.

The target for treatment?

In general, young people/adolescents who meet the ICD-10 or DSM IV harmful or dependent psychoactive substance dependence. In addition, the **family** of a young person/adolescent who meets the criteria for the above categories, and **significant others** in the life of a young person/adolescent; particularly partners and/or children as some young people are already parents.

4.3 Access and youth friendliness

Access to services may be restricted according to class, financial capacity, age, gender, religion, and so on. Likewise, general adolescent services often feel inadequate in dealing with substance use and adult programmes often feel inadequate in dealing with adolescents. Young people may be seen tokenistically, and added on to predominantly adult-oriented programmes

Ease of access is crucial. The UNODC (2008b) stressed the need for facilitating entry into accessible, evidence-based, good practice treatment, with 'harm reduction' measures to prevent immediate adverse health and social consequences of and continued substance use. Youth friendly services tend to have better access, engagement and maintenance of adolescents. (WHO, 2002b, 2002c).

Adolescent Friendly Health Services:

The term 'adolescent friendly health service' is widely used, but poorly understood. WHO has attempted to identify a framework for adolescent-friendly services. What follows draws on a number of WHO documents (e.g. WHO, 2002b, 2002c).

A framework:

Safe and supportive environments –

- Meaningful relationships with adults, peers and partners
- Structures and boundaries for behaviour
- Encouragement of self-expression
- Educational, economic and social opportunities
- Opportunities for participation with their contributions being valued
- Minimal risk of injury, exploitation, or disease

Barriers/obstacles to health care service utilisation:

- Legislation, restrictive laws and practices
- Judgemental workers
- Don't know where to go
- Don't trust workers – visibility, lack of confidentiality
- Bureaucratic procedures
- Waiting lists
- Hours of service provision
- Workers not skilled in working with adolescents
- Gender issues
- Racial/cultural issues
- Economic issues – cannot afford to pay

Quality adolescent friendly services:

- Availability
- Accessibility
- Equity
- Rights based
- Acceptability
- Appropriateness
- Comprehensiveness
- Privacy and confidentiality ensured
- Effectiveness
- Efficiency
- Involvement of target adolescents in planning and, where appropriate, delivery services
- Open when and where necessary
- Outreach and peer led interventions
- Evidence based services provided
- Good links for efficient referrals
- Good monitoring and evaluation processes

4.4 Screening and one stop services

One-stop services, with quick and easy appointment and referral processes, with knowledgeable and trustworthy health providers – e.g. near schools for those in schools, but 'discrete' (for example in Malaysia) – can be beneficial.

However, there is concern that stand-alone or adolescent/youth specialist services may be too costly or unable to be established. Thus, **there is a need to build the capacity of generalist Primary Health Care workers to screen for and provide brief interventions** which address adolescent substance use-related difficulties.

Training in use of the **HEADSS** approach and or via the **WHO/CAH Orientation Programme** could be beneficial (WHO, 2006).

HEADSS

Home

- Who lives with the young person? Where?
- Do they have their own room?
- What are relationships like at home?
- What do parents and relatives do for a living?
- Ever institutionalized? Incarcerated?
- Recent moves? Running away?
- New people in home environment?

Education and employment

- School/grade performance--any recent changes? Any dramatic past changes?
- Favorite subjects--worst subjects? (include grades)
- Any years repeated/classes failed
- Suspension, termination, dropping out?
- Future education/employment plans?
- Any current or past employment?
- Relations with teachers, employers--school, work attendance?

Activities

- On own, with peers (what do you do for fun?, where? when?)
- With family?
- Sports--regular exercise?
- Church attendance, clubs, projects?
- Hobbies--other activities?
- Reading for fun--what?
- TV--how much weekly--favorite shows?
- Favorite music?
- Does young person have car, use seat belts?
- History of arrests--acting out--crime?

Drugs

- Use by peers? Use by young person? (include tobacco, alcohol)
- Use by family members? (include tobacco, alcohol)
- Amounts, frequency, patterns of use/abuse, and car use while intoxicated?
- Source--how paid for?

Sexuality

- Orientation?
- Relationships?
- Degree and types of sexual experience and acts?
- Number of partners?
- Masturbation? (normalize)
- History of pregnancy/abortion?
- Sexually transmitted infections--knowledge and prevention? Contraception? Frequency of use?
- Comfort with sexual activity, enjoyment/pleasure obtained?
- History of sexual/physical abuse?

Suicide/Depression

- Sleep disorders (usually induction problems, also early/frequent waking or greatly increased sleep and complaints of increasing fatigue)
- Appetite/eating behavior changes
- Feelings of 'boredom'
- Emotional outbursts and highly impulsive behavior
- History of withdrawal/isolation
- Hopeless/helpless feelings
- History of past suicide attempts, depression, psychological counseling History of suicide attempts in family or peers History of recurrent serious 'accidents'
- Psychosomatic symptomology
- Suicidal ideation (including significant current and past losses)
- Decreased affect on interview, avoidance of eye contact--depression posturing
- Preoccupation with death (clothing, media, music, art).

References: Cohen, MacKenzie, Yates (1991), Goldenring and Cohen (1988)

4.5 Assessment

All treatment interventions must be preceded by adequate, unbiased **assessment**. Such assessment should cover a number of domains, for example:

Assessment domains:

- substance use, including perceived reasons for use, how and when initiated and maintained, substances used, mode of administration and any changes over time, periods of non use, current frequency of use, quantity used.
- any effects of use requiring attention, immediate (e.g. complicated withdrawal with possible fitting), or less acute (e.g. respiratory conditions).
- drug, sex or other risk behaviours.
- family life.
- relationships, and whether the adolescent has any children.
- physical health.
- mental health.
- History of abuse (physical, emotional and sexual).
- education and training.
- income.
- employment.
- psychological functioning.
- interpersonal functioning.
- criminal activity.
- leisure activities.
- supports.
- strengths.

The assessment can be staged over time, where possible, and ideally conducted in an adolescent-friendly environment. It should identify strengths and areas requiring attention. Some useful assessment tools are available in the UNESCAP Tool Kit (UNESCAP, 2007) and WHO Orientation Programme (WHO 2006).

There needs to be clarity in the treatment area so that only those with a disorder are subjected to treatment interventions. It needs to be ascertained from the outset who has the problem. A young person may not, on assessment, have a recognisable disorder and may be more appropriately involved in educative/preventive interventions. It may be that the parent is over-reacting and may need information to allay their fears, or a couples or family intervention to address family issues other than the substance use of one or more of their children. Referral, within the health sector or externally, may be more appropriate here.

4.6 Motivation enhancement and relapse prevention planning

There remains to some extent **the belief that detoxification must occur before 'treatment'** can begin and that this should be done in a medically supervised setting. There appears to be growing recognition that there are options to residential, medically supervised detoxification or withdrawal management, and more examples of alternatives. For example, use of community health services with community and family support (e.g. in Vinh, Viet Nam).

It is possible to work with hostile young people, and it needs to be remembered that few young people willingly volunteer themselves for treatment. Many interventions imply that those involved have adequate motivation, usually assessed by workers. However, it seems more appropriate to see the task of **workers as motivators, and not judges**. Young people may need many attempts to engage in preventive or treatment interventions. They are often regarded as 'treatment failures' if they leave, and this label can impede their requests for re-admission when they wish to return. It is preferable that the young person/adolescent be willing to undergo treatment. However, at times court orders are imposed which mandate treatment. Many persons involved in treatment are opposed to such situations. However, such orders can provide an opportunity to assist a young person to assess their predicament and engage in treatment. Alternatively, they may provide an 'excuse' that the young person can give to their peers for involvement in treatment so that they do not lose face. (Pritchard, Mugavin, & Swan, 2007; Stevens et al., 2006).

As for prevention, more attention is needed to the **engagement and motivation** of young people in contemplating their use of substances. The specific interventions will differ somewhat to those for prevention. The Prochaska and DiClemente (1986) model of change posits five stages: pre-contemplation (where the target individual or group sees no problem), contemplation (where an assessment of the situation is undertaken, weighing the benefits and costs of a particular behaviour), action to alter the situation, and maintenance. (Re-)lapse is common, and the process continues with a return to the stages of pre-contemplation or contemplation or action and maintenance.

Interventions required for the first two stages (pre-contemplation and contemplation) differ to those for the later stages. Engaging and motivational interventions, together with accurate, unbiased information provision appear appropriate for the earlier stages, possibly together with harm minimization information and skills. (see Miller and Rollnick, 1991). More focused and 'relapse prevention' models are more appropriate for the later stages. These models focus on identifying intrapersonal, interpersonal and environmental cues and situations which appear to be associated

with return to use. Thus, the substance, the individual and the context all receive attention.(see Miller and Rollnick (2002) and Miller (1995).

Adequate **engagement** is crucial and is associated with its completion of treatment and success. Engagement can be seen as a process which facilitates the joining together of the young person and the person(s) involved in the intervention. Too often, interventions involve the imposition of techniques thought to be useful on a young person who is scared, skeptical or coerced. The better the engagement, the greater the likelihood of the young person being willing and motivated to be involved in the intervention.

The provision of **material assistance** may be a necessary first step to engagement and treatment; for example accommodation, food, or clothing.

A very useful model which informs treatment is the **Relapse Prevention** model. This model identifies intra-personal, inter-personal variables and environmental situations and cues which are associated with use and return to use of substances. Assessment of individuals and groups leads to personalized treatment interventions for the individual or group.(see Heather and Tebbutt, 1989; Jarvis, Mattick, Tebbutt, Shand, Tebbutt, Shand, 2005; Marsh & Dale, 2006).

Planning for lapses and relapse is a crucial part of working with anyone who has experienced substance use-related difficulties. It is better to start to do “relapse prevention planning” from the first counselling session, in case the young person is tempted or wants to use drugs again almost immediately. For example, it can be useful to make a **Short-term Relapse Prevention Plan** in such cases, and for those about to leave a compulsory residential treatment centre.

The **Longer-term Relapse Prevention Plan** can be developed after the young person has settled. The plan can be reviewed and changed as necessary in future sessions when discussion takes place about what worked well, what was “OK”, and what did not work at all so that a better plan can be developed.

Relapse Prevention Plans can also be developed in groups where the groups help an individual develop a realistic Relapse Prevention Plan, or all the participants work on their own plans with guidance from the facilitator and assistance from other group members if they wish. An example is provided in Appendix II.

4.7 Treatment interventions and effectiveness

Interventions need to be rights-based and **developmental (sub)stage specific**, and take into account the tasks of the developmental stage and the needs and capacities of young people; particularly cognitive capacity, 'developmental/maturational lags', and the need for recreation and fun. Much adult treatment is very 'serious' business, and adolescents tend to react to such approaches by acting out and acting up. Unfortunately, they then, often, are discharged from the treatment for their 'unsatisfactory' behaviour, apparent lack of motivation or because they are 'in denial'.

Interventions need to be based on a **sound theoretical understanding** of how the variables associated with the onset, escalation and maintenance of substance use interact, and difficulties which are associated with use. These may vary from culture to culture, with geographical location, or among sub-groups.

The health sector is often involved at all levels, via funding, technical support, provision of specialized services, or direct and broad-based service provision. For example, a hospital-located service may operate an outreach component to the streets, to engage with and provide services for street children and commercial sex workers, or such a project may be operated by an NGO, with links to a hospital. Likewise, community interventions may be operated by elements of the health sector, or an NGO.

In some countries public security, police or armed services provide and operate mostly compulsory residential 'treatment' centres, which often are more like a mix of 'labour' and 'boot camps'. There may or may not be the involvement of health services in such centres. Evidence suggests that positive outcomes for such approaches are very unlikely, with relapse rates high (UNESCAP, 2009).

Interventions may be early (at the onset of difficulties) or late, brief or intensive. The main approaches include cognitive-behavioural approaches, skills training, family therapy, self-help (such as Alcoholics Anonymous/Narcotics Anonymous and users groups), community development. The approaches are covered in more detail below.

The **evaluation** literature for treatment is limited and findings are not conclusive due to weaknesses in research designs.(Catalano, Hawkins, Wells, Miller and Brewer, 1990-91). There are more research studies on outcome of treatment for adults, but there are problems in generalizing from this research. There is also more literature on residential programmes, particularly therapeutic communities. These are mainly across age-group studies, but they contain some young people. However, data is often not disaggregated for age. The programmes are predominantly adult ones. There are very few studies of adolescent-specific programmes; even fewer with controlled designs.

Despite this, the findings of Catalano, Hawkins, Wells, Miller and Brewer (1990-91) in their review of the treatment outcome research for adolescents, tend to remain current. They concluded that:

- some treatment is usually better than no treatment,
- few comparisons of treatment method have consistently demonstrated the superiority of one method over another,
- achieving at least brief periods of abstinence is readily achievable, but maintaining abstinence or avoiding relapse is difficult,
- post-treatment relapse rates are high (35% to 85%), and

For the few controlled trials positive outcomes were found for cognitive-behavioural (CBT), skills training and residential treatments. For residential treatment, three

months appears to be the maximum optimal period (Catalano, Hawkins, Wells, Miller and Brewer, 1990-91). Evidence is available for brief interventions based on CTB, some family and systemic interventions. These are described in more detail below.

For psychotherapy and general counselling versus structured **cognitive-behavioural** and/or skills based approaches, the latter consistently yield better results, as do those which attend to educational and vocational needs and the family and significant others. (Catalano, Hawkins, Wells, Miller and Brewer, 1990-91; Gowing et al., 2001; NIDA, 2009).

Detoxification, particularly medically supervised or hospital-based, is rarely required for young people; about 5% of those entering inpatient programmes. However, there does need to be available an age appropriate, youth-friendly accessible, suitable facility should the need arise.

Substitution interventions, such as methadone, buprenorphine and naltrexone for opioid dependence, are infrequently available to young people under the age of 18, and have not been specifically reviewed. WHO and UNODC have concluded that opioid substitution treatments are very effective and reduce HIV. (UNODC 2008b).

Comprehensive treatment provision appears to offer more satisfactory outcomes.

The WHO/UNODC discussion paper on drug treatment is useful as a guide to the development of evidence-informed treatment interventions (UNODC, 2008a). The discussion paper proposes that principles for treatment should recognise that people who use drugs have rights, drug dependence and illicit drug use are associated with health problems, poverty, violence, criminal behaviour, and social exclusion, and that in many societies drug dependence is still not recognized as a health problem and many people suffering from it are stigmatized and have no access to treatment and rehabilitation. It suggests that 'Nothing less' must be provided for the treatment of drug dependence than a qualified, systematic, science-based approach such as that developed to treat other chronic diseases considered untreatable some decades ago. Excerpts from the discussion paper are provided in Appendix III.

4.8 Interventions

Interventions can focus on the individual, the family, the community, broader social and structural issues, or be comprehensive and incorporate a number of foci. They can also be early, brief or longer term, and some use web-assisted approaches.

4.8.1 Brief Interventions

Research on **brief interventions for adolescent substance users** is beginning to accumulate, mainly in North America. Within the Western Pacific region, the National Drug and Alcohol Research Centre and the National Cannabis Prevention and Information Centre of the University of New South Wales, Australia have been exploring the adaptation for adolescents and young people of adult brief interventions for cannabis, ecstasy and ATS use. The Adolescent Cannabis Check-Up has been trialled and found to be effective (Martin, Swift and Copeland, 2004;

Martin, Copeland and Swift 2005, 2008). The approach is now being piloted with young cannabis users with more complex needs, and young ecstasy users. More information can be obtained from: <http://ncpic.org.au/>

Examples of brief interventions for problematic cannabis use – one with feedback and advice only, and one with feedback and exploring pro's and con's of use are provided in Appendix IV.

Often, there is limited time available to assist a young substance user. However, there are brief interventions that have been developed to use when time is limited. The research into effective brief interventions for substance use has found that they include a number of consistent features which appear to contribute to their effectiveness. These have been summarised using the acronym **FRAMES: Feedback, Responsibility, Advice, Menu of options, Empathy and Self-efficacy**. WHO (2003a).

Feedback

The provision of personally relevant feedback is a key component of brief intervention and generally follows a thorough assessment of drug use and related problems. Feedback can include information about the individual's drug use and problems from a screening instrument, information about personal risks associated with current drug use patterns, and general information about substance related risks and harms. If the client's presenting complaint could be related to substance use, it is important to inform the client about the link as part of feedback. Feedback may also include a comparison between the client's substance use patterns and problems, and the average patterns and problems experienced by other similar people in the population.

Responsibility

A key principle of intervention with substance users is to acknowledge that they are responsible for their own behaviour and that they can make choices about their substance use. The message that "*What you do with your substance use is up to you*" and that "*nobody can make you change or decide for you*" enables the client to retain personal control over their behaviour and its consequences. This sense of control has been found to be an important element in motivation for change and to decrease resistance.

Advice

The central component of effective brief interventions is the provision of clear advice regarding the harms associated with continued use. Clients are often unaware that their current pattern of substance use could lead to health or other problems or make existing problems worse. Providing clear advice that cutting down or stopping substance use will reduce their risk of future problems will increase their awareness of their personal risk and provide reasons to consider changing their behaviour.

Menu of alternative change options

Effective brief interventions and self help resources provide the client with a range of alternative strategies to cut down or stop their substance use. This allows the client to choose the strategies which are most suitable for their situation and which they feel will be most helpful. Providing choices reinforces the sense of personal control and responsibility for making change and can help to strengthen the client's motivation for change. Examples of options for clients

to choose could include:

- Keeping a diary of substance use (where, when, how much, who with, why)
- Helping clients to prepare substance use guidelines for themselves
- Identifying high risk situations and strategies to avoid them
- Identifying other activities instead of drug use – hobbies, sports, clubs, gymnasium, etc.
- Encouraging the client to identify people who could provide support and help for the changes they want to make
- Providing information about other self help resources and written information
- Inviting the client to return for regular sessions to review their substance use and to work through the “substance users guide to cutting down or stopping” together
- Providing information about other groups or counsellors that specialise in drug and alcohol problems
- Putting aside the money they would normally spend on substances for something else

Empathy

A consistent component of effective brief interventions is a warm, reflective, empathic and understanding approach by the person delivering the intervention. Use of a warm, empathic style is a significant factor in the client’s response to the intervention and leads to reduced substance use at follow up.

Self-efficacy (confidence)

The final component of effective brief interventions is to encourage clients’ confidence that they are able to make changes in their substance use behaviour. People who believe that they are likely to make changes are much more likely to do so.

4.8.2 Outclient/patient counselling/therapy

Outclient therapy/counselling with a cognitive-behavioural, skills focus is essential as most young people do not require residential placement. Cognitive-behavioural approaches are concerned with the association of thought processes (especially content) and behaviour. As for depression, many of the symptoms are supported by thinking which is focused around themes of hopelessness and lack of self-efficacy.

4.8.3 Family involvement

Family involvement (participation, therapy, parenting training, etc.) is regarded as an essential ingredient in effective treatment interventions, and reduces drop out. Family support post release from compulsory treatment centres in China has been identified as ‘crucial’ for reducing relapse (UNESCAP, 2009; Zhu et al., 2009), Early staff-family connection may be predictive of positive outcome and attendance. It can also reduce attempts by family, consciously or unconsciously to sabotage treatment.

Many young people can return home, if both they and family learn better adaptive and coping skills. Others need to separate adequately and be able to leave the family behind rather than explode out of it, carrying the residue with them. Often, family work aims to assist in the adjustment of expectations and in the development

of more effective parenting skills. Parent support groups have been found to be effective (Loxley et al., 2004), even if no discernable 'pathology' in family functioning.

Special attention needs to be given to the engaging of families in treatment, and dealing with quite understandable resistances. Szapocznik et al.(1988, 2003), who promote **brief systemic approaches**, have found that efforts to increase engagement with Hispanic families has increased participation and outcome. Their approach blends strategic, structural and systemic approaches and is based on concepts of 'joining' and 'restructuring' found in brief strategic family therapy. Once engaged in the process of treatment, families are much more likely to accept external views of their functions, and explore activities which may lead to a more positive restructure of their particular family system.

Promising family approaches, in addition to brief systemic interventions, are **Multidimensional Family Therapy** (Liddle, 2002, Liddle et al. 2008, 2009) and **Multisystemic Therapy** (Swenson, 2005), both of which have a strong evidence base. It is obvious by the titles of these interventions, that the effective interventions attend to the individual adolescent the family system, and community and broader social and structural determinants of drug use (e.g. Spooner et al., 2001). Their use in non-Western settings needs exploration.

4.8.4 Residential Treatment

Short-term residential may be useful, especially for detoxification or assessment and respite where the young person's life circumstances are chaotic or dangerous.

Longer-term (usually three months), intensive residential treatment is expensive and should only be indicated where community-based interventions are inadequate to meet the presenting needs, social/community supports have broken down, or there are significant health and safety concerns.

An example of an evidence informed residential programme for adolescents with substance dependence related difficulties is the Ted Noffs Foundation's Programme for Adolescent Life Management (PALM). A literature review informed programme design (Spooner, Matirck and Howard, 1996) and an evaluation of the earlier admissions (Spooner, Mattick and Noffs) and analyses of admissions from 2001 to 2005 – baseline versus outcome data (Arcuri and Howard 2006).

The Ted Noffs Foundation's (TNF's) Programme for Adolescent Life Management (PALM) offers up to three months of residential treatment, followed by up to twelve months of continuing care, for substance dependent young people aged between 14 and 18 years. PALM is based on a harm reduction philosophy and relapse prevention planning, and provides 42 beds across three metropolitan (PALM East and PALM West in Sydney and PALM ACT) and two rural (PALM Coffs Harbour and PALM Dubbo) locations in eastern Australia. Practically, PALM offers its residents a structured programme incorporating: living skills training; therapeutic, vocational/educational and creative group work; individual counselling; family work; journaling; and recreational activities.

Target Group:

Clients are adolescents aged 14-18 years whose presenting and primary problem is a maladaptive pattern of substance use.

Objectives:

The objectives of the PALM residential programme are to:

- Reduce/eliminate substance use among young people participating in the programme;
- Improve the mental and physical health outcomes of the clients of the service;
- Increase access to treatment services for young people with an alcohol and/or other drug problem;
- Improve integration and continuity in the spectrum of treatment services for young people;
- Facilitate the diversion of juveniles from the community justice system who have been involved in drug-related crime;
- Reduce participation in crime;
- Improve social and life skills;
- Increase access to vocational education and training and provide educational remediation as appropriate;
- Assist young participants to re-establish and develop links with their communities.

Arcuri and Howard 2006: PALM StatsPak 2001-2005

Are such programmes effective? A brief summary of an outcome study of the PALM programme is provided in Appendix V.

4.8.5 Other Interventions

Whole community interventions, where a particular community may decide to assess its own situation, develop, implement, monitor and evaluate its own strategy to deal with solvent use among its young people. The same could apply to whole schools.

Web-based and phone interventions have been developed, but not so much activity in this area has been focused on adolescents. Turning Point Drug and Alcohol Centre in Melbourne, Australia offers 24 hour, free, national online counseling, including information in Vietnamese, but the focus is not adolescents (<http://www.counselingonline.org.au/en/>). The Australian Drug Foundation, provides a web-based question and answer capacity regarding drug issues for young people (<http://www.somazone.com.au/>). The National Cannabis Prevention and Information Centre, UNSW, Sydney Australia (<http://ncpic.org.au>) provides phone based assistance on reducing or quitting cannabis use, and a structured web-based intervention; again, both do not have an adolescent focus, but could be adapted.

The role of **self-help groups such as Alcoholics Anonymous (AA)/ Narcotics Anonymous (NA)** has been highlighted in most treatment intervention. Such groups can provide essential treatment ingredients, such as extended hours assistance, structure, learning from others, support, a place to go and be accepted, and role models. However, a too ready adoption of programmes based on disease model concepts can be problematic. Adolescents may have problems identifying with older, formerly dysfunctional adults who suggest that they were like them when young. Or they may pick up unintended messages - "this person says that drugs ruined his/her life, yet here they are alive and coping and recovering - drugs can't be that bad for you - I've got years of drugging to go then."

Alford, Koehler and Leonard (1991) demonstrate that self-help groups used in conjunction with individual, group and family work show promise. However, was it the combination of elements or only one element which explained most of the variance?

Outward Bound-type programmes have been advocated by some as the sole treatment, or a component of a treatment intervention. McPeake, Kennedy, Grossman and Beaulieu (1991) reported significant effects in reduction of substance use 2 years after treatment which involved individual, group and family therapy and an Outward Bound component in a wilderness environment. In addition, the young people and their families were introduced to AA/NA and Al-Anon. (Loxley et al., 2004).

There may be a need to attend to **criminal behaviour**, as this may be related to substance use, or co-existing. (Simpson, Howard and Copeland, 2009).

A focus needs to be kept on developing **social support networks** which will remain beyond the formal treatment experience

Note: little of the above requires large increases in financial support. Most are based around different ways of working by existing staff and programmes.

4.9 The Continuum of Care

The Concept of continuum of care

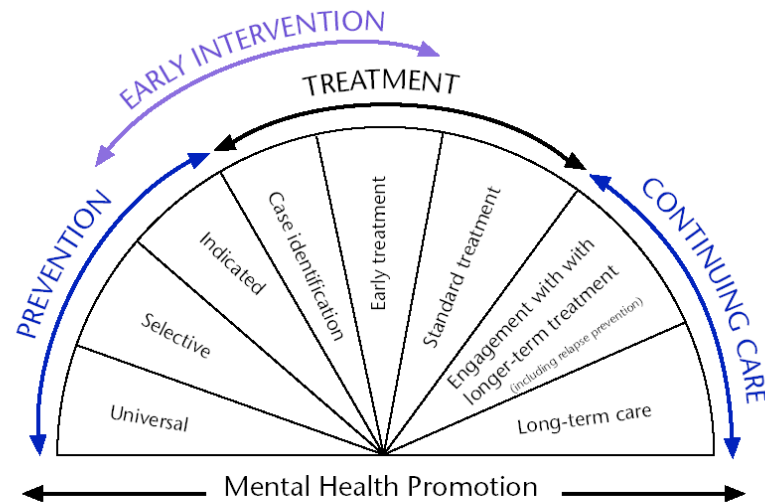
The model on the prevention, treatment and recovery of patients in mental health care below can be used for visualizing interventions for young substance users.

Universal prevention refers to activities targeted at whole populations (such as “Don’t drink and drive” campaigns). Selective interventions are meant for groups that may be more at risk (such as young people working in the hospitality industry) while indicated prevention activities are for high-risk groups (such as young sex workers who are also injection drug users). Indicated prevention could also be seen as “early treatment”. Treatment could be considered “preventive”, in that part of its aim is to prevent problematic use of substances.

Continuing care supports changes made during treatment so that they could be maintained. Sometimes this is referred to as “aftercare”. The term “continuing care”, however, is more appropriate because “treatment” is considered a combination of continuing activities. Long-term care is required for some young people who have complex needs and more severe history of substance use, various forms of abuse and mental health issues.

There is a need to pay particular attention to **post-treatment factors** as pre-treatment ones consistently explain little of the variance in treatment outcome, and post-treatment ones have been consistently associated with outcomes. In relation to **post-treatment** variables, Catalano, Hawkins, Wells, Miller and Brewer (1990-91) and Shoemaker and Sherry (1991) indicate that they explain from 13% to 37% of the variance in outcomes. Post-treatment domains requiring attention include, family, community, school, religion, peers, in addition to psychological health, coping skills

(especially active-behavioural and cognitive coping), and extended/after care provision).



Source: adapted from Mrazek & Haggerty (1994).

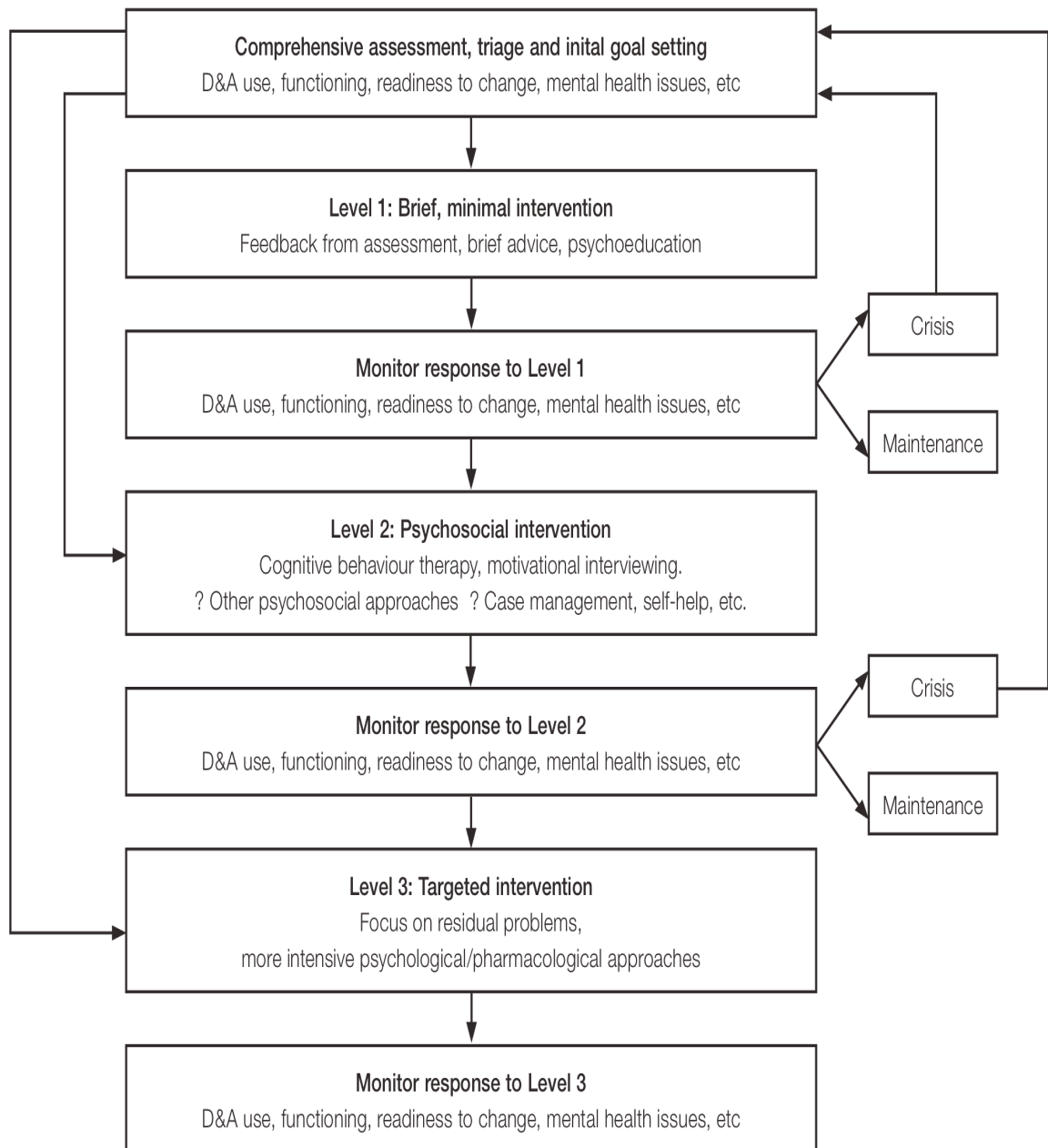
An approach gaining some attention is referred to as **'stepped-care'**. The figure below illustrates a simplified stepped care model for delivering psychosocial interventions to clients accessing drug and alcohol (D&A) treatment. Stepped care models for psychosocial treatments can sidestep the often difficult task of predicting from the outset of treatment which strategies will be most appropriate for a particular client at a particular point in time. In addition, stepped care treatment models offer an alternative way to manage existing treatment resources more efficiently (e.g. time), and are flexibly able to incorporate new evidence directly into practice as it becomes available. Stepped care approaches to treatment have been tested in several different settings, including: depression; anxiety; alcohol problems; heroin dependence; and recently for people experiencing mental health and substance use co-morbidity. (NSW Health, 2008)

Within a stepped care model, D&A professionals and clients should discuss commencing treatment at any of the levels, and following a comprehensive assessment phase. Usually, a first step in the management of these conditions is to gain an understanding of the range of issues impacting on the client with problematic drug and alcohol use, and set some immediate goals for change that are relevant to the client at that point in time (first tier of intervention). Client distress may need to be triaged within this first step, with immediate pressing concerns such as suicidality, emergency accommodation or other crisis issues given priority over others.

Following assessment, a minimal intervention could be offered that addresses the client's immediate goals for change (second level intervention). This may take the form of education about symptom management, and information about non-hazardous drug and alcohol use or other self-help booklets as appropriate. Brief advice or suggestions about other lifestyle factors that might be enhanced or reduced

may also be included at this time.

Stepped Care:



Following the brief (minimal) intervention, response to treatment should be assessed to determine the need for continued monitoring, referral, crisis support or more intensive intervention (third level intervention). At this time, issues that need crisis intervention and immediate action may be identified, such as suicide risk, risk to others, urgent medical care, withdrawal etc At this monitoring point, the plan may be to continue with regular monthly monitoring, as negotiated between D&A professional and client, with the option to re-enter a more active treatment or be discharged from the service at a later stage. Clients who have not responded to the brief intervention could be offered the next step of treatment. If there has been no response to the brief intervention, and/or the client has some residual symptoms or issues to address, a more intensive intervention is suggested. At this step,

psychosocial intervention (e.g. Cognitive Behaviour Therapy) is recommended, given its potential to prevent relapse and continue to produce improvement outside the active treatment phase. (NSW Health, 2009, pp 15-17). Greater intensity of intervention may occur if difficulties increase, and if they reduce, interventions can be 'stepped down'.

4.10 Intervention settings

* **Primary health care settings** (e.g. via community health workers and local or family medical officers) working in community health centres or individually in districts. In developing countries, community health workers are trained health workers who live within a community and work with other health and development workers as a team. They usually provide the first contact between the individual and the health system. In more developed countries, they usually form part of a community-located health service and are usually nurses, or are general practitioners (medical doctors) working in private practice settings.

* **Specialized services**, linked to tertiary health care provision (e.g. teaching hospitals) or by NGOs. These services may be day/outclient/patient or residential.

* Specific settings such as **juvenile justice** residential centres, where young people are detained who have been involved in criminal activities. Much crime committed by young people is claimed to be substance use related; i.e. to obtain money to buy various substances, or spending part of the gains on substances. Other specific settings include youth health and accommodation services.

* **Residential and specialized services** can be very expensive and beyond the financial capacity of the health sector (private and public components) and NGOs in developed and developing countries, other than on a very small scale of provision. However, they are typically required for a very small proportion of the population of young people experiencing substance use-related difficulties. In many cases, adult programmes may be able to provide what is required in the increase their capacity to accommodate to the needs of young people and become more accessible.

* **Cyber-space and phone systems** - web and phone counselling.

4.11 Capacity building

4.11.1 Staff/Worker characteristics are important, and experienced workers, and those with a number of years of work experience correlate with positive outcome for adolescent treatment. Many workers, particularly in traditional residential programmes, are ex/recovering substance dependent people. Some designated adolescent substance use programmes are run, and the ideology dictated by those who came to recovery in their mid to late twenties or later.

Such workers may not model a capacity to live in the world, as they may exist within a 'treatment' or 'recovery' milieu. In addition, they may have come to recovery late in their lives and be skeptical about the capacity of young people to change, or

evangelical in their zeal that the young person not have to face the difficulties which they experienced.

Howard (1994) found that about 32% of workers in juvenile justice residential centres reported coming from a family with at least one member with an alcohol and/or other drug problem, and 30% admitted to having had an alcohol and/or other drug problem themselves; both figures were close to those reported by the detainees and both are greater than can be expected in the general population.

In the study reported by Howard (1994), the behaviours/qualities perceived as most important in engaging difficult young people by 70 youth workers were, in order: humour, relating at the level of young people, use of non-threatening behaviours, developing trusting relationships, maintaining consistent limits, being honest, being friendly, being able to 'play', knowing what might be needed (being in tune).

4.11.2 Who delivers the interventions? Not all interventions require medical, nursing, social work or psychology training. Many brief and other interventions can be effectively delivered by trained youth workers, and some are best delivered by experienced community development workers (i.e. those which target broader structural determinants). Trained peers may be involved as appropriate, especially as mentors, supporters and in community development activities.

4.11.3 Worker support and training. There also remains a limited capacity to provide substantive alternative treatment interventions due to a fairly widespread **lack of skill among workers in relevant intervention techniques**, such as individual, group and family counselling. **Capacity building in more effective interventions for dealing with adolescent substance use** is essential in the health sector (especially for public health workers) and for those who work with youth such as teachers, police, youth workers.

The training of those who work with young people requiring treatment of substance use-related difficulties is essential. It is not acceptable to imply that training for interventions with adults is adequate for this population. Nor is having been treated oneself. Professionals, paraprofessionals and ex-users require adolescent-specific training.

The health sector both needs to and can provide a major role in training; via consultation, provision of information, curricula development, delivery of specific components or whole courses and ensuring that the treatment outcome research findings are not ignored (see WHO, 1995a), and adolescent specific training can be provided via the WHO, Department of Child and Adolescent Health's Orientation Programme on Adolescent Health for Health-care providers. (WHO, 2007).

4.12 Research needs

There is also a need to encourage more research with a resilience focus. It is probable that there are many indigenous strategies which young people employ which: protect them from ever using substances, assist them not to move beyond experimentation, or, if they do, from developing substance use difficulties, or which are utilized if difficulties emerge. They have implications for both prevention and treatment. The discovery of these and the development of means to enhance and

transfer such knowledge and skills could significantly improve our endeavours to minimise the harm associated with substance use among young people.

- * Interventions need to be much more clearly described. Much of the research literature does not adequately describe the interventions. 'Family therapy' can mean many styles, some diametrically opposed to others; so can 'group work', 'individual therapy', and so on.
- * There needs to be more systematic research and serious consideration given to the applicability of adult models of treatment (e.g. adult therapeutic community programmes, A.A./N.A., psychotherapy) and related interventions, for young people.
- * There is a need for treatment and its components to be based on adequate evaluations rather than ideology, and what appears to work for adults (also, often poorly evaluated).
- * There is an urgent need for an increase in controlled research designs, after consideration of any potential ethical difficulties.
- * There is also a need for greater attention to in-treatment variables, such as worker characteristics and style. These may be more crucial in the treatment of young people than for adults.
- * There is also a need for greater attention to post-treatment variables, such as 'continuing care', supports, opportunities for participation in education, training and employment, recreational activities, accommodation support.
- * The health sector may also need to consider how much influence it will attempt to bring to bear on governments to use policy, legislation and fiscal measures in their attempts to improve public health.

Two other issues are of significance.

4.13 Comorbidity and Complexity

Young people with **Comorbidity or Dual Diagnoses** often miss out on services. Mental health services may see them as warranting a substance use intervention, and substance use services see them as warranting a mental health intervention. Consequently, they can fall between the nets. Substance use can be a manifestation of psychopathology, an effect of psychopathology, or co-existing, but unrelated.

Dealing with Complexity: Many 'health' interventions target a disease (e.g. Malaria) or a behaviour (e.g. unsafe sex), and interventions to deal with them are difficult enough. Drug use is an illegal and complex activity. Issues initiating and supporting it are complex (individual, family, social, and availability, trends, fashion, etc.) as are needed responses – supply, demand and harm reduction. They involve many 'actors' – police, governments, families, communities as well as individuals.

4.14 Diversion

Models for diversion for youth crime exist within the region and nearby – e.g. the Juvenile and Family Courts in Thailand, especially in Nonthaburi with their Associate Judge and Community Networks, and a small pilot in Kunming China led by Save the Children UK, which utilises Appropriate Adults to support young people diverted from custody after arrest for certain crime categories. These models could be expanded to include young drug users, as is possible in Thailand.

The Thai Juvenile and Family Court in diversion and community treatment, especially as developed in Nonthaburi, and the Probation Service via provision of a coherent drug treatment process for young people in custody, could become roles models to the region where there is less ‘ownership’ of treating drug use by Ministries of Health and more by Public Security. There is also modeling of greater cooperation between ‘health’ and ‘police’ and the use of the community as a ‘resource’.

There is a need to explore the role of **pilot drug courts**, and to ensure that there is some **mechanism for formal review** of involuntary admissions to residential detoxification and or treatment, so that young less dependent or experimental drug users are afforded an opportunity to receive community-based treatment as the preferred option. Of concern is that young people can be ‘sent’ to CTCs by their parents, police or local community authorities without any apparent capacity for ‘appeal’ or ‘review’.

Some Models:

What follows are some diagrammatic representations of how the diversion could be conceptualised overall, or based around a youth ‘drop-in-centre or youth club, as well as pathways for diversion that exist (e.g. Thailand) and are possible (e.g. China). (UNESCAP, 2009). These models may be worth exploring via a ‘One UN family’ advocacy and technical assistance approach, especially as they link to national youth and drug policies.

Diagram 1 – The HUB approach - demonstrates the linkages necessary for the implementation of an holistic approach to community-based treatment for young drug users. It indicates that there need to be effecting working relationships developed between:

- the ‘community treatment centre’ and the police, public security, courts and the compulsory treatment system,
- the families,
- the health, education and employment providers,
- mass organizations,
- group homes and drop-in-centres (if they exist), and
- the importance of external ‘expert’ advice to support programmatic, clinical, research and evaluation components.

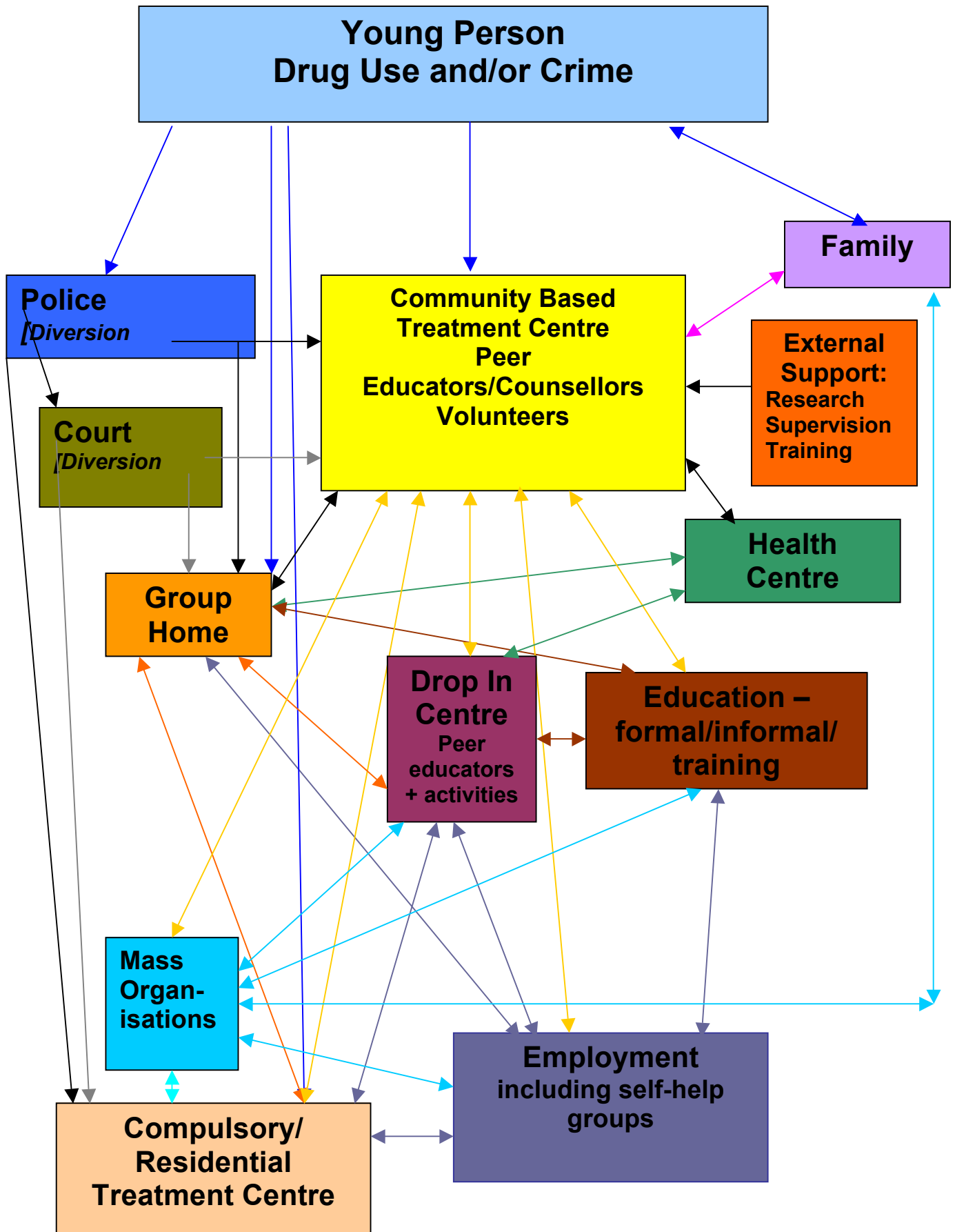
Diagram 2 represents an approach with a drop-in-centre or ex-drug users ‘club’ as central. It also indicates that there need to be effective working relationships developed between:

- the 'community treatment centre' and the police, public security, courts and the compulsory treatment system,
- the families,
- the health, education and employment providers,
- mass organizations,
- group homes (if they exist), and
- the importance of external 'expert' advice to support programmatic, clinical, research and evaluation components.

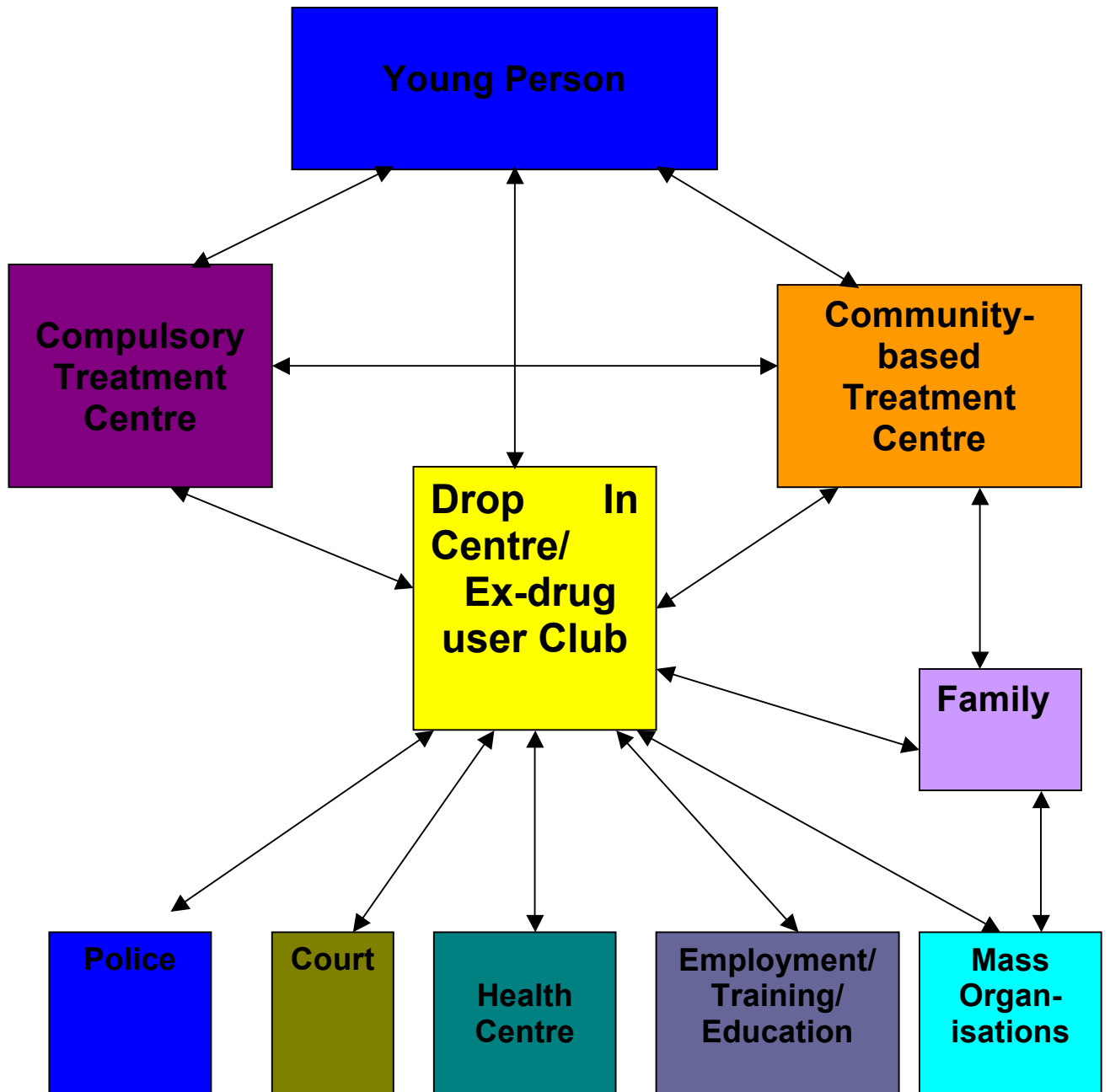
Diagram 3 illustrates the capacity for diversion from correctional and compulsory treatment in some jurisdictions Thailand (for example, Nonthaburi). It illustrates the capacity for police and courts to divert young drug users to community programmes.

Diagram 4 illustrates a possibility for China based on a pilot for young offenders operating in one area of Kunming, Yunnan Province. A Diversion and Review Panel could be developed, with membership from Police/Public Security, Narcotics Control, the community and mass organizations with expert advice from staff of YIDA. Diverted young people would be supported by 'Appropriate Adults', as in the Save the Children pilot, and/or Peer Educators from acknowledged NGOs, such as PSI and Red Cross.

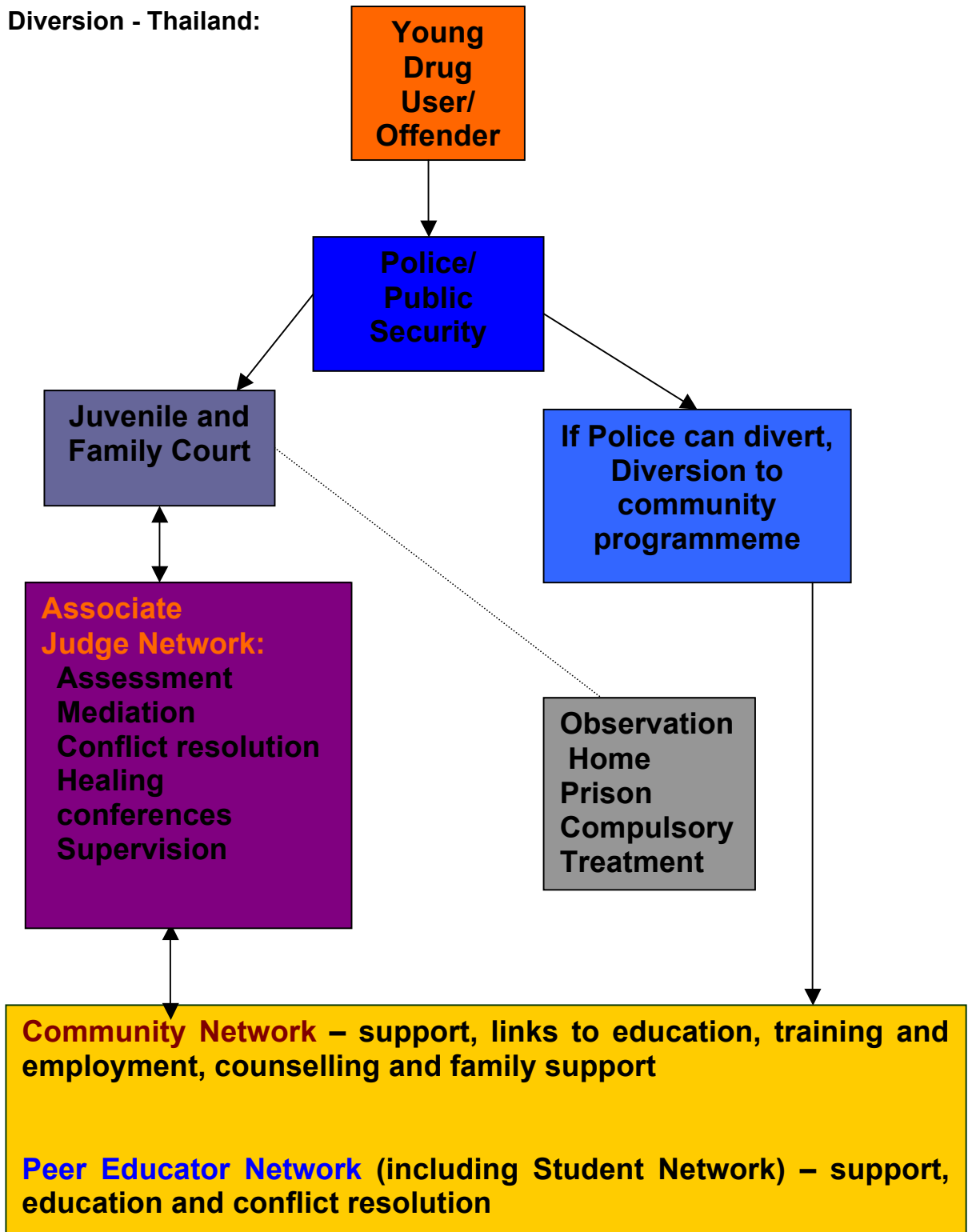
Community-based treatment for young drug users:



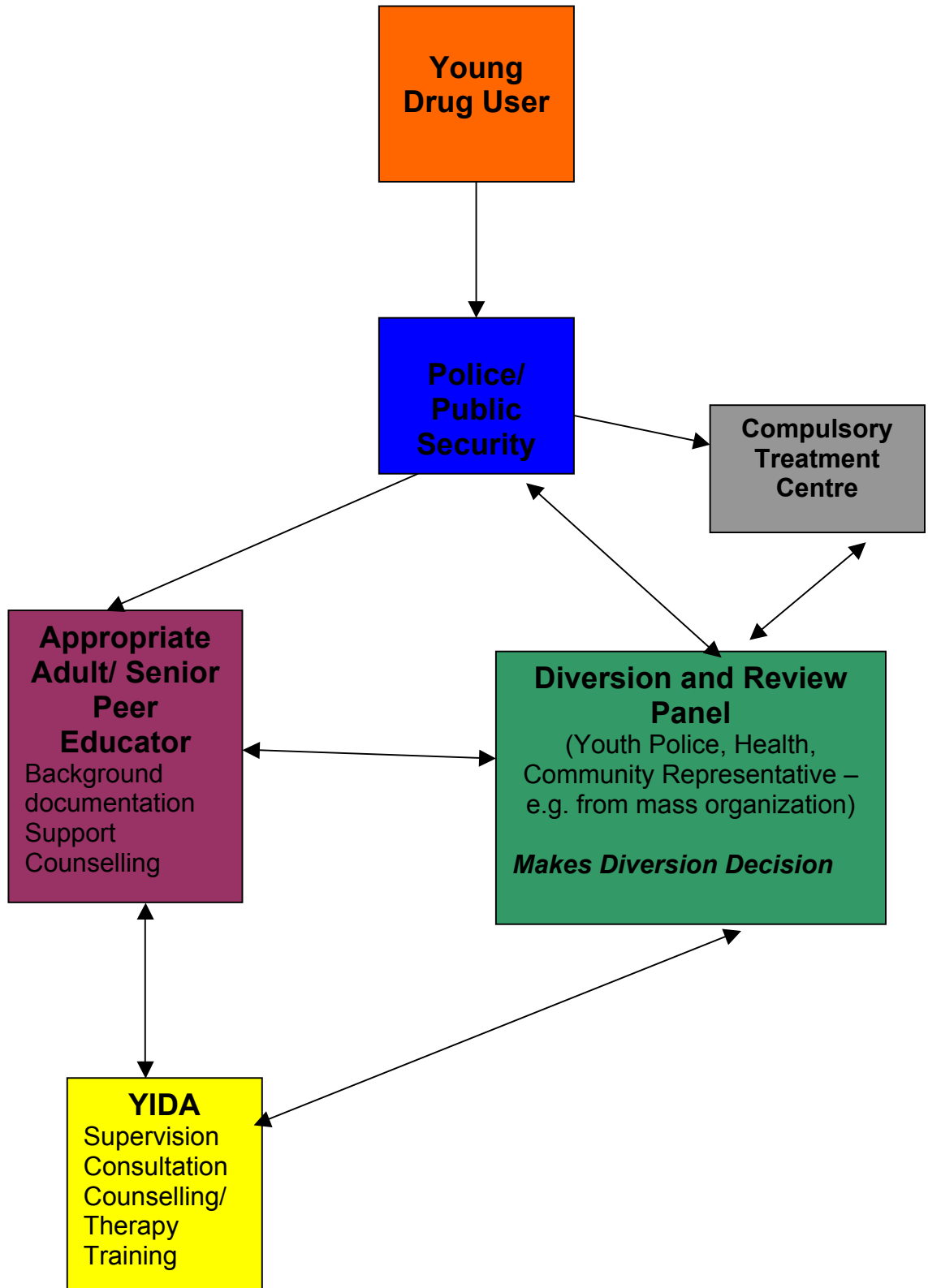
The HUB approach – e.g. a Drop-In-Centre



Diversion - Thailand:



China: Possible Diversion for Young Drug Users:



5 Conclusions and Recommendations

5.1 Barriers and Challenges Identified

Overly punitive laws, the demonisation of drugs, the criminalisation of drug users, and an apparent disregard for the human rights of drug users of whatever age in many countries in the region continue to work against change.

The specific needs of young people are recognized to some extent, but remain largely unmet in many settings.

The lack of current capacity for community treatment for young people with problematic drug use, and the current legislation and policies that almost automatically transfer young people identified as drug users to compulsory residential detoxification and/or rehabilitation centres (CTCs) where they exist make it extremely difficult to make a significant impact.

Likewise, many young drug users are sent to prisons as the crimes they commit while using drugs may necessitate them being sent to prison rather than being diverted to drug treatment. There is little, if any, capacity for diversion from prison in such cases in countries such as China. In some countries there is a recognition that a drug user should try to voluntarily admit themselves for treatment before they are arrested for 'crime'. Stigma is extensive in many settings, and those returning from CTCs find it difficult to be accepted back by their families, obtain employment, and interact with non-drug using peers. They quickly become alienated, feel hopeless and return to drug use.

In addition, many residential programmes, including CTCs, were set up to deal with heroin as the major substance of concern. There may need to change focus and strategies, especially in relation to changing patterns of use and the prominence of alcohol, cannabis, psychostimulants and volatile solvents as major substances of use by adolescents in the Western Pacific Region.

5.2 Recommendations

5.2.1 Data:

It must be stressed that data availability and quality overall are poor. Within many countries surveys used over time vary considerably, as do populations sampled. Most data are very much 'out of date', do not allow for trends or emerging drugs of concern to be identified. It is extremely difficult to convey a meaningful picture of current, or even recent, prevalence of adolescent substance use across the region, let alone identify details of preventive and treatment interventions.

There is an urgent need for more and better data that is routinely collected. There is a need for countries to ensure that available data can be disaggregated for age and sex, and that specific sub-populations of concern, such as MARA, are

surveyed. It is recognised that this can be a costly task, but routine surveillance of adolescent and youth risk behaviours is essential if effective preventive and treatment interventions are to be developed to address substance use-related difficulties (such as accidents, unplanned pregnancies, violence, crime and lack of participation in education, training and employment) and the spread of BBIs, STIs. Standardised surveys have been used in some sections of the region (e.g. the Youth Risk Behaviour Survey (YRBS) and Second Generation Surveillance Surveys), but have not often been repeated to gain information on emergent trends.

Buchanan-Aruwafu in 2007 recommended a way forward for better data on youth in the Pacific, especially as it relates to both HIV and substance use. She concluded that there is a need for 'a focus on **systematic repeated surveillance surveys** of young people's (both in and out of school) practices using probability sampling, so that trends in young people's behaviours can be monitored, understood and tracked overtime is a priority in all countries. As well as surveillance with higher risk youth who are involved in IDU, male to male sex or the exchange of sex, and in-depth studies about their participation in higher risk groups, their sexual networking, their understandings of the impact of socio-cultural change, youth cultures, their sexual desires and experimentation with inserts and sexual aids and other sexual practice, drug and alcohol use, and what other factors enhance their existing vulnerabilities, should also be a focus of inquiry within quantitative and qualitative studies in all countries.

Improved methodologies with cluster or time location sampling with young people, or respondent driven sampling (RDS) in higher risk groups for surveillance, would improve the veracity of data in surveillance studies. Continued surveillance with convenience samples is of little longer-term comparative value beyond their initial worth to inform the development of behavioural surveillance and for countries to use as an initial baseline to inform behavioural interventions. Trained youth researchers including members from higher risk groups, and supported youth to youth research are most recommended. Qualitative data collection, such as individual interviews, can be incorporated randomly from quantitative probability samples with youth involved in higher risk groups, to decrease potential for bias. A random sample for qualitative interviews done during time location or RDS would complement and create more understanding about what behavioural surveillance results mean, beyond the numerical percentiles of these behaviours, which can be devoid of meaning and context for behavioural change interventions' (pp 50-51).

In relation to **routine schools surveys** are used by some countries in the WP Region, and there could be benefit in attempting to standardize these to some extent, while allowing for country or sub-region/population-specific questions. The WHO Global School-based Student Health, Youth Risk Behaviour and second generation surveillance IBBS surveys are yielding results that cannot be compared, raise questions as to validity and may need to be re-considered. The GSHS has some advantages as regards to substance use, the island states more connected with the UN tend to have preferred the YBRS. WHO, in conjunction with others, might review school and youth surveys and implement a study in some countries of special concern within the region to identify 'best questions', 'best survey'. Consequently, there could be benefit in attempting to standardize these, while allowing for country or sub-region/population-specific questions.

The Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (ERDS), well established in Australia provide examples of monitoring and 'early warning' systems to detect drug trends and movement in drug markets. Consideration might be given to implementing a pilot in some countries of special concern within the region.

The Illicit Drug Reporting System (IDRS) consists of three components: interviews with injecting drug users (IDU); interviews with key experts (KEs), who are professionals who have knowledge of drug trends and/or regular contact with users through their work; and analysis and examination of indicator data sources related to illicit drugs.

The IDRS monitors the price, purity, availability and patterns of use of heroin, methamphetamine, cocaine and cannabis. The IDRS is designed to be sensitive to trends, providing data in a timely manner, rather than describing issues in detail. It is important to note that the information from the IDU survey is not representative of illicit drug use in the general population and nor is the information representative of all illicit drug users, but is indicative of emerging trends that warrant further investigation. Drug trends in this publication are cited by jurisdiction, although they primarily represent trends in the capital city of each jurisdiction, in which new drug trends are likely to emerge.

The Ecstasy and Related Drugs Reporting System (EDRS) is a comprehensive and detailed study of ecstasy and related drug markets in Australia. The EDRS uses a similar methodology to the Illicit Drug Reporting System (IDRS). The EDRS monitors the price, purity and availability of 'ecstasy' (MDMA) and other related drugs such as methamphetamine, cocaine, GHB and ketamine. It also examines trends in the use and harms of these drugs. The data collection includes: a) surveys with regular ecstasy users (REU); b) surveys with key experts who have contact with regular ecstasy users through the nature of their work; and c) the analysis of existing data sources that contain information on ecstasy and other drugs.www.ndarc.med.unsw.edu.au

In addition, Turning Point Alcohol and Drug Centre and Victorian Government Premier's Drug Prevention Council have been conducting a feasibility study for a Youth Drug Reporting System (YDRS). A YDRS would monitor illicit drug use and associated harms in at risk young people in Metropolitan Melbourne, Australia. The YDRS is designed to:

- monitor drug use trends and harms in vulnerable, hard to reach youth populations
- better target those at risk youth sub-populations that existing drug monitoring systems don't adequately capture (e.g. homeless youth)
- provide qualitative accounts of new trends and patterns in specific geographic areas and sub-populations, and
- examine developmental pathways resulting in harmful drug use by at-risk populations.

For the purpose of this survey, at risk youth have been defined as those:

- aged between 12-24 years (the researchers have been briefed to ensure the younger age cohort is a priority)
- not captured by other drug reporting systems
- residing in Melbourne for at least 6 months
- engaged in at least monthly use of cannabis, heroin, ecstasy or methamphetamines
- may be homeless, at risk of homelessness or have experienced homelessness
- may be experiencing unstable life circumstances
- may have had or is involved with children protection, juvenile justice, the adult criminal justice system and/or mental health.

Despite lower age being 12, the project gained ethics approval from a major Australian university. The final report on the pilot is not available at this stage.

IDU among adolescents in the Pacific Islands. If available data are accurate, levels of IDU are far greater than those of developed countries such as Australia (e.g. for secondary school males in the Marshall Islands 15.8% v. Australia 0.7%). The research for the Burnet Institute (2010) study did not yield such high results. Anecdotally, it is believed that the data are based on misunderstanding or poor translations of questions. Likewise, use of cannabis, ATS, cocaine and opioids warrants urgent attention. Mixed methodologies should be used, so that richer data may be obtained to inform responses.

There are three specific drugs of concern within the Western Pacific region- **Alcohol, Cannabis and ATS** – that require some depth research as to their impact on adolescent health and wellbeing.

- For **Alcohol**, areas of concern tend to relate to risk behaviour, violence, accidents and sexual and reproductive health.
- For **cannabis**, there are particular concerns about links between regular, heavy cannabis use and mental health disorders (predominantly psychoses) and violence in the Pacific Island states.
- For **ATS**, there are particular concerns about links between regular, heavy ATS use and mental health disorders (predominantly psychoses) in East and South-East Asia.

Much of the above could be aided by the development of a **regional youth substance use research network** (YSURN) that could link a number of credible research centres within the region to assist in monitoring youth drug use, undertake specific projects as necessary (e.g. epidemiology, prevention, treatment, substance specific), provide mentoring to emerging research centres and researchers. It could be a WHO Collaborating centre.

Recommendation: It is recommended that increased attention and resources be devoted to improving data on substance use among young people of the region.

5.2.2 Policy and a facilitating environment

To move forward, there is need for a **collaborative approach from the UN system** to engage with senior policy makers to ensure a supportive legislative, policy and practice environment, and compliance with international treaties and conventions (e.g. the Convention on the Rights of the Child). WHO, UNICEF, UNODC and other UN agencies need to develop a child and health rights-based unified strategy for both the prevention and treatment of substance use-related difficulties in the region and within countries. The CRC can be a useful tool to frame responses.

Recommendation: It is recommended that there is a need for a more collaborative approach to from the UN Family to adolescent substance use and related difficulties in the region

There is an urgent need for a facilitating and supportive policy environment. It is particularly important for the UN ‘family’ to encourage dialogue and cooperation between Health, Public Security and Education ministries to develop national adolescent health and drug strategies based on best available evidence. As for the Pacific, a balanced approach between law enforcement and health service providers is essential to effectively address the range of substance use issues identified in the Western Pacific Region (Burnet Institute, 2010).

Recommendation: It is recommended that the UN Family advocate for a more facilitating and supportive policy environment to be created to shape and drive a more effective response to adolescent substance use and related difficulties in the region

5.2.3 Capacity Building - Prevention and Treatment

There is a need to develop a skilled workforce that can utilize evidence-based interventions to respond to adolescent substance use and related difficulties within the region, especially for those most at risk.

WHO/WPRO might consider leading a process with other One UN partners UNICEF and UNODC to **identify both Prevention and Treatment interventions** that could be trialed within the region, a strategy for workforce capacity building and dissemination and support. Target interventions could be identified via a process that might involve developing panels of experts and facilitating regional workshops that propose priority rankings of projects/topics and develop a regional and/or sub-regional approach to developing proposals for funding. Larger projects could be broken down into discrete sequential components, to enable funding to build as earlier developmental activities prove their worth.

The development of 'knowledge hubs' and research centre links and twinning (less experienced centres 'twinned' with more experienced ones), and a similar approach for clinical intervention development should be undertaken.

Recommendation: It is recommended that WHO/WPRO develop 'knowledge hubs'

There is a significant lack of evidence informed prevention efforts. There is a need to explore a diversity of evidence informed interventions within the Western pacific region, and ensure evaluation in relation to impact on substance use among adolescents. It is recommended that interventions that could be most relevant include school-based (with community linkage), web-based, targeted interventions at workplaces and for specific sub-populations (e.g. MARA and MARYP).

MARA and MARYP require special focus as they tend to bear the greater burden of morbidity associated with substance use, in addition to being more likely to be involved with juvenile and criminal justice systems and public security and, thus, need to be promoted.

There is a need to explore **diverse sites for prevention and screening activities** – such as schools, dormitories and other out-of-home accommodation used by students, workplaces that employ young workers (e.g. garment factories in Lao PDR and Viet Nam that employ many young women) and other sites such as seafarer/ marine colleges in the Pacific. Pilot projects could be trialed in one for more key settings. In addition to WHO, UNICEF and UNAIDS, this may involve UN agencies such as ILO and UNESCO.

Given that many MARA and MARYP are often not engaged in formal or informal education, in particular in developing countries, community focused interventions are seen as more useful for such groups.

Recommendation: It is recommended that WHO/WPRO develop a strategy to develop and trial preventive interventions

There is concern that stand-alone or adolescent/youth specialist services may be too costly or unable to be established. Thus, **there is a need to build the capacity of generalist Primary Health Care workers to screen for and provide brief interventions** which address adolescent substance use-related difficulties. Training in use of the **HEADSS** approach and or use of the **WHO/CAH Orientation Programme** could be beneficial. Twinning and linking countries with greater need in this area, with those with a better-developed and skilled workforce could assist in providing curricula, training methods and mentorship.

Recommendation: It is recommended that greater attention be given to building the capacity of primary health care to meet the needs of young substance users, especially MARA and MARYP.

Adolescent Friendly Health Services appear to remain poorly understood in some settings. There needs to be a concerted effort to ensure that all health workers are aware of what are the key features of adolescent-friendly health services, and that these features can be incorporated into generalist or adolescent-specific services.

Recommendation: It is recommended that greater attention be given to the promotion, expansion and strengthening of the adolescent friendly health services initiative, especially in meeting the needs of MARA and MARYP.

There also remains a limited capacity to provide substantive alternative treatment interventions due to a fairly widespread **lack of skill among workers in relevant intervention techniques**, such as individual, group and family counselling. **Capacity building in more effective interventions for dealing with adolescent substance use** is essential in the health sector (especially for public health workers) and for those who work with youth such as teachers, police, youth workers. Twinning and linking countries with greater need in this area, with those with a better-developed and skilled workforce could assist in providing curricula, training methods and mentorship.

WHO/WPRO might also take a lead in the dissemination of readily available/downloadable resources developed by various UN agencies and organizations that may assist in capacity building. It appears that many of the resources are not well known, remain on shelves or are not available in a range of languages. Some may not be totally suitable for all settings in the region, but there should be encouragement to take what is useful from them and adapt as needed. A number of relevant resources are listed in Appendix VIII.

There is a **need to develop and trial brief interventions, especially for Alcohol, Cannabis and ATS use.** Brief interventions have demonstrated efficacy in developed countries, trials of appropriately adapted variants, to ensure cultural and setting relevance, are needed. WHO could develop, lead and/or support a coordinated series of trials in diverse settings, based on evidence informed strategies. It would be possible then to develop guidelines to assist clinicians.

Recommendation: It is recommended that WHO/WPRO develop a strategy to develop and trial treatment interventions

5.2.4 Drug testing in schools

The move toward **drug testing in schools in some states of the WP Region** requires consideration of the evidence from developed countries, which tends to be against such a strategy.

Recommendation: Drug testing in schools should not be encouraged, given the lack of an evidence base

5.2.5 Compulsory residential treatment

There is **overuse of compulsory residential treatment**, which has high relapse rates and inadequate programming to meet the specific and developmental needs of adolescents, and violate rights (see Thomson, 2010). The lack of current capacity for community treatment for young people with problematic drug use, and the current legislation and policies that almost automatically transfer young people identified as drug users to compulsory residential detoxification and/or rehabilitation centres make it extremely difficult to make a significant impact. It is recommended that the 'UN Family' needs to advocate for more developmental stage-specific treatment capacity that in line with the Convention on the Rights of the Child, would favour the least restrictive settings from which to provide necessary treatment.

As **compulsory treatment centres** will remain for some time within the region, there is the need for the health sector and NGOs involved in providing services to young drug users to develop effective working relationships with them that acknowledge the limitations, and stress adherence to human rights, the Convention on the Rights of the Child and international treaties and covenants related to torture and appropriate use of incarceration.

WHO and UNODC developed Principles of drug dependence treatment in 2008, which guide policy and treatment intervention development and can be used for advocacy and management. See Appendix: III.

There may be some financial constraints in some countries in relation to reform of the compulsory residential treatment approach, as the large, mainly work camps that are termed 'rehabilitation centres' provide income for the state and sustain the cost of their own activities (i.e. to provide food and minimal resources for inmates). In addition, irregular, short-term and mostly external and donor support impacts on motivation and implementation of the longer-term and complex processes required for necessary changes to policy and/or legislation and building of workforce skills, programme capacity and broad community support.

Evidence-informed interventions include those which come within a '**harm reduction**' framework (Toumbourou, 2007). This includes access to sterile injection equipment, condoms, Opioid substitution Treatment (OST) and associated interventions that address psychosocial issues. In relation to **Needle and Syringe Programmes** (NSP), there is a need to ensure these are available to adolescents who inject drugs, and that consideration be given to whether these function as 'exchange' programmes or distribution without the need to return used equipment. This is essential, as possession of used equipment can be considered evidence of 'illicit drug use' and increase the risk of being apprehended and charged by police who are not aware of, or ignore, the health risk reduction potential of NSPs.

Models for diversion for youth crime exist within the region and nearby. These models need to be considered for young drug users and, as appropriate, recommended to member states. There is a need to explore the role of **pilot drug courts**, and to ensure that there is some **mechanism for formal review** of involuntary admissions to residential detoxification and or treatment, so that young less dependent or experimental drug users are afforded an opportunity to receive

community-based treatment as the preferred option. Kunming, China, Malaysia and a larger Pacific Island state may be suitable sites for pilot projects.

In all activities referred to above, particular attention to is required to include difficult to reach, but highly vulnerable groups such as most at risk adolescents - MARA (for example, very young adolescents, same sex-attracted, minority populations/cultures, young workers, young parents, those in juvenile justice/closed settings) in research, intervention development and delivery.

Recommendation: It is recommended that strategies to engage with compulsory/ coerced treatment settings require careful consideration

5.2.6 Funding

Adequate, ongoing funding needs to be provided to better research prevalence and consequences of drug use, and to inform and support initiatives based on appropriate national and local policies, and to ensure that promising 'pilots' get an adequate chance to demonstrate efficacy.

Recommendation: It is recommended that adequate funding be available to progress responses to adolescent substance use and related difficulties in the region

Other areas that could be developed:

Family involvement

There is a need to develop family involvement, and identify good practice models. While the benefit of keeping contact with family, children, partners and positive peers appears to be more widely acknowledged for treatment, there is not much in the way of effective responses. Various family interventions have demonstrated efficacy in developed countries, and trials of appropriately adapted variants, to ensure cultural and setting relevance, are needed. Twinning and linking countries with greater need in this area, with those with a better-developed and skilled workforce could assist in providing curricula, training methods and mentorship.

Co-morbidity

Young people with **Co-morbidity or Dual Diagnoses** often miss out on services, if they exist. There is a need to research this and to develop appropriate models to address the needs of those young people who have both substance use and mental health concerns

Core treatment 'ingredients'

There is a need to identify 'core' effective ingredients of effective interventions in the various locations. That is, what mix of activity appears to work best in which settings within the region. This implies a **better research capacity**. A linked research project in a number of countries could develop and pilot culturally appropriate methodologies.

Introduction

This is a desk-based review conducted by the National Drug and Alcohol Research Centre. The data come from both white (Peer-reviewed) and grey (non-peer reviewed: including published and unpublished reports) literature. In addition online internet searches using Google and other drug specific websites were conducted to gather relevant information and data for specific countries.

In addition to online searches, key experts in the Western Pacific region were contacted via email and telephone. Initially a total of 106 experts were contacted in the region. The email request was further sent to another 35 or so experts identified via the initial email recipients. However, the feedback received from the key experts was very limited and gathered much less information than originally anticipated by the research team.

A total of around 300 documents were reviewed during the data review process, this included 15 documents/reports in hard copy sent in by the experts in the region.

The following country situations and profiles must be read with caution. Available data are extremely variable in relation to reliability and generalisability. In addition, data have been collected, and edited, by various government ministries and departments, often public security and police, NGOs and research centres - with attendant biases. Some ministries even refused requests for data. Questions regarding the same substance, means of use and associated behaviours have been asked in different ways, even within the same country and by the same groups, and translation of questions into different languages appears to have posed difficulties. . Data also vary as to year of collection.

In this section the following countries were chosen for a more in-depth focus: Australia, Cambodia, People's Republic of China, Lao People's Democratic republic, Malaysia, Papua New Guinea, Vanuatu and Viet Nam. They were chosen to represent the diversity of the region – high to low income, islands to land-locked, and system of government.

Introduction

Demographics

Australia is a geographically expansive country, but due to large regions of desert land, the majority of the population is located along the eastern seaboard, in the States of Victoria, New South Wales and Queensland. It is inhabited by 21,644,000 persons, with an annual growth rate of 2%. A substantial proportion of the population is located in the cities of Sydney and Melbourne, accounting for 20% and 17% of the total Australian population respectively, and Brisbane, Adelaide and Perth each account for approximately 5-8% of the total population. Adolescents and children aged 10-19 years account for 13% of the total population (ABS 3101.0, 2008) making up a total of 2,827,000 (United Nations Population Division, 2009). The poverty rate among all Australians has been estimated at 11% (Lloyd et al., 2004).

The legal status of drugs and enforcement

Illicit substances such as ATS, heroin, ecstasy, cocaine, LSD, cannabis and GHB are prohibited. Alcohol is legal, however legislation related to alcohol exists to prohibit sale of alcohol to minors, and reduce alcohol related harms such as drink driving through designated Blood Alcohol Concentration (BAC) levels that drivers must not exceed. In most Australian jurisdictions cannabis use is dealt with by civil penalty, however distribution of commercial quantities of cannabis is a serious offence (Loxley et al., 2004).

Drug demand is an activity engaged in by police in all Australian states and territories. Research into criminal sanctions for illicit substance use has provided no evidence to indicate that legal punishment for substance use has any deterrent effect on future illicit substance use in the community. Some argue that enforcement is ineffective in Australia as illicit substances remain available, however it is not known what the drug market would be like without this preventative strategy in place. In Sydney, targeted law enforcement has been found to encourage drug users into treatment (Loxley et al., 2004).

Demand reduction is also core business of health promotion activities of Australian and state and territory governments, education departments, employers and worker unions, and is tackled by government and NGO drug treatment agencies in terms of expected treatment outcomes being abstinence or reduced drug use.

Supply is reduced from outside of Australia through national border protection by the Australian Federal Police (AFP) and the Australian Customs Service (Customs), the key agencies responsible for protecting Australia from international drug trafficking. A national Heroin Signature Programme is in place

that allows the origin of the substances seized and their packing location to be detected through laboratory analyses, providing information which can be used operationally to reduce supply and distribution (Loxley et al., 2004).

Control of local manufacturing of illicit substances focuses on the main illicit substances produced locally – cannabis and ATS. This occurs through the location and closure of clandestine drug laboratories, seizure of cannabis crops and controlled supply and national monitoring of pharmacy products that contain precursor chemicals to distributed illicit substances. Aerial surveillance has helped to reduce outdoor cannabis crops, however hydroponic crops are more difficult to locate (Loxley et al., 2004).

Research into criminal sanctions for illicit substance use have provided no evidence to indicate that legal punishment for substance use has any deterrent effect on future illicit substance use in the community. Some argue that enforcement is ineffective in Australia as illicit substances remain available, however it is not known what the drug market would be like without this preventative strategy in place. In Sydney, targeted law enforcement has been found to encourage drug users into treatment (Loxley et al., 2004).

The National Drug Strategy

The Australian National Drug Strategy (NDS) and its forerunner, the National Campaign Against Drug Abuse (NCADA), have been operating since 1985. It is a cooperative venture between Australian, state and territory governments and the non-government sector aimed at improving health, social and economic outcomes for Australians through prevention of substance use uptake and reduction of substance use related harms. The core group responsible for the strategy comes from the health, law enforcement and education sectors, and policy is developed in consultation with NGOs, drug user groups and researchers.

Australia implements a comprehensive and balanced approach between the reduction of supply, demand and harm associated with the use of drugs across sectors and jurisdictions. The principle of harm minimisation has formed the basis of the National Drug Strategy since 1985. A new framework encompasses national substance-specific strategies, including the National Alcohol Strategy and the National Illicit Drug Strategy and one to tackle ATS use. National substance-specific strategies are developed through public consultation with community members and key stakeholders including liquor licensing authorities, police, local government, the health and education sectors, drug user groups and the alcohol beverage and hospitality industry; and a review of the most recent research literature and other data documenting trends in alcohol consumption and harm.

The National Alcohol Strategy 2006-2009 outlines four priority areas for coordinated action to develop drinking cultures that support a reduction in alcohol-related harm in Australia. These are intoxication, public safety and amenity, health impacts and cultural place and availability. It is intended to guide the development and implementation of a policy framework to respond to

alcohol-related harm in Australia. The National Illicit Drug has as focal areas: provision of grants to fund drug treatment services (mainly provided by NGOs); the increased availability and use of psychostimulants and programmes for ATS users; diversion of drug offenders and those involved in crime associated with drug use from the criminal justice system and into compulsory assessment, treatment and/or education; comorbidity; OST and Needle and Syringe Programmes (NSPs); and ATSI and CALD populations.

Determinants of substance use

A link between social disadvantage and substance use is present in Australia. Alcohol consumption in Australia appears to be moderated by availability of financial resources, with greater access to financial resources associated with higher alcohol use. Studies have found that Australians who are employed tend to drink more alcohol than those who are unemployed, and that during an economic downturn both alcohol consumption across the population, and serious alcohol-related harms, are reduced (Loxley et al., 2004).

An Australian survey of secondary school adolescents aged 12-17 years exploring risk and protection factors found that while adolescents with a high number of developmental risk factors and low protective factors are more likely to use all types of drugs in a potentially harmful manner, it is the bulk of adolescents at low or average developmental risk who engage in drinking regularly by approximately age 16 years. This is not the case for illicit substance use, with those using cannabis or other illicit substances at least weekly comprising in the majority high risk students, across all age groups. These findings suggest that prevention strategies for legal drugs need to be universal in their application and relevance to adolescents in Australia. An investment in targeted programmes for high risk adolescents is also warranted, especially with a view to the prevention of later use of illicit drugs (Loxley et al., 2004).

Special populations

Special populations in Australia include youth, Indigenous Australians, Culturally and Linguistically Diverse (CALD) Australians, older Australians and prisoners and detainees.

The National Drug Strategy - Australia's Integrated Framework 2004-2009 was set up to improve health, and social and economic outcomes by reducing use of harmful drugs. It is an umbrella framework under which national plans tackling alcohol, tobacco and illicit drugs, and education about drugs have been formed. The national plans apply to Australians generally and as such do not always relate well to the drugs issues that affect Aboriginal and Torres Strait Islander peoples. The Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2009 has been researched and written to complement the issues raised in these national plans and make them more applicable to Aboriginal and Torres Strait Islander peoples (Australian Government, 2009).

The complementary action plan sits between the national framework and the individual national action plans. It is not prescriptive but rather sets the national

direction, encouraging careful attention to the needs of Aboriginal and Torres Strait Islander peoples (Australian Government, 2009).

The plan provides an opportunity for communities, non-government organisations, Aboriginal and Torres Strait Islander community-controlled organisations and all levels of government to pursue strategies that are specifically relevant to Aboriginal and Torres Strait Islander peoples and appropriate to their circumstances, needs and aspirations. It recognises the similarities and differences between Aboriginal and Torres Strait Islander peoples, as well as the diversity that exists within these two broad cultures—although the problems encountered by each group are similar, the way each addresses those problems may be quite different (Australian Government, 2009).

CALD Australians generally have lower rates of alcohol and other substance use than the rest of the population, however this varies with culture and locality. This is also true of older Australians, however older Australians tend to experience more substance related harms due to the effects of older age and the cumulative effect of use. Rates of substance use among prisoners and detainees far exceed that of the general population, and are coupled with high risk behaviours such as injecting and needle sharing, and high rates of disease transmission (Loxley et al., 2004).

Substance use determinants, patterns and harms among Indigenous Australians differ to that of the wider population. Consensus exists among most researchers that a broad array of social factors, particularly colonialism, dispossession and economic exclusion, are linked to substance use among Indigenous Australians. A number of studies have also linked these social indicators to substance use in young Indigenous Australians (Loxley et al., 2004).

Drug-related harms are experienced to a greater extent among Indigenous people: some of these harms include deaths caused by alcohol; suicide with which substance use is a contributing factor; family violence and sexual assault that is associated with alcohol use; and deaths caused by mental health problems associated with psychoactive substance use (Loxley et al., 2004).

Substance use patterns

General population

In 1998-9, alcohol and illicit substance use cost Australia a total of \$13.7 billion in law enforcement, health care and lost productivity (Collins and Lapsley, 2002). A more recent estimate of the cost of alcohol and illicit substance use in 2004-5 places this figure at \$23.5 billion, of which alcohol accounted for \$15.3 billion of this cost, and illicit substances \$8.2 billion (Collins and Lapsley, 2008). The social cost of illicit substance use is estimated to have risen in this time by 11.3%, but changes in alcohol costs could not be provided due to altered estimation methodology. Alcohol specific costs were largely attributed to lost productivity, and to a lesser extent road accidents, health and crime; whilst illicit substance specific costs were largely attributed to the cost of crime, followed to

a lesser extent by loss of productivity, and less still to road accidents and health (Collins and Lapsley, 2008).

Substance use patterns in Australia demonstrate that the majority of Australians aged 14 years and over (nine out of ten people) have used alcohol in their lifetime, and have consumed alcohol recently (eight out of ten people). One third of the population (three out of ten people) have used cannabis, and a significant proportion of the population have used cannabis recently (one in ten people). Lifetime and recent use of substances has occurred to a lesser extent for ecstasy use, followed by ATS, inhalant, injected drug and heroin use. Since 2004 there have been significant decreases in the patterns of lifetime use of alcohol, recent cannabis use, and in both lifetime and recent use of ATS. Significant increases have occurred in lifetime use of ecstasy. The average age of initiation to ecstasy, ATS, injected drugs and heroin use occurs in the young adult years, and during adolescence for alcohol, cannabis and inhalant use (AIHW, 2008).

Table 5: Prevalence of substance use in lifetime and last 12 months and mean age of first use for all persons aged 14 years and over: NDSHS 2007 (with % change estimates since 2004) (AIHW, 2008)

Substance	% Ever use	% Change (2004-2007)	% Use in last 12 months	% Change (2004-2007)	Mean age of first use
Alcohol	89.9	(-0.8)*	82.9	(-0.7)	17.0
Cannabis	33.5	(-0.1)	9.1	(-2.2)*	18.8
ATS	6.3	(-2.8)*	2.3	(-0.9)*	20.9
Ecstasy	8.9	(+1.4)*	3.5	(+0.1)	22.6
Opioids	1.6	(+0.2)	0.2	(0)	21.9
Inhalants	3.1	(+0.6)	0.4	(0)	19.3
Injected drugs	1.9	(0)	0.5	(+0.1)	21.3

* Difference between 2004 and 2007 result is statistically significant.

The proportion of Australians aged 14 years and over who report drinking alcohol on a weekly basis is 41%, whilst 34% report drinking on a less than weekly basis, 8% on a daily basis and 17% report being non drinkers (comprising 7% ex-drinkers, and 10% alcohol abstainers). The proportion of people abstaining from alcohol has increased significantly between 2004 and 2007, whilst the proportion of daily drinkers has significantly declined in this time, with a greater change seen among males than females in both cases. Males are almost twice as likely as females to be daily drinkers, are more likely than females to be weekly drinkers, but less likely than females to be less than weekly drinkers (AIHW, 2008).

Males aged 14 years or over were more likely than females to have ever used cannabis (37% versus 30%), opioids (2% versus 1%), ATS (8% versus 5%), ecstasy (10% versus 8%), inhalants (4% versus 2%) and injecting drug use (3% versus 1%); and to have used cannabis (12% versus 7%), ATS (3% versus 2%), ecstasy (4% versus 3%), inhalants (1% versus close to 0%) and injecting drug use (1% versus close to 0%) in the past year. An equivalent number of males and females used opioids in the past year. There was a significant decrease

from 2004 to 2007 in the proportion of female Australians aged 14 years and over who had used cannabis (8% to 7%), ATS (3% to 2%) in the past year and in males who had used cannabis (14% to 12%), ATS (4% to 3%) in the past year (AIHW, 2008).

Special populations

Compared to the overall Australian population, Indigenous people reported being less likely to be current drinkers, and among those who did consume alcohol, they did so less frequently but were more likely to drink alcohol at high risk levels (Loxley et al., 2004). Indigenous people also reported being more likely to have injected illicit drugs and almost twice as likely to have ever used inhalants (Loxley et al., 2004). The data available on Indigenous substance use is out-dated by more than a decade, and although it provides the best available information on the prevalence of substance use in this population, the reliability of this data as a representation of substance use today among Indigenous people is questionable.

Adolescent substance use

Table 6: Prevalence of substance use in lifetime and last 12 months for all persons aged 14 years and over: by age, year and gender, NDSHS 2007, 2004 (AIHW, 2008)

Substance	% Ever use			% Use in last 12 months								
	2007			Age 14-19 years					2007			
	Age 14-19 years			All	Male		Female		Age (years)			
	All	Male	Female	2007	2007	2004	2007	2004	12-19	12-15	16-17	18-19
Cannabis	20.0	18.0	22.1	12.9	13.1	18.4*	12.7	17.4*	9.9	2.7	15.0	19.0
ATS	2.1	1.4	2.9	1.6	1.0	4.0*	2.2	4.9*	1.2	0.4	1.0	2.9
Ecstasy	6.0	4.8	7.2	5.0	4.0	3.9	6.0	4.7	3.8	0.5	4.9	9.1
Opioids	0.3	0.6	0.1	0.3	0.5	0.1	0.1	0.4	0.2	-	0.2	0.7
Inhalants	2.0	1.6	2.4	1.1	0.9	0.7	1.3	1.3	0.8	0.6	1.2	1.0
Injected drugs	0.7	0.7	0.8	0.4	0.5	0.1	0.2	1.0	0.4	-	0.2	0.8

* Difference between 2004 and 2007 result is statistically significant

Substance use patterns among adolescents in Australia vary from that of the overall population. While ever use is slightly less among adolescents for all substances, the order of most ever used substance to least is the same as for the overall population. Notable divergences occur in recent substance use, with adolescents being more likely than the overall population to have used cannabis (13% versus 9%), ecstasy (5% versus 4%) and inhalants (1% versus close to 0%) in the past 12 months. A detailed examination of adolescent substance use by substance follows.

Adolescent alcohol use

Table 7: Frequency of alcohol consumption in the last 12 months: proportion of the population aged 12 years or older, by age and sex, Australia, 2007, NDSHS 2007 (AIHW, 2008)

Age (years)	Gender	Frequency of alcohol consumption				
		% Daily	% Weekly	% Less than weekly	% Ex-drinker	% Never consumed
14-19	All	1.0	20.9	49.1	3.0	26.0
	Male	1.4	23.0	46.4	3.3	25.9
	Female	0.5	18.8	52.0	2.6	26.1
12-19	All	0.7	15.9	39.8	2.7	40.9
	Male	1.1	17.3	37.4	3.1	41.2
	Female	0.4	14.4	42.3	2.3	40.6
12-15	All	0.2	2.1	27.8	2.4	67.5
	Male	-	1.0	28.8	2.7	67.5
	Female	0.5	3.2	26.8	2.1	67.4
16-17	All	0.8	17.8	57	4.2	20.3
	Male	1.7	20.0	50.9	5.2	22.1
	Female	-	15.4	63.2	3.0	18.4
18-19	All	1.6	41.1	46.3	1.7	9.2
	Male	2.6	46.7	40.9	1.5	8.3
	Female	0.7	35.3	51.9	1.9	10.2

The proportion of 14-19 year old Australians who report drinking alcohol on a daily basis is 1%, whilst 21% reported drinking on a weekly basis, 49% reported drinking on a less than weekly basis, 3% reported being ex-drinkers and 26% reported never having consumed alcohol. Adolescent males are three times more likely to drink alcohol on a daily basis than females, are more likely than females to be weekly drinkers, but less likely than females to be less than weekly drinkers (AIHW, 2008). Gender differences among adolescents thus mirror those in the general population.

Two thirds of 12-15 year old Australians report never having consumed alcohol; by age 15-16 this remains true for only one fifth of adolescents, and by age 18-19 just under one tenth remain abstinent, nearing the rate of abstinence for all Australians. As rates of abstinence decrease with age among adolescents, daily drinking increases (from near 0% among 12-15 year olds to 2% among 18-19 year olds), but remains significantly lower than the population rate. Among 12-15 year olds, more females drink alcohol on a daily and weekly basis than males, but this pattern reverses among 16-17 year olds, and remains consistent with increasing age (AIHW, 2008).

The proportion of 14-19 year old Australians consuming alcohol in quantities that were considered a risk to health in the long term by the National Health and Medical Research Council (NHMRC 2001) is 71%: 62% are considered low risk drinkers; 6% risky drinkers; and 3% high risk drinkers (AIHW, 2008). Adolescent

females were more likely than males to consume alcohol at risky (7% versus 4%) or high-risk (4% versus 3%) levels for long-term harm (AIHW, 2008). The proportion of 14-19 year old Australians consuming alcohol in quantities that were considered a risk to health in the short term is 71%: 32% are considered low risk drinkers; 13% risky or high risk drinkers on at least a yearly basis; 17% at least monthly; and 9% on at least a weekly basis (AIHW, 2008).

Table 8: Alcohol consumption and risk of harm in the long and short term in the last 12 months: proportion of the population aged 14-19 years, by age and sex, Australia, 2007, NDSHS 2007 (AIHW, 2008)

Risk of harm in the long term					
		Level of risk			
Gender	% Abstainers	% Low risk	% Risky	% High risk	
All	29.0	62.2	5.6	3.2	
Male	29.2	63.7	4.4	2.6	
Female	28.7	60.7	6.7	3.9	
Risk of harm in the short term					
			Risky and high risk		
Gender	% Abstainers	% Low risk	% At least yearly	% At least monthly	% At least weekly
All	29.0	31.8	12.9	17.2	9.1
Male	29.2	33.4	12.9	15.7	8.8
Female	28.7	30.1	12.9	18.8	9.5

Adolescent cannabis use

The proportion of 12-19 year old Australians reporting cannabis use in the past year is 10% (AIHW, 2008). Approximately one in 40 12-15 year olds reported having used cannabis in the past year, compared with six in 40 16-17 year olds and one in five 18-19 year olds (AIHW, 2008).

One in five 14–19 year olds reported having ever used cannabis and almost one in eight have used cannabis in the past year. More female (22%) than male (18%) adolescents reported having ever used cannabis, and an equal proportion had used cannabis in the past year (13%). There was a significant decrease from 2004 to 2007 in the proportion of both female (17% to 13%) and male adolescents (18% to 13%) who had used cannabis in the past year (AIHW, 2008).

Adolescent ATS use

The proportion of 12-19 year old Australians reporting ATS use in the past year is 1%. Approximately one in 200 12-15 year olds reported having used ATS in the past year, compared with one in 100 16-17 year olds and three in 100 18-19 year olds (AIHW, 2008).

One in 50 14–19 year olds reported having ever used ATS and having used ATS in the past year. More female (3%) than male (1%) adolescents reported having ever used ATS and using ATS in the past year (2% versus 1%), forming a gender pattern inverse to that of the general population. There was a significant

decrease from 2004 to 2007 in the proportion of both female (5% to 2%) and male adolescents (4% to 1%) who had used ATS in the past year (AIHW, 2008).

Adolescent ecstasy (MDMA) use

The proportion of 12-19 year old Australians reporting ecstasy use in the past year is 4%. Approximately one in 200 12-15 year olds reported having used ecstasy in the past year, compared with five in 100 16-17 year olds and nine in 100 18-19 year olds (AIHW, 2008).

Three in 50 14–19 year olds reported having ever used ecstasy and five in 100 have used ecstasy in the past year. More female (7%) than male (5%) adolescents reported having ever used ecstasy and having used ecstasy in the past year (6% versus 4%), forming a gender pattern inverse to that of the general population (AIHW, 2008).

Adolescent opioid use

The proportion of 12-19 year old Australians reporting opioids use in the past year is close to 0%. No 12-15 year olds reported having used opioids in the past year, compared with one in 500 16-17 year olds and just over three in 500 18-19 year olds (AIHW, 2008).

One in 300 14–19 year olds reported having ever used opioids and having used opioids in the past year. More male (1%) than female (close to 0%) adolescents reported having ever used opioids and having used opioids in the past year (1% versus close to 0%) (AIHW, 2008).

Adolescent inhalant use

The proportion of 12-19 year old Australians reporting inhalants use in the past year is 1%. Approximately three in 500 12-15 year olds reported having used inhalants in the past year, compared with six in 500 16-17 year olds and one in 100 18-19 year olds (AIHW, 2008).

One in 50 14–19 year olds reported having ever used inhalants and one in 100 have used inhalants in the past year. An equal proportion of female and male adolescents reported having ever used inhalants and having used inhalants in the past year (1%) (AIHW, 2008).

Adolescent injecting drug use

The proportion of 12-19 year old Australians reporting injecting drug use in the past year is close to 0%. No 12-15 year olds reported having injected drugs in the past year, compared with one in 500 16-17 year olds and two in 500 18-19 year olds (AIHW, 2008).

Seven in 1000 14–19 year olds reported having ever used injecting drug use and two in 500 have used injecting drugs in the past year. An equal proportion of male and female adolescents reported having ever used injecting drugs, and

more male (1%) than female (close to 0%) adolescents reported having used injecting drugs in the past year (AIHW, 2008).

Special populations of young people

Same sex- attracted young people.

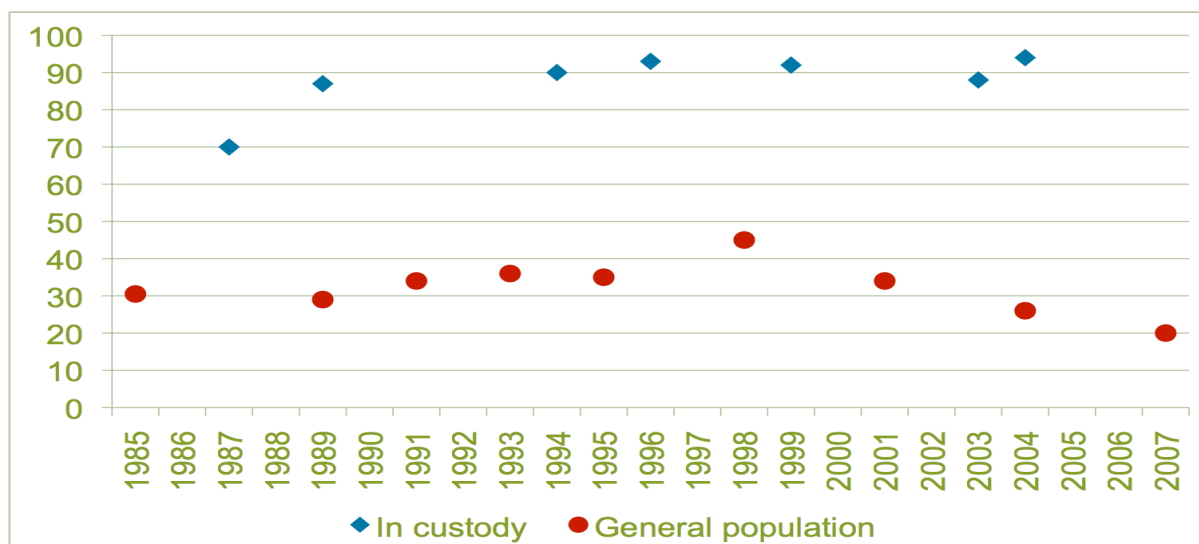
Substance use and sexuality are related to one another in complex ways. As for most young people, there are variations in patterns and extent of use, and exposure to risk varies according to age, gender, location, psychopathology unrelated to sexuality and attachment to various sub-cultures. Sexuality issues may also play a distal or proximal role in the development of substance use and associated difficulties. There is evidence that some same-sex attracted youth use substances at higher levels than their opposite sex-attracted peers, and are at elevated risk for HIV and other blood-borne viruses and STIs, and suicide attempts. (Howard and Arcuri, 2006).

Young offenders:

Young people who are involved in the criminal justice system in Australia tend to be characterised as having backgrounds of risk and vulnerability. Many come from situations of economic disadvantage, parental imprisonment and substance use and are more likely to be disengaged from education, training and employment. Regular participation in a range of risk-taking and thrill-seeking behaviours; particularly in relation to substance use is also common among this group.

Both international and Australian research has found that young offenders tend to experiment with, and begin using regularly, both licit and illicit substances at a much younger age than non-offending youth. Such earlier onset of licit and illicit substance use is associated with increased harm, such as continued and escalating use of illicit substances, higher prevalence of substance use disorders, engagement in multiple health risk behaviours, increased criminal activity and more frequent and longer periods of incarceration.

Ever used Cannabis



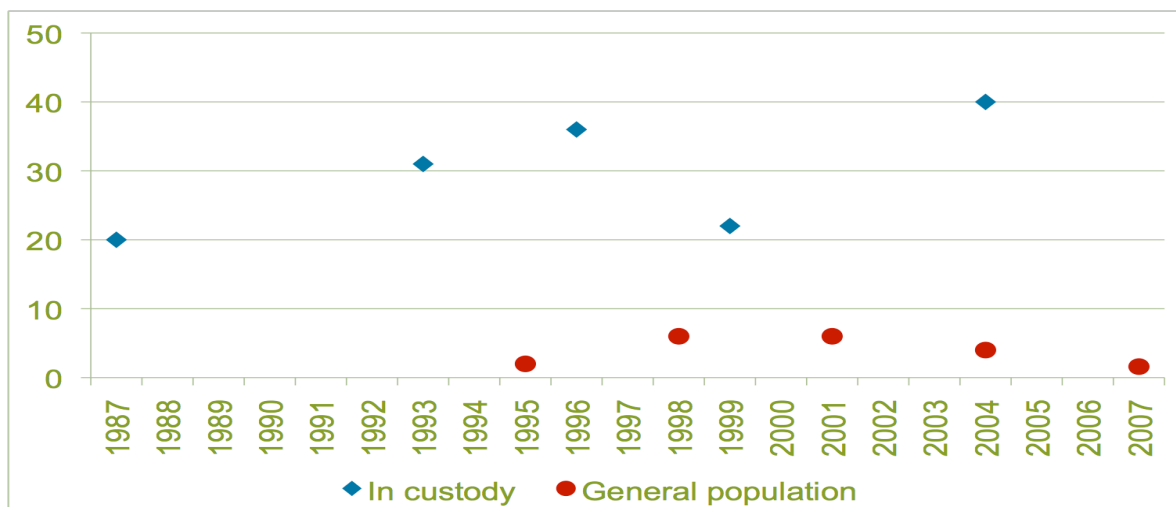
Recent use of Cannabis



Ever use ATS



Recent use ATS



Source of graphs: Simpson, M., Howard, J., Copeland, J., Arcuri, A. (2009) The need to monitor and reduce cannabis use among young offenders. NCPIC Bulletin Number 5, Sydney:NCPIC. Available at www.nicpic.org.au

Prevention

Prevention overview

Prevention programmes specifically addressing adolescent substance use that are active in Australia include: parent education, family intervention, school-based drug education, school organization and behaviour management, peer intervention and peer education, youth sport and recreation programmes, mentorship, community based drug education, preventive case management, community mobilisation, health service reorientation, employment and training and social marketing (Loxley et al., 2004). The evidence for implementation, outcome effectiveness and effective dissemination of these programmes varies across programmes, and also depends on the substance that is targeted. The programmes to date with demonstrated effectiveness in the Australian context of changing substance use related attitudes or behaviours are reviewed below.

Table 9: Evidence for effectiveness of alcohol and illicit substances prevention programmes (Adapted from Loxley et al., 2004).

Intervention	Substance			Nature of evidence
	Alcohol	Cannabis	Other Illicit	
Parent education	O	O	O	Few programmes address a single drug type
Family intervention	X	X	*	Impacts relevant to illicit substance use can only be inferred from impacts on related behaviours
School based drug education	*	*	*	Effects evident but tend to be weak or short term
School Organization and behaviour management	O	O	O	Evidence for feasibility in high schools
Peer intervention and peer education	O	O	O	Implemented to reduce substance related harm but there is little research
Youth sport and recreation programmes	O	O	O	
Mentorship	X	O	O	
Community based drug education	X	O	O	One evaluation for illicit substances had negative outcomes
Preventive case management	X	X	O	Australian application for youth with a high number of risk factors is emerging
Community mobilisation	**	*	O	Cost effectiveness unclear
Health service reorientation	*	O	O	
Employment and training	X	X	X	
Social marketing	*	O	X	May require delivery combined with other strategies

Key: X Limited investigation ** Evidence for outcome effectiveness
 O More research needed
 * Evidence for implementation *** Evidence for effective dissemination

Parent education

Parent education involves the parents of an adolescent receiving information or a course of instruction on substance use or substance use related issues, and ranges from one off messages to self-help books and computer-based self-help programmes through to training programmes that may involve professional contact on a number of occasions (Loxley et al., 2004). Along with functioning as a universal prevention strategy, this intervention can also be delivered as a targeted strategy. There is evidence from Australian studies that parenting programmes may be a useful intervention for adolescent substance use, although further research is warranted.

The Parenting Adolescents a Creative Experience (PACE) programme targeted parents of early adolescents an 8-week parenting programme that provides practical information on a range of issues facing young people and their families. Adolescents who received this intervention were more likely to report increased maternal care, less delinquency, and less poly-drug use (the odds of transition to poly-drug use were halved) than those who did not receive the intervention. Evaluation from this study suggested that adolescent substance use was influenced by their peer's substance use, and that family improvements that were reported had a flow on effect to other families through peer-networks.

Adolescents at risk of becoming involved in illicit substance use may benefit from the 'Teen Triple P' Positive Parenting Programme. Teen Triple P was developed for parents of older children who fit the late-starter model. It addresses issues that might lead to severe adolescent antisocial and delinquent behaviour. Teen Triple P targets parenting risk factors, such as: harsh, coercive discipline styles; parent-teenager conflict and communication difficulties; parental monitoring of teenagers' activities; parental depression; and marital conflict. Preliminary results suggest positive outcomes for most parents involved in this programme. There have been significant reductions in a variety of risk factors, with some evidence of improvements still being maintained after six months (Ralph and Sanders, 2004). This programme has an international website providing access to local information and resources: <http://www.triplep.net/>,

Resources are available at:

http://www.pfsc.uq.edu.au/publications/evidence_base.html

School based programmes

School based programmes involve efforts to reduce substance use related harm through the delivery of a structured social health education curriculum within the school. Ideally these programmes are delivered by classroom teachers as this improves the effectiveness of this intervention, but in some cases the programmes are delivered by visiting outside professionals. Successful alcohol and substance use education programmes use the social influence approach, or multiple component programmes, with a large emphasis on the social influences

rather than information-based approaches alone or those targeting affective education alone (Loxley et al., 2004).

Three examples of evidence-based, and apparently effective school-based alcohol prevention intervention are presented below.

1. SHAHRP – for more information see ‘Prevention’ section above

What is the SHAHRP classroom programme?

SHAHRP is a classroom based programme aimed at reducing alcohol-related harm and risky consumption. SHAHRP is designed to be implemented at a time when local prevalence data indicate that young people are starting to experiment with alcohol.

Before developing and pre-testing the programme, project staff conducted extensive formative work, including talking about alcohol issues with young people, to ensure that activities were based on reality and relevant to young people. The programme is evidence-based in that it incorporates findings from a systematic literature review of school drug education research, incorporates the experience of young people, and has been well tested in schools with students and teachers.

The SHAHRP activities incorporate various strategies for interaction including delivery of utility information; skill rehearsal; individual and small group decision making; and discussions based on scenarios suggested by students, with an emphasis on identifying alcohol-related harm and strategies to reduce harm. Interactive involvement is emphasized, with two-thirds of activities being primarily interactive and another 15% requiring some interaction between students. Interactive involvement of students provides important practice in reducing harm associated with alcohol use and is a critical aspect of lessons using an evidence-based approach.

The SHAHRP teacher manual and student workbooks are available free from: <http://ndri.curtin.edu.au/research/shahrp/>

2. CLIMATE Schools:

CLIAMTE Schools is another promising classroom-based intervention that originally targeted targets alcohol and cannabis use, but now includes a psychostimulant module.

The CLIMATE Schools program, original research conducted by NDARC, has provided important new evidence for the effectiveness of schools-based approaches. For some time, the perceived effectiveness of school-based drug prevention has been contentious, but given that school-based drug prevention is the primary means by which drug prevention education is delivered to adolescents, it is essential to focus on increasing program efficacy. Although skills-based drug prevention programs have shown promise, there is considerable evidence to suggest that the effectiveness of such programs is compromised by implementation failure and a reliance on abstinence-based goals and outcomes. The CLIMATE Schools drug prevention programs have been designed to overcome such concerns. The CLIMATE Schools programs which are based on a harm

minimisation approach have two important components; the first component involves students completing an interactive computer-based program, with the second consisting of a variety of individual, small group and class-based activities. Delivering the content and skills by computer is more effective than more traditional styles of delivery as it guarantees complete and consistent delivery on every occasion. Computer delivery ensures that all active ingredients are delivered and there is less risk of program adaptation. The classroom activities are included to allow students to interact with the content in relation to their own lives. These activities included role plays, small group discussions, decision making and problem solving activities and skill rehearsal, all of which have been identified as being central to program efficacy. The CLIMATE Schools drug prevention programs have been shown to be effective in changing drug use behaviour. Specifically, the CLIMATE Schools: Alcohol Course was more effective than usual classes in increasing alcohol related knowledge of facts that would inform safer drinking choices and decreasing the positive social expectations which students believed alcohol may afford. For females it was effective in decreasing average alcohol consumption, alcohol related harms and the frequency of drinking to excess (> 4 standard drinks; 10g ethanol). For males the behavioural effects were not significant. The CLIMATE Schools: Alcohol and Cannabis Course led to significant increases in alcohol and cannabis knowledge at end of the course and at the six and twelve month follow-ups. In addition, the students who received the CLIMATE course showed a reduction in frequency of cannabis at the six month follow-up, a reduction in average weekly alcohol consumption at the six and twelve month follow-ups, and a reduction in frequency of drinking to excess twelve months after the intervention. Early evidence from the more recently developed CLIMATE Schools: Cannabis and Psychostimulant Course show that this program was effective in increasing cannabis and psychostimulant related knowledge, decreasing pro-drug attitudes towards cannabis and psychostimulant use, delaying the onset and frequency of ecstasy use and decreasing the frequency of cannabis use for females. This program was also effective in decreasing young people's intention to use meth/amphetamine and ecstasy in the future. The mode of delivery offered by the CLIMATE Schools drug prevention programs has been welcomed by both students and teachers; with the latter rating this program as superior to other drug prevention approaches. Clearly the CLIMATE Schools drug prevention programs are both feasible and acceptable within the school setting and have the potential to offer an innovative new platform for the delivery of prevention education in schools.

Newton et al.(2007; 2009a; 2009b), Vogl et al. (2008; 2009)

3. Making the Link: a school-based programme to *promote helpseeking* or cannabis use and mental health problems.

MAKINGtheLINK is a curriculum-based programme for schools to promote helpseeking for cannabis use and mental health problems, based on evidence-based research and developed in collaboration with teachers and students. By seeking help early, young people are less likely to develop long-term consequences as a result of mental health and substance use issues. However, research indicates young people are reluctant to seek professional help and tend to keep their problems to themselves or turn to their friends, parents or teachers for support – people who often don't know what to do. It is not uncommon for young people to believe that they should be able to sort out their problems on their own, or be too embarrassed to talk about them. They are also worried about the confidentiality of information they give a professional. Existing school resources do not teach students how to overcome these barriers to helpseeking nor focus on improving helpseeking skills for substance use and mental health.

MAKINGtheLINK aims to increase staff and students' confidence and intention to facilitate professional helpseeking for young people and reduce barriers to professional helpseeking for cannabis and mental health problems.

MAKINGtheLINK was successfully piloted in a Victorian high school.

Available: <http://ncpic.org.au/workforce/teachers/making-the-link/>

Social marketing

Social marketing in Australia involves the communication of a health promotional message to a high proportion of young people through mass media strategies. This intervention is typically a universal prevention strategy in Australia. Evidence suggests that media campaigns are most effective when coupled with other interventions such as school based health education or community mobilisation (Loxley et al., 2004). These interventions are generally delivered in Australia through television or radio, with both media appearing to be equally as effective, but radio significantly less expensive, whilst less attention has been paid to internet and adolescent focused magazines as options for information and message dissemination (Loxley et al., 2004).

Lessons learned in Australia from previous media campaigns, such as the Australian Drug Offensive Campaign Against Alcohol Abuse, launched in 1988, have been that high adolescent awareness of campaigns can be associated with attitudinal changes, but this does not always translate to actual or intended behaviour changes relating to substance use (Loxley et al., 2004). During the last stage of this campaign in 1992-1993, the proportion of 15-17 year old adolescents consuming alcoholic beverages significantly reduced, and pursuant to this, when no adolescent campaign activity was undertaken, an increase in drinking occurred among this adolescent group (Loxley et al., 2004). Evidently, media campaigns can be an effective universal prevention strategy, but as the success of this campaign was not uniform across time, it indicated that perhaps some elements of the campaign were more effective than others.

Media campaigns such as the 2000 National Alcohol Campaign and the 1997 'Drink drunk the difference is U' campaign seemed to support the notion that this intervention strategy provides high population coverage, and that media dissemination of key messages about drinking behaviour and its consequences can have a significant impact on attitudinal change, without providing detectable changes in actual alcohol related behaviour (Loxley et al., 2004). Campaigns targeting adolescent illicit substance use such as the 1993-1995 Speed catches up with you campaign and the 2000 National Illicit Drugs Campaign have similar outcomes: public awareness of illicit substance use campaigns appears to be high, although slightly lower than that for campaigns targeting alcohol use; and promising attitudinal changes have been demonstrated, but these campaigns have not provided measures of illicit substance use related behavioural change (Loxley et al., 2004).

Community mobilisation

Community mobilisation involves campaigns to initiate or strengthen an explicit strategy of coordinated community action aiming to advance healthy adolescent development and prevent harmful substance use (Loxley et al., 2004). The cost of implementing this intervention is considerable, but it provides the opportunity to target a range of risk and protective factors influencing adolescent substance use. These programmes have been implemented in Australia since the mid 1990s, with the aim of better coordinating community responses addressing illicit substance use. Common features of these programmes included efforts to bring together community members for consultations and discussions to establish agreed local strategies, often resulting in positive service development and, in some cases, better resource coordination. Unfortunately evaluations of these programmes in Australia have not yet been conducted (Loxley et al., 2004).

Health service reorientation

Health service reorientation involves the use of a variety of strategies to improve the accessibility and effectiveness of existing health services relevant to adolescents. A prevention focus and utilisation of effective methods of engagement within existing health services seem fundamental to prevention of substance use.

Treatment

Between 2007-2008, contact with a substance use treatment agency was made 17,618 times by Australian adolescents and children aged 10-19 years, accounting for 11% of all treatment episodes. Those presenting for treatment were more likely to be male, with between 11-12% of presentations among males and females being for adolescents aged 10-19 years. Further, a significant proportion of this group was Indigenous Australians (17%). Four tenths of these treatment episodes were for cannabis (43%), 34% for alcohol, 8% for ATS, 3% for heroin, and 2% for Ecstasy (AIHW, 2008).

The most utilized treatment service by adolescents was support and case management only (30%), followed by information and education only (25%), counseling (9%), rehabilitation (8%), assessment only (7%) and withdrawal management (7%) (AIHW, 2008). Australian adolescents in drug-treatment programmes are not just younger versions of Australian adults in drug-treatment: their issues and needs differ qualitatively and quantitatively, and adolescent specific services are best able to meet those needs (Spooner, Mattick, & Howard 1996).

Residential programmes, community-based programmes, psychosocial programmes, compulsory/ coerced programmes, OST, and harm reduction programmes are the treatment programmes operating in Australia with the most substantial evidence base for effectiveness. Examples of Australian treatment programmes can be referred to in the introductory section of this review.

In Australia available harm reduction programmes include Needle and Syringe Programmes (NSP), Supervised Injecting Facilities (SIF), non-injecting routes of administration, outreach, HIV education and counselling, brief interventions and overdose prevention initiatives. The focus of harm reduction is on the harms of injecting, not on injecting per se. The most strongly identified harm reduction programme is the NSP, and there is significant evidence that this programme is both effective and cost-efficient (Ritter and Cameron, 2005). The prevalence of injecting drug use in Australia is 1%, and among this subgroup of substance users the prevalence of HIV is just under 2% (Mathers et al, 2008).

Introduction

Cambodia has a population of 14 million people and an estimated annual population growth rate of 2% (IPPF, 2007). Approximately one-third of the population in Cambodia live below the poverty line. Compared with surrounding South East Asian countries, substance use is a relatively new phenomenon in Cambodia.

The total population of Cambodia is 14,562,000 with a growth rate of 1.643. The 10 – 19 year population is 3,589,000 (United Nations Population Division, 2009).

Cambodia lies near the major drug trafficking routes for South East Asia and shares borders with Thailand, Lao PDR and Vietnam as well as a coastline with the Gulf of Thailand to the southwest. Drug transiting and trafficking of heroin and ATS is present. It is also a nation recovering from the trauma inflicted by the years of Khmer Rouge rule. Many leaders, professionals and intellectuals were murdered during that time, and of those who were not, most were directed to become farmers. Re-building the rule of law, health, education and welfare provision takes time, and during such time social dislocation, confusion and behavioural difficulties can emerge; significant factors impacting on adolescent development and substance use.

Methamphetamine appears to be entering Cambodia via the Mekong River, both to supply the domestic market and in transit to Thai markets via land routes in northwest Cambodia (NACD, 2008). It has been seized throughout the country, but mostly in Phnom Penh and the provinces of Banteay Meanchey and Stung Treng, which lie along the major domestic trafficking routes. Internally, clandestine methamphetamine laboratories appear to be present in the Koh Kong province and other locations along the Thai - Cambodian border, as well as possibly in Battambang, Siem Reap, Kandal and Phnom Penh (Humeniuk et al., 2004). The international dimension of the methamphetamine trade has been highlighted through seizures made at Cambodian international airports, and arrests of foreign nationals in relation to these seizures (NACD, 2008).

Cambodia also appears to be a transit point for heroin bound for international markets (NACD, 2008). Local heroin markets are concentrated in Phnom Penh, with limited reports of heroin use in Siem Reap and Poipet (NACD, 2008).

Cannabis use may also may on the increase after several years of decline, as indicated by increased seizures (NACD, 2008). Seizures made outside of Cambodia indicate that cultivation for the world market is occurring in Cambodia (Humeniuk et al., 2004).

Demographics

The legal status of drugs and enforcement

Historically, the legal system in Cambodia has not functioned optimally, with reported favouring those with money or political/security influence (UNODC, 2002). A lack of knowledge of the drug control law and, in particular, how to apply the law has been reported among those working in the legal system (UNODC, 2002). Additionally, the police and judiciary have reportedly struggled to collaborate, leading to a lack of mutual understanding and the failure of drug-related cases to be processed according to the law (UNODC, 2002).

Cambodia is a partner in various Greater Mekong and broader regional initiatives to tackle drug use, many of these are funded via various UN agencies, UNODC in particular, and international donors. Some address young people and ATS use, guidelines for community treatment, and developing greater cooperation in tackling drug trafficking and enhancing cross-border cooperation in law enforcement.

The National Drug Strategy

Cambodia's first 5-year National Plan on Drug Control, coordinated by the National Authority for Combating Drugs (NACD), is being implemented. Provincial drug control committees, although formally in existence for several years, will be fully operationalized to support the National Plan on Drug Control, although their implementation has been limited due to budgetary constraints and a lack of technical expertise. The NACD will focus on the labour sector as a priority group.

Determinants of substance use

While numerous factors appear to be associated with substance use among adolescents in Cambodia. Poverty is associated with substance use, middle-class youth also appear to be at risk of substance use due to disposable incomes creating opportunity to purchase drugs. Boredom and peer group pressure appear to be factors associated with substance use among adolescents, along with exposure to drugs through congregation in public places or entertainment areas such as pool halls. Emulation of substance taking behaviours among the socially advantaged may then occur by socially disadvantaged groups. Decreased cost and increased availability of illicit substances in urban areas also allows socially disadvantaged groups easier access to drugs than in the past (Humeniuk et al., 2004).

Other economic factors including un- and under-employment may also contribute to increased risk of ATS use. Lack of opportunity and disillusionment among street youth and families who migrate to gain employment and financial success may be vulnerable to risk of uptake of substance use (Humeniuk et al., 2004). In addition, dispensation of ATS by some employers to increase worker productivity may be occurring. Improvement in work performance is seen as a

positive attribute, which may be a motivating factor for use of methamphetamine (Humeniuk et al., 2004).

Special populations

At risk populations are heavily populated by adolescents, and include street youth, middle class youth who use illicit substances, commercial sex workers, manual labourers and migrants (Humeniuk et al., 2004).

Limitations in scope of available information

Systematic information on substance use patterns does not appear to be available in Cambodia. Due to the lack of surveillance data, the true nature and extent of substance use is unknown.

Substance use patterns

A recent data from the UNODC indicates that there has been a considerable rise in substance use in Cambodia in the past few years (UNODC, 2009). Previously, a 1995 World Bank situational assessment concluded that substance use was not a significant problem in Cambodia.

General population

The official Government figure for the number of illicit drug users in Cambodia for 2007 was 5,797, however the government acknowledges that this figure likely underestimates the extent of illicit substance use in Cambodia (NACD, 2008). The figure is better understood to represent the number of problem drug users in contact with local authorities (NACD, 2008). Expert consensus has estimated that there are approximately 46,300 illicit drug users in Cambodia for the year 2007 (NACD, 2008).

Illicit drug use in Cambodia is strongly linked with methamphetamine tablets, often called *yaba or yama*, youth populations and cross border migration. Methamphetamine users accounted for 81% of all illicit drug users, and over 80% of illicit drug users were below 25 years of age. Inhalant use and heroin use accounted for 4% each of illicit substance users, and 12% used other substances (NACD, 2008).

The provinces with the highest illicit drug use rates bordered Thailand and Lao PDR (NACD, 2008). In all 24 provinces ATS was the predominant drug with the exception of Kratie, where 91% of all drug abusers used inhalants. In addition to Kratie, seven provinces reported inhalant use, with a large proportion reported in Siem Reap (25% of all illicit substance users). Only Banteay Meanchey Province and Phnom Penh Municipality reported heroin use, and only Phnom Penh Municipality reported a proportion of heroin users exceeding 10% (NACD, 2008). Furthermore, 85% of all heroin use in the country occurred in Phnom Penh (NACD, 2008).

Farmers and labourers comprised more than a third of illicit drug users (38%), followed by street children (17%), students (15%), and the unemployed (14%) (NACD, 2008). Nationally, 7% of illicit drug users were females, which remained unchanged from 2006. Kampong Thom and Pailin had the largest proportions of female drug users (39% and 37% respectively), the proportions of which both increased by over 10% over the past year (NACD, 2008).

Special populations

Heroin use has remained limited in Cambodia, and remained an illicit drug associated with high-risk and vulnerable populations in Phnom Penh, including youth, MSM, and ESWs (NACD, 2008).

Adolescent substance use

Youth appear to account for the overwhelming share of known illicit substance users in Cambodia (about 80%), with the majority of illicit drug users in the 18-25 age bracket (60%) and the 10-17 age bracket (17%) (NACD, 2008).

In 2007, the NGO Mith Samlanh surveyed 2,089 street children and youth, with 1,041 (50%) reporting recent use of at least one illicit drug (58% of boys and 30% of girls). Illicit drug use among street children increased by 5% compared to the past year, with the greatest increase occurring among street children in the 12-18 year age brackets (an increase of 12%). Illicit substance use was highest among adolescent street children aged 16-18 years, with approximately two thirds of this age group reporting use, compared to one third of adolescent street children aged 12-15 years. Survey results indicated that 83% of children living alone on the streets recently used an illicit drug, while only half this amount of street children that were classified as street working children or children in street families had used illicit substances (44% and 43%, respectively). Illicit drug use among children living alone on the streets declined by over 12% over the past year, while illicit drug use among the other two groups of street children rose by over 10% compared in this time (NACD, 2008).

Adolescent cannabis use

The Mith Samlanh survey of street children reported that 5% of respondents had used cannabis in 2007, comprising a substantial decrease from 10% of respondents the year before (NACD, 2008).

Adolescent ATS use

Adolescent groups that are most at risk of ATS use in Cambodia include students, street youth, street working youth, commercial sex workers and labourers (Humeniuk et al., 2004).

In 2000, the Mith Samlanh survey of street children reported that 12% of street children were using methamphetamine, but by 2007, 87% of street children who used illicit drugs reported the use of methamphetamine (which includes yama and crystal methamphetamine). Yama remained the preferred drug with 57% of

street children reporting its use, although this declined by about 5% from the previous year. Yama use was highest among children living with their families, followed closely by children living alone on the streets. The most popular route of administration was smoking, at 99%. The first reports of yama injecting were recorded in 2007, with 2% reporting the practice (9 persons). Use of crystal methamphetamine was reported by 43% of respondents, an increase of about 8% over the previous year. Smoking was the most popular route of administration (99%), followed by injecting (2%). Injection of the drug doubled over the past year, although numbers remained small (8 persons in 2007). Crystal meth was most popular among street working children, followed closely by children living alone on the streets. Approximately one fifth of 12-15 year old adolescent street children reported poly drug use; by ages 16-18 this figure rises to half of all substance users in this population (NACD, 2008).

Adolescent opioid use

The Mith Samlanh survey of street children reported that 13% of respondents had used heroin in 2007, with 77% of heroin users reporting injecting heroin and 31% reporting smoking it. Heroin was often smoked with cannabis, or injected with sedatives. Youth living alone on the streets were the most likely to use heroin. Heroin injection has been associated with high-risk and vulnerable populations in Phnom Penh, particularly street children (5% reporting injection), MSM (5%), and male youth (3 % reporting lifetime prevalence) (NACD, 2008).

Adolescent inhalant use

A survey of street children in 2000 found that over 75% interviewed were using inhalants (Humeniuk et al., 2004). Since this time, it appears that the preferred drug among street children has shifted to methamphetamine (NACD, 2008). The Mith Samlanh survey of street children reported in 2007 that 41% of respondents had used inhalants. Children living with their families were far more likely to use inhalants than children living alone on the streets or street working children (NACD, 2008).

Adolescent injecting drug use

Assessments of street children in Phnom Penh have shown that injecting drug use by children and adolescents living on the street rose dramatically from around 1% in 2000 to 10% in 2004. Between January and December 2004 in Phnom Penh, 10 of 32 (31%) drug injecting street youth who were voluntarily counselled and tested were found to be HIV positive (UNAIDS, 2006). In 2007 government run treatment centres reported a 34% treatment admission rate for use of crystal methamphetamine, again underscoring the increasing prevalence of ATS use (NACD, 2008).

Prevention

From the limited information available, it appears that prevention activities comprise of warnings against drug use, school activities, mass campaigns, and targeted interventions such as those provided by Mith Samlanh.

Treatment

Treatment overview

Limited substance use treatment is available through the government, non-government and international agencies, however there appears to be a lack of skilled trained people to provide a targeted response to substance use in Cambodia (Humeniuk et al., 2004). The health and social sector had not appeared to have placed a high priority on this issue, however there were some signs of change (Humeniuk et al., 2004). A total of 1719 illicit drug users were admitted to government-run treatment centres in 2007, an increase of 58% clients over one year. The rise in admissions was seen in all Provinces and facilities, with the exception of Battambang, which experienced a significant decline compared to the past year. Most clients entered treatment for ATS use (81%), followed by inhalants (10%) and heroin (2%). A number of patients were also admitted for the use of alcohol (6%). Approximately 85% of admissions were assessed to be drug dependent. More than two-thirds of admissions were between the ages of 16-25, and most were either students or unemployed (NACD, 2008).

Residential programmes

The Cambodian government runs a Youth Rehabilitation Centre in Phnom Penh under the Ministry of Social Affairs, Labour, Vocational Training and Youth Rehabilitation (Mo SALVY), which also serves as a youth detention centre. As of 2004, the management of withdrawal is undertaken through symptomatic care only as the centre does not have facilities for detoxification or rehabilitation, and qualified staff were not present (Humeniuk et al., 2004).

Privately operated drug treatment services are available for those with enough income. However, these centers are neither formally licensed by nor are they under any obligation to report their activities to the Government. They are for the most part utilized by the affluent class in Cambodia. Most of these private facilities are believed to be operated by doctors interested in generating additional income from private practice (NACD, 2008).

Community-based programmes

There appears to be some debate in Cambodia about whether the focus for treatment and rehabilitation should be community-based or institution-based. The Cambodian government appears to be focused on institutionalization, however it may be more progressive to offer both community based and residential programmes, particularly due to the evidence for effectiveness of community based treatments (Humeniuk et al., 2004).

A few NGOs provide limited counseling, detoxification and rehabilitation services. In 2007, Mith Samlanh provided voluntary symptomatic detoxification to substance dependent youth at its Green House Centre, with a total of 124 young people (16 IDUs) attending, and 94 (including 13 IDUs) successfully

completing their treatment. Seventy-three recovering youth completed the social rehabilitation programme at the Mith Samlanh centre and received vocational skills training. Twenty-four youth completed their vocation skills training and were assisted with employment and integration into society with ongoing support. Eleven youth remained at the rehabilitation centre at the end of the year. Mith Samlanh also operates Camp Sabay-Sabay, located in Kampong Speu, but data was not available on number of admissions in 2007. Drug Addict Relief Association of Cambodia (DARAC) is located near Phnom Penh, and has been operating for three years. It receives about 80 patients per year. The Drug Abuse Treatment Association opened 09 April 2008 with seven clients, including one female (NACD, 2008).

Compulsory/ coerced programmes

There is an expanding network of compulsory treatment facilities in Cambodia, which are similar to detention centres with limited, if any, treatment provided. Military-style camps operated by the Government are the primary providers of treatment services for illicit drug users in Cambodia. Most of the facilities provide limited educational and health services, and focus almost exclusively on exercise and discipline, and are operated by civilian or military police. A few others are operated by the Ministry of Social Affairs (MoSAVY) or Provincial administrations. With the exception of Orkas Knhom Center, most do not have doctors, mental health workers, or nurses on staff; a few have police/military police medical assistants who do not function in a clinical capacity. In most cases no assessment of participants' physical or mental health is undertaken on admission to the centre. None of the centres provide formalized medical detoxification services, and no medication is used to stabilize residents in acute distress (from withdrawals). The focus of the facilities is on rehabilitation of illicit drug users. Drug dependence rehabilitation generally involves activities such as exercise, vocational training such as haircutting and farming, counseling on morals/religion, and group counseling sessions (NACD, 2008).

In 2007, 1719 substance users were treated in these centres, a rise of 58% from the previous year. Approximately 1% of all persons treated were female, 22% were aged 16-18 years, 7% 13-15 years, and 2% 12 years old or younger. Students (21%) and street children (9%) comprised nearly one third of admissions. The majority of clients are referred to these services by their families, usually in collaboration with local authorities; of all those admitted, only 2% do so voluntarily. NGOs or public health care providers did not refer any cases to these centres in 2007, save for a few individuals initially referred by Korsang early in the year. Figures suggested that there may not be enough treatment services in some areas, with 28% of admissions coming from a province outside the one their treatment center was located in. The majority of admissions at the military police-run centres in Battambang and Banteay Meanchey came from other provinces (75% and 88%, respectively), with a significant portion of these out-of-province admissions coming from Phnom Penh (NACD, 2008).

OST

NACD and its Drug and HIV/AIDS Working Group (DHA) are currently finalizing the methadone programme policy guidelines. Methadone procurement is being planned, and programme training needs are currently being assessed and the data management system is being developed (NACD, 2008).

Harm reduction programmes

Harm reduction programmes are limited, but do exist (Humenuik et al., 2004). The non-government sector provides some interventions for illicit substance use in Phnom Penh and the northwest of the country through Mith Samlanh (Friends), Goutte d'Eau, Korsang, Family Health International and KHANA (Humenuik et al., 2004; NACD, 2008). Mith Samlanh particularly targets street children in Phnom Penh and provides prevention, harm reduction, peer education and general support to substance using street children through programmes targeting both substance use and HIV/AIDS (Humenuik et al., 2004). Goutte d'Eau operates in Poipet and provides similar services to Mith Samlanh, as does Korsang, including a drop-in centre, counselling service, shelter and basic medical treatment (Humenuik et al., 2004). Mith Samlanh and Korsang are implementing Needle Syringe Programmes in Phnom Penh. Family Health International (FHI) is heavily involved in HIV prevention and care, and is playing a leading role in developing a drug rehabilitation “center of excellence” in Orkas Knhom Center and, together with other key stakeholders, will roll out these promising practices to other drug rehabilitation centers across Cambodia. KHANA is implementing a programme to reduce drug-related HIV risk by raising community awareness about illicit drug use, providing substance use education and promoting correct and consistent condom use and responsible sexual choices (NACD, 2008).

Services are also gradually increasing for some other marginalized groups, including female children, adolescents and youth. The Women’s Network for Unity promotes the rights of sex workers, while some government hospitals provide them with check-ups for sexually transmitted infections (IPPF, 2007).

In 2007, Needle Syringe Programme (NSP) data providers Mith Samlanh and Korsang reported 52,750 services contacts with illicit substance users through their outreach and fixed site activities. Of total service contacts 3,516 (7%) were new contacts and 8,962 (17%) were female. Slightly less than half of total NSP service contacts were IDU (46%), with the percentage increasing towards the end of the year. Of total IDU contacts, 1,209 (5%) were new contacts, and 3,617 (15%) were female (NACD, 2008). Interestingly, the percentage of total IDU service contacts with female IDUs increased over 2007, which was consistent with increased reporting of heroin use towards the end of the year.

Mith Samlanh and Korsang dispensed a total of 67,721 needle/syringes, and a total of 49,743 needle/syringes were returned or collected by NSP implementing agencies, a return rate of 87% (needle/syringes returned and collected divided by needle/syringes dispensed) (NACD, 2008). On average 3 needle/syringes

were dispensed at each contact with an IDU. Additionally, Mith Samlanh and Korsang dispensed a total of 124,445 condoms through the NSP.

A total of 17,069 referrals were made by the NSP programme, including 2,337 referrals (14%) made to other drug user services, 3,764 (22%) to medical practitioner/hospital services, 1,805 (11%) to sexual health services, 5,770 (34%) to VCCT services, 411 (3%) to HIV or OI treatment and monitoring, 117 (1%) to other health services, and the remaining 2,865 (17%) to other non-health services. The number of referrals made per quarter increased in the last quarter of 2007, which corresponded to the increasing numbers of heroin users accessing services towards the end of the year (NACD, 2008).

Introduction

Drug abuse in China started when the British colonists started bringing Indian Opium into the country in exchange for silk, tea and cash in 1644 – 1911 A.D. The "Golden Triangle" (comprising of Myanmar, Laos and Thailand) and the "Golden Crescent" (comprising of Afghanistan, Iran and Pakistan) are the two major opium-producing regions in Asia and both regions are geographically close to China. Majority of heroin and opium that comes into the country comes from either Myanmar into Yunnan or from Viet Nam into Guangxi. From these provinces it is further trafficked to other parts of the country. Amphetamine-type stimulants (ATS) and other chemically related synthetic drugs including amphetamine, methamphetamine and Ecstasy have been in use since the late 90s. It is also common for people to use poly-substances for example combine Heroin with benzodiazepines. (Qian et al., 2006; UNESCAP, 2009)

Demographics

The total population of China is 1,337,411,000 with a growth rate of 0.629. The 10 – 19 year population is 213,430,000 (United Nations Population Division, 2009).

Drug use has increased tremendously in China since the 1990s with drugs coming into China from the neighbouring drug producing countries. This has caused serious social problems especially as the youth of the country is the most affected population. There were about 148,000 drug users in China in 1991 according to the official figures. This number increased to 520,000 in 1995, and 1.16 million in 2006. Around 800,000 of these drug users (70%) are below the age of 35. Along with the decreasing age in the use of drugs in the country, the number of female drug users is also increasing. The ratio between male and female drug users has gone down from 4 – 10 males to every female to about 3 males to every female drug user. Furthermore, according to a survey by the National Drug Control Committee, female drug users make up 28% of admissions in drug use centres in 14 provinces. (YIDA, 2009; UNESCAP, 2009)

The legal status of drugs and enforcement

Drug trafficking and abuse are illegal in China and offenders may be sentenced to prison if smuggling 10 grams or more of heroin and could receive the death penalty for smuggling more than 50 gram of heroin. According to the 1990 "Regulations on Prohibition Against Narcotics" three levels of penalty can be applied to drug users (Qian et al., 2006):

- First-time offenders may be fined and/or allowed to go to voluntary detoxification centres, where they receive 10-day methadone treatment managed by the Ministry of Public Health.

- If drug users who have gone through a voluntary detoxification programme are caught again using drugs, they are sent to compulsory rehabilitation centres administered by the Ministry of Public Security for 6 to 12 months.
- Drug users who relapse users after going through rehabilitation centres are sent to re-education-through-labour-centres administered by the Justice Department for two to three years.

The Regulations on Compulsory detoxification centre by the State Council (1995) stipulate that the time for drug abstinence shall be two to three months normally and not longer than one year at most and the time for indoctrination through labour shall not exceed three years. The public security organ shall be in charge of compulsory detoxification centre have the right to put drug takers under pharmacotherapy, psychotherapy, legal education, moral education, and physical training for a certain period. (YIDA, 2003)

Legal issues related to young drug users:

- According to “Law of the People's Republic of China on the Protection of Minors” cigarette and alcohol are forbidden to be sold to the minors. The operators should set up the sign “not to sell cigarette and alcohol” in a prominent position. As to the persons whose age are hard to ascertain, they should be requested to show their ID cards. (YIDA, 2009)
- “The Law of the Prevention of Juveniles’ Crimes of the People’s Republic of China” defines juveniles’ use or injection of drugs as “serious unhealthy behaviors”. For these juveniles, their parents/guardians must cooperate with their schools to discipline them strictly or send them to reformatory schools for correction and education. (YIDA, 2009)
- Juvenile offenders are put on trial in juvenile courts; however, there is no court specifically responsible for drug-related young offenders. Additionally, the juvenile courts only take charge of criminal cases committed by young peoples who are between 15 and 18 years (UNESCAP, 2009).

The National Drug Strategy

The Chinese government has adopted pragmatic policies and measures to target both the cause and affect of the drug abuse problem. The measures which target the cause of the problem include continuously cracking down on drug smuggling activities and discouraging new users through anti-drug education campaigns. Additionally, the government actively seeks to collaborate with neighbouring countries to prevent drug smuggling across borders. (Qian et al., 2006)

China adopted the first anti-drug law of the country in 2008 to help curb drug related crimes and reduce the growing number of users, especially under-aged addicts. Now, the police are authorized, if necessary, to search people and their luggage for illegal drugs at key public places, such as train stations, long-distance bus stations and border crossings. According to the law, drug addicts might be allowed to recover in their communities in a limited period of three

years, rather than being confined to rehabilitation centers as the current drug control regulation requires. A bill regarding the law states that "drug-addicted minors under 16, pregnant women and those who breast-feed babies less than one year old are not appropriate for compulsive isolated drug rehabilitation." (China Daily, 2007)

Determinants of substance use

Much of the following has a bias toward Yunnan province in southern China which borders Myanmar, Lao PDR and Viet Nam, as there was more accessible data from that province. Thus, Yunnan data may not be regarded as typical of other provinces, or the People's Republic of China in general.

Experimentation, peer pressure, and relaxation are commonly cited reasons for initiation of drugs. Initially, drugs are taken primarily through sniffing/snorting or smoking cigarettes mixed with drugs. Most young drug abusers have low education background and weak psychological quality. Numbers of drug abusers are fast increasing in primary and high school which is a major problem in the country. Ninety percent of the recovered drug abusers re-start taking drugs. In order to get drugs, the males rely on theft and females rely on prostitution, and some of them even engage in smuggling, guns sale or chain crimes. (Yunnan Institute, 2009; Qian et al., 2006)

Determinants of Alcohol Use(YIDA, 2003)

- **Increasing age:**

Drinking behaviours tend to grow with increasing age:

- Zhang Hechuan et al.'s 1998 epidemiological survey of adolescents' smoking and drinking in Yunnan Province shows that drinking behaviours tend to grow with the increase of grades, from Grade One of junior middle schools to Grade three of senior middle schools.
- A survey in Wuhan City, Hubei Province in 2000 shows that the higher grades the students are in, the higher drinking rates they have.

- **Drinking with family members:**

Adolescents mainly drink with family members in the occasion of festivals and holidays and drinking with friends for celebrations also takes up a considerable proportion.

- The study in middle school students, carried out in 1999 in Shanxi Province, indicates that 73.6% people drink to celebrate exciting things.
- A survey in Wuhan shows that 53.5% students drink alcohol when they are happy or when they attend banquets.
- A survey of middle school students' drinking situation in Yunnan Province in 2002 shows that 48.4% students drink with family members at the occasions of Spring Festival and other festivals. 25.5% students drink with friends at friends' parties or to celebrate birthdays.

- **Frequency of drinking:**

The rate of frequent drinking in adolescents is quite low.

- A survey conducted in Beijing shows that the rate of frequent drinking in middle school students is 2.3%.
- Another survey of middle school students' drinking situation in 1998 in Yunnan Province shows that the drinking frequency of only 3.4% middle school students is $\geq 1\%$.

- **Parents' education:**

An increase of parents' education background is related to gradual decrease in students' drinking rates.

- Researches in Jiangsu Province show that the drinking rates of the students whose parents are farmers and thus have low education background are usually high whereas the drinking rates of the students whose parents are doctors are low.
- The researches in Wuhan, Hubei Province indicate that the lower education background the parents have, the higher drinking rates the students have.

- **Gender differences:**

The results of many surveys show that there is a significant difference between the drinking rates of different sexes.

- The survey results of middle school students' drinking situation in 2000 in Wuhan City, Hubei Province indicate that boy students have a drinking rate of 31.3%, while girl students have a rate of 10.9%.

Determinants of Drug Use (YIDA, 2003)

- **Personal risk factors**

Various researches reveal that the personal risk factors which lead to the use of heroin and other narcotics. These risk factors include:

- Curiosity, sensation seeking, searching for stimulation, impulsiveness
- Low self-esteem, emotional problems, depression
- Immature defence mechanisms (such as projection and denial)
- Antisocial behaviours, such as fighting, truanting and stealing
- Poor educational performance and school-dropout
- Interaction with drug users at a young age
- Lack of awareness of drugs and their effects
- Multiple sexual partners

- **Family risk factors**

Family risk variables include:

- Lack of communication between parents and children, lack of mutual agreements and lack of mutual help and support
- Too much care and overindulgence
- Parents' indifferent attitude toward children
- Another family member's drug dependence
- Intense relationship between parents
- Parent's divorce
- Scolding/physical-punishment-centred family attempts at limit setting
- Child abuse

- **Social risk factors**

Social risk factors include:

- Drug accessibility.
- Social and economic transformation for the country
- Unemployment
- Insufficient/inadequate drug prevention

- **Protective factors**

Research also highlights some protective factors. These include:

- Being selective in making friends
- Avoiding contact with drug users
- Receiving good family education
- Strong will power

Special populations

Risk behaviours other than injecting drugs and sharing needles include unprotected commercial sex, this puts drug users and ultimately non drug users at high risk of STIs including HIV. It is believed that many female drug users sell sex for drugs, and limited published research also provides supporting evidence for this. (Qian et al., 2006)

Substance use patterns

General population

The main drug of choice in China remains heroin, but the use of ATS and MDMA has become popular in city nightclubs in recent years. In the 1980s, farmers living in rural bordering areas in Yunnan and Guangxi provinces constituted a large fraction of drug use, however, since the early 1990s, more and more urban residents use illicit drugs. (Qian et al., 2006)

Special populations

The majority of drug abusers are young people with a low education level and limited job skills, although a small proportion of urban users regard using drugs as an indicator of "high social class." (Qian et al., 2006). The abuse scale of traditional drugs like opium, heroin, etc, tends to be stable, while the abusers of other drugs, such as ecstasy, ketamine, etc, rises rapidly in entertainment venues, in some of which cannabis, ice drug tablets, Dolantin, Caffeine Sodium Benzoate are commonly abused (YIDA, 2009).

Adolescent substance use

In 2002 74% drug users were aged 17–35 years according to NNCC data. According to another source, 60% of all the registered drug users in China are below 25 years.

- A study was conducted by Luo Chunyan et al. in Shanghai in 2002 on a target population of 9246 students of 64 common middle schools and 39 vocation high schools. This study found that among the middle school

students 45.7% of the students had ever drunk, 17.8% of them drank recently, 4.4% of the students admitted they used drug and 20.5% of those taking drugs were dependent on them drug they used (Yunnan Institute, 2009).

- A survey conducted in 15104 students between 11-24 years in Henan province showed that 11.1% of the students have had a drink and 0.6% of the students had used drug in last month (Yunnan Institute, 2009).
- Another survey showed that the condition of adolescent use substance is much severe in Fushan city in Guangdong province. This survey covered 3844 students from 16 middle schools and colleges. It showed that 64.8% of the students have had a drink, 13.3% of the students had the experience of drunkenness, 1.0% of the students ever used heroin, 4.5% of the students had used sedative-hypnotic drug (Yunnan Institute, 2009).
- In 2003 WHO conducted the Global school-based student health survey in 4 cities among students aged 13 - 15 years. The survey showed variable results in the 4 cities where it was conducted namely: Beijing, Hangzhou, Wuhan and Wulumqi. The survey covered both alcohol and drugs. The survey shows that 13 – 18% of 13 – 15 year olds have at least one drink containing alcohol one or more days drug in the past month, 8.4 – 13.5% of surveyed had so much alcohol that they were really drunk one or more times during their life, 4.2 – 6.3% students had a hang-over, felt sick, got into trouble with family or friends, missed school, or got into fights, as a result of drinking alcohol one or more times during their life and 0.9 – 1.3% had used drugs one or more times during their life. The percentage of boys who take alcohol and drugs is much more than females across all cities.

Table 10: Alcohol and drug use in adolescents in China

Adapted from World Health Organization (2003). Global school-based student health survey (GSHS) - Country fact sheets: China.

Results for students aged 13-15 years	Beijing	Hangzhou	Wuhan	Wulumqi
Percentage of students who had at least one drink containing alcohol on one or more days during the past 30 days	13.0 (M=17.7, F=8.6)	18.1 (M=20.9, F=3.5)	14.8 (M=19.7, F=9.7)	13.7 (M=16.3, F=11.0)
Percentage of students who drank so much alcohol that they were really drunk one or more times during their life	8.4 (M=11.9, F=4.8)	8.8 (M=12.3, F=5.2)	13.5 (M=18.5, F=8.0)	12.7 (M=16.0, F=9.0)
Percentage of students who had a hang-over, felt sick, got into trouble with family or friends, missed school, or got into fights, as a result of drinking alcohol one or more times during their life	4.8 (M=6.7, F=2.9)	4.2 (M=4.6, F=3.8)	6.3 (M=8.1, F=4.1)	6.2 (M=7.7, F=4.6)
Percentage of students who used drugs one or more times during their life	0.9 (M=1.2, F=0.7)	2.5 (M=3.5, F=1.2)	2.3 (M=3.8, F=0.7)	1.3 (M=1.5, F=1.1)

Adolescent alcohol use

A survey completed in 2001 in five areas in China suggests that the prevalence of alcohol dependence in adolescent (15-20years) in survey areas is 0.18%, which is much lower than that of other people (older than 21years). The survey

areas include Anhui, Jilin, Sichuan, Shandong and Hunan province (YIDA, 2009).

Adolescent ATS use

The high availability of “ice” has created quite a large number of “ice” consumers in China. A survey conducted among 74 “ice” abusers in Menglian and Menghai Counties showed that the age group of the abusers is between 16 and 48 years. The reasons for abusing “ice” were to stay alert, increase physical strength and resist physical exhaustion; almost a quarter used it out of curiosity; some used it to detoxify alcohol and 1 person used it as an alternative for heroin. Some of the reasons to continue and maintain “ice” dosages included feeling refreshed, increase physical strength and resist physical exhaustion, physical pleasure, fear of withdrawal symptoms, dispelling worries and for recreational purposes. Under the effect of “ice”, 21.6% became violent and offensive, attacking, beating and wounding people and animals, 32.4% felt sexual drives, 5.4% had violent sexual behaviours and 23.0% thought of committing homicide and suicide. (YIDA, 2003)

Adolescent opioid use

Most of the heroin abusers in China are 20 - 30 years old, taking up more than 80% of the abusers. The average age of female drug users is lower than that of male drug users. A survey in Yunnan Province shows that the heroin users who are younger than 25 years old take up 62.4% of all the heroin users and 80.43% of the female drug users are younger than 25 years old. The results of an investigation of adolescent drug users in Xining indicate that the percentage of 15-17-year-old drug users is increasing continually. According to the statistic of relevant departments of Sichuan Province, 5.8% of all the drug users registered in 1992 were below 25 years old and 0.17% of all the drug users were below 17 years old. (YIDA, 2009)

The results of many surveys show that most of the heroin abusers are males but female abusers tend to increase. The use of heroin and other narcotics by students is very rare, and the purpose of using them is for treating diseases. One survey on the use of mental active drugs in the students of grade two of senior middle schools in Beijing City reveals that only 0.2% of the students used heroin their lives. One survey on drug abuse, which was undertaken by Luo Jian et al. from YIDA in 2002 in 4020 middle school students in Yunnan Province, shows that 0.5% of the students used heroin/opium. Two surveys on middle school students' use of mental active drugs in Beijing City and Wuhan City reveals that the percentages of students who ever used heroin/opium are 0.03% and 0% respectively.

The main method of use is changing from smoking to injection. The percentage of vein injection is increasing continually with 60% of drug users injecting the drug.

Adolescent injecting drug use

National behavioral surveillance data showed that the median prevalence of IDU among drug users increased from 35% in April 1995 to 49% in April 2004, and median prevalence of needle sharing among IDUs also increased from 26% to

43% during this period (Qian et al., 2006). Most drug users who younger than 20 years think that sharing syringes is very common (UNESCAP, 2009)

Other drugs:

A. Hypnotics and sedatives: (YIDA, 2003)

Use of hypnotic and sedative exists among adolescents and a very small number of adolescents even abuse such drugs. The results of a survey on college students' in Kunming City, showed that 19.79% of male college students have once used diazepam, and 20% female college students have once tried diazepam. The survey of the use of benzodiazepine in some middle school students and primary school students indicates that 3.04% of the students have once tried BZD, and more boys used the medicine than girls. A survey of the use of BZD in adolescents of Chongqing City shows that 15.92% of the adolescents have once used BZD and 1.57% of them had been addicted to it. The survey of the use of diazepam in middle school students of Yunnan Province shows that 3% students used diazepam and 1.6% has been addicted to the medicine.

Adolescents use sedatives and hypnotics mainly for treatment purpose, that is, they use the medicines to overcome sleeping difficulties. Many surveys show that adolescents' sedative and hypnotic come mainly from hospitals or from doctors' prescriptions. It is important to note that a small part of sedative and hypnotic is bought by the adolescents themselves from drug stores. Though it is clearly stipulated by the country that sedative and hypnotic belong to prescriptive medicines, some drug stores are still selling these drugs without obeying the rules.

Prevention

Nationwide three-level prevention project (YIDA, 2003):

1. Primary prevention

General public's drug and HIV/AIDS awareness is increased through the public media. For example, on "May 26" International Drug Prohibition Day and "December 1" World AIDS Day, the governments of all places organize large-scale publicity exercises, using public media to publicize drug prohibition and legal knowledge. The State Drug Prohibition Office and the offices in different places have set up telephone hot lines for drug prohibition consultation. Some laws, including the Law of the People's Republic of China on Protection of Juveniles and Law of the People's Republic of China on Preventing Juveniles from Committing Crime, have stipulations protecting teenagers from being harmed by drugs.

2. Secondary prevention - intervention project on reducing drug demand in schools

There are only some projects on drug prevention education being carried out in schools. From 1993 to 1998, the Yunnan Research Institute on Prevention and Cure of Drug Dependence and the Yunnan Reproductive Health Research Society took the lead in carrying out the "Drug Demand Reduction and AIDS Prevention in Schools Project" in several middle schools and universities of Kunming City. From 1995 to 1998, the British Children Salvation Society

cooperated with Yunnan Provincial Education Commission to carry out the “AIDS Prevention Peer Education Project in Middle Schools” in some middle schools of Yunnan Province. The project workers carried out health education on drug prevention by adopting participatory training and methods of peer education, making positive efforts in in-school prevention and intervention projects. In 1997, supported by the State Natural Science Fund, the China Preventive Medicine Scientific Research Institute carried out a “Study on Community Intervention for Drug Prevention/AIDS awareness” in Longchuan County of Yunnan Province targeting students.

3. Level-three prevention - intervention projects for community drug prevention

From 1991 to 2000, Yunnan carried out several international and domestic projects based in the community to reduce drug demand and prevent HIV/AIDS. These projects succeeded in combining the international community intervention methods with the reality of China’s situation, achieving remarkable results and accumulating rich experience in project operation. See Wu et al., 2002.

Universal prevention

Chinese mass media have increased anti-drug education to the general population. (Qian et al., 2006)

School based programmes

In 1997, the State Education Commission and the State Drug Prohibition Commission issued notification introducing drug prohibition education into national quality education and moral education teaching programme for pupils and middle school students. Universities, middle schools, and primary schools are asked to carry out all forms of drug prohibition education. In 1999, the drug prohibition departments at county level and higher levels established drug prevention education contact offices in 24,223 primary and middle schools in accordance with the requirements of the State Drug Prohibition Commission. These offices directly guide the schools in drug prohibition education. (YIDA, 2003)

Targeted prevention programmes

Chinese youth organizations’ participation in anti-drug movement (YIDA, 2009)

Chinese youth organizations always give importance to anti-drug work. In recent years, the local youth federations of Yunnan province are actively participating the building of ‘drug-free community’ with the theme of ‘Youth, Keep Away from Drugs’.

1. Strengthening the education on drug prohibition

Youth organizations of Yunnan use all means of publicity to explain the dangers of drug and establish education mechanisms. During the ‘Anti-drug Month’, the youth organizations visit schools, communities, villages, towns and streets to

remind the youth to keep away from drug by exhibitions, performances, knowledge competitions and ceremonies.

2. Anti-drug volunteer teams

Youth federations recruit volunteers from the civil society who put great vigor into the anti-drug battle. Teachers, doctors, lawyers, media and social workers are also recruited as volunteers to carry out 'one-helps-one' or 'several-help-one' programmes. The programme aims to help the youth involved in drug abuse to realize the harm of drug. Since 2005, Yunnan province has spread its volunteer recruitment and training work all over the province. Guangxi Autonomous Regional Youth Federation has been cooperating with Lang Son and Cao Bang provinces, Vietnam to carry out joint anti-drug volunteer movement in the border. Hubei Provincial Youth Federation has also carried out a 'Youth Volunteer on the Move on Drug Prevention' Project.

3. Improving the quality of anti-drug publicity and education

In order to attract youth to quit or stay away from drugs various creative education activities are arranged. Shanghai Municipal Youth Federation has conducted an activity of choosing the 'Campus Anti-drug Ambassador', which expands the influence of anti-drug movement. All-China Youth Federation, National Anti-drug Leading Group together with China Youth Online have opened 'Youth Away from Drug' website in 2003, and established an 'Online Museum on Youth Anti-drug Education'. The website has attracted a lot of youth due to its rich content and interactive mode.

Treatment (YIDA, 2003)

At present, there are two kinds of therapies for drug users in China, namely compulsory and voluntary detoxification. While the latter is mainly carried out with medical consideration, the former is a mandatory approach in accordance with the law. Currently, compulsory detoxification and drug abstention by re-education through labour are the main treatment modes in China.

Drug treatment takes place in four settings:

- Compulsory detoxification centres operated by public security
- Mandatory re-education through labour centres operated by the Justice Department
- Voluntary medical drug treatment institutions which are part of the health system
- Households of a few drug users who have managed to complete their drug treatment in the community

Voluntary detoxification (YIDA, 2003)

Voluntary detoxification is offered in both mandatory as well as medical drug abstention institutions. However, the two types of institutions are quite different in management and therapy.

The compulsory detoxification centres institutions establish a voluntary detoxification centre section to receive drug abusers seeking drug abstention of

their own accord or those sent by their family members. The voluntary detoxification here is done under closed management. The medicine detoxification and adequate therapy are given in accordance with the concrete situation. The therapy term is two to three months.

Voluntary detoxification centre therapy can be carried out in the form of an ambulatory therapy or through hospitalization. Ambulatory therapy focuses on medicated detoxification combined with counselling and psychological guidance. The therapy lasts about seven days and the reported relapse rate is as about 30 per cent to 40 per cent. Hospitalization is done in closed management, and mainly offered to drug abusers between 20 and 35 years. The number of drug abusers under 20 accounts for less than 10% of all patients.

Hospital-based detoxification is provided in a closed ward and mainly offered to drug users between 20 and 35 years old. Less than 10 per cent of the clients are younger than 20. The process takes 10 to 20 days and the relapse rate is reported as about 20 per cent. However, there are few systematic individual therapies provided, little assessment and a lack of postdetoxification care and rehabilitation. Also, there are few interventions for young drug users and their families.

Compulsory detoxification (YIDA, 2003)

The majority of the clients of compulsory detoxification centres are heroin users. None of the centres where interviews were carried out had received or treated amphetamine users. This was not the case in 2008 where a significant minority of new admissions were young ATS users. Drug users under the age of 20 accounted for 10 to 30 per cent of the total number of clients treated.

The re-education through labour centres receive drug users who have finished compulsory detoxification. Juveniles under 16 are not subjected to this treatment. The compulsory detoxification centres adopt a uniform management throughout the country. Most centres do not offer special treatment for juvenile or teenage clients. Young drug users who are at the same time guilty of serious violations of a law are subject to judicial procedure after compulsory drug treatment. This form of treatment has been critiqued for some time (see WHO/WPRO, 2009), and the high relapse rates and human rights violations identified.

Different management modalities in compulsory detoxification centers:

- **Medical management:** The drug abstinence institutions are staffed with a number of doctors and nurses that have received certain professional training.
- **Detoxification therapy:** The often-used drug abstinence methods include decreasing therapy with substitution of opium-kind or non-opium-kind medicines, traditional Chinese medical therapy, “cold-turkey” therapy appropriate to diagnosis on admission.
- **Recovery therapy:** The recovery therapy is done in unified group management modes and there is no room for individual therapy schemes. Clients are required to adapt to a military-like management routine which includes: a strict daily schedule, drill and physical exercise,

housekeeping, courses on culture, the legal system, current events, morality, physical health, self-examination activities (such as acknowledging drug harm and writing personal experiences), various recreational and sports activities, adequate productive labour, as well as 'heart-to-heart' talks.

A group interview with teenage drug users in a treatment centre showed that about 50 percent received education on drug use. It also revealed that present drug education is far from being in depth or effective. Treatment centres report to have carried out harm reduction activities and to have developed prevention education communities, but according to teenage focus group members these hardly exist. In addition, relapse rates are quite high.

OST

Opioid Substitution Therapy is becoming widely available in the country; however, it is not currently available for people under 21 years of age.

Harm reduction programmes

Among the ongoing harm reduction programmes currently provided in China are:

- Information, Education and Counselling activities
- Peer education – outreach and within compulsory treatment centres
- Needle exchange projects
- Promotion of condom use
- HIV counselling and testing

Introduction

Despite continued efforts to eradicate the cultivation of opium poppies in the country, it remains the third-largest producer of opium in the world. In 2004, cultivation was confirmed in 11 out of the 17 provinces in the Lao PDR. Cannabis is also thought to be widely produced. Lao PDR is a transit country for heroin and ATS as well as equipment and precursor chemicals used in ATS manufacturing. The majority of these commodities enter from Myanmar and China. While local production of heroin or ATS has not been found in recent years, a growing domestic market and increased regional law enforcement control preventing drugs from entering the country suggest that local production is likely if not already occurring (Devaney et al., 2006).

Demographics

In 2008 the population of Lao People's Democratic Republic was 6,205,000 and the 10 - 19 year population was 1,548,000 with a population growth rate of 1.8 (United Nations Population Division, 2009).

The legal status of drugs and enforcement

Lao PDR is a party to the 1961 United Nations Single Convention, the 1971 UN Convention on Psychotropic Substances and the 1988 UN Convention against Illicit Trafficking in Narcotics. Lao PDR has not ratified the 1972 protocol. Drug law enforcement is coordinated by the Counter-Narcotics Office. The office consists of five sections: Investigation, Suppression, Intelligence, Foreign Affairs and Administration. Article 135 of the Criminal Code on Drug Trafficking and Possession was introduced into the Penal Code in 1990 by the National Party Congress. Article 135 prohibited the manufacture and traffic of all narcotics, except opium. The production and possession of opium were made illegal when Article 135 was amended in 1996. (Devaney et al., 2006) Lao PDR is also a signatory to ACCORD 'drug-free ASEAN by 2015' strategy.

The National Drug Strategy

It is based on the implementation of three strategies: prevention and rehabilitation of drug users, alternative options for illicit crop farmers and enforcement of adequate laws to fight against drug traffickers. The Ministry of Health and the Police Department are jointly responsible for drug treatment and detoxification. Drug treatment in Lao PDR is abstinence-focused and is now predominantly set up to deal with young ATS users.

Determinants of substance use

The following risk and protective factors have been highlighted from research conducted by UNODC, and PADETC (an NGO) on a number of sample groups which included: construction workers, *tuk tuk* drivers, secondary school students in rural and urban areas, dormitory students (university and college level), garment workers and drug rehabilitation centre clients.(UNESCAP, 2009)

Risk factors

Disharmonious family background

Emotional maltreatment and physical abuse were found to be important factors affecting drug use later in life. An important relationship was seen between the use of ATS and physical abuse. The use of some drugs (ATS, opium) appears to be closely linked to sexual abuse during childhood.

Delinquency, family interaction patterns and family drug use

A small number of secondary school students (2 to 8 %) were found to be involved in illegal activities at least once in the last twelve months. A significant correlation was observed between stealing and the use of ATS, opium or cannabis. Those who had been arrested by the police were at the same time likely to be among those who used ATS or cannabis. ATS or cannabis use was also correlated to financial penalties during the previous 12 months. A significant relationship could be observed between divorced parents and the child's cannabis use. Also, students whose parents were not living together were more prone to use ATS. The research confirmed family drug use as a major risk factor leading children to drug use. Opium/ATS use among secondary school students was strongly correlated with parents' drug use. Students also tended to use ATS or opium if their grandparents or their uncle/aunt had been using drugs.

Peer pressure

Peer pressure also played an important role in pushing friends to use drugs, as did curiosity.

Curiosity and style

Curiosity was considered as a main factor pushing young people to take drugs. A second one was the belief that drugs were fashionable and perceived as a 'tonic'.

Protective factors

Participants in the research thought that people who did not use drugs knew about the negative consequences of drug use. The main sources of information were from the media, such as from television or the radio. They stressed that the main factors discouraging drug use were:

- strong awareness of drug use and associated problems,
- a dislike of 'addictive' substances,
- preferring to spend leisure activities with their family at home,
- not wanting to waste money
- having been told by their friends about drug use and its consequences

Family bond was also considered to be a major factor determining the use of drugs in the youth. They identified that non-drug users:

- Had parents who sacrificed their time to listen to their children's voice and to their opinions, were aware of how to rear them and motivate them to play sports, are were aware of where their children went at night and encouraged them not to frequent drug user gangs;
- Listened to their parents' advice.

Substance use patterns

Opium remained the most commonly used drug in the Lao People's Democratic Republic (PDR) until recently. Patterns and numbers of opium use have remained similar over the past few years, with typical consumers being male farmers living in the north and northwest provinces of the Lao PDR. Recent evidence points toward a rapid increase in the use of amphetamine-type substances (ATS) in the country (Devaney et al., 2006).

General population

According to WHO (2008) 3% of the 18+ population surveyed in the country were binge drinkers in 2003.

Special young populations

PADETC participated in substantial countrywide research on youth drug use in 2003. PADETC investigated current patterns of drug use among youth, tried to identify risk and protective factors influencing young peoples' attitudes towards drug use, and assessed existing drug prevention and treatment services for youth. The research was mainly based upon quantitative surveys and focus group discussions among seven sample groups: construction workers, *tuk tuk* drivers, secondary school students in rural and urban areas, dormitory students (university and college level), garment workers and drug rehabilitation centre clients. In addition, existing documents on drug use in Lao PDR were analysed and a few in-depth interviews undertaken. Data collection was carried out in the provinces of Luang Namtha, Luang Prabang, Vientiane Municipality and Savannakhet (UNESCAP, 2009).

Tuk tuk drivers

At the time of the study (2003) there were 1,050 *tuk tuk* drivers in Vientiane Municipality which are defined as a high-risk group. Focus groups were conducted with *tuk tuk* drivers aged 18-25.

Findings

The research showed that *ya baa* was the most popular or 'fashionable' drug of use among *tuk tuk* drivers when compared to other groups. Participants thought that people started using this drug by the age of 17. Participants said that if people used too much of any kind of drug, they would hallucinate - similar to symptoms of a psychotic disorder - their memory would decrease, and they would feel dreamy. They added that if people used glue or heroin, they would be

dreaming, if they used cannabis, their ability to do things would be increased. Most of them remarked that the accessibility of drugs had become more difficult than before, because the police seemed to be strictly enforcing the law and so the supply was reduced. They estimated that 30-40 % of young people were using drugs. They thought that students were the most vulnerable groups to drug use due to their curiosity. Many people were curious to consume a drug and to discover the effects.

Garment workers

Among the roughly 2,000 enterprises in Vientiane Municipality at the time of the study (2003) there were over 50 garment factories employing about 23,000 garment workers, most of them female. Based on anecdotal evidence it was believed that the use of *ya baa* was widespread among garment workers in order to work longer and harder at night shifts. Focus group discussions were conducted in 2003 and participants were chosen randomly among female garment workers aged 16 to 28 years in Vientiane Municipality. In addition, 60 garment workers responded to a structured questionnaire which included male and female garment workers.

Findings

Quantitative results: Only 10% of survey participants were between 15 and 19 year of age. ATS or *ya baa* were the most well known drugs followed by cannabis, opium and heroin. Only 8 respondents admitted that they had tried at least one type of drugs in their life. In all eight cases the drug tried was ATS with one respondent having also tried cannabis. Five respondents had used ATS during the previous twelve months, four were currently using it with a frequency of either once, or maximum twice, per week. Smoking seemed to be the most fashionable route of drug administration. Most of the five current drug users reported that they used drugs in order to feel relaxed. Curiosity and to forget misery and sadness were also mentioned as reasons for drug use. All drug users usually took drugs in places where there were few people. Most of them regarded present drug accessibility as difficult. Some female garment workers were also involved in the exchange of sex for money or drugs.

Qualitative results: The three focus group discussions with female garment workers revealed that the preferred drug among garment workers were stimulants like ATS, including *ya baa* and nicotine. Participants stressed that current law enforcement limited drug availability considerably. While some focus group members thought that most people started to use drugs at the age of 15 others reported that some people were as young as 5 to 6 when they first used drugs.

Construction workers

Construction workers are considered as a high-risk group for drug use. Six focus group discussions were conducted in Vientiane Municipality and in Savannakhet with construction workers who were selected randomly based on a list of construction workers provided by the chiefs of the selected villages.

Findings

Construction workers mostly consumed beer, home-brew or locally produced alcohol and cigarettes. They remarked that the age of first drug use was between 13 and 18 and they felt that students preferred *ya baa*. They estimated that 30-50 % of young people were using drugs and young people who liked to have fun at night were considered the most at risk. They thought that accessibility to drugs depended on the money available to people.

Regarding the statement “What do people experience when they use *yabaa*, glue and other drugs?” participants did not specify effects for each substance. They raised general positive (such as pleasant feelings of drunkenness, leading to speaking more convincingly and greater self-confidence) and negative effects (such as paleness, thinness and looking older than one’s real age). Getting drugs was harder when compared to previously. However, it seemed that drugs were available even in markets due to an increasing number of drug sellers. They estimated that 10-20 % of construction workers were using drugs. They mentioned that the upper secondary school population was the most vulnerable group because it was an age of curiosity, they expected to discover social events by wandering with a gang of friends.

Adolescent substance use

In 1999 and 2000, the Lao PDR Government, with assistance from the UNODC, surveyed 11,049 students at 43 educational institutions in three urban areas: Vientiane, Savannakhet and Luang Prabang. The students ranged from 12 to 21 years of age and were attending secondary school, vocational school or university. The studies showed that the most commonly used drugs were prescription drugs, cannabis, ATS and solvents. Lifetime prevalence of all drugs ranged from 17.5% for students in Vientiane, to 7.6% in Savannakhet and 5.5% in Luang Prabang. Lifetime prevalence of ATS was less but showed a similar decrease across the sites. Monthly use of any drug ranged from 7.2% in Vientiane to 2.5% in Luang Prabang. The average age of initiation into ATS use was about 16 years. (Devaney et al., 2006)

Table 11: Drug use in different cities

	Vientiane	Savannakhet	Luang Prabang
No. of students	2631	3534	4884
Lifetime prevalence (all drugs)	17.5%	7.6%	5.5%
Lifetime prevalence (ATS)	4.8%	2.1%	1.1
Durrent abuse (all drugs)	7.2%	2.9%	2.5%
Mean age of first ATS absue	15.6	15.4	16.5

Research conducted in 2003 included two groups: secondary school students and university students (UNESCAP, 2009). Findings of both groups are given separately here:

Secondary school students

The survey on drug use among secondary school students was undertaken in 2003 in four provinces: Vientiane Municipality with its school population; the transit hub Savannakhet; the tourist centre of Luang Prabang; and Luang Namtha, one of the main places of opium-poppy cultivation. Of roughly 14,500 students in these four provinces, a total number of 1,006 students (oral most 8% of the total school population of these provinces) filled out a structured questionnaire. Survey participants were aged between 12 and 20, both male (55%) and female (45%) and living in urban as well as rural areas.

Findings

Large majority of respondents (94%) lived with their family or relatives. For 6% students, spending their money on drugs were their first priority. Whereas, for 17.5% students buying drugs was their second priority. Six out of ten secondary school students (59.7 %) reported that they knew of at least one drug. The most familiar substances were cannabis, opium and ATS. However, knowledge about different categories of drugs varied considerably in the four provinces, with ATS being the most well known drug in Vientiane and Luang Prabang. Knowledge about drugs in general appeared to be much lower in these two survey sites than in the other provinces, as in Savannakhet where 235 out of 270 students (87%) claimed to know ATS. Cannabis and opium were known by 36% and 20% of respondents respectively. In the poppy growing province of Luang Namtha students had by far the most knowledge about drugs. Also, students from Luang Namtha province appeared more open on the issue than other groups and were very enthusiastic to respond to the questions. Cannabis and opium were very well known followed by ATS.

In general, secondary school students got information on drugs through the media or from their teachers. Friends and acquaintances also played a role as drug information providers. The majority of students underestimated the grave consequences drug use could have. For all drug types, except ATS, more than half of the students did not know whether the respective substance was addictive or not. A significant proportion of respondents believed that certain types of drugs were not addictive at all (17% for opium, 16% for heroin, 15% for morphine, 18% for cannabis, 1% for cocaine). Almost every fourth student thought that ATS did not cause dependence. Knowledge about harmful consequences of drug injection was limited. While some respondents (18%) knew that injecting drug use could lead to HIV infection only 34 out of 1,006 students were aware of the risk of hepatitis B or hepatitis C transmission through drug injection.

Drug use patterns: Study results indicated that 14% of the Lao secondary students surveyed had tried some form of drug at some point during their lifetime. However, lifetime drug use differ tremendously between the four provinces. Lifetime prevalence was as high as 24.1% in Luang Namtha, 20% in Savannakhet, 9% in Luang Prabang and 1.9% in Vientiane Municipality. This is

a considerable decline compared to the UNODC study mentioned earlier which shows lifetime drug use at 17.5%.

The present data show that quite a few students used ATS (lifetime prevalence 9%) and cannabis (lifetime prevalence 6.2%) at some point in their lives. Opium was predominant in Luang Namtha. The groups most at risk for drug use were those aged between 15 to 19 years. Males reported a higher percentage of drug use at some point during their lifetime (19%) compared to females (6.5%). Current prevalence of any drug use for the total sample was 8.2 % with a peak current drug use of 19.3% in Luang Namtha province.

In Luang Namtha province 32 out of 52 current drug users used cannabis and 7 students used opium, a drug that none of the respondents in the three other regions reported to have used. Savannakhet province had some current ATS use (7.8 %). Current drug use in Vientiane Municipality was limited to 2 students (0.8 %) both using ATS. Those who used several substances at the same time tended to combine ATS and cannabis, ATS and opium or opium and cannabis. Inhaling and smoking were the predominant routes of drug administration. Some students took drugs orally, while only one respondent reported to inject substances. The main reasons for drug use were curiosity, peer pressure (“imitating friends”) and the search for expected benefits such as “relaxed feeling” or “happy feeling”.

Table 12: Lifetime prevalence trend in various cities

	Vientiane		Savannakhet		Luang Prabang	
	1999	2003	1999	2003	1999	2003
Lifetime prevalence (all drugs)	17.5%	1.9%	7.6%	20%	5.5%	9%

Students of National University, Vientiane

A survey that comprised both a qualitative as well as a quantitative part was conducted in the National University of Laos which has about 8000 students. Three focus group discussions were held among male students aged 17 to 26 years selected randomly. (UNESCAP, 2009)

Findings

Quantitative findings

Comprising 60 students in total, most students (58%) were between 20 and 24 years of age, 30% were between 17 and 19 and 12 % were aged 25 or 26. Only one student out of 60 said that he used money primarily to buy drugs, two students considered drugs to be the second most important thing and four students rated drugs as their third priority. Thirty six students (60%) knew at least one drug, with ATS being known by almost half (29) of the respondents. Opium was known by 20 students and cannabis by 17. Sedatives were mentioned by 8 and heroin by 7 respondents. Male students were more knowledgeable about drugs than their female peers. The large majority (88 %)

reported getting information about drugs from the media. A fourth of the students mentioned friends as a source of information, 20% of students reported receiving drug information from teachers.

Drug use patterns: Thirteen out of the total sample of 60 students had tried some form of drugs at some point in their lifetime. While lifetime prevalence of drug use in all students was 22%, male students at 31 % were more prone than female students at 11%. The most important drugs of initiation were opium, ATS and nicotine as well as alcohol, glue and sedatives. Poly-drug use was common among those who used drugs. Most lifetime drug users had experience in using combinations of three to five substances. However, there was no considerable poly-drug use among the six current drug users. Current drug use prevalence was 10% with the majority of current drug users being between 17 to 19 years of age. Current drug use prevalence for the 17 to 19 year age group was 6.7%.

ATS was the most commonly used drug. Six students (10%) had used it at least once in their life and four persons were currently using ATS. Opium and cannabis had been used at least once by five respondents, but no one had used either of these drugs within the previous 12 days. Eight students said that they had used substances which fall under the category of sedatives (excepting barbiturates) and one student was currently using sedatives other than barbiturates. Preferred routes of drug administration for the entire sample were smoking and inhaling. The main reasons given for drug use by the 13 lifetime drug users were curiosity followed by expected benefits through an energetic boost (staying up late, being strong), increased sexual desire, happiness and peer imitation. Relaxation and avoiding misery and sadness were also mentioned. Six lifetime drug users reported the frequency of their drug use. One subject used drugs more than four times a day while the other five students reported to use substances once a week. All eight subjects who commented on drug availability said that it was easy or very easy to get drugs. Most of them bought drugs from acquaintances. More than every third student (21 subjects) had at least one friend who used drugs. Five students reported to have more than five drug using friends. As among the drug users in the sample, smoking and inhaling was reported as the preferred route of administration among the respondents' drug using friends. Three students reported to have friends who took drugs parenterally (by injection).

Qualitative findings

According to participants, university students used ATS (*ya baa*), alcohol and nicotine as well as cannabis (*ganja*) and opium. The accessibility to drugs was reported to be easy because drug users usually had friends who could provide drugs. However, some of the students mentioned that access to drugs could be limited by current law enforcement efforts. Focus group participants indicated that between 30 and 40% of students used drugs. Participants were aware that injecting drug use was very risky and associated with HIV/AIDS, hepatitis B and C and STIs. Participants believed that if people had used drugs, they needed to get support from mass organizations and their families, in collaboration with the concerned organization. If they chose self-help, they decreased use gradually until they felt that they could stay abstinent from the drug.

Adolescent alcohol use

According to the Young Women's (aged 15 – 24 years) Sexual Behaviour Study conducted in the Vientiane Capital most young women drink beer or other alcoholic beverages at certain times, such as when they have a day off. The garment factory workers and general women who were part of the study said that drinking beer decreases their inhibitions, makes them less interested in what other people are thinking, stimulates their sexual desires and may also lead them to forget to use a condom. While students said that drinking alcohol increased their sexual desire, they also mentioned various stimulant drugs, such as Ecstasy (known as the "love drug"). Women reported that some couples took drugs to increase their sexual desire, have longer lasting and more varied sex. (Burnet Institute, 2008)

Service women said that some clients gave them drugs because they wanted the service women to have harsh and sadistic sex. However, the participants were aware that taking drugs and drinking beer is not good for their health. Most said that the next day after drinking beer, they were very tired, could not do anything and could only sleep. They also said that, as a result of drinking too much beer, they got a big tummy, became overweight, listless, had headaches, became weak, lost their appetite, and had yellow skin. (Burnet Institute, 2008)

Adolescent cannabis use

Cannabis is used in the Lao PDR; however, the extent of its use is unclear. (Devaney et al., 2006)

Adolescent ATS use

Young people tend to prefer ATS over opium. Studies involving school-based youth reported an average age of initiation for ATS use being about 16 years of age. Other studies suggest that ATS is also commonly consumed by sex workers, clients at discos, and by unemployed youth in Vientiane.

A recent qualitative study showed a normalisation of ATS use among some populations. The study suggested that it was common for young people to take *yaba* and that it was readily available. *Yaba* was commonly used at bars and nightclubs to facilitate social gatherings and to increase energy levels. Participants in the study acknowledged negative impacts of *yaba* use including problems with families, lifestyle issues and law enforcement. (Devaney et al., 2006)

Adolescent opioid use

Heroin use remains limited in Lao PDR. Reports from treatment centres show that patients are rarely admitted for heroin use. Some heroin use has been reported in border regions with Myanmar and Thailand and among some groups of refugees. Anecdotal accounts of heroin injection in some social groups in Vientiane have also been reported. However, the most common route of administration for both opium and ATS is smoking. (Devaney et al., 2006)

Adolescent injecting drug use

While injecting drug use is thought to be limited in the Lao PDR, there are increasing reports of blackwater opium and heroin injection, and evidence that some groups are injecting ATS. (Devaney et al., 2006)

Prevention

Burnet Institute received funding from AusAID to undertake a programme of research that aimed to measure the responses to the health and development impacts of ATS use through strengthening research capacities of academic institutions and NGOs that are working with young ATS users in the region and Lao is one of the focus countries of the project. Uniform data collection tools were used to build up a regional data set that examines the youth amphetamine drug using culture and its implications for individual and public health. From this data, interventions that focus on reduction of risks associated with ATS use for the individual, implemented through peer networks and community engagement, were encouraged. (Burnet Institute, 2009a).

Community drug education is available in the country. (Devaney et al., 2006)

Life skills and drug education has been introduced to all primary schools and school based drug education is available in the country. (Devaney et al., 2006)

Treatment

Drug treatment in Lao PDR is provided through government facilities such as hospitals, detoxification centres and re-education camps as well as through private clinics. Most treatment entrants are coerced into treatment either as a result of family pressure or because of law enforcement intervention. Typical detoxification involves the opium user being administered tincture of opium and herbal medicine over a 15–42 day period at an inpatient detoxification centre. Models of ATS treatment currently follow opium-style residential detoxification based on 4–6 week stays. Psychosis related to ATS is treated by one of the two psychiatrists in Lao PDR at the Mahosot Hospital's mental health unit. Most of these treatments require payment by the drug user, family or community, thus access is limited.

Detoxification is available in the country. Detoxification of an opium user usually involves administration of tincture of opium and herbal medicine over a 15–42 day period at an in-patient detoxification centre. The treatment is available in both compulsory and voluntary and self-referral modes, and again requires payment. Most treatment entrants 'cold turkey'.

Treatment statistics from the Mental Health Unit of Mahosot Hospital, show that substance use rose considerably after 1998. In 1998 there were only 11 cases of cannabis and solvent use. In 2002 there were 150 cases. From 1999 to 2002, among those seeking treatment for substance use, the most popular drug was methamphetamine (or *ya baa*). 'Chasing the dragon' was the most common route of administration among those patients seeking treatment at this unit. Curiosity, peer influence and family problems were the main causes of drug use. The age group 15 to 25 years was the most vulnerable group.

Methadone is only used for detoxification and not for substitution and is costly.

Very few harm reduction services exist for drug users in the Lao PDR and there are no needle and syringe programmes in the country (Devaney et al., 2006).

Compulsory Treatment:

In Lao PDR the main compulsory treatment centre – Somsanga near Vientiane – houses predominantly young ATS users who are sent there by their families, their community or police.

Somsanga, is a residential facility that accommodates mostly involuntary residents, and has a youthful population. It accommodates about 700, most of whom have used ATS. There have been some changes to Somsanga in the past 5 years: better documentation; a renovated section to opened for women (separate from male building, and well renovated); some under 17year olds sleeping in a separate area; an ex-resident staff member; greater openness of key staff; an apparently positive and easy relationship of Director with residents; increased activity in vocational area (handicrafts and computing), and a new toilet/shower block being built in main section. Yet, conditions in main section remain sub-standard, food availability not sufficient to provide adequate nutrition for all, mentally ill residents not being provided with adequate treatment, much of programme being 'mass lectures' (e.g. 600 or so in one room being read to by staff member), remaining concerns about safety and meeting minimum standards, and limited availability of vocational activity. There are plans to renovate the male section in a similar manner to that for female residents.

Lengths of stay remain about 4-6 months for first admission, around 12 months for second, and up to two years for third. Forty-two days in hospital on admission for those who can afford to pay for it, three months in main section, then to vocational section if cooperative. There were 805 residents during the visit, with 63 being female, and 18 IDUs. While admissions from Vientiane appear to have reduced considerably, numbers have increased overall due to an influx from other provinces.

Burnett Institute (an international NGO) workers have been attending and providing HIV, STI and drug prevention activities, and final year law students from the National University are providing residents with legal information.

Approximately monthly visits from VYC staff accompanied by a counsellor or other 'network' person from each target village to meet with and support those from their respective villages occur, but greater regularity is needed.

Plans for the short term: process 'lessons learned' with staff about counselling; give certificates for those in computer course; start English course; increase handicraft work; hold a sports camp; involve Somsanga staff with VYC – ie in counselling training – especially advanced and Training of Trainers.

It appears that the age group is reducing (63% of recent releases 24 years or younger). In a study of 67 persons released from Somsanga, 22 were aged 20-24, 10 aged 18-19, 8 aged 16-17, 1 was 14 and one 12. The numbers of under 18 year-olds in Somsanga is of concern, and reinforces the need for a separate facility for those under 18 and suitable alternatives to Somsanga placement within the community for those for whom remaining with their families could be counterproductive.

UNESCAP, 2009 – from field notes

A cautionary tale:

During one field visit, there were at least three former peer educators from VYC, including one who was involved in counselling, now in 'treatment' in Somsanga – all had relapsed, and all said it was due to mixing with old negative peers. The need for careful and effective support for ex-drug using Peer Educators is crucial.

UNESCAP, 2009

Introduction

Although not a major producer of illicit drugs, Malaysia is in close geographical proximity to other drug producing nations, including the Golden Triangle (Myanmar, Lao PDR and Thailand) and other Southeast Asian countries that produce heroin, amphetamine type substances (ATS) and other drugs (Reid et al., 2007). Illicit drug use is considered a major social threat in Malaysia, and accordingly the government has implemented various strategies to tackle drug use, with the current goal of achieving a drug-free society by 2015 (Sattler, 2004).

Demographics

The total population of Malaysia is 27,014,000 with a growth rate of 1.705. The 10 – 19 year population is 5,277,000 (United Nations Population Division, 2009). Malaysia is a culturally diverse country, with the population being 45% Malay, 38% Chinese, 11% Indians and 7% Indigenous groups (Chawarski et al., 2006).

The legal status of drugs and enforcement

Until recently Malaysian drug policy emphasized public safety and criminal penalties over prevention and treatment. The National Anti-Drug Agency (NADA) is authorized to address drug problems under the National Anti-Drug Agency Act 2004 (Act 638). The AADK act authorizes agency officials to intervene with prevention, treatment, rehabilitation, enforcement, investigation, and special preventive measures activities. Other relevant acts include the: Dangerous Drug Act 1952 (Act 234), Drug Dependant Act (Treatment and Rehabilitation) 1983 (Act 283), Dangerous Drug Act (Special Preventive Measures) 1985 (Act 316), and the Dangerous Drug Act (Forfeiture Property) 1988 (Act 340) (Shobri, 2009).

Drug testing is carried out by government authorities through urine testing among individuals stopped at regular road blocks, nightspots, schools and factories. Individuals testing positive are registered in the government registry of drug users and detained for enforced treatment or criminal prosecution. Other severe penalties include capital punishment for drug trafficking (Mazlan et al., 2006).

The National Drug Strategy

The Malaysian government initially responded to growing rates of substance use with a plan to eradicate use by tough actions based on the notion that substance use was an illegal activity that threatened the fabric of society. The Malaysian government charged itself with the task of reducing the supply of drugs through tough laws and strict enforcement measures, also assuming a monopoly role in

the area of demand reduction by controlling all treatment programmes and conducting most of the prevention programmes in the country (Vicknasingam and Narayanan, 2008).

A National Drug Policy was originally launched in 1983 and revised in 1996 with a series of new strategies and priority areas of prevention, enforcement, treatment and rehabilitation and regional and international cooperation (Reid et al., 2004). The key component of drug policy was zero tolerance and these policies were largely the responsibility of the law makers. Striving to eliminate the supply and demand of illicit drugs and create a drug free Malaysia by 2015, the result was an acceleration of draconian punishments towards drug users.

Essentially, both the primary and general prevention was based on demand reduction principles through education and promoting positive religious, moral and cultural attitudes and values to reject drugs and encourage healthier lifestyles. The enforcement strategy comprises interdiction (reduce the supply of drugs reaching the community), legislation (impose severe penalties with regards to trafficking and possession of drugs) and lastly intelligence (focused on controlling syndicates and individuals involved in drug smuggling). Treatment and rehabilitation was focused on eliminating drug dependency and preventing relapse among drug users. Lastly, international cooperation was regarded as a strategy to control and prevent drug use and trafficking and strengthen international control and prevention (Navaratnam et al. 2002).

Determinants of substance use

Heroin was introduced to Malaysia in the late 1960s, with an epidemic of heroin dependence following shortly afterwards, and continuing until present. Of late, methamphetamine has also emerged as an increasingly used illicit substance (Chawarski et al., 2006).

Malaysia has a long established fishing industry, and fishing boats are involved in drug trafficking as a result of their easy access to various sea ports (National Narcotics Agency 2001; UNODC 2003, U.S. State Department 2004). Heroin was commonly smuggled through Bukit Kayu Hitam and Padang Besar, while cannabis was often smuggled using the Kelantan – Thai borders around Rantau Panjang or Golok (Najib 2004). Clandestine laboratory activities were mainly confined to heroin conversion, but more recently amphetamine processing laboratories have been uncovered in a number of states, including Semenyih, Selangor (Andres 2004).

In 2008, arrests linked to ATS tablets increased dramatically from the previous year (779,593 arrests in 2007) to 292,394,076 arrests in 2008. Cannabis seizures almost halved in 2008 from the previous year (1,483 kg vs 875 kg), whereas opiate seizures increased slightly (251kg vs 311 kg) (Shobri, 2009).

The transition period from non-injecting to injecting drugs appears to have reduced to around three to four years from a previous seven years. Reasons for this shift include: peer pressure; increased price rise of heroin; decrease in

heroin purity; a shortage in supply of heroin on the market; and a stronger desire to acquire a greater feeling of euphoria (Reid et al., 2004).

The trend in Kuala Lumpur to 'chase' and mix heroin with methamphetamine, appears to have emerged from reduced quality of heroin. High risk behavior of widespread needle and syringe sharing as well as other injecting paraphernalia appears to be present, new injecting equipment may be difficult to obtain, and substance use remains underground due to frequent anti-narcotics raids (Reid et al., 2004).

Limitations in scope of available information

Few studies examining drug taking practices in Malaysia have been conducted, and no recent studies have been identified (Reid et al., 2004).

Substance use patterns

General population

The current literature suggests increasing numbers of people are using illicit drugs (Mohamed, 2004). In 2002, the National Drug Agency estimated there were more than 350,000 drug users in the country (Huang & Hussein, 2004) with the media citing government figures of between 400,000 and 500,000 (Chua, 2004). Between January and March 2004, 1931 new drug users were being registered each month (Chua, 2004).

In 2006 the National Drug Agency reported that as many as 22,811 drug users had been detected (apprehended by the police), 12,430 of whom were repeat offenders, showing a 34% reduction in the number of cases detected compared to the previous year (34,813 cases detected in 2005). Some regions recorded higher volumes of detected substance users: Pulau Pinang recorded the highest number of detected cases at 5,127, followed by Kedah (2,634), Perak (2,545), Kelantan (2,243) and Johor (2,329). All states recorded a drop in number of detected cases except for Kedah, Sarawak and WP Labuan. Among those detected in 2006, 98% were male, 69% were Malay, and 71 percent were youth aged between 25-29 years old. The total number of drug users recorded by the ADK for the period of 1988 - 2006 is 300,241 people, approximately 1.1% of Malaysia's population (UNICEF, 2007). In 2007, 14,489 addicts were detected, a marked decrease from previous years. This continuing decrease in the number of substance users detected could be a reflection of the widening impact of harm reduction programmes (Vicknasingam and Narayanan, 2008).

The prevalence of HIV/AIDS is increasing among the substance using population. The number of PLWHA reported was 5,830, with 79% of them being injecting drug users. The total number of PLWHA between 1986 and 2006 was about 72,500; nearly three quarters of whom were injecting drug users. The majority of substance users male and Malay by ethnicity (Vicknasingam and Narayanan, 2008).

Of the detected drug users in Malaysia in 2006, 23% used cannabis, 32% of whom were recidivists; 13% used ATS; 1% used Ecstasy, 17% of whom were recidivists; 61% used heroin or morphine, 70% of whom were recidivists and less than 1% used inhalants, 27% of whom were recidivists (UNICEF, 2007).

In a recent clinical trial, 19% of the 157 heroin dependent individuals seeking treatment in Muar were HIV seropositive. Among this group HIV infection was significantly associated with a lifetime history of injection drug use (IDU), needle sharing, Malay (compared to Malaysian Chinese) ethnicity and failure to consistently use condoms (Chawarski et al., 2006).

Adolescent substance use

In 1999, the National Drug Information System (NADI) reported 35,359 drug users in Malaysia. Of this total, the 16 to 24 year age group made up 28% while the 13 to 24 year age group made up 29%. There were also four reported cases of addicts less than 13 years of age (UNESCAP, 2002).

Kelantan and Selangor had the greatest number of drug users aged 18 to 19 years and Sabah and Pahang had the highest number of young drug users aged 13 to 17 years (UNESCAP, 2002). These differences by age-group and by state point to the need for age-specific and state-specific prevention campaigns (UNESCAP, 2002).

Among adolescents and youth (those aged 13-24 years) 51% were new drug users while 49% were recidivists. From the previous year there was a 6% decrease in the total number of drug users. In 1999, the highest concentration of drug users were found in Pulau Pinang followed by Kuala Lumpur, Selangor, Perak, Johor, and Kelantan, and Sarawak had the lowest number of drug users. Only four areas registered an increase in the number of drug users from the previous year: Sabah, Kuala Lumpur, Negeri Sembilan, and Terengganu (UNESCAP, 2002).

According to the National Drug Information System of NADA, in 2008 there were 260 (2%) adolescents (age ranging from 13 – 19 years old) detected from a total of 12,352 drug abusers. As of June 2009, 111 drug users had been detected (NADA, 2009).

Adolescent alcohol use

A Malaysian survey of alcohol use with a 53% response rate for a sample of 39,922 Malaysians aged 13 years and over found that among adolescents aged 18 years and below, the prevalence of having ever consumed alcohol was 7%, and consuming alcohol in the past month was 2% (Institute for Public Health National Institutes of Health Ministry of Health Malaysia, 2007). Among the adolescents who consumed alcohol in the past month, the prevalence was higher among males (3%), urban dwellers (3%), the Chinese (9%) and Christian (11%) demographic groups. The percentage of adolescent binge drinking among

those who consumed alcohol in the past month was 25% (Institute for Public Health National Institutes of Health Ministry of Health Malaysia, 2007).

Table 14: Prevalence by socio-demographic characteristics among adolescents who consumed alcohol in the past month

Sociodemography	Total Respondent	Estimated Population	Prevalence %	95% CI	
				Lower	Upper
Ethnicity					
Malay	7	2,718	0.3	0.1	0.6
Chinese	50	19,772	8.6	6.2	11.0
Indian	8	3,045	2.6	0.8	4.5
Other Bumis	21	7,531	7.7	4.2	11.3
Others	0	0	0.0	0.0	0.0
Religion					
Islam	8	3,041	0.3	0.1	0.6
Christian	27	9,929	10.8	6.8	14.8
Buddhist	44	17,646	8.9	6.3	11.5
Hindu	5	1,733	1.8	0.2	3.4
Others	1	348	4.0	-3.7	11.8
Unclassified	1	370	23.3	-17.3	64.0
Gender					
Male	56	21,543	3.3	2.4	4.2
Female	30	11,523	1.7	1.1	2.4

Table from (Institute for Public Health National Institutes of Health Ministry of Health Malaysia, 2007).

Prevention

Parent education

Parents are involved in drug prevention activities primarily through participation in community based drug awareness programmes. They are also encouraged to participate in awareness raising through involvement in the parents and teachers associations. Parents are also provided with parenting skills information so that they are more aware of the needs and vulnerabilities of their adolescent children either in schools or institutions of higher learning (NADA, 2009).

School based programmes

School based programmes in Malaysia have been conducted with the aim of implementing preventative drug education to achieve drug free schools. The government strategic plan included training of teachers in preventative drug education and subsequent integration of the programmes into pre-school, primary school, secondary school curricula between 1998-1999, followed by roll-out of similar training programmes for all trainee teachers in teacher training colleges, leading to the present day situation where all students in educational

institutions are exposed to preventative drug education. The governmental aim was to have all schools drug free by the year 2012 (How, 1999).

The approach taken with this preventative education programme has been to implement this programme routinely at all grade levels to repeatedly reinforce the preventative message, to include co-curricular activities involving parents in the process, and to promote what is perceived to be a more positive personal and social development through development of life skills such as building self-esteem, communication and assertion skills, decision making skills and resistance skills to enable a drug free life through strength, a sense of self, and ability to resist external pressures (How, 1999).

The main components of the preventative drug education strategy in Malaysia are: a clear school drug policy; relevant drug information; parental/community involvement; health-enhancing environment; providing beneficial alternatives; early intervention programmes to assist those involved with drugs; developing interpersonal skills and strategies to enhance students' self esteem. These components are not employed in isolation, but are used in combination, especially through the school curriculum, but also in co-curricular activities, guidance and counseling, and in teacher training programmes (How, 1999).

The principles are not taught in one particular class, but rather they are infused throughout all school subjects (for example into mathematics, art classes, Islamic studies, and moral and civics studies). In primary school the programme is delivered within the health education curriculum (How, 1999).

In Malaysia, random urine screening in schools has been instituted as a preventative measure and a deterrent to drug taking, and is considered to be an early intervention strategy. Students identified through this process or considered to be at risk of substance use are required to undergo counseling sessions with a school counselor and to attend a series of education seminars on self-resistance and interpersonal skills (How, 1999).

In the past, extracurricular activities have included self-reliance camps, which are for "high-risk" school students involved in truancy, substance use or delinquent behavior. The camp ran for one week and aimed to improve student self-awareness, motivation, and knowledge of the career world (Scorzelli, 1988).

Social marketing

The Ministry of Information supports the dissemination of information on substance use. Since 1980, the ministry has been involved in the following activities: field officers and other media personnel disseminate information about drug abuse to the public, and ex substance users have been trained to be communicators at assemblies and media broadcasts; training courses on disseminating information were conducted by the field officers for local community leaders in villages and towns; community leaders are encouraged to extend their knowledge about preventive education to the public in their respective areas by giving out information and encouraging the public to actively participate in anti-dadah programmes; and substance use information is

provided through television documentaries, drama, filmlets, antidrug songs, and news coverage on a regular basis (Scorzelli, 1988).

Intensive campaigns have been conducted to round up substance users. In corridors of airports, schools and offices there were graphic images of hangman's nooses with slogans such as "Dadah Means Death" and "Dadah Kills". The government announced in 2003 a social evils campaign with a focus on drugs and sex workers to be the principle targets of law enforcement (Reid et al, 2004).

In 1999, the National Drugs Agency implemented various drug prevention programmes and activities throughout Malaysia, including talks and briefings, most of which were targeted at youth and students, anti-drugs mobile exhibitions. Random urine test programmes, anti-drug radio broadcasts, and workplace campaigns (UNESCAP, 2002).

A special carnival-like programme "Community Blitz against Drugs" has been launched in every state and districts. These programmes are targeted to specific groups like parents and teachers associations, community and religious leaders or involve a whole community like settlers in a specific land scheme, a fishing community or a village. It also involved NGO/community based organizations and parliamentarians. More than 800 programmes were held in 2008 in all states. In addition, more than 3000 talks, briefings, video and exhibitions were also carried out (NADA, 2009).

Community mobilisation

NADA introduced a new club-like project, Friends Against Drugs for adolescents/youths (RADA), whether in the urban or rural areas of the country. It aims to enhance life skills of this vulnerable group so that they can be more resilient in saying no to drugs. Further, youths can be the ears and eyes of the community in protecting their environment from drugs and other drug related crimes. Membership drives are carried out in the country to entice youths to join the "club" whereby healthy lifestyle activities are formulated and implemented. As of December 2008, NADA registered 5,458 youths in this project (NADA, 2009).

The National Anti Drugs Agency also established Anti Drug Service Centres in various districts where any adolescent having a drug problem can attend. The role and functions of these centres are as follows:

- a. plan and implement drug preventive programmes at the district level;
- b. provide facilities for drug treatment and rehabilitation for volunteering drug addicts;
- c. provide counseling and advisory services to those who require such services;
- d. manage and determine the rehabilitation programme that would best suit those who are referred to the centre by the police or by drug users who volunteer for treatment and rehabilitation;

e. provide follow-up services to those users who have been placed under the Supervision Programme and for those who have finished their programme at the Rehabilitation Centres (NADA, 2009).

Greater focus is being given to relapse prevention in the community. This aims to strengthen the community based programme through a comprehensive range of activities and programmes conducted by service centres. These activities include seminars and motivational courses for recovering persons / adolescents, programmes for families as well as outreach programmes (NADA, 2009).

Treatment

Treatment overview

The Ministry of Health oversees treatment and prevention of infectious diseases, including HIV/AIDS, however drug rehabilitation is the responsibility of the Ministry of Social Welfare, where it remains. This bureaucratic division has historically led to difficulties in coordinating HIV and drug use prevention and treatment efforts. Recently, more coordinated drug abuse treatment and HIV risk reductions are being implemented (Chawarski, 2006). The release of data in 2004 showing high relapse rates and very poor results of enforced detention programmes has led to significantly increased public dissatisfaction with the predominantly criminal justice system approaches to drug treatment (Mazlan, 2006). Specific treatment programmes for opioid use are in place, however there were specific treatment programmes for ATS use (Mazlan et al., 2006). Public hospitals discharge ATS users without referral for relapse prevention treatment and many private rehabilitation centres did not have the skills for treating ATS users (Mazlan, 2006). Although the majority of substance users are youth, they constitute less than 2% of those under treatment (UNESCAP, 2002).

The National Anti Drug Information System has released official data showing that there has been a 3-fold reduction in the number of dependent substance users referred by the court for mandatory treatment and rehabilitation over a three year period (15,389 cases in 2005 reduced to 5,939 cases in 2008). Cases of relapse have also decreased by almost two thirds over the same three year period (17,419 cases in 2005 from 6,413 in 2008). From January to December in 2008, 6,363 male and 177 female cases were reported as having successful treatment outcomes, 1,945 male and 42 female cases were reported as relapsing (Shobri, 2009).

In 2008 the majority (70%) of substance users detected recorded opioids as the primary substance of use (40% for heroin, 30% for morphine and >1% for opium), followed by 14% for cannabis use, 12% for methamphetamine use, and 4% for ATS use (Shobri, 2009). The proportion of cannabis users decreased from the previous year (23% in 2007), whereas the proportion of heroin users (33% in 2007) showed a marked increase, and an increase was also present to a lesser extent in the proportion of methamphetamine users (9% in 2007) (see table 15 below).

Table 15: Drug trends 2002 – 2008

Table adapted from Shobri, 2009

Year	Heroin	Morphine	Opium	Cannabis	Methamphetamine	ATS	Total cases
2002	38%	28%	>1%	22%	7%	4%	31893
2003	36%	30%	>1%	23%	7%	2%	36996
2004	33%	31%	>1%	17%	15%	2%	38672
2005	42%	25%	>1%	15%	12%	5%	32808
2006	35%	26%	>1%	23%	11%	5%	22811
2007	33%	30%	>1%	23%	9%	5%	14489
2008	40%	29%	>1%	14%	12%	4%	12352

In Malaysia, juveniles are those aged under 21 years of age. A juvenile identified only as a drug user is viewed as a “sick” person in need of treatment. After identification, the juvenile substance user can be placed on extended supervision, which sometimes involves some form of outpatient or inpatient treatment at a non-government drug facility. Alternatively, the youth can be sent to a governmental rehabilitation center for youth, which is a type of training institution that places emphasis on education, religious instruction, counseling, and vocational training. Youth rarely stay more than three years in these institutions. If however the youth substance user has also committed a serious crime and the substance use is considered secondary to the criminal act, the youth can be sentenced to a Henry Gurney School which are part of the juvenile correctional system. Segregated drug rehabilitation units for youths identified as substance users exist within these schools (Scorzelli, 1988).

Residential programmes

Private agencies must have governmental approval to treat substance users. Non-governmental agencies in Malaysia provide a range of treatment interventions from day programmes to residential facilities. Substance users in these facilities volunteer for treatment and are exempt from prosecution for drug usage, but not from other drug related charges. Treatment ranges from use of traditional medicine through to religious instruction, and therapeutic communities (Scorzelli, 1988). Pusat Pertolongan is one example of a therapeutic community, and operates with a treatment philosophy based on a peer hierarchical structure incorporated within a phase system, based on the US Daytop therapeutic community model. In this therapeutic community substance users are considered to be emotionally disturbed, irresponsible individuals in need of resocialization training in a community living situation. Adolescents can be found in these therapeutic communities as volunteers and court referrals are accepted for patients aged from 12-50 years. Treatment emphasizes confrontation, the use of encounter groups and a variety of tasks, and is carried out largely by ex substance users (Scorzelli, 1988).

As of 2004, 60 private drug rehabilitation centres had been approved by the National Drug Agency, most operated by religious organisations, and there were 121 private clinics that have been approved by the Ministry of Health to treat drug users (National; Drug Agency 2004; Reid et al., 2004).

Community-based programmes

An NGO called Youth With a Mission (YWAM) conducts outreach but with small resources their scope of work and coverage is limited. Currently IKHLAS (an NGO) runs a male drop-in-centre, women and transsexual drop-in-centre (many of whom were known drug users) and a medical clinic. Distribution of injecting equipment does not occur, but equipment is available elsewhere. The male drop-in-centre services between 1,500 to just under 2,000 clients per month, with a daily number ranging from 68 – 96, and undertakes referrals to halfway houses, recovery houses and HIV community homes. The women and transsexual drop-in-centres services between 244 – 450 clients per month, with a daily number ranging from 10 – 20, with about half this group believed to be substance users (Reid et al., 2004).

Compulsory/ coerced programmes

A suspected user can be detained for a period of 14 days for urine and medical examination to ascertain his/her status (NADA, 2009). If certified to be drug user, a magistrate, guided by information and recommendations contained in the social report, can either commit him/her to an institutional rehabilitation programme or place him/her under the supervision of NADA's Officer in the community (NADA, 2009). A single drug positive urine toxicology screen results in admission to compulsory treatment for a minimum of 2 years, although it is common for some to be discharged after a year and a day (National Narcotics Agency (NNA), 2001; Sattler, 2004; UNAIDS and UNDCP, 2000).

There were 28 governmental drug rehabilitation centres operating in 2004, with a capacity for 18 000 individuals (Mazlan et al., 2006). Eleven of the compulsory treatment centres focused on group therapy, eight on self-realizing therapy, six on family therapy, two on work therapy and one on individual therapy (Reid et al., 2004). There has been a move to categorise these centres into three levels: one for hardcore addicts, one for youths between the ages of 14 and 21, and one for those who voluntarily enter rehabilitation programmes (Reid et al., 2004).

Some individuals with positive urine tests may be mandated to parole supervision (with monthly urine toxicology testing conducted by the police or drug agency officers) in place of mandatory detention. Mandatory detention in a drug-free residential rehabilitation centre is followed by 2 years of supervised parole. While nearly all those being treated in government drug rehabilitation centres are there by order, voluntary entry is also accepted (Mazlan et al., 2006). Relapse rates within the first year following discharge are high (70 – 90%) (Mazlan et al., 2006; Reid et al., 2004).

The number of drug users entering government drug rehabilitating centres was reported in 2001 to be 8,178 people (National Narcotics Agency 2001) but as of August 2004 the maximum number was 14,700, with a bed capacity for 9,300, highlighting overcrowding was a problem (Reid et al., 2004). In August 2004, the weekly admissions numbered 278 individuals. The government also funds a rehabilitation centre in the Kajang prison and as of August 2004 the number of detainees was 15,000, a stark contrast to the 8,688 in 2001 (Reid et al., 2004).

Governmental drug rehabilitation centers involve the following types of services and activities: detoxification (either prior to entry at a general hospital or at the facility by “cold turkey,” unless the person is over 55 years of age or has medical complications); calisthenics, physical training and paramilitary drills; moral guidance and religious instruction; vocational and recreational therapy; and individual counseling, group counseling and family counseling. Governmental programmes are designed to reshape the drug dependent person in all areas of his/her life, and the physical training and military drills are included to enhance a sense of discipline and cooperation. Family counseling consists of making the substance users family aware of the rehabilitation services and the negative effects of drugs (Scorzelli, 1988).

A phase system is utilized by the detention centres. This consists of detainees working towards achieving a higher stage, which entails more responsibility and privileges in treatment based on performance. Phases are identified by different colored shirts, and attainment of the highest phase results in weekend passes, and an opportunity for an inmate to assume a leadership position and to secure employment before his or her discharge (Scorzelli, 1988).

After leaving governmental rehabilitation centers substance users are mandated to a two-year aftercare programme in which the individual is required to participate in individual counseling and report to a local police station once a week for urine testing, and may also be sent to a residential or day treatment programme. This decision is made by the magistrate in consultation with an officer from the Ministry of Home Affairs (Scorzelli, 1988).

Substance users who voluntarily present for treatment may be placed only on aftercare rather than being sent to a governmental rehabilitation center. Aftercare facilities include three day treatment centers, residential facilities, and an aftercare residential camp involving treatment for six months that is very similar to that provided by the governmental centers. As presentation was voluntary, residents can leave treatment at any time (Scorzelli, 1988).

Recidivist substance users who are detected for a second and third time are sent to prison from five to seven years, those detected for the fourth for seven to 13 years and those considered to be ‘hardcore addicts’ could face jail terms of up to 13 years. Jail sentences are often accompanied with caning (Reid et al., 2004). Under proposed amendments to Dangerous Drugs Act a hardcore addict is defined as someone who has been ordered to undergo treatment at drug rehabilitation centers or has been convicted under Section 15(1)(a) of The Dangerous Drugs Act more than twice (Reid et al., 2004).

For adolescents and those under the age of 21 years, there are special residential centres. Residents undergo programmes like vocational training, special academic classes, religious guidance, counseling (individual, group and family), recreational and sports and reintegration programmes (NADA, 2009).

Since adolescent substance users are still young, if use is considered only experimentation and there is strong family support, NADA officers usually recommend to the Magistrate to place them under supervision in the community. However, parents can seek treatment and rehabilitation for their children to be placed under supervision in the community or undergo treatment in the centres as volunteers. Under community supervision, officers ensure that their clients are successfully employed, monitored through frequent urine screening, counseling sessions and attend other programmes/activities planned for them (NADA, 2009).

OST

Until recently, OST programmes were not supported by the Malaysian government. The activity of maintaining substance users on medicated doses of opioid substitutes was thought to oppose the principle of abstinence based rehabilitation, and therefore compromise the nation's goal of becoming a drug free society. Over the past few years, several OST programmes were piloted and later expanded. One pilot methadone maintenance programme had two thirds of participants complete treatment, with most treatment completers reporting either an improvement in work performance or gaining employment, and none reported involvement with crime or high risk behaviours. A pilot study of buprenorphine showed high completion and high compliance, with only a minority returning positive urine tests (Reid et al., 2007). The initial success of the MMT programme prompted the government to widen the coverage in 2007 to 5000 drug users, but it is doubtful that they have reached levels that can reverse the rising HIV prevalence among the drug using population. Delivery is held back by capacity constraints such as insufficient numbers of trained counsellors to deliver the required psychosocial interventions (Vicknasingam and Narayanan, 2008).

Despite the evident benefits of buprenorphine treatment, treatment practice appears to be leading to problems of poor medication adherence and diversion through prescription of large quantities of buprenorphine for unsupervised use from the beginning of treatment and inconsistent provision of provided drug counseling or other psychosocial services. These same concerns exist for the prescription of methadone. However, stringent checks and recent prosecution of those over-prescribing, coupled with limits placed on the supply of buprenorphine appear to have reduced the risk of diversion. The high cost of methadone and the practice of dispensing it in liquid form may help to reduce problems with methadone diversion (Mazlan et al., 2006).

Harm reduction programmes

The establishment of needle and syringe programmes (NSPs) was endorsed by the Malaysian government in 2005 (Reid et al., 2007). Obstacles to the

establishment of harm reduction programmes included the allocation of separate Malaysian ministry agencies to deal with HIV and substance use respectively, with the division in jurisdiction making it difficult to implement broad-ranging interventions for substance users, as well as religious opposition (mainly Islamic) and a much stronger government focus on supply and demand reduction (Reid et al., 2007). In 2005 it became known that Malaysia had failed to achieve one of the targets in the Millennium Development Goal (MDG) set by the United Nations: to contain the spread of HIV/AIDS (Vicknasingam and Narayanan, 2008). The Deputy Prime Minister made the case that following consideration of the potentially rapid surge in the number of PLWHA, Islam permitted harm reduction measures (Vicknasingam, 2008).

Introduction

Demographics

In 2008 the population of Papua New Guinea was 6,577,000 and the 10 - 19 year population was 1,480,000 with a population growth rate of 2.371 (United Nations Population Division, 2009).

The legal status of drugs and enforcement

Legislative controls are in place for the monitoring and control of illegal drugs, in the face of widespread cannabis cultivation, trade and use.(Stewart, C.) There is a legislative framework covering illicit drugs in the country but it has not been updated for some time. The National Narcotics Bureau has been unsuccessful in convincing successive Governments to update it.(McDonald, 2005).

The National Drug Strategy

With the agreement of the Government, around 230 Australian police were deployed to PNG in 2004/2005 to assist with capacity building in the criminal justice system owing to what many see as a breakdown in formal (though not informal) systems of law enforcement and maintenance of order. (McDonald, 2005).

Determinants of substance use

According to a personal communication with a key expert in the country (Vicky Wari, 2009), substance use, especially of cannabis, has become a major concern because of the following:

1. The substance is grown extensively, both in the higher and lower altitudes
2. Increasing numbers of young people and adults are becoming involved in using the cannabis
3. No laws exist to control the use of cannabis and to punish those who use it
4. Social issues and crime rates have risen over the 10 years
5. No strategic plan at the political level to rehabilitate those at risk of cannabis use and for those who already use

Substance use patterns

Various types of psychoactive substances were used in PNG prior to the European colonisation and they continue to be used today, these include betel

nut and kava. With colonisation came commercial alcoholic beverages and, particularly during the Second World War, 'home brew' alcohol, both fermented and distilled. (McDonald, 2005).

Cannabis use was largely limited to a small proportion of the expatriate population until the 1980s when its use by Papua New Guineans became more widespread. By the 1990s, cannabis was found throughout PNG (either grown locally or imported from other provinces) and use of the drug was commonplace. Cannabis in PNG is very cheap compared with commercial alcohol or (sometimes) betel nut. Some of the cannabis grown in PNG is trafficked into Australia (McDonald, 2005).

General population

A study by McDonald(2005) concluded that, although alcohol was the drug that caused most harm in PNG, the use of cannabis and 'home brew' alcohol and trafficking in cannabis are highly problematic.

Adolescent substance use

Adolescent alcohol use

Alcohol is used widely mostly by men including adolescents but the prevalence rate is hard to measure. Beer is widely consumed in PNG but as far as records are concerned, no psychosis related to alcohol has been reported. (Vicky Wari, 2009) Alcohol use is a matter of public health concern in the country. (McDonald, 2005). The WHO STEPS Data Book for PNG 2007-2008 indicated that 14.7% of male and 2% of females aged 15-24 years drank alcohol in the 30 days prior to being surveyed; with 2.2% of the young males and 9.8% of the young women who indicated that they had drunk alcohol in the past 12 months reporting daily drinking. In relation to the amount of alcohol consumed in a 'drinking day', 76.3% of males and 38% of females aged 15-24 reported drinking in excess of 6 standard drinks. In this age group, 2.3% of the males and 3.7% of the females were assessed as drinking at hazardous or harmful levels. Friends and relatives provided 48.8% of alcohol consumed by the young males and 80.7% of that consumed by the young females. Purchasing from stores accounted for 24% of that consumed by the young males, with 27.2% coming from home brews.

Adolescent cannabis use

According to key informants in the study by McDonald (2005) cannabis is available 'almost everywhere' in PNG and used by 'almost everyone'. This should be interpreted as meaning that the drug is available to virtually anyone who wants it and is used by people from all walks of life (though prevalence is probably higher among younger people than older, and among males rather than females).

According to the results of the study, most cannabis smokers were introduced to the drug by friends or school-mates and virtually nobody was introduced to the drug by a stranger. The implication of this pattern of initiation into cannabis use

is that campaigns directed at traffickers are insufficient, as cannabis is widely available and use is widespread. Strategies are also needed that recognise the realities of the social networks within which people initiate cannabis use. Cannabis was smoked by those interviewed as 'joints' rather than in a pipe or 'bong' as in some other countries. Daily or near daily cannabis smoking was rare among those interviewed; most users seemed to have their use of the drug generally under control. Nevertheless, substantial proportions reported signs of dependence on cannabis, suggesting that opportunities exist for working with cannabis users who want to reduce their consumption levels or to abstain.

The study does not support the claim that cannabis use is a significant cause of violence or other forms of criminal behaviour, but this may require further exploration. Most current users stated that they used the drug to 'get high', to boost self-confidence or to assist in coping with or escaping from their personal problems.

Adolescent 'betel nut' use

The WHO STEPS Data Book for PNG 2007-2008 indicated that 78.2% of male and 79.5% of females aged 15-24 years were current users of betel nut – 67.3% of the young males and 72.1% of the young females being daily users.

Prevention

There is an emerging requirement for government policies to address adolescent substance use. However, preceding governments have not made any policies or provided funds. In some institutions, such as the Laloki psychiatric hospital, funds are insufficient to provide programmes such as rural outreach, school programmes and community campaigns. (Vicky Wari, 2009)

Universal prevention and School based programmes

The National Narcotics Bureau conducts drug awareness programmes. (Vicky Wari, 2009).

A small amount of drug prevention work does take place in the country, mainly under the auspices of the National Narcotics Bureau. It involves educational and awareness programmes generally delivered through educational institutions, church groups and public rallies. However, the techniques used generally do not reflect contemporary knowledge about what works in prevention. (McDonald, 2005).

Targeted prevention programmes

There are no policy areas or government directives to cater for drug using at-risk populations, thus it is difficult to plan or implement any targeted programmes for these populations. (Vicky Wari, 2009).

Treatment

No specialised treatment resources exist in PNG for people with drug-related problems. Some broadly based church and secular social welfare organizations try to assist in this regard where they can, generally using staff with no training in this area.

Residential programmes

There is only one public Psychiatric Hospital in the country (Laloki Hospital) which provides treatment to patients who develop psychosis after using various substances, especially cannabis. The table below shows the number of adolescents who were admitted to the Laloki Psychiatric Hospital from 2003 to 2008 for cannabis-induced psychosis. The number of adolescents undergoing treatment has gradually reduced from 2003. (Vicky Wari, 2009).

Table 16: Number of adolescents admitted to Laloki Psychiatric Hospital from 2003 to 2008 for cannabis-induced psychosis. (Vicky Wari, 2009)

Year	Number of Adolescents
2003	16
2004	14
2005	8
2006	9
2007	7
2008	3
TOTAL	57

Community-based programmes

Drug counselling is available to individuals, families and communities on a small scale through social workers, church workers, mental health workers, police and justice departments and some NGOS. A mental health unit also provides counselling to drug use population which includes awareness in schools and communities. The programme is also conducted in the correctional facilities where counselling is provided to the detainees. (Vicky Wari, 2009).

Introduction

Demographics

Vanuatu is the name of the 83 islands formerly known as the New Hebrides. The total population of Vanuatu is about 243,000 with a growth rate of 2.543. The 10 – 19 year population is 54,000 (United Nations Population Division, 2009). Vanuatu has a very young population, with 43% of the population are aged between <1-14 years and 54% aged 15-64 years old according to 1999 Census in Vanuatu.

Determinants of substance use

According to a qualitative study conducted in 2001, the major underlying cause of substance use in Vanuatu is the scarcity of alternative activities to enable young people to build self-esteem and social responsibility. Most obvious is the scarcity of employment and income earning opportunities. This leaves young people with limited opportunities to fulfill personal goals, limited pressure to conform, and an abundance of free time. (SPC, 2001)

Substance use patterns

Adolescent substance use

A second generation surveillance survey was conducted in 2008 with 301 young people aged 15 to 24 years (VMOH & SPC, 2008). In addition, 302 antenatal women were surveyed (51.2% aged under 25 years).

Adolescent alcohol use

A recent review by Lee and Jenner (2010) has indicated that 80% of 13 year olds and 66% of 15 year olds have never consumed alcohol.

According to the second generation surveillance most youth reported drinking either 2 to 4 times a month (19.6%) or monthly or less (42.9%). More than twice as many females (40%) compared with males (16%) reported that they had not consumed alcohol in the last 12 months. The average number of standard drinks consumed on a typical drinking occasion was 6.6 for males and 5.4 for females. Youth were also asked about their frequency of consuming five or more standard drinks at one time. Similar patterns of consumption are shown for both sexes. One quarter of youth reported consuming five or drinks at one time on a weekly basis, and a further third consumed five or more drinks monthly. (VMOH & SPC, 2008).

For the antenatal women, 2% reported drinking weekly, with 59% reporting never using alcohol.

According to a UNICEF situation analysis 46% adolescents had used alcohol. In another survey, 22.5% of adolescents who are currently in school have tried alcohol whereas 52% of adolescents out of school have tried alcohol. 11% of adolescents in urban areas have ever been drunk whereas 43% of adolescents in the rural areas have ever been drunk (Iauma, 2009)

In the two major urban centres of the country, Port Vila and Luganville, regular Friday night drinkers known as ‘tuskier drinkers’ are predominantly 19-30 years of age. Save the Children Australia reports provide anecdotal accounts of homebrew consumption as part of family and community celebrations outside the urban centres. In addition to homebrews, both imported and locally brewed spirits are said to be consumed at special occasions. The estimated age range for consumption is 15-30 years. (Burnet Institute, 2009).

A 2005 research report noted that over a third of surveyed out-of-school youth reported ever having had sex when intoxicated on alcohol or other drugs. The reports also highlighted an association between binge drinking and increased number of sexual partners. (Burnet Institute, 2009).

Lee and Jenner (2010 a) in their draft alcohol policy discussion paper, indicated that concerns were raised about the practice of home brewing alcohol which was particularly prevalent among young people “who are unable to afford store bought alcohol which is relatively expensive following an increase in alcohol import duty and excise tax in 2008. Around 1 in 4 young people recently interviewed in Port Vila admitted to drinking home brew. Yeast, sugar and tropical fruits are common ingredients of home brew and are easily and cheaply accessed” (p. 7).

They added: “Harms from home brew include variations in quality and strength leading to acute intoxication and possible toxicity, accidents and injuries, drink driving, aggression and violence, and possible exposure to contaminants. Home brewing apparatus can be easily concealed in the bush or in suburban backyards, making detection and regulation extremely difficult.

Anecdotal reports suggest that children as young as 12 years of age are consuming home brewed alcohol which is particularly concerning. The consumption of alcohol by adolescents has been associated with negative effects on the structure and function of the developing brain [15], delayed development of the reproductive system in adolescent girls [16], and increased risk for alcohol dependence” (p.7).

The use of spirit fuel (Coleman Light) to brew an alcoholic drink was identified as an issue as early as 2003. Youth have been identified as the key group of concern. Lee and Jenner (2010a) also noted this trend: Another trend “involved the consumption of naphtha fuel intended for use in Coleman® lanterns, referred to as ‘120’ for its retail price of 120 vatu. Key informants suggest that some young people in Port Vila consume this fuel for its intoxicating effect, and the practice is reportedly even more widespread in the outer islands” (p.7).

Possible harms identified “associated with exposure to this highly flammable fuel include skin irritation, nasal and respiratory irritation, breathlessness, fatigue, headache, nausea, drowsiness, pneumonitis, pulmonary oedema, central nervous system depression, convulsions, and loss of consciousness.... Research into patterns of consumption and health and social consequences should be undertaken to inform future policy directions” (p.7).

Adolescent cannabis use

According to the second generation surveillance, 48.5% youngsters between age of 15 and 24 had ever used cannabis. The proportion was 67.1% for males and 28.8% for females. 43.2% males and 17.1% females had used it in the last 30 days (VMOH & SPC, 2008). Five percent of the antenatal women reported ever using cannabis, with 1.7% reporting use in the last 12 months.

The use of cannabis has increase of among adolescents. A survey found that 61% said they had smoked cannabis (Kaloris, 2009).

At the 2008 and 2009 PDARN meetings, cannabis was again identified as the key illicit drug of concern. Save the Children Australia reported that an increasing number of unemployed 15-30 year olds smoke cannabis as a pastime activity: ‘kilim taem’. There is also a suggestion of a ‘cannabis following’ among music fans/artists, in particular reggae and hip-hop. (Burnet Institute, 2009)

Adolescent ecstasy (MDMA) use

Although Vanuatu is not a source of precursor chemicals, some small scale relatively recent seizures of amphetamines and synthetic drugs including ecstasy occurred in 2003. These drugs reportedly come from Asia for supplying to affluent youth. (Burnet Institute, 2009). According to the second generation surveillance, 8.0% those aged 15 and 24 had used Ecstasy/Ice/Speed. The proportion was 12.3% for males and 3.4% for females. 11.6% males and 1.4% females had used it in the last 30 days. None of the antenatal women reported ATS use. (VMOH & SPC, 2008).

Adolescent opioid use

Some heroin use was reported (see below under IDU), but no specific figures provided.

Adolescent inhalant use

The second generation surveillance shows 11.0% youngsters between age of 15 and 24 had ever used Inhalants. The proportion was 16.1% for males and 5.5% for females. 12.3% males and 2.1% females had used it in the last 30 days. Of the antenatal women, lifetime use of Inhalants was 0.3% as was use in the last 12 months (VMOH & SPC, 2008).

Adolescent injecting drug use

According to the second generation surveillance, twenty males (12.9%) and two females (1.4%) reported injecting recreational drugs during the previous 12 months. (Meth)amphetamine was the most commonly used drug (used by 41% of injecting drug users) followed by Heroin (22.7%) and coke (13.7%). More than half of injecting drug users reported that the needle and syringe was used by

another person first (59%). One of the 302 women in the antenatal sample reported IDU in the last 12 months (VMOH & SPC, 2008).

Adolescent other drug use

Kava:

The use of kava, a drink derived from the root of the *Piper methysticum* plant, is deeply embedded in the culture of Vanuatu and has been used ceremonially and as a medicine on all of the islands throughout its history. While, traditionally, only village Chiefs and adult males used kava, predominantly as a means to strengthen community ties and to resolve disputes, the use of kava has become increasingly commercialized.

Lee and Jenner (2010a) note that in a survey in 2005, 1 in 8 school going students had tried Kava where as 35% of those out of school had tried Kava. Similarly, according to a UNICEF situation analysis 37% adolescents had used Kava.

According to the second generation surveillance, 48.5% youngsters between age of 15 and 24 had ever used Kava. The proportion was 59.4% for males and 37.0% for males. 47.7% males and 26.0% females had used it in the last 30 days. Of the antenatal women, 35.6% reported lifetime use of Kava with 23.8% reporting use in the past 12 months (VMOH & SPC, 2008).

Benzene and glue sniffing, the use of highly concentrated coconut and fruit juice to make homebrew and hallucinogenic mushrooms have also been identified. (Burnet Institute, 2009)

Prevention

The steering committee within the Ministry of Internal Affairs and the Ministry of Justice and Community Services (MJCS) has developed a framework of National Drugs Policy for Vanuatu. The committee undertook research and consultation to prepare a discussion paper for the development of a framework of a National Drugs Policy for Vanuatu which has now been finalized. In addition, with the assistance of AusAID the steering committee has begun an extensive programme of community consultation on the discussion paper in an attempt to obtain the views and of community and government leaders before a final report is submitted to the Council of Ministers for their consideration. (Vanuatu Daily Post, 2009)

UNICEF has taken a regional approach when working with issues facing children in the Pacific Island countries. High levels of risk for HIV and increased teen pregnancies, drug and alcohol abuse, and sexual violence are reported as contributing to an overall decline in living standards for women and children. In addition to UNICEF, Save the Children Australia and Oxfam's youth programmes in Vanuatu intersect with substance use prevention activities. (Burnet Institute, 2009)

Of late, Lee and Jenner (2010 and 2010 a) have drafted a national alcohol policy for Vanuatu. This policy could provide a model for other PICTs.

Treatment

No information was found on drug treatment in Vanuatu.

Introduction

Demographics

Viet Nam is located in South-East Asia and is bordered by China, Lao People's Democratic Republic, Cambodia, the Gulf of Thailand, the Gulf of Tonkin, and the South China Sea. Viet Nam consists of 58 provinces and 3 municipalities, with the majority of the population located in rural areas (ESCAP, 2000). The total population of Viet Nam is 87,096,000 with a growth rate of 1.145. The 10 – 19 year population is 17,534,000 (United Nations Population Division, 2009).

One quarter of the population are aged between 15 and 24 years (UNODC, 2005). The 2003 poverty rate was 29%, with the majority of persons located in rural areas (UNODC, 2005).

The legal status of drugs and enforcement

Legislation recognises illicit substance use as a social problem and that substance users are not offenders or criminals. Legislation stipulating procedures and authority to make decisions on admission of substance users to drug treatment centres for rehabilitation and vocational training allows for mandated substance use treatment. Adolescent substance users aged 12-18 years old are mandated to attend compulsory treatment centres if they fail to abstain from substance use when remaining in the family home or other treatment centres (UNODC, 2005).

Drug supply reduction is hindered by inadequate and ineffective border security enforcement. Drug trafficking has particularly increased along the Viet Nam-Cambodia border since 2003. Drug trafficking is largely discovered inside the country (over 80% of discoveries), with minimal detection at the border areas (approximately 15-18 per cent) (UNODC, 2005).

Legislation to combat trafficking is currently insufficient and not fully in compliance with relevant international conventions and protocols. Viet Nam faces numerous challenges in the area of drug control, including lack of financial resources, lack of technical drug control and crime prevention expertise, and growing drug trafficking and substance use problems (UNODC, 2005).

Viet Nam is an active participant in the Greater Mekong Sub-region Memorandum of Understanding (MOU) on Drug Control Cooperation established in 1993 through which regional needs are determined and joint efforts are undertaken to address the problems of illicit drug production, trafficking, and abuse. Viet Nam is also a partner in the "ASEAN and China Cooperative Operations in response to Dangerous Drugs (ACCORD)" Plan of Action.

The National Drug Strategy

Viet Nam has a National Drug Control Action Plan that expired in 2006. The aim of this plan was to reduce the number of substance users by 10-20% annually. The objectives of this plan were to: measurably reduce drug consumption and to promote programmes on harm reduction and prevention of substance use and HIV/AIDS prevention and care; reduce, and ultimately eliminate opium poppy cultivation and in its place, introduce permanent and sustainable measures to prevent future cultivation; prevent and permanently eliminate the production of, and trafficking in, illicit substances, including the identification and elimination of congregation points for illicit substance use; eliminate illicit trafficking in licit substances and precursors under international control, and effectively control the licit trade; establish effective international cooperation in drug control. Based on these objectives eight main programme areas were identified: drug prevention (focus on high-risk groups); drug prevention in schools; opium poppy eradication; law enforcement; trafficking; strengthening of treatment and rehabilitation; application of traditional medicine; drug-free communities; and strengthening of international cooperation (UNODC, 2005).

The National Drug Control Master Plan to the Year 2010 also aims at reducing the number of substance users: by 20-30% as compared with 2001, setting targets to achieve by 2010 that 70% of the communes, city wards and townships will be free from substance abuse and drug-related crime; 90% of the workplaces, schools and armed force units will have no drug problems; and 80% of the substance abusers will receive treatment (UNODC, 2005).

Determinants of substance use

Opium poppy is cultivated by ethnic minorities for local use in the north-western and central provinces bordering Laos and China (Devaney et al., 2006). A recent official estimate of land planted with opium poppy was 32 hectares, grown in seven provinces. This is a reduction from 105 hectares grown in 12 provinces the year before, and a significant reduction from the 12 thousand hectares in 1992 (UNODC, 2005). Cannabis is grown in the remote parts of the Mekong Delta in the south and in some north-western highland areas for commercial hemp, although some is cultivated for illicit consumption (Devaney et al., 2006). Production of ATS is a newer practice that is occurring mainly in larger cities (Devaney et al., 2006). Little emphasis has been placed on developing income alternatives for the Vietnamese people formerly involved in drug cultivation, thus involvement in recultivation has occurred on a small scale, and may potentially increase (UNODC, 2005).

Substance use appears to be associated with unemployment: approximately 42% of all substance users in 1999 were unemployed, with figures for Hanoi and HCMC exceeding 50% (UNODC, 2005). High underemployment, increasing migration to urban areas and rising unemployment among young people all appear to be impacting on substance use patterns in Viet Nam (UNODC, 2009).

Among youth, including adolescents, a lack of knowledge and experience in life combined with curiosity; a lack of regular attention and care from parents and

relatives who are preoccupied with earning a living; and a lack of attention provided by teachers appear to be associated with uptake of substance use. Additionally, uptake may be influenced by provision of free injections of narcotics to youth who sell illicit substances for drug traffickers (UNESCAP 2000).

Special populations

Special populations in Viet Nam include the unemployed, out of school youth, migrant workers, ethnic minorities and street children. These populations have been identified as being at higher risk of involvement in illicit substance use and trafficking. There are more than 54 ethnic groups: the largest group is the Kinh (86%), followed by four other groups that have populations of more than one million: Tay, Thai, Muong, Kh'mer (MoH, 2003). Social and economic inequality particularly affects the Kinh population and other ethnic minority groups. Attempts to address this by the Vietnamese government through development of remote and mountainous areas has led to social and economic enhancement among these ethnic minority groups, but with this enhancement has come increased social problems including substance abuse, sex work, and HIV/AIDS (MoH, 2003).

The youth population, including adolescents, is also an important special population in Viet Nam, as youth form the majority of persons affected by both substance use and PLWHA. Injecting drug use is primarily the source of route of infection with HIV/AIDS among youth. Youth in regions such as the north-east, the north-west and the south-west, which have traditionally had high concentrations of substance abusers, need to be continuously targeted, but emerging problem areas such as the Red River Delta, and specifically Hanoi, also require urgent attention (UNESCAP, 2000).

Limitations in scope of available information

In Viet Nam the capacity for systematic information gathering and analysis is currently limited, and issues with inter-agency cooperation and coordination further hinder systematic gathering of substance use related data in this country. There is no unified standard statistical and reporting system, thus there are significant discrepancies in acquired information and statistical data.

Substance use patterns

General population

In Viet Nam there are more than 170 thousand registered substance users, and this figure is increasing annually (Devaney et al., 2006). There are no official estimates of the number of substance users nationwide, but unofficial estimates place this figure at between 200 and 500 thousand persons (Devaney et al., 2006). Approximately 70 to 156 thousand people are estimated to be injecting drug users (Devaney et al., 2006). Sharing of needles is common, with reports that in prison settings approximately 30-50 inmates may share the same needle (Devaney et al., 2006). Six in ten of all notified HIV cases are IDUs, with up to 30% of the IDU population representing PLWHA. It is estimated that opioids are the drug of choice for 70% of the substance using population. Other illicit substances used include cannabis, ecstasy, and ATS. The use of inhalants appears to be increasing (Devaney et al., 2006).

Adolescent substance use

The number of substance users aged 30 years and under has increased from 42% in 1995 to 70% in 2004, and to 80-90% in many provinces and cities (Viet Nam country profile). A recent school survey including adolescents and children aged 14 years and under (50%), and adolescents aged 15-17 years (41%) and 18 years or older (9%) examined substance use patterns among adolescents, with results indicating that substance use rates were higher among males than females, and vocational versus secondary students (UNDCP 2002).

Prevalence of life-time substance use was 44%, past year use 20%, and past month use 16% (UNDCP 2002). More than 50% of students initiated substance use between 10-14 years of age, but only 3% had ever injected drugs (UNDCP 2002). Substance specific findings are reported below.

Adolescent alcohol use

School survey results found that 33% of students had tried alcohol, with 18% of students having used alcohol in the past year and 13% in the past month (UNDCP 2002).

Adolescent cannabis use

School survey results found that close to 1% of students had tried cannabis, and 3 in 1000 students had used cannabis in the past year and past month (UNDCP 2002).

Adolescent ATS use

School survey results reported ATS use, however levels were very low (UNDCP 2002).

Adolescent ecstasy (MDMA) use

School survey results reported hallucinogens use, however levels were very low (UNDCP 2002).

Adolescent opioid use

School survey results found that 2 in every 1000 students had tried opioids, with 1 in every 1000 students having used opioids in the past year and past month (UNDCP 2002). Past month opium users were using this substance 6-19 days per month by the majority of users (UNDCP 2002). The majority of students smoked opioids (60%), 25% injected opioids and 28% reported 'chasing the dragon'.

Prevention

Prevention overview

Special attention is given to young people and in particular to high-risk groups. However, a lack of resources is a major constraint for implementing a comprehensive prevention strategy. While there is a need to step up preventive work for all high-risk groups, the need for IDUs and sex workers is particularly

urgent. Both groups are increasing in number and are extremely vulnerable to contracting HIV. In Viet Nam, prevention of substance use among adolescents largely revolves around the compulsory treatment model, however progressive prevention programmes, for example in the school system, are beginning to populate the substance use prevention landscape.

Parent education

Parent involved programmes in Viet Nam focus largely on monitoring substance use of adolescents and encouraging treatment in compulsory substance use treatment programmes. Parents are encouraged to: inform and encourage substance using adolescents into compulsory treatment centres; create appropriate conditions for adolescent substance users to undertake treatment; encourage substance dependent adolescents to abide by the regulations of compulsory treatment centres; preparing adequate conditions for substance adolescents to return to after treatment in compulsory treatment settings; and to continue to supervise adolescent substance users and prevent them from relapse upon return to the family home (UNESCAP, 2003).

School based programmes

Although education and information campaigns on drug prevention and HIV/AIDS awareness have been improved in schools and workplaces, these campaigns do not target the most vulnerable groups – IDUs and sex workers.

Treatment

Treatment overview

It has been reported that lack of resources, experience, and qualified staff have adversely affected national treatment and rehabilitation efforts (country profile Viet Nam). Currently there are 112 drug treatment centres at provincial level with a total capacity of 40,000 treatments per year; and 7,100 treatment facilities providing treatment at district and local levels (UNODC, 2005). The number of substance users in treatment facilities is approximately 49 thousand. Relapse rates are reportedly high (70-75%) as treatment focuses primarily on detoxification, with little attention given to relapse prevention and community involvement (Vietnam country profile). Approximately 138 thousand treatments were provided during 2001-2003 of which, 65% was on compulsory and 35% on voluntary basis (UNODC, 2005). It is estimate that the existing treatment centres can meet only 30% of the present requirement (UNODC, 2005).

Community-based programmes

A number of pilot programmes on community-based treatment and rehabilitation have been initiated. Efforts have been made also to unify treatment procedures. In light of the high cost of setting up and running treatment centres, community-based approaches have proven both effective and less expensive if well managed. Further funding is needed in order to extend and improve the number

of existing treatment centres, as most centres are permanently overcrowded (Viet Nam country profile). Adolescents are free to attend community based programmes as there are no age based restrictions, however the programmes do not specifically target adolescent substance users or their specific treatment needs. Community-based programmes appear to be primarily detoxification programmes, and subsequent to involvement in detoxification patients are returned either to their families or to appointed Organizations, to be supervised for a period of 2 years for relapse to substance use (UNESC 2003). Relapse can lead to enrolment in compulsory treatment programmes.

Compulsory/ coerced programmes

Vietnamese adolescents aged from 12-18 years can be mandated to attend compulsory treatment centres. Compulsory treatment can last from 1-2 years, and is financed by the state. Substance use treatment in these centres can consist of a diverse range of elements, which have been reported to include: detoxification, recuperation, labour-therapy, and personality and behaviour rehabilitation. In particular, labour therapy stands out as one element of treatment which lacks empirical evidence for effectiveness. Labour therapy is included as part of compulsory treatment not on the basis of established effectiveness for treatment of substance use disorders, but as it provides something to occupy detainees, and it supplements the state income of the compulsory treatment centres, and hence it is argued to improve living conditions of the occupants (UNESC 2003).

Another entry point for adolescents aged 12-18 years to this treatment programme is registry for spontaneous treatment. The conditions appear similar to the experience of mandated compulsory treatment, however those entering treatment via this route pay for the services, and treatment duration is far shorter (approximately 6 months). Both compulsory and spontaneous classified occupants of the compulsory treatment centres endure 15-30 days of detoxification, followed by educational regimes to regain their behaviours and personality by learning Vietnamese drug prevention law, academic, sporting and artistic activities, self help groups, vocational training geared towards demand in the national labour market, and participation in labour therapy (UNESC 2003).

In the Northern mountainous provinces, detoxification is followed by compulsory subscription to working sites for manual labour for a period of 1-2 years. After this period of time, patients must participate in community based treatment. They are placed on management lists and must report on a monthly basis to local authorities and undertake drug tests for a period of 2 years. If these tests return positive or there is other evidence of relapse, patients must return to the manual labour sites. Only after 2 years of absence from substance use following labour therapy can a patient have their name removed from the management lists (UNESC 2003).

OST

A pilot programme for methadone is currently being carried out but treatment cost is high and public support relatively low (UNESC 2003).

Harm reduction programmes

Harm reduction programmes in Viet Nam are legal, but not widely available. These programmes are implemented by the public health sector, and funded by NGOs and international Organizations. Given the established effective outcomes of harm reduction programmes, including reduction of risk of exposure to HIV and other substance use related harms, it is unsettling that harm reduction programmes in Viet Nam such as NSPs have been reported to be obstacles to substance use rehabilitation due to the distribution of clean needles and syringes, which are reported as enticements to substance use. Unfortunately, the aims of harm reduction programmes are poorly delineated in public understanding from the aims of substance use treatment approaches, and are perceived as an irrational treatment response as they make available equipment used for substance use, and thus are perceived as not encouraging an abstinence based approach (UNESC 2003).

This section provides a brief overview for the remaining countries that make up WHO's Western Pacific region. No drug related youth specific information was available for Brunei Darussalam, Macao, Nauru, Niue, Kiribati and Pitcairn Islands. Thus, these countries have not been included in the summary overviews.

As for the preceding section, the following country situations and profiles must be read with caution. Available data are extremely variable in relation to reliability and generalisability. In addition, data have been collected, and edited, by various government ministries and departments, NGOs and research centres; with attendant biases. Questions regarding the same substance, means of use and associated behaviours have been asked in different ways, even within the same country and by the same groups. Data also vary as to year of collection.

Demographics

Population:

- 67 000, with an annual growth rate of 2% (2008)

Adolescents (10-19 years):

- No estimate available

Youth Substance use profile

Data from the Youth Risk Behavior Survey 2007 – Sample size 3625 high school students

Alcohol:

- Lifetime prevalence of alcohol use 46.6% (F=43.9%, M=49.7%) whereas the prevalence of current alcohol use was 29.8% (F=28.7%, M=31.1%).
- In addition 18.3% students were episodic heavy drinkers (who had five or more drinks in a row) (F=16.3%, M=20.3%).
- 13.5% students bought alcohol in a store themselves.
- 13.9% students had drunk alcohol before 13 years of age (F=10.5%, M=17.4%).
- 9.4% students had taken alcohol on school property (F=8.5%, M=10.3%).

Amphetamine type stimulants:

- Lifetime prevalence of methamphetamine use 5.7% (F=2.7%, M=8.6%).

Cocaine:

- Lifetime prevalence of cocaine use 5.4% (F=2.9%, M=7.9%) whereas the prevalence of current cocaine use was 3.0% (F=1.5%, M=4.3%).

Opioids:

- Lifetime prevalence of heroin use 5.3% (F=2.7%, M=7.9%).

Cannabis:

- Lifetime prevalence of cannabis use 17.6% (F=10.6%, M=25.3%) whereas the prevalence of current cannabis use was 10.2% (F=5.6%, M=15.2%).

- 7.0% students had tried cannabis before 13 years of age (F=3.1%, M=11.0%). 5.3% students had used cannabis on school property (F=3.1%, M=7.8%).

Ecstasy:

- Lifetime prevalence of ecstasy use 5.0% (F=2.2%, M=7.7%).

Inhalants:

- Lifetime prevalence of inhalant use 11.6% (F=10.6%, M=12.6%).

Injecting drug use:

- Lifetime prevalence of injecting 5.9% (F=3.8%, M=8.0%).

Demographics

Population:

- 13 000, with an annual decline rate of 2% (2007)

Adolescents (10-19 years):

- No estimate available

Urbanisation:

- No estimate available
- The national population density is 81 people per square kilometer (2007)

Youth substance use profile

- Data from the second generation survey in 2006 involving 258 young people between 15 – 24 years.

Alcohol:

- 30.7% had never had alcohol, 12.4% reported monthly or less use, 22.3% reported 2-4 times per month use, 27.1% reported 2-3 times per week use and 7.6% reported 4+ times per week use of alcohol.

Amphetamine type stimulants:

- 6.7% young people had ever used speed/amphetamines whereas 0.4% had had used these in last 30 days
- 4.3% young people had already ever used Ice/crystal meth where as none had used it in last month

Opioids:

- people had already ever used heroin where as none had used it in last month

Cannabis:

- 46.8% young people had ever used cannabis/cannabis whereas 11.2% had used in last 30 days

Ecstasy:

- 6.7% young people had already ever used ecstasy where as none had used it in last month

Inhalants:

- 6.3% young people had already ever used inhalants where as none had used it in last month

Others:

- 22.9% young people had ever drunk kava whereas 1.6% had drunk Kava in last 30 days
- 11.1% young people had ever used LSD/acid/magic mushrooms whereas 0.4% had had used these in last 30 days
- 4.7% young people had already ever used betel nut where as none had used it in last month

Demographics

Population:

- Estimated to be 110,000
- Half the population is less than 19 years of age
- 10 -19 years population: 27,000

Adolescents (10-19 years):

- No estimate available

Youth substance use profile

- Cannabis, kava, alcohol and tobacco use in the country

Alcohol:

- Drug of main concern
- A 2006 survey of high school students in Kosrae revealed a quarter of students reporting being drunk at least monthly.
- The 2007, a Second generation Surveillance survey of 280 youth aged 15-24 from Pohnpei found: 80.3% of males and 55.2% females had consumed alcohol, with 29.9% of males reporting drinking 2-3 times per week. One in five reported drinking 10 or more drinks per drinking session.

Cannabis:

- 18.2% reported smoking cannabis in last 30 days..

Betel Nut:

- 55.5% had used betel.

ATS:

- While 6.9% reported ever use of ATS, none reported use in the last 30 days.

Injecting:

- 2007 survey found that 6.4% of young females and 11.1% of young males reported having injected drugs in the previous 12 months

Prevention strategies

- Family life sector programs of National Youth Policy 2004 - 2010 included health and wellness, family life-skills, peer education training, prevention of HIV and AIDS, and alcohol awareness

Demographics

Population:

- 844000, with an annual growth rate of 0.62% (2008).

Adolescents (10-19 years):

- 175,000

Youth Substance use profile

- Data from the School Information Management System (SIMS).

Alcohol:

- 142 students were found engaged in drug (other than alcohol) related offences
- 184 students were found engaged in alcohol related offences.

Inhalants:

- According to the School Information Management System (SIMS) data 30 students were found engaged in inhalant related offences.

Prevention strategies

- Fiji has a School Drug Use policy which is circulated to all schools by the Ministry of Education. The National Substance Abuse advisory Council provides the policy (NSAAC).

School programmes:

- According to the School Drug Use policy the Ministry of Education will implement the following measures:
 - Drug education programmes to be Incorporated in the New Curriculum Framework.
 - Professional development for staff teaching Health and Family Life Education
 - Involvement of parents and community members in health and drug education programmes
- In addition the School Drug Use policy also provides guidelines on the procedures to be undertaken if a student is suspected of drug use or abuse.
- There is a weekly school broadcast programme referred to as the Fiji STAHS and Drugs programme. It is

designed to target students and teachers.

- NSAAC's quarterly newsletter is produced and distributed to central and government schools inclusive of diplomatic missions, government departments and NGOs. The newsletter mainly features students' activities on drugs and substance use awareness
- NSAAC prepares an annual school circular on International Day Against Drug Abuse and Illicit Trafficking informing all schools on the current year's theme and suggest activities to commemorate the day

Universal:

- The Ministry of Education also conducts awareness programmes for students, teachers, parents and the community through lectures, presentations, workshop, dissemination of drug information in the media and through the publication and distribution of drug education materials
- Radio talkback show is conducted via occasional invitation by media personals on drugs and alcohol use by young people

Targeted:

- Workshops are conducted for at-risk young population upon invitation from interested schools or organizations
- IEC materials are displayed and distributed to at-risk young population

Treatment strategies

Range:

- NSAAC offers brief counselling to students referred from schools
- NSAAC has initiated a peer education programme- Fiji Students Stand Against HIV AIDS and Substance Abuse

Residential:

- St Giles Hospital treats people who experience Cannabis induced psychosis.

Demographics

Population:

- 266 000, with an annual growth rate of 1.2% (2007)

Adolescents (10-19 years):

- 25 750 (2007)

Urbanisation:

- Urban regions contain 75% of the population, with an annual growth rate of 1.2% (2007)
- The national population density is 74 people per square kilometer (2007)

Poverty:

- No estimate available for national percentage of population living below the international poverty line

HIV/AIDS:

- The percentage of PLWHA among those aged 15-49 years is 0.08% in 2008.
- The number of PLWHA aged 15 years and over is 297
- 87% of population with advanced HIV are able to access to ART.

Youth Substance use profile

Alcohol:

- According to a survey done in 1999 among school children aged 10 to 20 years : 59% of young people have consumed alcohol and half of them are regular drinkers (one per week maximum).
- Approximately two young people on three began before the age of 14 years and more than a young person on three before the age of 12 years.
- 32% experienced drunkenness
- One on four consumed once at least an illicit drug during his life.

Prevention strategies

School programmes:

Universal:

- Prevention and control actions against alcohol in French Polynesia are

coordinated by the Ministère de la Santé (Ministry of Health), particularly by the Centre de consultations spécialisées d'alcoologie et de toxicomanie (CCSAT) of the Health Department. One of the missions of CCSAR is to meet the medical, psychological, and family needs of alcohol and drug patients.

- The "Comité de Lutte contre l'Alcool et la Toxicomanie" in an intersectoral committee who makes proposals of strategies and actions against addiction including alcoholism. The 2007- 2011 Programme includes strategies such as :
 - To reinforce the preventive actions in schools and on all young people, on the relatives and families, on the pregnant women and on the workers
 - To strengthen the fight against driving under drunkenness and influence of the drug
 - To develop Information and health education
 - To create healthy environments without drugs and less alcohol, by using legislation on the accessibility to the products, on advertisings
 - To improve the tertiary prevention (optimization of specialized care services, early screening of addictions, etc.)
 - To build an information and monitoring system on substance abuse
 - To strengthen the partnerships and the intersectoral coordination

Demographics

Population:

- 176 000, with an annual growth rate of 1% (2008)

Adolescents (10-19 years):

- 32 000 (2008)

Urbanisation:

- Urban regions contain 94% of the population, with an annual growth rate of 2% (2007)
- The national population density is 321 people per square kilometer (2007)

Substance use profile

Alcohol:

- Alcohol consumption was 1.3 litres per capita among those aged 15 years and over (2003)
- The prevalence of adults consuming at least one alcoholic beverage in the past 30 days is 40%, of heavy drinking is 8% and binge drinking was 20%. Drinking is more prevalent among males than females across all alcohol consumption categories (2007)

Amphetamine type stimulants:

- The prevalence of methamphetamine consumption in the past month reported from a survey of 800 respondents was 1%, with first use occurring on average at age 24 years, with a range from 13-40 years (2007)
- Reports state that ice smokers in the Northern Mariana Islands are said to be moving to injection of methamphetamine
- The prevalence of cannabis consumption in the past month reported from a survey of 800 respondents was 3%, with first use occurring on average at age 18 years (2007)

Youth Substance use profile

Youth behaviour risk survey 2007

Alcohol:

- The prevalence of current alcohol consumption among secondary school students was 35%. Male and female current drinking was comparative. Current drinking was highest amongst Caucasian secondary school students (67%) followed by Chamorro (41%), Filipino (33%), Other Asian (30%) and Micronesian Islander (23%) students. Since 2005, current drinking decreased markedly among Micronesian Islander students, but increased among Filipino and Other Asian students (2007)
- The prevalence of binge drinking amongst secondary school students was 19%. This is higher among males (22%) than females (16%). Binge drinking increased between 2003 and 2007; from 2003-2005 this was due to increased binge drinking among males, and from 2005 to 2007 this was due to increased binge drinking among females. By ethnicity, binge drinking was highest amongst Caucasian secondary school students (40%) followed by Chamorro (22%), Micronesian Islander (17%), Filipino (14%), and Other Asian (14%) students. Since 2005, binge drinking decreased markedly among Micronesian Islander students, but increased among Caucasian, Filipino and Other Asian students (2007)
- The prevalence of drinking and driving amongst secondary school students was 8%. This represents a decrease since 2005, due to decreased drink-driving among males. Drink driving was higher among males (10%) than females (6%) (2007)
- The prevalence of current and lifetime alcohol consumption is similar among secondary school students and court-involved youth, however court-involved youth are more likely to binge drink and to drink and drive than their secondary school peers (2007)

Cannabis:

- The prevalence of current cannabis consumption among secondary school students was 23%. This represents a

decrease since 2005, due largely to a significant reduction in male cannabis consumption. More males consume cannabis (26%) than females (21%), however this discrepancy has significantly narrowed since 2005. Current cannabis use is highest amongst Caucasian secondary school students (55%), followed by Chamorro (36%), Micronesian Islander (17%), Other Asian (12%) and Filipino (8%), students. Since 2005, current cannabis use decreased among Micronesian Islander and Filipino students, but increased markedly among Caucasian students, and to a lesser extent amongst Other Asian students (2007)

- The prevalence of lifetime cannabis use has decreased since 2005 among male secondary school students to 15%, and remains higher than use among female students (10%) (2007)

Inhalants:

- The prevalence of lifetime inhalent use among secondary school students was 14%, remaining stable since 2005. Inhalent use is higher among middle school students (16%) than high school students (14%), but use remains comparative across genders. Lifetime inhalent use is highest amongst Caucasian secondary school students (36%), followed by Other Asian (20%), Micronesian Islander (14%), Chamorro (13%), and Filipino (11%) students. Since 2005, lifetime inhalant use has increased markedly among Caucasian and other Asian students (2007)

Amphetamine type stimulants:

- The prevalence of lifetime methamphetamine use among secondary school students was 6%, remaining stable since 2005. Lifetime methamphetamine use is higher among males (8%) than females (4%) (2007)

Demographics

Population:

- 6,982,000, with an annual growth rate of 1% (2008)

Adolescents (10-19 years):

- 862 000 (2008)

Urbanisation:

- Urban regions contain 100% of the population, with an annual growth rate of 1% (2007)
- National population density is 6 551 people per square kilometer (2007)

Youth Substance use profile

- There were 3430 young drug users (<21 years) in Hong Kong in 2008. (Males = 69.2%, F = 30.8%)
- The major reasons for reported youth drug use included peer influence/to identify with peers, curiosity and relief of boredom /depression/ anxiety.

Amphetamine type stimulants:

- 1.1% used Methylamphetamine.

Cocaine:

- 9.3% used Cocaine

Opioids:

- 1.8% used Heroin

Cannabis:

- 9.0% used Cannabis

Ecstasy:

- 15.6% used MDMA.

Others:

- 85.4% used Ketamine.
- 14.9% used Triazolam/midazolam/zopiclone.
- 6.5% used Nimetazepam.
- 3.0% used cough medicine.

Other surveys:

- According to Caritas Hong Kong Youth and Community Service survey conducted on youth drug use in New Territories West in mid-2008 ketamine, cannabis and MDMA remained the most popular substances used and about 80% interviewees took more than one type of drugs and 64% took

more than three types of drugs. 74% interviewees first used psychotropic substances at the age 16 or below. Similar findings were reported in a survey by the New Being Fellowship and the Christian Zheng Sheng College. This survey showed that 82% students took psychotropic substances and mean age of first use was 14 with the youngest one being 8 years old.

- A survey jointly conducted by counselling centres for psychotropic substance users revealed that the youth drug use problem, once largely confined to the northern districts of the territory, had spread to schools in all areas, particularly to those top band schools located on the Hong Kong Island. Counselling centres were afraid that these reported cases might only be the tip of the iceberg. Survey also revealed that students in wealthier areas took cocaine, while those from poorer districts preferred ketamine

Prevention strategies

School programmes:

Universal:

- 'Community Programme against Youth Drug Abuse' introduced in 2009 which is a cross-sector co-operation between the government, the Hong Kong Medical Association, schools, NGOs, religious and parent-teacher associations. It targets young people who are at risk or have used drugs.
- Healthy activities appealing to young people such as ball games, wushu, rock climbing, dancing, music and drama and vocational training courses such as beauty care, sales and hair dressing are a part of the programme.
- Counselling services, fitness tests and treatment are arranged for young people as part of the programme and publicity and public education activities, including seminars and sharing sessions for parents and teachers to enhance their understanding of the causes of the youth drug problem, help them identify the physical symptoms of drug taking and ways to tackle the problem.

Demographics

Population:

- 127,293,000, with no annual growth or decline (2008)

Adolescents (10-19 years):

- 12,124,000 (2008)

Urbanisation:

- Urban regions contain 66% of the population, with no annual growth or decline (2007)
- The national population density is 339 people per square kilometer (2007)

Poverty:

- Nationally 11.8% of the population lives below the international poverty line (2003)

HIV/AIDS:

- Among 15-49 year olds 0.1% are PLWHA (2007). The number of PLWHA aged 15 years and over is 9 600 (2007)
- No estimate available for percentage of those with advanced HIV able to access to ART

Substance use profile

Alcohol:

- Alcohol consumption was 7.6 litres per capita among those aged 15 years and over (2003)
- 84% males and 64% females drink alcohol in Japan according to a national survey in 2003.
- 6.4% of 20+ population is binge drinker (2003).

Youth Substance use profile

- According to a study conducted in urban Osaka in 15 – 24 years old (N=2096), 82% of participants had used drugs such as cannabis and solvents.

Alcohol:

- 50% of junior high school and 70% of senior high school students reported some form alcohol experience in 2000.

However, a 2004 comparison indicates that this number has declined.

- Alcohol consumption increased steadily from 7th grade to 12th grade and is higher in males than females.

Amphetamine type stimulants:

- 0.4% of lower secondary school students had used methamphetamines in 2002.
- According to a survey, 80% of those who used stimulants first did so between ages of 15 and 29 years.
- 0.4% of young people aged 13–15 years had ever used amphetamines (2006)

Cannabis:

- 0.5% of lower secondary school students had used cannabis in 2002.
- 0.4% of young people aged 13–15 years had ever used cannabis (2006)

Prevention strategies

Laws:

- “The Law for Prohibiting Liquors to Minors” prohibits underage drinking itself along with imposing penalties for sales of alcoholic beverages that will lead underage drinking.
- “The Law on Control and Improvement of Amusement and Entertainment Business” imposes penalties for providing alcoholic beverages for underage people upon the person engaging amusement and entertainment business.

School programmes:

- Drug use prevention classes are conducted in schools
- Schools provide guidance on drug use prevention through the overall educational activities, mainly in "physical education," "health and physical education," "moral education" and "special activities".
- Drug use prevention classes held at least once a year at all lower and upper secondary schools, and elementary schools instructed to hold drug use prevention classes depending on the local circumstances. In 2001 16,070 classes held in various schools with 3,930,642 students.

- Teaching materials for students and guidance materials for teachers prepared and distributed to allow students to acquire accurate knowledge about the harmful effects and hazards of drugs

Universal:

- MHLW has carried out the People's Health Promotion Campaign (Healthy Japan 21) including alcohol policy. Major targets include propagation of information about alcohol and elimination of juvenile drinkers.
- Diversified activities promoted through various media to improve publicity and educational activities.

Targeted:

- Courses on drug use prevention offered and consultation services for local residents at health centers are provided

Demographics

Population:

- 48 152 000, with annual growth rate of 0.33 (2008)

Adolescents (10-19 years):

- 6 687 000 (2008)

Urbanisation:

- Urban regions contain 62% of the population, with an annual growth rate of 1% (2007)
- The national population density is 486 people per square kilometer (2007)

HIV/AIDS:

- Among 15-49 year olds 0.1% are PLWHA (2007)
- No estimate available for number of PLWHA aged 15 years and over
- Of those with advanced HIV, 0% have access to ART (2007)
- No estimate available for percentage of PLWHA among those aged 0-15 and 15-24 years, number of PLWHA aged 0-15 years, or percentage of those with advanced HIV aged 0-15 years able to access to ART

Substance use profile

Alcohol:

- Alcohol consumption was 7.9 litres per capita among those aged 15 years and over (2003)
- Prevalence of drinking among adults 20 years and over was 51.9% (M=72.5%, F=35.1%) in 2005.

Youth substance use profile

Alcohol:

- Monthly prevalence of drinking among young people was 31.3% (M=32.8%, F=28.6%) in 2004.
- Yearly prevalence of drinking among young people was 47.2% (M=48.3%, F=45.7%) in 2004.
- Life-time prevalence of drinking among young people was 74.4% (M=75.5%, F=72.9%) in 2004

Cannabis:

- 0.1% of young people aged 11-12 years had ever used cannabis (2007)

Prevention strategies

- There is no national public health agency in Korea to monitor alcohol-related harms to develop/implement alcohol policy and to do research on alcohol.

Demographics

Population:

- 59 000, with an annual growth rate of 2% (2007)

Adolescents (10-19 years):

- No estimate available

Urbanisation:

- The national population density is 329 people per square kilometer (2007)

Substance use profile

Alcohol:

- No estimate available for alcohol consumption per capita among those aged 15 years and over

Youth Substance use profile

Data from the Youth Risk Behavior Survey 2007 – Sample size 1,522 high school students

Alcohol:

- Lifetime prevalence of alcohol use 55.0% (F=44.0%, M=66.4%) whereas the prevalence of current alcohol use was 41.7% (F=33.4%, M=51.0%).
- In addition 26.6% students were episodic heavy drinkers (who had five or more drinks in a row) (F=22.6%, M=30.8%).
- 10.9% students had drunk alcohol before 13 years of age (F=6.9%, M=14.8%).
- 15.3% students had taken alcohol on school property (F=11.7%, M=18.9%).

Amphetamine type stimulants:

- Lifetime prevalence of methamphetamine use 13.1% (F=10.5%, M=15.4%).

Cocaine:

- Lifetime prevalence of cocaine use 7.7% (F=5.8%, M=9.5%) whereas the prevalence of current cocaine use was 5.3% (F=3.9%, M=6.7%).

Opioids:

- Lifetime prevalence of heroin use 9.6% (F=7.5%, M=11.6%).

Cannabis:

- Lifetime prevalence of cannabis use 13.9% (F=5.5%, M=22.4%) whereas the prevalence of current cannabis use was 8.5% (F=3.2%, M=14.1%).
- 4.5% students had tried cannabis before 13 years of age (F=3.0%, M=6.0%).
- 4.5% students had used cannabis on school property (F=2.3%, M=6.7%).

Injecting drug use:

- Lifetime prevalence of injecting 15.0% (F=14.1%, M=15.8%).

Demographics

Population:

- 2 683 500, with an annual growth rate of 1% (2008)

Adolescents (10-19 years):

- 549 000 (2008)

Urbanisation:

- Urban regions contain 57% of the population resides in urban dwellings, with an annual growth rate of 1% (2007)
- The national population density is 2 people per square kilometer (2007)

Poverty:

- Nationally 22% of the population lives below the international poverty line (2005)

HIV/AIDS:

- Among 15-49 year olds 0.1% are PLWHA (2007)
- The number of PLWHA aged 15 years and over is 1 000 (2007)
- No estimate available for percentage of population with advanced HIV able to access to ART

Substance use profile

Alcohol:

- Pure alcohol consumption was 9.3 litres per capita (2005)
- 66.5% population between 15 – 64 years of age are current alcohol drinkers (2005).
- 27.3% males and 10.3% females between 15 – 64 years of age are binge drinkers (2005)

Youth substance use profile

Alcohol:

Data from the Mongolian Youth development Centre indicates that:

- 54.7% young people above age of 16 drink alcohol whereas 70.5% young people above age of 20 drink alcohol
- 86.9% students in a survey had used alcohol

- The average age of initiation of alcohol is 17.6 years

Prevention strategies

Universal:

- National programme on alcohol prevention and control 2003

Targeted:

- The MYDC has a Youth training programme which is still in a formative stage of development in which teachers will receive training who will train youth to get involved. One of the specific issues the programme is hoping to address is the education about the dangers of alcohol and drug abuse.

Treatment strategies

Coercion/Compulsory:

- Law on forced treatment and labor for alcohol abusers 2000 revised in 2003
- Cognitive behaviour therapy, the Minnesota model, is used in Mongolia

Demographics

Population:

- 245 580, with an annual growth rate of 1.7% (2009)

Adolescents (10-19 years):

- 44 240 (2008)

Urbanisation:

- Urban regions contain 64% of the population, with an annual growth rate of 2% (2007)
- The national population density is 13 people per square kilometer (2009)

Substance use profile

Alcohol:

- Alcohol consumption was 9.7 litres per capita among those aged 15 years and over (2008)

Youth substance use profile

- Findings from the second generation survey in 2005 involving 292 young people between 16 – 24 years

Alcohol:

- 4.6% young people (M=6.4%, F=2.4%) have alcohol at least once a day.
- 32.5% young people (M=39.7%, F=23.6%) have alcohol at least once a week.
- 17.7% young people (M=18.6%, F=26.5%) have alcohol less than once a week.
- The number of standard units consumed over the course of one social event was 7.3 units/event (M=9.3 units, F= 5.2 units).

Amphetamine type stimulants:

- 2.1% young people (M=2.6% and F=1.6%) had tried ecstasy/acid/speed

Cocaine:

- 1.1% young people (M=1.9% and F=0.0%) had tried cocaine

Cannabis:

- 49.3% young people (M=54.8% and F=42.5%) had tried cannabis.

Ecstasy:

- 2.1% young people (M=2.6% and F=1.6%) had tried ecstasy/acid/speed

Injecting:

- 0.4% young people (M=0.6% and F=0.0%) had tried injecting drugs such as heroin

Others:

- 1.1% young people (M=1.3% and F=0.8%) had tried Datura.
- 34.8% young people (M=38.7% and F=29.9%) had drunk Kava.

Demographics

Population:

- 4 230 000, with an annual growth rate of 1% (2008)

Adolescents (10-19 years):

- 620 000 (2008)

Urbanisation:

- Urban regions contain 86% of the population, with an annual growth rate of 1% (2007)
- The national population density is 16 people per square kilometre (2007)

HIV/AIDS:

- Among 15-49 year olds 0.1% are PLWHA (2007)
- The number of PLWHA aged 15 years and over is 1 400 (2007).

Substance use profile

High school survey, 2007

Alcohol:

- Alcohol consumption was 9.7 litres per capita among those aged 15 years and over (2003)
- A 2007 survey of high school students found that 72% of students had tried alcohol, 61% consumed alcohol in the past month, 34% had consumed 5 or more drinks in 4 hours in the past month, and 18% consumed alcohol weekly or more often
- Among students who consumed alcohol in the past month, substantial numbers of students reported problems from drinking alcohol such as unsafe sex (14%), unwanted sex (7%), or injuries (22%)
- Māori suffer disproportionate harm from alcohol use
- Pacific communities have increasing alcohol consumption and low alcohol and drug service utilisation

Amphetamine type stimulants:

- The 2007 survey of high school students found that the use of speed was uncommon among students
- The proportion of students reporting methamphetamine use was 1%

Opioids:

- The 2007 survey of high school students found that the use of heroin was uncommon among students

Cannabis:

- The 2007 survey of high school students found that approximately 5% of students use cannabis weekly or more often, and that among students who used cannabis in the past month, about 1 in 4 use it before or during school
- Almost one-third of students using cannabis have tried to cut down or give up using it
- the proportion of students who use cannabis has decreased over the past 6 years; in 2001 39% of students had tried cannabis, compared to 27% of students in 2007
- Maori suffer disproportionate harm from cannabis use

Ecstasy:

- The 2007 survey of high school students found that the use of Ecstasy was uncommon among students

Inhalants:

- In 2003 0.1% of people surveyed had used solvents in the previous year
- Solvent use has been associated with a number of deaths: over the three years from 1996 to 1998 there were 35 deaths specifically due to solvents, with the deaths related to drug dependence, abuse, accidental poisonings and suicide

Prevention strategies

School programmes:

- School-based health promotion initiatives work best when supported by consistent family and community-based approaches
- A community focus will also be necessary to reach members of this target group who are at higher risk, including those who may not regularly attend school
- Personal decision-making and other life skills need to be developed and fostered so that young people feel able

to make healthy decisions about the use of tobacco, alcohol and other drugs

Universal:

- A demand reduction programme is being introduced that will include a web resource to act as a platform to ensure there is adequate information about drugs and where to go for help located in a single centralised site
- The web resource will hold existing resources and provide new resources to respond to gaps in information, emerging issues and key target audiences
- As well as an information repository, the website will have interactive tools, such as on-line assessments and downloadable resources

Targeted:

Treatment strategies

Range:

- Models of service will range from brief early interventions to withdrawal services and longer treatment and support programmes, which address the physical and psychological needs of individuals and their families, as well as wider social and financial issues
- Of identified service providers, community services consisted of: 20 service providers reported that they provided a Māori community treatment service available to both Māori and the general population, 15 providers said they provided general community treatment and counseling services, 10 services provided community counseling, support and treatment services for young people, 3 services provided community services targeted to Pacific peoples
- Of identified service providers, residential services consisted of: 16 service providers reported that they provide residential treatment services for adults. In addition, two services provided Kaupapa Māori residential services for adults. One service stated they provided residential treatment services for youth and one other provided youth residential services with a Kaupapa Māori approach. Eight

services provided supportive accommodation and five provided residential detox services.

Content:

- Of identified service providers, community services appeared to offer: counseling, support and treatment
- Of identified service providers, the following gaps in youth services were each identified by one or two providers: emergency accommodation for youth aged 17-18; respite care for adolescents; support and after care for young people following treatment; classroom education for 16 years and over; and facilities for young people with conduct disorders and offending that is attached to a prison
- Of identified service providers, providers mentioned a gap in services for Pacific peoples, with one of these providers also specifically mentioning Pacific youth

Coercion/Compulsory:

- Children and Young people can be subject to compulsory treatment under the following Acts: The Alcohol and Drug Addiction Act 1966 which can compel treatment for severe alcohol and drug dependence and the Mental Health (Compulsory Assessment and Treatment) Act 1992, however this rarely occurs

Residential:

OST:

- Young people can receive opioid substitution treatment, however it is uncommon for young people under the age of 18
- Under the age of 16, the guardian consent may be required

NSP

- Those aged less than 16 years are unable to access needles and syringes from Needle exchange authorised outlets, but the possibility exists that they can access needles & syringes from a GP as part of a prescription to that effect
-

Demographics

Population:

- 84 000, with an annual growth rate of 2% (2007)

Adolescents (10-19 years):

- No estimate available

Urbanisation:

- The national population density is 182 people per square kilometer (2007)

HIV/AIDS:

- No estimate available for percentage of PLWHA among those aged 15-49 years, number of PLWHA aged 15 years and over, or percentage of population with advanced HIV able to access to ART

Substance use profile

Alcohol:

- No estimate available for alcohol consumption among those aged 15 years and over

Amphetamine type stimulants:

- Reports state that ice smokers in the Northern Mariana Islands are said to be moving to injection of methamphetamine

Youth Substance use profile

Data from the Youth Risk Behavior Survey 2007 – Sample size 2,292 high school students

Alcohol:

- Lifetime prevalence of alcohol use 69.8% (F=70.5%, M=69.1%) whereas the prevalence of current alcohol use was 41.1% (F=39.5%, M=42.6%).
- In addition 25.5% students were episodic heavy drinkers (who had five or more drinks in a row) (F=21.3%, M=29.2%).
- 27.4% students had drunk alcohol before 13 years of age (F=25.0%, M=29.6%).
- 6.5% students had taken alcohol on school property (F=5.5%, M=7.3%).

Amphetamine type stimulants:

- Lifetime prevalence of methamphetamine use 4.9% (F=3.2%, M=6.2%).

Cocaine:

- Lifetime prevalence of cocaine use 4.7% (F=2.8%, M=6.3%) whereas the prevalence of current cocaine use was 2.9% (F=1.7%, M=4.0%).

Opioids:

- Lifetime prevalence of heroin use 3.5% (F=1.9%, M=5.0%).

Cannabis:

- Lifetime prevalence of cannabis use 54.9% (F=48.7%, M=61.0%) whereas the prevalence of current cannabis use was 31.9% (F=26.3%, M=37.5%).
- 19.9% students had tried cannabis before 13 years of age (F=12.3%, M=27.5%).
- 11.0% students had used cannabis on school property (F=8.5%, M=13.5%).

Ecstasy:

- Lifetime prevalence of ecstasy use 4.7% (F=2.5%, M=6.7%).

Injecting drug use behavior:

- Lifetime prevalence of injecting 4.1% (F=2.4%, M=5.5%).

Demographics

Population:

- 20 000, with an annual growth rate of 0.01 (estimate) (2007)

Adolescents (10-19 years):

- No estimate available

Urbanisation:

- The national population density is 44 people per square kilometer (2007)

HIV/AIDS:

- Prevalence of HIV/AIDS in adult population is 0.15 (2007) and the prevalence of HIV among population aged 15 – 24 years is 0.00 (2007).

Substance use profile

Alcohol:

- No estimate available for alcohol consumption among those aged 15 years and over (2003)

Youth Substance use profile

Data from the Youth Risk Behavior Survey 2007 – Sample size 732 high school students

Alcohol:

- Lifetime prevalence of alcohol use 64.3% (F=61.8%, M=66.8%) whereas the prevalence of current alcohol use was 36.0% (F=29.0%, M=42.4%).
- In addition 23.3% students were episodic heavy drinkers (who had five or more drinks in a row) (F=15.6%, M=31.0%).
- 12.7% students bought alcohol in a store themselves.
- 20.8% students had drunk alcohol before 13 years of age (F=15.4%, M=26.4%).
- 6.8% students had taken alcohol on school property (F=5.8%, M=7.9%).

Amphetamine type stimulants:

- Lifetime prevalence of methamphetamine use 7.1% (F=4.3%, M=9.9%).

- **Cocaine:** Lifetime prevalence of cocaine use 5.9% (F=3.9%, M=8.0%) whereas the prevalence of current cocaine use is 3.5% (F=1.7%, M=5.5%).

Opioids:

- Lifetime prevalence of heroin use 5.2% (F=3.3%, M=7.3%).

Cannabis:

- Lifetime prevalence of cannabis use 59.8% (F=55.6%, M=64.3%) whereas the prevalence of current cannabis use was 38.5% (F=33.0%, M=43.7%).
- 18.9% students had tried cannabis before 13 years of age (F=9.4%, M=29.0%).
- 20.9% students had used cannabis on school property (F=15.8%, M=25.9%).

Ecstasy:

- Lifetime prevalence of ecstasy use 6.9% (F=4.9%, M=9.1%).

Inhalants:

- Lifetime prevalence of inhalant use 8.8% (F=7.3%, M=10.5%).

Injecting drug use:

- Lifetime prevalence of injecting 5.1% (F=3.8%, M=6.5%).

Demographics

Population:

- 90,348,000 with an annual growth rate of 1.815% (2008).
- **Adolescents (10-19 years):**
- 19,578,000

Poverty:

- The national percentage of population living below the international poverty line is 37% (2006)

Youth Substance use profile

Alcohol:

- The 1989 National Smoking Prevalence Survey found that more than half of the youth surveyed in the national study mentioned above had tried drinking alcohol, and those still consuming alcohol stood at 37 percent (DOH 1999)
- A 2001 survey (sample = 1105; age group 15 to 19 years =) found that 24% of the respondents were current drinkers. 42% of males and 11% of females were reported to be currently drinking alcohol
- The prevalence of alcohol use among Filipino youth (total sample size n = 4198; aged 15–29 years old), is 39%; males (67%) are twice more likely than females (34%) to drink alcohol
- Seven out of ten youth drinkers are light drinkers (70%), three out of ten are moderate drinkers, and only 4% are heavy drinkers
- A 2001 survey (total sample size n = 1105; age group 15 to 19 years old) found that 2.6% of the total population sampled were heavy drinkers. Heavy drinking was defined as having more than 12 drinks on an average drinking day

Amphetamine type stimulants:

ATS is the most available and popular substance in the illicit drug market, with 95% of arrested users reporting 'shabu' or 'ice' as their preferred form of ATS

Cannabis:

- Cannabis is the second most popular substance in the illicit drug market, and is believed to be a 'starter drug' for teenage users

Ecstasy:

- Ecstasy is reported as the third most popular substance and is believed to be popular among youth and those who are affluent

Prevention strategies

School programmes:

- The National Drug Education Programme (NDEP) of the Department of Education has gone beyond the classroom and its structured learning processes to the larger environment by encouraging greater parent and community involvement in the drug abuse education and prevention process. The Programme has five components: (a) curriculum and instruction; (b) co-curricular and ancillary services; (c) teacher and staff development; (d) parent education and community outreach; and (e) research, evaluation and monitoring
- In the Basic Education Curriculum, drug education is part of the learning area of Makabayan (Nationhood), from Grade 1 to 6, and also in the high school. Teachers and their supervisors are trained on the use of strategies and resource materials on drug use to enhance their communications expertise on the subjects
- From July to December of 2002, the Department trained a total of 377 teachers, nurses and school health and nutrition personnel on Skills on Drug Abuse Prevention in nine of the country's 15 regions
- Informal education approaches are also being implemented to support existing knowledge imparted in the classrooms. Ancillary services such as counselling or related help are also being strengthened to help drug experimenters and students considered to be high risk probable users cope with their problems. Informal learning, the NDEP states, "occurs in diverse forms, in many

places & under varying circumstances and involves all kinds of people”

- Guidance centres, school clinics, security posts, student organizations, scouting and other youth clubs as well as student projects are being harnessed as informal channels of drug-abuse information dissemination. Moreover, to safeguard students from drug abuse, random drug testing shall be initiated among public and private high schools

Universal:

- In 2007, 969 lectures/seminars on drug awareness, 915 anti-drugs meetings and conferences and 819 programmes on substance use involving community were conducted
- In 2007, Philippine Drug Enforcement Agency (PDEA) key officials participated in 805 television and radio programmes, 1331 guest-speakerships, and 343 press conferences to inform the public about the status of the government’s anti-drugs campaign, and 600 press releases were distributed by the agency

Targeted:

- While the NDEP is the sole and major Organizational effort of the government aimed at drug abuse education and prevention among children, especially in the schools, there have been similar efforts – though sporadic and scattered, targeted at children at risk, such as those coming from poor families and communities as well as street children. Most of these efforts are undertaken by non-government organizations at the community level
- NGOs have their own projects usually involving one to four barangays in various cities nationwide, with support from the Global Initiative. These projects engage in training core groups of volunteers who would eventually implement outreach and street education activities
- For example, Childhope Asia Philippines – an organization that provides and organizes street-based education and shelter for street-

children and community-based projects for children, is training children to become peer trainers and to be actively involved in mobilizing other children in community through networking, training and outreach

- In 2007 advocacy programmes in workplaces, schools and barangays were intensified and aimed at targeted individuals and organizations
- In 2007 other advocacy seminars in schools and barangays reached out to students, out-of-school youths, barangay and community leaders, and other professional groups

Treatment strategies

Residential:

- In 2003, a total of 8,189 substance use cases were reported by 49 residential and 3 outpatient centers nationwide, comprising 7,663 cases (94%) from residential facilities and 526 (6 %) from outpatient centers
- An increase of 45% in new admissions and 2% in relapse cases were noted as compared to the previous year (2002)
- For the year 2003, most of the center confines were males (91%)
- Methamphetamine, commonly known as Shabu in the Philippines, remains the principle drug of use with 6,195 cases (87%), followed by Cannabis with 2,229 cases (31%)
- Reports also indicate Ecstasy and Nalbupine Hydrochloride (Nubain) use with an insignificant number of users admitted in some centers
- In 2007 4278 admissions were reported by residential and outpatient drug rehabilitation centres, which is lower than previous years
- Most admissions in 2007 were for poly drug users, 30% of the patients were of high school age, with approximately 90% of patients being male
- Methamphetamine and cannabis were the most commonly reported substances of use (69% and 38% respectively)

Demographics

Population:

- 179 000, with an annual growth rate of 1% (2008)

Adolescents (10-19 years):

- 47 000 (2008)

Urbanisation:

- Urban regions contain 23% of the population, with an annual growth rate of 2% (2007)
- The national population density is 66 people per square kilometer (2007)

Poverty:

- No estimate available

HIV/AIDS:

- No estimate available for percentage of PLWHA among those aged 15-49 years, number of PLWHA aged 15 years and over, or percentage of population with advanced HIV able to access to ART

Substance use profile

Devaney et al., 2006

Alcohol:

- Alcohol consumption was 1.7 litres per capita among those aged 15 years and over (2003)

Cannabis:

- Cannabis use is present
- Key informants and published reports indicated that cannabis is generally combined with alcohol
- Regionally, cannabis is mainly smoked but it is also chewed and sometimes baked with flour (Nejo, 2001)
- All data sources agreed that cannabis use is strongly gender linked, with significantly more males than females using it (Nejo, 2001)
- The majority of cannabis users are young, aged approximately 15–20 years (Nejo, 2001)
- Cannabis is used in the expatriate community and by tourists

Other Illicit substances:

- There has been little systematic research undertaken on drugs such as heroin, cocaine and methamphetamine
- Keyinformants suggested that drugs such as heroin, methamphetamines and cocaine are not commonly used due to their high cost compared to the average income

Prevention strategies

- There are no initiatives against primary prevention of illicit substances

Treatment strategies

Range:

- There is no formal drug and alcohol treatment.
- Life counseling for issues including employment, family conflict, sexuallytransmitted infections, cannabis use/abuse,alcohol (particularly homebrew), unplannedpregnancies, and domestic violence may occur through NGOs or churches

Demographics

Population:

- 4 615 000, with an annual growth rate of 1% (2008)

Adolescents (10-19 years):

- 678 000 (2008)

Urbanisation:

- Urban regions contain 100% of the population, with an annual growth rate of 1% (2007)
- The national population density is 6 347 people per square kilometer (2007)

Poverty:

- No estimate available for national percentage of population living below the international poverty line

HIV/AIDS:

- Among 15-49 year olds 0.2% are PLWHA (2007)
- The number of PLWHA aged 15 years and over is 4 100 (2007)
- No estimate available for percentage of population with advanced HIV able to access to ART

Substance use profile

Alcohol:

- Alcohol consumption was 2.2 litres per capita among those aged 15 years and over (2003)

Youth Substance use profile

- Data from Central Narcotics Bureau
- In 2008, the prevalence rate of youth drug use was 10 (per 100,000 youths).
- The world drug report does not report prevalence of Cannabis, ATS and Opioids in Singapore

Alcohol:

- According to the National Health Survey conducted in 2004, the crude prevalence of frequent drinking (drinking 1 – 4 days a week) was 7.5% (M= 8.1% and F=6.7%) for 18 – 29 years old. The age adjusted prevalence was almost the same.

- The crude prevalence of regular drinking (drinking more than 4 days a week) was 2.5% (M= 2.8% and F=1.9%) for 18 – 29 years old. The age adjusted prevalence was almost the same.
- The crude prevalence of binge drinking (five or more drinks within one drinking session at least once in the past month) was 14.1% (M= 18.9% and F=9.4%) for 18 – 29 years old.

Inhalants:

- In 2008, the prevalence rates of youth inhalant use was 42.8 (per 100,000 youths).
- According to the School Information Management System (SIMS) data 30 students were found engaged in inhalants related offences.

Prevention strategies

- Central Narcotics Bureau's (CNB) Preventive Education Unit (PEU) has been carrying out a series of Preventive Drug Education (PDE) programmes directed both generally at youth and students, and also specifically at high-risk students and youths since 1994.

School programmes:

- CNB's PDE programmes include anti-drug talks conducted by experienced narcotics officers in schools. Anti-drug exhibitions are regularly held in schools and public places.

Universal:

- An 'addiction mall' and a mobile addiction exhibition bus have been created by PDE to deliver anti-drug messages in an interesting and easily approachable manner.
- PDE arranges various activities and events throughout the year at a national level to create awareness of dangers of drug abuse. These activities include:
 - National Anti-Drug Abuse Day Campaign
 - DanceWorks – Anti-drug dance competition

- Anti-drug Ambassador Scheme: to conduct research and attempt anti-drug exercises
- Special interest competitions
- Sports activities: "Drugs Out, Sports In"
- Activities for parents and teachers: Parent-kid camp
- Teacher's seminar
- PDE has put together resources and publicity materials to further the anti-drug message. Three booklets have been produced which look at various aspects & activities related to drug prevention. These are:
 - Bridging the Gap: Talks & Exhibitions
 - Making an Impact: Activities & Events
 - Spreading the Word: Resources & Publicity

Targeted:

- The anti-drug talks are separately arranged for at-risk students, parents and at workplaces.
- PDE also involves information technology which include:
 - Interactive websites
 - E-learning modules
 - Computer games
 - Videos
 - Drug information booklets
- PDE also produces publicity materials in order it spread the anti-drug messages.

Treatment strategies

Content:

- For inhalant use, students and juveniles are first placed on counselling. Repeated offenders are placed under CNB supervision. Recalcitrant users are considered for tougher action such as prosecution in court or committal to an approved centre for treatment and rehabilitation.

Coercion/Compulsory:

- Treatment and rehabilitation take place at Drug Rehabilitation Centres (DRCs) managed by the Singapore Prisons Service, which take into careful consideration the person's rehabilitation needs, 'addiction severity' and readiness for change and treatment.

- The drug and inhalant supervision scheme is a compulsory programme for ex-drug or inhalant users, after their release from Drug Rehabilitation Centres, prison or Inhalant Treatment Centre (ITC). It serves as a monitoring system to instil discipline and compliance to ex-users. A case officer is assigned to the ex-user placed under supervision. When a student or young drug abuser (below 16 years old) is placed on the programme, the case officer also liaises with relevant agencies such as the supervisee's school or Ministry of Community, Youth and Sports to update and seek updates from the relevant personnel involved in the supervisee's case.

OST/NSP

- No OST or NSP available in the country

Demographics

Population:

- 511 000, with an annual growth rate of 2% (2008)

Adolescents (10-19 years):

- 116 000 (2008)

Urbanisation:

- Urban regions contain 18% of the population, with an annual growth rate of 4% (2007)
- The national population density is 17 people per square kilometer (2007)

Poverty:

- No estimate available

HIV/AIDS:

- No estimate available for percentage of PLWHA among those aged 15-49 years, number of PLWHA aged 15 years and over, or percentage of population with advanced HIV able to access to ART

Substance use profile

Devaney et al., 2006

Alcohol:

- Alcohol consumption was 1.0 litres per capita among those aged 15 years and over (2003)

Cannabis:

- Cannabis use is present
- Key informants and published reports indicated that cannabis is generally combined with alcohol
- Regionally, cannabis is mainly smoked but it is also chewed and sometimes baked with flour(2001)
- All data sources agreed that cannabis use is strongly genderlinked, with significantly more males than females using it (2001)
- The majority of cannabis users are young, aged approximately 15–20 years (2001)
- Cannabis is used in the expatriate community and by tourists

Other Illicit substances:

- There has been little systematic research undertaken on drugs such as
-

heroin, cocaine and methamphetamines

- Keyinformants suggested that drugs such as heroin, methamphetamines and cocaine are not commonly used due to their high cost compared to the average income
- There were a number of anecdotal reports made by key informants regarding inhalant use in the countries under investigation. The most widely used/abused is petrol

Prevention strategies

- There are no initiatives against primary prevention of illicit substances

Treatment strategies

- There is no formal drug and alcohol treatment.
- Life counseling for issues including employment, family conflict, sexuallytransmitted infections, cannabis use/abuse,alcohol (particularly homebrew), unplannedpregnancies, and domestic violence may occur through NGOs or churches
- Treatment of patients whose condition is linked to substance use occurs in general or psychiatric hospitals

Demographics

Population:

- 1,500

Adolescents (10-19 years):

- 220 adolescents and youth aged 15-24 years old

Substance use profile

- A second generation surveillance survey was conducted in 2007 in 206 young people aged 15 – 24 years.

Alcohol:

- Alcohol consumption was 1.1 litres per capita in 2003
- A second generation survey found that among youth and adolescents aged 15-24 years old, approximately 20% of males and 32% of females had never consumed alcohol, whilst 21% of males and 44% of females had consumed alcohol at least monthly, 31% of males and 12% of females had consumed alcohol 2-4 times per month, 38% of males and 11% of females had consumed alcohol 2-3 times per week, and 6% of males and 2% of females had consumed alcohol four or more times a week
- For males, 7% consumed one or two drinks each time they drank, 13% consumed three or four drinks, 26% consumed five or six drinks, 14% consumed 7-9 drinks, 18% consumed 10-19 drinks, and 14% consumed 20 or more drinks
- For females, 34% consumed one or two drinks each time they drank, 13% consumed three or four drinks, 27% consumed five or six drinks, 8% consumed 7-9 drinks, 11% consumed 10-19 drinks, and 3% consumed 20 or more drinks
- In the past year, the prevalence of males drinking more than 5 standard drinks in one session was: 4% never, 20% less than monthly, 32% monthly, and 41% weekly
- In the past year, the prevalence of females drinking more than 5 standard drinks in one session was: 13% never,

24% less than monthly, 55% monthly, and 7% weekly

- The WHO STEPS report noted that 100% of 15-25 old (n = 60) were current drinkers, and 87.1% of females in the same age range (n= 27), with 64.4% of the males and 44.4% of the females reporting drinking more than 6 standard drinks per day.

Note: *the timing of the second generation survey may have led to the inclusion of 'visitors' to the atolls who may be reporting on substance use in other countries.*

Amphetamine type stimulants:

- prevalence among females of ever having use 'ice' was 2%, as it was for speed, with no males reporting use of amphetamines

Cannabis:

- the prevalence among males of ever having used cannabis was 37%, and among females 13%

Inhalants:

- the prevalence among both males and females of ever having used inhalants was 4%

Kava:

- the prevalence among males of ever having used kava was 40%, and among females 16%

IDU:

- no injecting drug use was reported in the survey

Demographics

Population:

- 106 276, with an annual growth rate of 1% (2009)

Adolescents (10-19 years):

- 22 172 (2009)

Urbanisation:

- Urban regions contain 24% of the population, with an annual growth rate of 2% (2007)
- The national population density is 134 people per square kilometer (2007)

Poverty:

- No estimate available, but previous survey identified 'hardship'.

HIV/AIDS:

- No estimate available for percentage of PLWHA among those aged 15-49 years, number of PLWHA aged 15 years and over, or percentage of population with advanced HIV able to access to ART

Substance use profile

Devaney et al., 2006

Alcohol:

- Alcohol consumption was 0.8 litres per capita among those aged 15 years and over (2003)

Cannabis:

- Cannabis use is present
- Key informants and published reports indicated that cannabis is generally combined with alcohol
- Regionally, cannabis is mainly smoked but it is also chewed and sometimes baked with flour (Nejo, 2001)
- All data sources agreed that cannabis use is strongly gender linked, with significantly more males than females using it (Nejo, 2001)
- The majority of cannabis users are young, aged approximately 15–20 years (Nejo, 2001)
- Cannabis is used in the expatriate community and by tourists.
- According to information from the psychiatry unit of the Ministry of Health, cannabis is a major problem,

associated with mental illness in young people. It is prevalent in this unit's records as a dual diagnosis.

Other Illicit substances:

- There has been little systematic research undertaken on drugs such as heroin, cocaine and methamphetamines
- Key informants suggested that drugs such as heroin, methamphetamines and cocaine are not commonly used due to their high cost compared to the average income
- According to information from the Ministry of Health (Psychiatry unit), cocaine use in the community is common. Inhalant use is also commonly seen. Petrol (benzene), glue and other inhalants are commonly sniffed by youths in downtown areas of Tonga.

Prevention strategies

- Non government organisations are active in initiating preventive strategies for primary prevention of illicit substance. The Salvation Army has been running a program for over 10 years and Life Line has a program called ASSIST aimed at addressing some of these issues.

Treatment strategies

- There is no formal drug and alcohol treatment.
- Life counselling for issues including employment, family conflict, sexually transmitted infections, cannabis use/abuse, alcohol (particularly homebrew), unplanned pregnancies, and domestic violence do occur through NGOs (e.g. the Family Health Association), churches and the Reproductive Health program of the Ministry of Health.

Demographics

Population:

- 11 000, with no annual growth or decline (2007)

Adolescents (10-19 years):

- No estimate available

Urbanisation:

- Approximately half of the population lives on the capital island of Funafuti, with the rest of the population spread across islands (2003)
- The national population density is 351 people per square kilometer (2007)

Poverty:

- The 1994 Household Income and Expenditure Survey showed that 23% of households were below the poverty line

HIV/AIDS:

- No estimate available for percentage of PLWHA among those aged 15-49 years, number of PLWHA aged 15 years and over, or percentage of population with advanced HIV able to access to ART

Youth Substance use profile

- According to a 2005 survey no one reported ever using cocaine, heroin, speed or ice.

Alcohol:

- Alcohol consumption was 1.4 litres per capita among those aged 15 years and over (2003)
- A 2003 ADB survey of Tuvaluans reported that in urban areas increasing alcohol consumption was occurring among youths and men, particularly construction workers and paid laborers.
- Income appeared to be diverted to purchasing of alcohol in place of necessary dietary requirements
- This survey also reported that alcohol and drug abuse was related to hardship among Tuvaluan youth

- A survey among seafarers found that 62% of respondents reported drinking alcohol, averaging 8 cans at a time.
- According to a 2005 survey 127 out of 305 (41.6%) youth members reported drinking alcohol. Of these 81.9% were male and 17.3% females. Among those who drink, 57% were drinking once a week.

Amphetamine type stimulants:

- No respondents of a survey among seafarers reported ATS use

Cannabis:

- A 2003 survey of Tuvaluans reported that cannabis use among youth, particularly those who have worked overseas, was of concern
- Less than 1% of respondents of a survey among seafarers reported cannabis use
- According to a 2005 survey 15 out of 305 (5%) youth members reported ever using cannabis.

Treatment strategies

- A 2003 survey of Tuvaluans appeared to indicate that treatment for substance use in Tuvalu is limited or non-existent.
- Medical facilities were reported to consist of generally one or two nurses stationed in the clinics on each of the outer islands, and Doctors appeared to only be assigned to the hospital in the capital; during emergencies, patients from the outer islands may have to either travel by boat to Funafuti or fly to Fiji for treatment.

OST:

- In Tuvalu, there are no known injecting drug users

Youth

Alcohol:

- The BSS survey found that alcohol use among youth appears to be high (44%)
- No survey respondents of the BSS reported injecting drug use

Demographics

Population:

- 13 944, with an annual growth rate of 0.60 (2008).

Adolescents (10-19 years):

- No estimate available

Substance use profile

Alcohol:

- Alcohol consumption was 1.1 litres per capita in 2003.

Youth substance use profile

Findings from Second Generation Surveillance in 2006 involving 199 young people (40 in Futuna and 159 in Wallis) between 15 – 24 years.

Alcohol:

- 7.5% young people (M=16.7%, F=3.1%) have alcohol at least once a day.
- 20.6% young people (M=22.7%, F=19.4%) have alcohol at least once a week.

- 11.1% young people (M=13.6%, F=10.1%) have alcohol less than once a week.
- The number of standard units consumed over the course of one social event was 5.4 units/event (M=7.3 unites, F= 3.1 units).

Cannabis:

- 13.2% young people (M=15.3% and F=12.6%) had smoked cannabis.

Ecstasy:

- 0.6% young people (M=1.7% and F=0%) had tried ecstasy/acid/speed

Amphetamine type stimulants:

- 0.6% young people (M=1.7% and F=0%) had tried ecstasy/acid/speed

Others:

- 1.1% young people (M=3% and F=0%) had already tried Datura.
- Used other drugs that are dangerous e.g. glue, acetone, petrol, “eay ecarlate” (a chlorine-based liquid stain remover).

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Appendix I: PICT data ** Note: warning there are concerns about the validity and reliability of some data in this section **

Alcohol, Cannabis, ATS, IDU and young people in the Western Pacific region

Table 1 displays available data for 'ever use of alcohol'. It can be seen that rates vary considerably, but tend to be similar to those for Australia and New Zealand.

Table 1: Ever Youth Alcohol use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey 14-19 N= 1549	2007	74.1	73.9
American Samoa	YRBS School Students N= 3625	2007	49.7	43.9
Cook Islands	Second Generation IBBS (youth aged 15-24) N= 258	2006	69.3 <i>total – for males and females</i>	69.3 <i>total – for males and females</i>
Federated States of Micronesia	Second generation IBBS (youth aged 15-24) N= 280	2007	80.0	55.2
Guam	YRBS School students N= 1610	2007	69.1	68.0
Marshall Islands	YRBS School students N=1522	2007	66.4	44.0
New Caledonia	Second Generation IBBS (youth aged 15-24) N= 292	2005	6.4	2.4
New Zealand	Secondary School students N= 9107	2007	72.3	70.9
Northern Mariana Is	YRBS School students N= 2292	2007	69.1	70.5
Palau	YBRS School Students N= 732	2007	66.8	61.8
Solomon Islands	Second Generation IBBS (youth aged 15-24) N= 592	2008	76.4	46.5
Tokelau	Second Generation IBBS 15-24 N= 207	2007	80.0	57.0
Tonga	Second Generation IBBS (youth aged 15-24) N= 387	2008	69.0	47.0
Vanuatu	Second Generation IBBS (youth aged 15-24) N= 301	2008	83.8	59.9

Sources:

Adolescent Health Research Group, (2008a, b)

AIHW (2008)
 Council of the Ongoing Government of Tokelau and Secretariat of the Pacific Community (2007)
 Guam Department of Mental Health & Substance Abuse (2008)
 Lippe et al. (2008).
 Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)
 Secretariat of the Pacific Community (2007a, b)
 Secretariat of the Pacific Community and Federated States of Micronesia (2008)
 Secretariat of the Pacific Community and Vanuatu Ministry of Health, (2008).
 Secretariat of the Pacific Community and Solomon Islands Ministry of Health (2008).
 Secretariat of the Pacific Community and Tonga Ministry of Health (2008).
 Secretariat of the Pacific Community (2009).

Table 2 displays available data for 'recent use of alcohol'. 'Recent use' is use in the last month. Again, it can be seen that rates vary considerably, but are generally less than those for Australia and New Zealand.

Table 2: Recent Youth Alcohol use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey 14-19 N= 1549	2007	70.8	71.3
American Samoa	YRBS School students N= 3625	2007	31.1	28.7
Cook Islands	Second Generation IBBS (youth aged 15-24) N= 258	2006	<i>57 total – for males and females?</i>	<i>57 total – for males and females?</i>
Guam	YRBS School students N= 1610	2007	36.2	33.4
Marshall Islands	YRBS School students N= 1522	2007	51.0	33.4
New Zealand	Secondary School Students N= 9107	2007	60.8	60.3
Northern Mariana Is	YRBS School students N= 2292	2007	42.6	39.5
Palau	YBRS School Students N= 732	2007	42.4	29.0
Solomon Islands	Second Generation IBBS (youth aged 15-24) N= 592	2008	55.5	29.5
Tonga	Second Generation IBBS (youth aged 15-24) N= 387	2008	38.0	23.0
Vanuatu	Second Generation IBBS (youth aged 15-24) N= 301	2008	38.9	19.0

Sources:
 Adolescent Health Research Group, (2008a, b)
 AIHW (2008)

Council of the Ongoing Government of Tokelau and Secretariat of the Pacific Community (2007)
 Guam Department of Mental Health & Substance Abuse (2008)
 Lippe et al. (2008).
 Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)
 Secretariat of the Pacific Community (2007a, b)
 Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).
 Secretariat of the Pacific Community and Solomon Islands Ministry of Health (2008).
 Secretariat of the Pacific Community and Tonga Ministry of Health (2008).
 Secretariat of the Pacific Community (2009).

Table 3 displays available evidence for students who drank 5 or more standard drinks in a row. It can be seen that rates are between 91% (Tokelau) and 21.6% (Guam) for males in all countries listed and 15.6%(Palau) and 94.9% (Vanuatu) for females.

Table 3: Students who drank 5 or more standard drinks in a row.

Country	Sample	Year	Male %	Female%
American Samoa	YRBS School students N= 3625	2007	20.3	16.3
Cook Islands	Second Generation IBBS (youth aged 15-24) N= 258	2006	80.4 <i>total</i> – <i>for</i> <i>males and</i> <i>females</i>	80.4 <i>total</i> – <i>for</i> <i>males and</i> <i>females</i>
Federated States of Micronesia	Second generation IBBS (youth aged 15-24) N= 280	2007	51.8	41.1
Guam	YRBS School students N= 1610	2007	21.6	16.3
Marshall Islands	YRBS School students N= 1522	2007	30.8	22.6
Northern Mariana Is	YRBS School students N= 2292	2007	29.2	21.3
Palau	YBRS School Students N= 732	2007	31.0	15.6
Solomon Islands	Second Generation IBBS (youth aged 15-24) N= 592	2008	75.3	55.4
Tokelau	Second Generation IBBS 15-24 N= 207	2007	91.0	53.0
Tonga	Second Generation IBBS (youth aged 15-24) N= 387	2008	69.7 <i>total</i> – <i>for</i> <i>males and</i> <i>females</i>	69.7 <i>total</i> – <i>for</i> <i>males and</i> <i>females</i>
Vanuatu	Second Generation IBBS (youth aged 15-24) N= 301	2008	90.0	94.9

Sources:

AIHW (2008)
 Council of the Ongoing Government of Tokelau and Secretariat of the Pacific Community (2007)

Guam Department of Mental Health & Substance Abuse (2008)
 Lippe et al. (2008).
 Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)
 Secretariat of the Pacific Community (2007a, b)
 Secretariat of the Pacific Community and Federated States of Micronesia (2008)
 Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).
 Secretariat of the Pacific Community and Solomon Islands Ministry of Health (2008).
 Secretariat of the Pacific Community and Tonga Ministry of Health (2008).
 Secretariat of the Pacific Community (2009).

Table 4 displays available data for use of alcohol on school premises. It can be seen that rates are highest for the Marshall Islands, and lowest for Guam.

Table 4: Ever used alcohol on school premises:

Country	Sample	Year	Male %	Female%
American Samoa	YRBS School students N= 3625	2007	10.3	8.5
Guam	YRBS School students N= 1610	2007	5.8	4.6
Marshall Islands	YRBS School students N= 1522	2007	18.9	11.7
Northern Mariana Is	YRBS School students N= 2292	2007	7.3	5.5
Palau	YRBS School Students N= 732	2007	7.9	5.8

Sources:

Guam Department of Mental Health & Substance Abuse (2008)
 Lippe et al. (2008).
 Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)
 Secretariat of the Pacific Community (2007a, b)
 Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).

Table 5 displays available data for use of alcohol before last sexual intercourse. It can be seen that rates are highest for the Marshall Islands, and lowest for Guam.

Table 5: Used alcohol before last sexual intercourse

Country	Sample	Year	Male %	Female%
American Samoa	YRBS School students N= 3625	2007	38.2	27.3
Guam	YRBS School students N=1 610	2007	24.2	11.2
Marshall Islands	YRBS School students N= 1522	2007	40.5	26.2

Northern Mariana Is	YRBS School students N= 2292	2007	37.5	19.9
Palau	YBRS School Students N= 732	2007	36.3 <i>total – for males and females</i>	36.3 <i>total – for males and females</i>

Sources:

Guam Department of Mental Health & Substance Abuse (2008)

Lippe et al. (2008).

Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)

Secretariat of the Pacific Community (2007a, b)

Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).

Table 6 displays available data for 'ever use of cannabis'. It can be seen that rates vary considerably, but tend to be far higher than those for Australia, with, in some cases, nearly two thirds of young male surveyed reporting that they have tried cannabis (e.g. Northern Mariana Islands, Palau and Vanuatu), and over 50% of young females in Palau and the Solomon Islands.

Table 6: Ever Youth Cannabis use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey 14-19 N= 1549	2007	18.0	22.1
American Samoa	YRBS School Students N= 3625	2007	25.3	10.6
Cook Islands	Second Generation IBBS (youth aged 15-24) N= 258	2006	46.8 <i>total – for males and females</i>	46.8 <i>total – for males and females</i>
Federated States of Micronesia	Second generation IBBS (youth aged 15-24) N= 280	2007	14.5% <i>total – for males and females</i>	14.5% <i>total – for males and females</i>
Guam	YRBS School students N= 1610	2007	49.9	40.6
Marshall Islands	YRBS School students N=1522	2007	22.4	5.5
New Caledonia	Second Generation IBBS (youth aged 15-24) N= 292	2005	54.8	42.5
New Zealand	Secondary School students N= 9107	2007	27.2	26.8
Northern Mariana Is	YRBS School students N= 2292	2007	61.0	48.7
Palau	YBRS School Students N= 732	2007	64.3	55.6
Solomon Islands	Second Generation IBBS (youth aged 15-24)	2008	53.7 <i>total – for males</i>	53.7 <i>total – for males</i>

	N= 592		<i>and females</i>	<i>and females</i>
Tokelau	Second Generation IBBS 15-24 N= 207	2007	37.0	13.0
Tonga	Second Generation IBBS (youth aged 15-24) N= 387	2008	24.0 <i>total – for males and females</i>	24.0 <i>total – for males and females</i>
Vanuatu	Second Generation IBBS (youth aged 15-24) N= 301	2008	67.1	28.8
Wallis and Fortuna	Second Generation IBBS (school youth aged 15-24) N= 199	2006	15.3	12.6

Sources:

Adolescent Health Research Group, (2008a, b)

AIHW (2008)

Council of the Ongoing Government of Tokelau and Secretariat of the Pacific Community (2007)

Guam Department of Mental Health & Substance Abuse (2008)

Lippe et al. (2008).

Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)

Secretariat of the Pacific Community (2007a, b)

Secretariat of the Pacific Community and Federated States of Micronesia (2008)

Secretariat of the Pacific Community and Vanuatu Ministry of Health, (2008).

Secretariat of the Pacific Community and Solomon Islands Ministry of Health (2008).

Secretariat of the Pacific Community and Tonga Ministry of Health (2008).

Secretariat of the Pacific Community (2009).

Table 7 displays available data for 'recent use of cannabis'. 'Recent use' is use in the last month. Again, it can be seen that rates vary considerably, but some tend to be much higher than those for Australia. Over 40% of young males reported 'recent use' of cannabis in Palau, Solomon Island and Vanuatu, and over 40% of young females in the Solomon Islands.

Table 7: Recent Youth Cannabis use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey 14-19 N= 1549	2007	8.0	6.3
American Samoa	YRBS School students N= 3625	2007	15.2	5.6
Cook Islands	Second Generation IBBS (youth aged 15-24) N= 258	2006	6.5 <i>total – for males and females</i>	6.5 <i>total – for males and females</i>
Federated States of Micronesia	Second generation IBBS (youth aged 15-24) N= 280	2007	6.8 <i>total – for males and females</i>	6.8 <i>total – for males and females</i>
Guam	YRBS School students N= 1610	2007	25.6	20.5
Marshall Islands	YRBS School students N= 1522	2007	14.1	3.2
New Zealand	Secondary School Students N= 9107	2007	16.5	14.8

Northern Mariana Is	YRBS School students N= 2292	2007	37.5	26.3
Palau	YBRS School Students N= 732	2007	43.7	33.0
Solomon Islands	Second Generation IBBS (youth aged 15-24) N= 592	2008	44.7 <i>total – for males and females</i>	44.7 <i>total – for males and females</i>
Tonga	Second Generation IBBS (youth aged 15-24) N= 387	2008	16.5 <i>total – for males and females</i>	16.5 <i>total – for males and females</i>
Vanuatu	Second Generation IBBS (youth aged 15-24) N= 301	2008	43.2	17.1

Sources:

Adolescent Health Research Group, (2008a, b)
 AIHW (2008)
 Council of the Ongoing Government of Tokelau and Secretariat of the Pacific Community (2007)
 Guam Department of Mental Health & Substance Abuse (2008)
 Lippe et al. (2008).
 Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)
 Secretariat of the Pacific Community (2007a, b)
 Secretariat of the Pacific Community and Federated States of Micronesia (2008)
 Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).
 Secretariat of the Pacific Community and Solomon Islands Ministry of Health (2008).
 Secretariat of the Pacific Community and Tonga Ministry of Health (2008).
 Secretariat of the Pacific Community (2009).

Table 8 displays available data for use of cannabis prior to age 13. It can be seen that rates tend to be higher for young males in Northern Mariana Islands and Palau.

Table 8: Tried cannabis before age 13

Country	Sample	Year	Male %	Female%
American Samoa	YRBS School students N= 3625	2007	11.0	3.1
Guam	YRBS School students N= 1610	2007	20.2	9.9
Marshall Islands	YRBS School students N= 1522	2007	6.0	3.0
Northern Mariana Is	YRBS School students N= 2292	2007	27.5	12.3
Palau	YBRS School Students N= 732	2007	29.0	9.4

Sources:

Guam Department of Mental Health & Substance Abuse (2008)
 Lippe et al. (2008).
 Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)
 Secretariat of the Pacific Community (2007a, b)

Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).

Table 9 displays available data for use of cannabis on school premises. It can be seen that rates are between 28 and 42% for males in all countries listed and 19-30% for females.

Table 9: Ever used cannabis on school premises:

Country	Sample	Year	Male %	Female%
American Samoa	YRBS School students N= 3625	2007	30.2	23.6
Guam	YRBS School students N=1 610	2007	42.0	30.7
Marshall Islands	YRBS School students N= 1522	2007	28.5	19.7
Northern Mariana Is	YRBS School students N= 2292	2007	42.3	29.9
Palau	YRBS School Students N= 732	2007	28.3	29.0

Sources:

Guam Department of Mental Health & Substance Abuse (2008)

Lippe et al. (2008).

Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)

Secretariat of the Pacific Community (2007a, b)

Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).

Table 10 displays available data for 'ever use of ATS'. It can be seen that rates vary considerably, but most tend to be higher than for Australia with the highest in the Marshall Islands and Vanuatu.

Table 10: Ever Youth ATS use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey 14-19 N= 1549	2007	1.4	2.9
American Samoa	YRBS School Students N= 3625	2007	8.6	2.7
Cook Islands	Second Generation IBBS (youth aged 15-24) N= 258	2006	6.7 total – for males and females	6.7 total – for males and females
Federated States of Micronesia	Second generation IBBS (youth aged 15-24) N= 280	2007	6.9total – for males and females	6.9 total – for males and females
Guam	YRBS School students N= 1610	2007	7.5	3.7
Marshall Islands	YRBS School students	2007	15.4	10.5

	N=1522			
New Caledonia	Second Generation IBBS (youth aged 15-24) N= 292	2005	2.6	1.6
New Zealand	Secondary School students N= 9107	2007	0.5 - 1.1 <i>for males and females</i>	0.5 - 1.1 <i>for males and females</i>
Northern Mariana Is	YRBS School students N= 2292	2007	6.2	3.2
Palau	YBRS School Students N= 732	2007	9.9	4.3
Solomon Islands	Second Generation IBBS (youth aged 15-24) N= 592	2008	0.0	1.1
Tokelau	Second Generation IBBS 15-24 N= 207	2007	0.0	1.0
Tonga	Second Generation IBBS (youth aged 15-24) N= 387	2008	2.6 <i>total – for males and females</i>	2.6 <i>total – for males and females</i>
Vanuatu	Second Generation IBBS (youth aged 15-24) N= 301	2008	12.3	3.4

Sources:

Adolescent Health Research Group, (2008a, b)

AIHW (2008)

Council of the Ongoing Government of Tokelau and Secretariat of the Pacific Community (2007)

Guam Department of Mental Health & Substance Abuse (2008)

Lippe et al. (2008).

Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)

Secretariat of the Pacific Community (2007a, b)

Secretariat of the Pacific Community and Federated States of Micronesia (2008)

Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).

Secretariat of the Pacific Community and Solomon Islands Ministry of Health, (2008).

Secretariat of the Pacific Community and Tonga Ministry of Health (2008).

Secretariat of the Pacific Community (2009).

Table 11 displays available data for 'recent use of ATS'. 'Recent use' is use in the last month. It can be seen that rates tend to be similar to those for Australia, except for Vanuatu which has the targets.

Table 11: Recent Youth ATS use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey 14-19 N= 1549	2007	1.0	2.2
Cook Islands	Second Generation IBBS (youth aged 15-24) N= 258	2006	0.4 <i>total – for males and females</i>	0.4 <i>total – for males and females</i>
Solomon Islands	Second Generation IBBS (youth aged 15-24)	2008	0.0	0.7

	N= 592			
Tonga	Second Generation IBBS (youth aged 15-24) N= 387	2008	1.6 <i>total – for males and females</i>	1.6 <i>total – for males and females</i>
Vanuatu	Second Generation IBBS (youth aged 15-24) N= 301	2008	11.6	1.4

Sources:

Adolescent Health Research Group, (2008a, b)
 AIHW (2008)
 Council of the Ongoing Government of Tokelau and Secretariat of the Pacific Community (2007)
 Guam Department of Mental Health & Substance Abuse (2008)
 Lippe et al. (2008).
 Ministry of Health Cook Islands and Secretariat of the Pacific Community (2005-2006)
 Secretariat of the Pacific Community (2007a, b)
 Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).
 Secretariat of the Pacific Community and Solomon Islands Ministry of Health (2008).
 Secretariat of the Pacific Community and Tonga Ministry of Health (2008).
 Secretariat of the Pacific Community (2009).

IDU:

While injecting of drugs other than heroin is not common in Asia, and where it occurs is usually a secondary phenomenon to injecting of heroin, but is beginning to be reported in some Pacific Island states at levels far higher than Australia. However, the data presented below requires further examination as to validity. In addition to the Island states included in the table, Buchanan-Aruwafu (2007) indicates presence of IDU in Fiji, Solomon Islands and Kirabati.

Table 12: Youth IDU in selected Pacific Islands (with Australia as a reference point)

Country	Sample	Year	Male % IDU	Female% IDU
Australia	Household survey	2007	0.7	0.8
American Samoa	YRBS School Students N= 3625	2007	8.0	3.8
Federated States of Micronesia	Second generation IBBS (youth aged 15-24) N= 280	2007	11.1	6.4
Guam	YRBS School students N= 1610	2007	5.4	2.1
Marshall Islands	YRBS School students N=1522	2007	15.8	14.1
New Caledonia	Second Generation IBBS (youth aged 15-24) N= 292	2005	0.6	0.0
New Zealand	Secondary School students N= 9107	2007	0.4 <i>total – for males and females</i>	0.4 <i>total – for males and females</i>

Northern Mariana Is	YRBS School students N= 2292	2007	5.5	2.4
Palau	YRBS School students N= 732	2007	6.5	3.8
Tonga	Second Generation IBBS (youth aged 15-24) N= 387	2008	<i>2.3 total – for males and females</i>	<i>2.3 total – for males and females</i>
Vanuatu	Second Generation IBBS N =301 Youth N=302 Antenatal women	2008	12.9	1.4 0.1

Sources:

Adolescent Health Research Group, (2008a, b)

AIHW (2008)

Guam Department of Mental Health & Substance Abuse (2008)

Lippe et al. (2008).

Secretariat of the Pacific Community (2007a, b)

Secretariat of the Pacific Community and Federated States of Micronesia (2008)

Secretariat of the Pacific Community and Tonga Ministry of Health (2008).

Secretariat of the Pacific Community and Vanuatu Ministry of Health (2008).

Secretariat of the Pacific Community (2009).

Appendix II:

Example of a Relapse Prevention Plan (from UNESCAP, 2009):

NOY:

My Relapse Prevention Plan for managing *ya baa*, alcohol and cannabis use is as follows:

- (1) To abstain from using *ya baa*.
- (2) To abstain from using cannabis.
- (3) To use alcohol occasionally, every second weekend on one night only unless there are parties on 2 weeks in a row.
- (4) In maintaining these goals I will seek regular support of my family and counsellor/peer educator and other chosen support people.
- (5) After 12 months of following this Relapse Prevention Plan I will revise my overall Plan with the assistance of my counsellor/peer educator. I will decide whether I wish to continue with the original plan or change it.
- (6) If I lapse during the time between leaving counselling and the end of the 12 month period. I will follow the *Back-up Plan*.

BACK-UP PLAN

If any lapses occur before 30th June 2010, I will:

- (1) Think of the experience in a positive and constructive way and understand that a lapse is not a total relapse. I will avoid letting it get me down or letting it undermine my efforts to manage my drug and alcohol use.
- (2) I will inform my counsellor/peer educator of my lapse and seek support.
- (3) I will then contact my counsellor/peer educator to talk about it
 - To work out how it happened.
 - And to work out how it could be prevented next time, and what I will need to do differently.

Early warning sign	Thoughts and feelings	Coping strategy
Hanging out with people who use all the time	That I think it's OK to use because I'm around it all the time	Think, Nah this is no good, we'll have to part company! Just cause they do it doesn't mean I do!
Having a fight with family/ girlfriend	Wanting a drink, or to use <i>ya baa</i> or cannabis	Solve fight or cool down. DO think before acting
Bad day.	Wanting to get drunk	Punch my boxing bag
Feeling it creeping back up on me.	Think that I NEED <i>ya baa</i>	Go off and sit by myself to think it over. I don't NEED that crap!

Triggers and Coping Strategies for Noy:

Trigger	Coping Strategy
<p>People <i>Nong</i></p>	<p>Tell Nong I am busy and have to get home any see peer educator</p>
<p>Places Party where people are using ya ba</p>	<p>Mingle in with the crowd, have a dance. Think, nah, I can't do those drugs anymore - I go to school now</p>
<p>Thoughts Yeah, look at me, I can't help myself, always in trouble. Life is no good!</p>	<p>Who am I kidding! Yeah, I'm me and I'm at school and I'm going to represent my country in sport, get a great job and a mad car. You just watch me! It will get better if I want it to! It's up to me! Talk to the Peer Educator/Counsellor. Go to the Youth Centre and join in some fun activities.</p>
<p>Feelings I'm bored and want to get drunk</p>	<p>Play video games, go to the Youth Centre, watch TV, walk the dog, ride my bike, talk to my Peer Educator/Counsellor. Think nah, there's heaps to do that won't ruin my life! I MUST go and see if I can get that part-time job at the market.</p>
<p>Situations Having an argument with girlfriend, feel wild and think I don't care, I'm going to get drunk</p>	<p>Call my brother to come and pick me up. Talk to the Peer Educator/Counsellor.</p>

Source: UNESCAP (2009)

Appendix III:

Excerpts from Discussion Paper: Principles of drug dependence treatment.

Introduction

Drug dependence and illicit drug use are associated with health problems, poverty, violence, criminal behaviour, and social exclusion. Its total costs to society are difficult to estimate. In addition to the health-care costs and other costs associated with the consequences of drug use, drug dependence also involves social costs in the form of loss of productivity and family income, violence, security problems, traffic and workplace accidents, and links with corruption. These result in overwhelming economic costs and an unacceptable waste of human resources. Unfortunately in many societies drug dependence is still not recognized as a health problem and many people suffering from it are stigmatized and have no access to treatment and rehabilitation. Over recent years, the *biopsychosocial* model has recognized drug dependence as a multifaceted problem requiring the expertise of many disciplines. A health sciences multidisciplinary approach can be applied to research, prevention and treatment. The notion that drug dependence could be considered a 'self-acquired disease', based on individual free choice leading to the first experimentation with illicit drugs, has contributed to stigma and discrimination associated with drug dependence. However, scientific evidence indicates that the development of the disease is a result of a complex multi-factorial interaction between repeated exposure to drugs, and biological and environmental factors. Attempts to treat and prevent drug use through tough penal sanctions for drug users fail because they do not take into account the neurological changes drug dependence has on motivation pathways in the brain.

'Nothing less' must be provided for the treatment of drug dependence than a qualified, systematic, science-based approach such as that developed to treat other chronic diseases considered untreatable some decades ago. The best results are achieved when a comprehensive multidisciplinary approach which includes diversified pharmacological and psychosocial interventions is available to respond to different needs. Even taking into account the requirements for the delivery of evidence-based treatment, its costs are much lower than the indirect costs caused by untreated drug dependence (prisons, unemployment, law enforcement, health consequences). Research studies indicate that spending on treatment produces savings in terms of reduction in the number of crime victims, as well as reduced expenditures for the criminal justice system. At a minimum there was a 3:1 saving, and when a broader calculation of costs associated with crime, health and social productivity was taken into account, the rate of savings to investment rose to 13:1. These savings can improve disadvantaged situations where opportunities for education, employment and social welfare are undermined, and increase possibilities for families to recover battered economies, thus facilitating social and economic development. Individuals involved in the criminal justice system may be at higher risk of health and social consequences of drug dependence. Drug taking behaviour inside the prison involves more harmful patterns leading to increased risk of contamination with infectious diseases like HIV and hepatitis. The potential for imprisonment to cause harm should not be underestimated.

Depending on human and financial resources available and the quality level of the existing health system in each country, the actions suggested by the present document may be progressively and gradually implemented, taking into account the outlined components for each principle as a general framework.

PRINCIPLE 1: AVAILABILITY AND ACCESSIBILITY OF DRUG DEPENDENCE TREATMENT

Description and Justification

Drug dependence and its associated social and health problems can be treated effectively in the majority of cases if people have access to continuum of available and affordable treatment and rehabilitation services in a timely manner. To this end, all barriers limiting accessibility to treatment services need to be minimized for people to have access to the treatment that best fits their needs.

PRINCIPLE 2: SCREENING, ASSESSMENT, DIAGNOSIS AND TREATMENT PLANNING

Description and Justification

Patients affected by drug use disorders often have multiple treatment needs across a range of personal, social and economic areas that cannot be addressed when taking into consideration only their addictive symptoms in a standardized way. As for any other health-care problems, diagnostic and comprehensive assessment processes are the basis for a personalized and effective approach to treatment planning and engaging the client into treatment.

PRINCIPLE 3: EVIDENCE-INFORMED DRUG DEPENDENCE TREATMENT

Description and Justification

Evidence-based good practice and accumulated scientific knowledge on the nature of drug dependence should guide interventions and investments in drug dependence treatment. The high quality of standards required for approval of pharmacological or psychosocial interventions in all the other medical disciplines should be applied to the field of drug dependence.

PRINCIPLE 4: DRUG DEPENDENCE TREATMENT, HUMAN RIGHTS, AND PATIENT DIGNITY

Description and Justification

Drug dependence treatment services should comply with human rights obligations and recognize the inherent dignity of all individuals. This includes responding to the right to enjoy the highest attainable standard of health and well-being, and ensuring non-discrimination.

PRINCIPLE 5: TARGETING SPECIAL SUBGROUPS AND CONDITIONS

Description and Justification

Several subgroups within the larger population of individuals affected by drug use disorders require special consideration and often specialized care. These groups with specific needs include young people, women, pregnant women, people with medical and psychiatric comorbidities, sex workers, ethnic minorities, and socially marginalized individuals. A person may belong to more than one of these groups and have multiple needs. The implementation of adequate strategies and provision of appropriate treatment for these patients often require targeted and differentiated approaches regarding contacting services and entering treatment, clinical interventions, treatment settings and service organization that respond best to the needs of these groups.

Young people: Ideally specialized training should be available for counsellors, outreach workers and other professionals involved in treatment of young people with drug use disorders, and child/adolescent psychiatrists and psychologists should be part of these multidisciplinary teams. It may be counterproductive for young patients in early stages of drug use disorders to get in contact with people in more advanced stages of the disease through the treatment setting, and therefore, whenever possible, separate settings for young people and their parents can be considered. Planning and implementing interventions with young people will benefit from close cooperation with families and, when appropriate, schools.

Principle 6: ADDICTION TREATMENT AND THE CRIMINAL JUSTICE SYSTEM

Description and Justification

Drug related crimes are highly prevalent, and many people are incarcerated for drug related offences. These include offences to which a drug's pharmacologic effects contribute, offences motivated by the user's need for money to support continued use and offences connected to drug distribution itself. A significant proportion of people going through criminal systems worldwide are drug dependent. In general, drug use should be seen as a health-care condition and drug users should be treated in the health-care system rather than in the criminal justice system where possible. Interventions for drug dependent people in the criminal justice system should address treatment as an alternative to incarceration, and also provide drug dependence treatment while in prison and after release. Effective coordination between the health/drug dependence treatment system and the criminal justice system is necessary to address the twin problems of drug use related crime and the treatment and care needs of drug dependent people. Research results indicate that drug dependence treatment is highly effective in reducing crime. Treatment and care as an alternative to imprisonment or commenced in prison followed by support and social reintegration after release decrease the risk of relapse in drug use, of HIV transmission and of re-incidence in crime, with significant benefits for the individual health, as well as public security and social savings. Offering treatment as an alternative to incarceration is a highly cost-effective measure for society.

PRINCIPLE 7: COMMUNITY INVOLVEMENT, PARTICIPATION AND PATIENT ORIENTATION**Description and Justification**

A community based response to drug use and dependence can support and encourage behavioural changes directly in the community. This might imply a paradigm shift from a directive to a more cooperative form of service delivery, for which the active involvement of local stakeholders (governmental and non-governmental organizations, private sector, community leaders, religious organizations and traditional healers), community members (families) and the target populations is needed to establish ownership and an integrated network of community-based health-care services.

PRINCIPLE 8: CLINICAL GOVERNANCE OF DRUG DEPENDENCE TREATMENT SERVICES**Description and Justification**

A drug dependence treatment service requires an accountable, efficient and effective method of clinical governance that facilitates the achievement of its goals. Service organization needs to reflect current research evidence and be responsive to service user needs. Its policies, programmes, procedures and coordination mechanisms should be defined in advance and clarified to all therapeutic team members, administration, and target population.

PRINCIPLE 9: TREATMENT SYSTEMS: POLICY DEVELOPMENT, STRATEGIC PLANNING AND COORDINATION OF SERVICES**Description and Justification**

A systematic approach to drug use disorders and patients in need of treatment, as well as to planning and implementation of services, require a logical, step-by-step sequence that links policy to needs assessment, and treatment planning and implementation to monitoring and evaluation.

Appendix IV:

EXAMPLE OF A BRIEF INTERVENTION FOR PROBLEMATIC CANNABIS USE - Feedback and advice only ~ 3 minutes

Zhong has been doing well, but now has developed problematic cannabis use.

After completion of the assessment questionnaire with Y, Zhong, an 18-year-old man who lives with his family, has scores in the low risk range for all substances except cannabis. His score for cannabis places him in the moderate risk category. FRAMES Techniques and Motivational Interviewing strategies used are in brackets at the end of sentences.

Y: OK, thanks for going through this questionnaire with me (affirmation). Would it be fair to say that cannabis is the drug that you use the most at the moment?

Zhong: Yeah, pretty much.

Y: How much would you smoke, say, on an average day after work? (taking brief history)

Zhong: Um, usually about 3 or 4 'cones' (amount of cannabis used to use in bong or water pipe) throughout the evening, maybe a bit more on the weekends.

Y: Would you like to see the results of the questionnaire that you did? (Elicit)

Zhong: Yes.

Y: If you remember, the questions asked about your drug and alcohol use and whether you have experienced any problems related to your substance use. It really is up to you what you would like to do with this information. (responsibility)

From your answers it appears that your scores for most of the substances we asked about are in the low risk range so you may not have any problems from those substances if you keep on with your current pattern of use. However, your score for cannabis was high, which means that you are at risk of experiencing health and other problems related to your cannabis use by smoking cannabis at your current levels. (provide feedback)

(tells the client: Some of the problems that are caused by risky use of cannabis are - problems with attention and motivation, anxiety, feeling depressed, panic, paranoia, decreased memory and problem solving ability, high blood pressure, asthma and bronchitis, heart disease and lung disease. (provide advice)

Y: How concerned are you about cannabis affecting you? (open ended question, elicit self motivating statement)

Zhong: Yeah...I don't know, I never thought about it....I mean....I suppose it is a bit worrying that it could cause all these problems. I don't know. (dissonance)

Y: Can I give you some pamphlets about using cannabis that you can take home with you? They just explain more about the effects that cannabis can have and provide information about how to cut down, if that's what you want to do (hands Zhong written materials). Have a read, and if you want to talk about it more I'm happy to talk to you about it at our next appointment (Menu, written advice). And you could talk with one of our peer educators.

Zhong: Ah....OK....thanks...I'll have a think about

If the client is concerned or is ready to consider change then further intervention should be offered. Key components of this intervention could include:

- Further feedback linking substance use with current and potential health problems.
- Further discussion aimed at eliciting change talk.
Discuss the client's level of confidence that they can change their substance use if they want to. If confidence is low, encourage the client to tell you about other changes they have made or the personal qualities which would help them to make changes in their substance use.
- Discuss specific options to assist change (Menu of options). Examples include:
 - Keep a diary of substance use including:
 - Time and place of using
 - Other people present when using
 - What substances were used, and how much
 - How much money was spent.
 - Identify high risk situations and strategies to avoid them or to reduce use in those situations.
 - Identify other activities instead of drug use.
- Help the client decide on their goals.
- Encourage the client to identify people who could provide support and help for the changes they want to make.
- Provide self help resources and written information to reinforce what has been discussed.
- Invite the client to return to discuss their substance use if they need further help or information. Review how they are going with changing their substance use whenever they return to see you about other health problems.

EXAMPLE OF A BRIEF INTERVENTION FOR PROBLEMATIC CANNABIS USE - Feedback and exploring pro's and con's of use ~ 5 minutes

After completion of assessment questionnaire with Y, Minh, who is now an 18-year-old man who lives with his girlfriend and their young child, has scored low risk for all substances, with the exception of cannabis, placing him in the moderate risk category.

FRAMES Techniques and Motivational Interviewing strategies used are in brackets at end of sentences.

Y: OK, thanks for going through this questionnaire with me. Would it be fair to say that cannabis is the drug that you use the most at the moment? (Affirmation)

Minh: Yeah, pretty much.

Y: What do you enjoy about using cannabis – I mean what are the good things about it? (Open ended question – exploring pros and cons)

Minh: Well, it makes me relax, especially after coming home from work. It really helps me to unwind and forget the day. It's also good when you're out with mates or at a party or something on the weekend because you enjoy yourself more.

Y: How much would you smoke, say, on an average day after work? (Taking brief history)

Minh: Um, usually about 3 or 4 cones (amount of cannabis used to use in bong or water pipe) throughout the evening.

Y: Would that be the amount you'd usually use on the weekends? (Taking brief history)

Minh: Yeah...probably a bit more actually...maybe 5 or 6, I don't know, sometimes I lose track (laughs).

Y: What are the less good things about using cannabis? (Open ended question – exploring pros and cons)

Minh: Ask my girlfriend – she always nagging me about it (laughs). I guess probably the worst thing about it for me is that it seems to affect my memory and concentration at work. Sometimes after a big binge session the night before, the next day at work I'm a bit hazy and I feel really tired. If I feel really bad sometimes I won't go into work that day.

Y: So smoking dope (cannabis) helps you to relax and unwind after work, but it also makes you forgetful and tired, and sometimes you miss work because of it. You also said your girlfriend doesn't like you using it – why do you think that is? (Reflective listening, refocus, open ended question)

Minh: She doesn't like me getting 'stoned' all the time because she says I don't do anything except sit around and watch TV and that I'm always forgetting to do stuff. She says I don't do enough around the house and that she's always left to do all the work and look after the baby. But, I mean, I work and bring home a wage every week....

Y: And it's hard for you because using cannabis helps you relax, but at the same time you're not lending a hand around the house because you're 'stoned' and sometimes you forget to do things that she is relying on you to do. (Summary, empathy)

Minh: Yeah.

Y: Would you like to see the results of the questionnaire that you did? (Elicit)

Minh: Yes.

Y: If you remember, the questions asked about your drug and alcohol use and whether you have experienced any problems related to your substance use. It really is up to you what you would like to do with this information. (Responsibility)

From your answers it appears that your scores for most of the substances we asked about are in the low risk range, so you are unlikely to have any problems from those substances if you keep on with your current pattern of use. However, your score for cannabis was high, which means that you are at risk of experiencing health and other problems related to your cannabis use by smoking it at your current levels. (Provide feedback) [Tells the client some of the problems that are caused by risky use of cannabis – problems with attention and motivation, anxiety, depression, panic, paranoia, decreased memory and problem solving ability, high blood pressure, asthma and bronchitis, heart disease and lung disease.] (Provide advice)

You said you've experienced some of these problems with your memory and concentration and motivation.....

Minh: (interrupts) yeah, but that could be because I'm always tired because I don't always sleep well if the baby cries at night. (Resistance)

Y: So it seems to you that the only reason you're forgetting things and finding it hard to concentrate and help your girlfriend after work is because you don't get enough sleep? (Roll with resistance – amplified reflection)

Minh: Well, that's part of it anyway. I guess part of it could be from using cannabis too much. (Ambivalence)

Y: How concerned are you about the way using cannabis affects you? (Open ended question, elicit self-motivating statement of concern)

Minh: Yeah...I don't know.....I mean....I suppose it is a bit worrying that it's doing this to my brain...I don't know. (Dissonance)

Y: Listen Minh, you do have many options available, and it's up to you to decide what is best for you. Can I give you some pamphlets about smoking dope that you can take home with you? They just explain more about the effects that cannabis can have and provide information about how to cut down, if that's what you decide to do (hands Minh written materials). If you want we could talk about your options more at another time. (written advice, menu, emphasis on personal choice and control). And maybe you could talk with one of the peer educators.

Minh: Ah....OK....thanks...I'll have a think about it.
(A longer session could focus on the importance of the relationship between Minh. and his girlfriend and child)

Appendix V:

Outcome study on 291 admissions to PALM programmes available to follow-up assessment 3 months post- discharge.

Drug use:

Alcohol: There was a significant decrease in the **number of days** alcohol was used, from an average of 9.6 days in the month prior to admission to 5 days in the third month after leaving PALM ($p < .0005$, $n = 261$), and in the **number of standard drinks** consumed per drinking day, from 14.3 to 7.3 standard drinks ($p < .0005$, $n = 252$).

Tobacco: There was a significant decrease in the **number of days** tobacco was used, from an average of 28.2 days in the month prior to admission to 23.3 days in the third month after leaving PALM ($p < .05$, $n = 276$), and in the **number of cigarettes** consumed per smoking day, from 17.2 to 13 cigarettes ($p < .0005$, $n = 263$).

Cannabis: There was a significant decrease in the **number of days** cannabis was used, from an average of 22.2 days in the month prior to admission to 8.9 days in the third month after leaving PALM ($p < .0005$, $n = 261$), and in the **amount of cannabis used** per 'session', from 20.5 to 6.5 'cones' or equivalent measure ($p < .0005$, $n = 251$).

Heroin/Opioids: There was a significant decrease in the **number of days heroin/an opioid** was used, from an average of 10.4 days in the month prior to admission to 2.4 days in the third month after leaving PALM ($p < .0005$, $n = 82$), and in the **amount of heroin/opioids used** per 'session', from 2.3 to 1.1 'hit' or equivalent measure ($p < .05$, $n = 67$).

ATS: There was a significant decrease in the number of days an ATS was used, from an average of 10 days in the month prior to admission to 1.9 days in the third month after leaving PALM ($p < .0005$, $n = 154$), and in the amount of ATS used per 'session', from 4.3 to 1 'hit' or equivalent measure ($p < .0005$, $n = 138$).

Cocaine: There was a significant decrease in the number of **days cocaine was used**, from an average of 4.2 days in the month prior to admission to 0.5 days in the third month after leaving PALM ($p < .005$, $n = 37$), and in the **amount of cocaine used** per 'session', from 3.7 to 1 'hit' or equivalent measure ($p < .0005$, $n = 33$).

Hallucinogens: There was a significant decrease in the **number of days a hallucinogen was used**, from an average of 3.8 days in the month prior to admission to 0.8 days in the third month after leaving PALM ($p < .05$, $n = 29$), and in the **amount of hallucinogens used** per 'session', from 2.1 to 0.3 'hits' or equivalent measure ($p < .005$, $n = 27$).

Inhalants: There was a significant decrease in the number of days inhalants were used, from an average of 4.9 days in the month prior to admission to 1.5 days in the third month after leaving PALM ($p < .05$, $n = 31$), and in the amount of inhalants used per 'session', from 4.7 to 0.4 'hits' or equivalent measure ($p < .05$, $n = 27$).

For **injecting drug use**, 34.4% reported having injected in the 3 months prior to PALM, which reduced significantly to 19.6% reporting injecting in the three months post-PALM ($p < .0005$, $n = 291$).

Severity of Dependence Scale (SDS) scores declined significantly from a mean of 9.2 prior to admission to 5.4 three months post-PALM ($p < .0005$, $n = 195$).

Mental Health:

Depression scores reduced significantly from 1.4 prior to admission to 0.7 three months after PALM ($p < .0005$, $n = 194$).

Anxiety scores reduced significantly from 1.2 prior to admission to 0.6 three months after PALM ($p < .0005$, $n = 195$).

Hostility scores reduced significantly from 1.5 prior to admission to 1.1 three months after PALM ($p < .005$, $n = 195$).

Paranoia scores reduced significantly from 1.3 prior to admission to 0.9 three months after PALM ($p < .0005$, $n = 195$).

There was a significant reduction in the percentage of young people reporting **suicidal ideation**, from 51.9% pre-PALM to 17.7% post-PALM ($p < .0005$, $n = 291$).

There was a significant improvement in the **Family Assessment Device General Functioning** score, from 2.6 pre-PALM to 2.4 post-PALM ($p < .005$, $n = 212$).

Crime:

Arrests: There was a significant reduction in the average number of arrests, from 1.6 in the three-month period prior to admission to 0.5 in the three-month period after leaving PALM ($p < .0005$, $n = 270$).

Property offences: There was a significant reduction in the number committing property offences, from 40.1% in the three months pre-PALM to 18.4% in the three months post-PALM ($p < .0005$, $n = 272$).

Offences against persons: There was a significant reduction in the number committing offences against persons, from 31.8% in the three months pre-PALM to 13.1% in the three months post-PALM ($p < .0005$, $n = 270$).

Offences related to the supply of drugs: There was a significant reduction in the number committing offences related to the supply of drugs, from 24.0% in the three months pre-PALM to 7.4% in the three months post-PALM ($p < .0005$, $n = 271$).

Arcuri and Howard 2006: PALM StatsPak 2001-2005

Appendix VI:

Preliminary outcomes of the YIDA and UNESCAP project in Kunming, China (UNESCAP 2009).

Target Group

- ◆ Young Drug users under 24 years old in Chang Po Compulsory Detoxification Centre (the biggest compulsory detoxification centre in Kunming)
- ◆ Families of those young drug users
- ◆ Peer educators and volunteers recruited from related agencies and organizations
- ◆ Policymakers of managing problematic young drug users in Kunming

Management of project activities

In order to ensure the smooth implementation of the project, staff from YIDA monitored peer educators' and volunteers' project activities.

- At the beginning of the project, project team signed contracts with recruited peer educators and volunteers. In the contracts, mutual rights and responsibilities were specified.
- Project team made a series of recording tables for project activities so that all the activities of peer educators and volunteers have written record.
- Project team made sure that peer educators and volunteers met every two weeks to summarize their activities in the past two weeks and make plans for the coming two weeks.
- Project team facilitated a routine meeting every month for peer educators, volunteers and project workers. In the meeting, the activity records handed in by peer educators and volunteers were checked; the problems of and solution to every case were analysed. The activities, difficulties and experiences of the month were also discussed and summarized in the meeting.
- Project team went to the Centre once a month and provided on-the-field monitoring for peer educators and volunteers.
- Project team met with relevant personnel from Kunming Committee of Drug Control and the Centre every month to provide feedback on the progress of the project and to coordinate or deal with problems arising in the implementation of the project.

Capacity building for peer educators and volunteers

Recruiting and training new peer educators and

The project team recruited 22 peer educators and volunteers from PSI Mutual Help Drop in Centre, Red Cross Sunshine Homeland, DAYTOP Care Centre, Rainbow Community, Kunming Medical College, etc. The training workshop invited experts to train peer educators and volunteers on the topics of "basic knowledge on drug use", "introduction to counselling and counselling skills", "individual counselling practice" and "the risk situation of relapse and how to deal with them" by way of lectures, games, group discussions, case study and actual practices etc. After the training, project team selected 6 new peer educators and 4 new volunteers. The criteria of selecting new peer educators and volunteers are as follows:

- Having basic knowledge on drug use;
- Having basic skills to communicate with young drug users and provide them with counselling;
- Having objective and non-discriminative attitudes towards drug users;
- Being kind, tolerant and responsible;
- Being willing to invest half a day's time and energy into the project during project duration.

Engaging in CTC with young residents:

Police warn residents not to say anything negative about the centre to the PEs. Then the two young residents meet community members, PEs and social workers. Community members and PEs introduce what they can provide to them when released.

Emphasis was placed on the importance of:

- Perseverance – keep trying to build a relationship no matter how many rejections
 - Building trust – with both parents AND young person – it will take time
 - Having information – and having it in attractive brochure format to leave with young people and families
 - Offering a range of services and options
 - Not colluding with the young drug user
 - Waiting for opportunities to offer suggestions
 - Avoiding too much obvious persuading/pressuring
 - Offering practical assistance – e.g. bringing young person home on release, accompanying young person drop in centre/MMT, financial aid, training, psychological services - BUT not promising what you cannot to
 - Admitting what you CANNOT/ WILL NOT do
 - Supporting parents/siblings/carers
 - Keeping parents/carers involved – not taking their role as parents
 - Maintaining good relationships between community and PEs
 - Developing family-to-family networks
 - Getting to know the family/carers before young person returns home
 - Being friendly but not their 'friend'
 - Supporting PEs so they don't relapse
 - For PEs, NOT assuming that the young person's situation is the same as theirs
- UNESCAP, 2009

1 □ Basic demographic features

Among the 40 target youth who participated in the baseline survey, 22 of them only used heroin. 5 of them only used new types of drugs (such as ephedrine, Ketamine and MDMA etc.). The remaining 13 used both heroin and new types of drugs. Their average age is 20.15 ± 2.58 years old. 15 (37.5%) of them are males and 25 (62.5% of them are females. Absolute majority (37) of them have the education background of junior middle school. In addition, 17 of the interviewed come from single-parent families or families with step fathers or stepmothers. By mid January 2008, 25 and 20 target youth had completed mid-term and final questionnaires.

2 □ Evaluation of mental health

Table 2 Change in mental health after intervention: Baseline survey v. Final evaluation

		Yes	No	P
Being lonely, sad, depressed and desperate to the future	Baseline survey	14	26	0.012*
	Mid-term evaluation	1	19	
Having lost interest in the former	Baseline survey	16	24	0.154

interesting things	Mid-term evaluation	4	16	
Having bad memory, being hard to concentrate and being hard to make decisions	Baseline survey	17	23	0.854
	Mid-term evaluation	9	11	
Feeling ashamed and sensitive	Baseline survey	22	18	0.005*
	Mid-term evaluation	3	17	
Thinking that others do not understand and appreciate me	Baseline survey	17	23	0.150
	Mid-term evaluation	4	16	
Being easy to lose temper and become angry, being hard to control temper	Baseline survey	10	30	0.008*
	Mid-term evaluation	12	8	
Once consider of ending my life	Baseline survey	9	31	0.023*
	Mid-term evaluation	0	20	
Tried to end my life in the past 3 months	Baseline survey	0	40	—
	Mid-term evaluation	0	25	

*P<0.05 = statistically significant

Limitations of the data:

First, although peer educators and volunteers introduced themselves and stressed the principle of privacy, it was very difficult to establish a proper relationship and win trust immediately impacting on willingness to be open. By the mid-term evaluation, after 3 months' communication, the young people trusted the peer educators and were more willing to talk about their true feelings. Second, it was only 3 months from baseline to mid-term evaluation. The period of intervention was probably not long enough for intervention effects to appear. However, after participating in the project, they began to think about their past, feelings and the future. In addition, life in the compulsory detoxification treatment centre is quite dull. With the passage of the time, losing freedom, some of their parents' unwillingness to visit them, and the impact of some negative events in the centre, the young people showed some ambivalence.

The results of final evaluation showed improved mental health from the baseline. It appears that the passage of time and increased peer educator and volunteers contact may have influenced the positive results. Furthermore, in the last 3 months of the intervention, the project team stressed the importance of family counselling and urged peer educators and volunteers to contact with the parents of the young participants more actively. Some parents who had been unwilling to accept their children were moved and tried to accept their children again, which increased optimism once more.

The results of qualitative study

In order to collect the effects of the project in more thorough ways, the project team conducted interviews on some qualitative aspects during the final evaluation of the project.

Among the 20 interviewed target youth, 5 said that the project "is helpful" and 15 said

that the project “is very helpful” to them. As for the most helpful activities of the project, 11 of them chose “monthly heart-to-heart talk”; 6 chose “help to communicate with family members”; the remaining 3 chose “support after leaving the compulsory detoxification treatment centre”. All of the interviewees hoped that the project could last for longer time and they hoped that they could continue to get help from the project after leaving the compulsory detoxification treatment centre. All (20) of them said that the most urgent help they wanted was to “solve present surviving problems”, which is followed by “communicate with project workers via telephone, talk etc.” (14 interviewees), “help to communicate with family members” (12 interviewees), “establish special centres by the project so that we can go to the centre to get further help” (10 interviewees), “provide professional and skill trainings” (10 interviewees), “provide job information and opportunities” (7 interviewees) and “provide help to contact with organizations committed to helping drug users” (6 interviewees).

Main challenges found:

- No supportive legislation/policy
- No legal capacity for diversion
- Difficulty in accessing and engaging families – stigma, financial pressures on parents in one-child culture, etc.
- Difficulties in linking parents for mutual support – stigma again
- Linking with target communities – again stigma
- Police ‘round ups’ and ‘quotas’, and payments to community members for identifying drug users to the police
- No ‘half-way’ houses and youth centres

UNESCAP, 2009

Appendix VII:

Examples of better intersectoral cooperation.

An example of improved cooperation comes from **Lao PDR**, where young drug users are 'treated' in compulsory treatment centres or linger in prison or police lock-ups, Vientiane Youth Centre focused on developing counselling skills among a variety of youth-serving agencies. This linked to pilot capacity building in some districts and villages and linked with those in compulsory residential treatment with youth-serving agencies and peer volunteers. VYC took the lead in facilitating the development of a core youth counselling team that provided treatment, supervision and support for peer volunteers in various locations.

An effective **Network** developed linking seven target villages in Vientiane Capital area, and the CTC – Somsanga. Members of the Network are local village leaders, police, older community members, the womens union, and the VYC trained counsellors who come from varied backgrounds (e.g. high school and university students, retired and current teachers, nurses, and others from business and trades). Some local VYC trained Peer Educators are ex-drug users. The hope is that relapse rates can be reduced, and, via building community capacity, fewer young people will develop significant drug dependence or require 'compulsory' residential treatment as there will be an effective and competent community alternative.

UNESCAP (2009)

A Network Meeting - Seeboonheang Vilage

Meeting attended by at least one member from each target village, and by a staff member from Somsanga, and PCDC. Representatives came from many backgrounds – eg. young workers, Deputy Head of village, Womens Union, VYC trained Counsellors. Then there were verbal reports from each village representative and Somsgana. New and ongoing cases were discussed, frustrations aired, problems solved, and plans made for next time period.

A report was presented on overall activities by VYC. Highlights included the thee day camp held last week with residents of Somsanga from target villages, residents of Don Tao island, and a visit to Don Tao for all, and a moving ceremony with parents and their children where the children acknowledged their wrongdoing and the pain they caused to the parents and sought forgiveness.

Participants stated that he main drug of concern remained 'ya baa', but it has become a little more expensive (Day price Kip30,000 = \$US3, Night price Kip 50,000 = \$US5) per pill.

Finding time for follow-up was an issue, as often young people are not on time, or do not show up – requiring many attempts to et one 'visit'. Likewise, they often broke their 'promises' – not unusual for this population.

Engaging with the families was also seen as a difficulty, as many are 'in denial', ashamed and lack trust. However, most found that talking to the parents before engaging with their drug using son/daughter was the best approach.

Then there were verbal reports from each village representative and Somsgana. New and ongoing cases were discussed, frustrations aired, problems solved, and plans made for next time period. The meeting was lively, yet focussed and productive. All are informed of who is 'in treatment', who needs 'follow up' and who is 'at risk for relapse'.

The Network is a 'model' for other projects on: cooperation, information exchange, directly linking 'community' to the residential 'treatment' centre, sustaining motivation and enthusiasm, and problem solving.

Another example comes from **Yunnan Province, China**, where young people who are apprehended for drug use are sent by the public security officers (police) to a compulsory treatment centre. 'Chang Po' near Kunming, contains young people under 25 undergoing what is called 'treatment' with about 5,000 adults of average age 25-30. The Yunnan Institute of Drug Abuse (YIDA) provided a greater focus on young people and linked Peer Education activities at NGO drop-in-centres in the community with the compulsory treatment centre. They developed effective processes for engaging with young people in CTCs, conducting baseline assessments, supporting young people while in the CTC via visits from Peer Educators who provided harm reduction information and YIDA professional staff, and well planned continuing care after release from the CTC.

UNESCAP (2009)

Appendix VIII:

Some key web available resources for dissemination:

Burnet Institute. (2010). Situational analysis of drug & alcohol issues & responses in the Pacific. Research Paper 21, ACT: ANCD.

Available: http://www.ancd.org.au/images/PDF/Researchpapers/rp21_situational_analysis.pdf

Devaney, M., Reid, G. & Baldwin, S. (2006). Situational analysis of illicit drug issues and responses in the Asia-Pacific region. Woden, ANCD.

Available: <http://www.ancd.org.au/publications-and-reports/research-papers.html>

Gowing, L., Proudfoot, H., Henry-Edwards, S., Teeson, M. (2001) Evidence supporting treatment: the effectiveness of interventions for illicit drug use. Woden, ANCD.

Available: <http://www.ancd.org.au/publications-and-reports/research-papers.html>

Loxley, W., Toumbourou, J., Stockwell, T., et al. (2004) The prevention of substance use, risk and harm in Australia – a review of the evidence. Canberra: Commonwealth Department of Health and Ageing.

Available: http://www.health.gov.au/internet/main/publishing.nsf/Content/health-publhlth-publicat-document-mono_prevention-cnt.htm

National Cannabis Prevention and Information Centre, Australia. (2009) Making the link – A school based programme to promote helpseeking for Cannabis use and mental health problems.

Available: <http://ncpic.org.au/workforce/teachers/making-the-link/>

National Drug & Alcohol Research Centre, Australia. (2009). CLIMATE Schools: Drug prevention programmes - The development and evaluation of interactive computer based prevention programme for alcohol, cannabis and psychostimulants.

Available:

<http://notes.med.unsw.edu.au/ndarcweb.nsf/0/73582B3A5B2A608DCA2571800021A04D?OpenDocument>

National Drug Research Institute, Australia. (2009). SHARP – School Health and Alcohol Harm Reduction Project.

Available: <http://ndri.curtin.edu.au/research/sharp/>

Roche, A. et al. (2008) Drug testing in schools: evidence, impacts and alternatives. Canberra: ANCD.

Available:

http://www.ancd.org.au/images/PDF/Researchpapers/rp16_drug_testing_in_schools.pdf

Spooner, C., Hall, W., Lynsky, M. (2001) Structural determinants of youth drug use. Woden: ANCD.

Available: <http://www.ancd.org.au/publications-and-reports/research-papers.html>

UNESCAP (2003). Young people – partners in HIV/AIDS prevention. UN, New York. Available: <http://www.unescap.org/esid/hds/resources/publications.asp>

UNESCAP (2003). Adolescent substance use: risk and protection. UN, New York.

Available: <http://www.unescap.org/esid/hds/resources/publications.asp>

UNESCAP (2005). HIV prevention among young people: Life skills training kit. UNESCAP, Bangkok.

Available: <http://www.unescap.org/esid/hds/resources/publications.asp>

UNESCAP (2006). Young people and substance use: prevention, treatment and rehabilitation. UNESCAP, Bangkok.

Available: <http://www.unescap.org/esid/hds/resources/publications.asp>

UNESCAP (2007c). A tool Kit for: building capacity for community-based treatment and continuing care of young drug users in the Greater Mekong Subregion. UNESCAP, Bangkok.

Available: <http://www.unescap.org/esid/hds/resources/publications.asp>

UNESCAP (2009) Building capacity for community-based treatment and continuing care of young drug users in the Greater Mekong Subregion: an overview and discussion paper. Bangkok, UNESCAP.

Available: <http://www.unescap.org/publications/detail.asp?id=1330>

UNDCP (2000) Drug Counsellor's Handbook: a Practical Guide for everyday Use. UNDCP, Nairobi, Kenya.

Available: www.unodc.org/unodc/en/report_2000-05-01_1.html

UNODC (2008a). Principles of Drug Dependence Treatment: a discussion paper.

Available: http://www.who.int/substance_abuse/publications/principles_drug_dependence_treatment.pdf

UNODC (2008b). Reducing the adverse health and social consequences of drug abuse: A comprehensive approach: a discussion paper. Available:

[http://www.unodc.org/docs/treatment/Reducing-adverse-consequences-drug-abuse\[1\].pdf](http://www.unodc.org/docs/treatment/Reducing-adverse-consequences-drug-abuse[1].pdf)

World Health Organization (2000) Working with street children: a training package on substance use, sexual and reproductive health including HIV/AIDS and STDs. (WHO/MSD/MDP/00.14

Available: http://www.who.int/substance_abuse/activities/street_children/en/

World Health Organization (2003) Brief Intervention for Substance Use: a Manual for use in Primary Care (Draft Version 1.1).

Available: http://www.who.int/substance_abuse/activities/assist/en/index.html

World Health Organization (2006). Orientation Programme on Adolescent Health for Health-care providers. Facilitators Guide – New modules.

Available: http://www.who.int/child_adolescent_health/documents/9241591269/en/index.html

WHO-WPRO (2009) Assessment of compulsory treatment of people who use drugs in Cambodia, China, Malaysia and Viet Nam. Manila:WHO.

Available: <http://www.idpc.net/publications/who-assessment-compulsory-treatment-asia>