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A Study on the Psychotropic Substance Abuse Problem in Hong Kong

Commissioned by Action Committee Against Narcotics (ACAN)

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Executive Summary
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Hong Kong's *drug problem* is no longer solely an opiate problem with a unified solution. Today, Hong Kong's *drug problem* is a more diverse one. It entails stimulant and poly-drug use by a wider range of people, and as such, requires a multi-faceted approach. Considering the epidemiological trends across the globe in amphetamine type stimulants (ATS) use, it is perhaps surprising that ATS use in Hong Kong is a relatively recent phenomenon and has not attained the prevalence rates found in other places. This lag time is a crucial point in the development of a comprehensive proactive policy and program strategy for addressing psychotropic drug use, in particular ATS use, in Hong Kong.

Hong Kong has essentially been a follower rather than a leader in ATS use trends. This is the good news. It means that time is on our side to develop appropriate strategies. There are important considerations to bear in mind based on the experiences of other countries. There does not seem to be any immediate signs of a decline in ATS use among young people. In fact, the use of ecstasy, ketamine, amphetamines, cannabis and other club drugs, has over the course of the last decade, become firmly entrenched in global and local youth and music culture. The trends in other countries also suggest that ATS use has become increasingly problematic as ecstasy users search for the sensation of their original high, and resort to a cocktail of illicit substances.

The experiences of other countries suggest then a transition to a "post rave" culture. This transition reflects a diversification in the types of music appearing in dance venues and partially accounts for the emergence of new "cocktails" of drugs being consumed (the effects of particular combinations being conducive to particular moods of music). This transition also reflects a diversification in venues for dancing and drug use (although one should not presume that all dance goers use dance drugs). The music and venues began to diversify and grow, resulting in an extremely lucrative industry.

As we document in this report, elements of this transition appear to be emerging in Hong Kong. There are signs of increasing numbers of psychotropic drug users and increasing numbers of poly-drug users. Large-scale warehouse dance events in Hong Kong remain occasional events with the real attraction being the ever-increasing number of permanent dance and disco clubs in areas like Tsim Sha Tsui but expanding into other districts. While Hong Kong clearly has been successful in developing a comprehensive strategy for heroin use, the application of an opiate treatment model is neither appropriate nor relevant to current psychotropic drug use. As noted in other countries, psychotropic drug use like ecstasy and ketamine today are in some ways more complex and difficult to treat and address than with drugs like heroin where a great deal of medical and social research and development has been done. Researchers are still far from decisively

knowing the mental and physical effects (short and long term) of “new stimulant drugs,” and as such, have yet to establish an effective treatment approach.

This report provides an in-depth look at the trends and patterns of psychotropic drug use, the motivations and consequences of using these drugs, the experiences of other countries in dealing with stimulant drugs, and policy considerations and recommendations. The report is based on review of government and non-governmental statistics and data collected within and outside Hong Kong, interviews and focus groups with those who work in the drug field including outreach workers, the police, corrections, social workers, teachers and treatment staff, and in-depth interviews with 40 psychotropic drug users. Below are highlights of the major findings of this study.

Summary of CRDA findings

- Although there has been a significant decline in the number of reported young heroin users from 1995 to the first half of 2000, there has been a corresponding rise in the number of reported young users of amphetamine type stimulants, in particular, ice, ecstasy and most recently ketamine.
- Ice use began to increase in 1996 but appears to have leveled off during the first six months of 2000. The number of young newly reported ice users more than doubled from 1996 to 1997 and then slightly declined by the first half of 2000. The number of young previously reported persons consuming ice grew from 1996 to 1999 but has slightly declined in the first six months of 2000. Despite this slight decline in the number of ice users, the proportion of newly reported female ice users is exceptionally high. By 1999, young females represented nearly 50% of all newly reported ice users.

Over the last five years, there has been a gradual rise in the proportion of male ice users who are poly-drug users, principally of heroin and cannabis. In 1999, 63% of male ice users were poly-drug users. The proportion of female ice users who are poly-drug users declined slightly over the five years with 46% of them saying they used a second drug. Like their male counterparts, their second drug was typically heroin or cannabis. From these quantitative data, it is unclear, however, whether ice use preceded heroin use or vice versa.

- The number of reported persons using ecstasy began to climb in 1997 and 1998, and rose dramatically by 1999. Most of this rise is due to newly reported persons under the age of 21. The female to male ratio of reported ecstasy users is 1:4 in 1999.

In 1999, 69% of reported male ecstasy users were poly-drug users, principally of cannabis. During the same year, 52% of reported female ecstasy users also indicated using other drugs, with cannabis and ice being cited most often as the second drug of choice.

- The number of ketamine users has risen dramatically from 21 in the last six months of 1999 to 453 in the first six months of 2000. In 2000, ketamine represented the second most popular drug of choice (after ecstasy, which ranked number one,) among newly reported young persons.

In 1999, over 80% of reported male ketamine users were poly-drug users with cannabis being reported as the most common second drug consumed. 83% of reported female ketamine users were also poly-drug users with ecstasy most often being reported as the second drug of choice.

- Although reported cannabis use has remained relatively steady, the increase in ecstasy and ketamine use may result in an accompanying increase in cannabis use as users' find cannabis providing an effective method for reducing insomnia.

Since 1995, there has been a gradual rise in the proportion of reported cannabis users who are poly-drug users. At the end of 1999, 40% of male cannabis users and 48% of female cannabis users were poly-drug users with ice and ecstasy appearing to be the most common drugs used with cannabis.

- Tranquilizers like brotizolam, diazepam, flunitrazepam, triazolam and midazolam have decreased in popularity among young users from 1995-1999, but have become increasingly popular among older previously reported users who are showing a preference for injecting the drug, most likely as part of their heroin use.
- The number of cough medicine users has also declined over the five-year period, but remains steady in use by a small group of previously reported young persons.
- Questions on the CRDA reporting form, in particular usual daily expenditure, reasons for current use, and age at first abuse, are not being completed during the recording process, have resulted in missing data, and make it difficult to monitor and assess particular user' characteristics.

Summary of Lifestyle Survey Findings

- Data clearly reveal differences between the lifestyles and attitudes of non-drug users and their counterparts who reported use within thirty days before the survey.
- Almost all users are regular or occasional users of tobacco while non-users do not, in general, smoke. Users also report up to ten times as much alcohol use as non-users.
- Users have much more access to money either through work or from parents compared to non-users. Users may have up to five times more money per week from work compared to non-users. Users may have double the amount of allowance from parents compared to non-users.
- Users show a much more gregarious lifestyle, not unexpectedly, than non-users, but when at home do not engage so much in past-times such as television watching, preferring magazines and listening to music. They generally are more oriented towards cultural matters, attending the cinema, writing and drawing for pleasure. In addition more of them record playing with and spending money on pets as significant. There is evidence that fewer users engage in school homework than non-users, but no evidence that those who do engage, do so less diligently (i.e., users who do homework do as much as non-using peers, but fewer do homework at all).

- Users have food preferences different from non-users. Users show a tendency to use more prescriptions and self-medication. They visit dentists more frequently, and more of them have some radical treatment such as teeth extractions, yet in other personal hygiene matters they tend to be more careless. Fewer brush teeth as regularly maybe leading to dental problems noted, or take showers as frequently as non-using students.
- More users spend money on gambling and in video-game arcades. Apparently, although sports uptake in Hong Kong is very low generally, users are more likely to be found engaging in sports, especially ball games than non-users. The range of sports reported by them is large.
- Users consistently have a lower self-esteem rating than non-users and this increases with age. They also have less self efficacy concerning control over their own health, and this is manifested in a very uncertain grasp of knowledge about HIV/AIDS, about which none of the students, users or non-users, seem to engage any significant others in discussion.
- Users are extremely critical of their local environment, often rating it as poor or very poor, and of safety in that environment, particularly during the day. This critical attitude, desirable as it may be in general, seems to lead to frustration that may be a cause of drug use.
- The message coming clearly from the lifestyle survey is one pointing to a wish to be less constrained in earlier childhood which leads to self-protection mechanisms, protecting from the constraints by withdrawal at home, escape to alternative activities with peers perhaps encouraged by parents who supply funding rather liberally. If programmes of social education, coupled to parent education were in place in the schools, at risk youth, identified by a profiling mechanism not focussing on drug related behaviour but on other parameters identified by the survey could allow students to be assessed for risk in upper primary schools and to be allocated to home room classes in junior secondary schools focussing more clearly on the difficulties and concerns expressed by them (i.e. building social education programmes to the needs of the individuals, rather than adopting a “one size fits all” approach).

Summary of Findings from Interviews with Users - Motivations & Consequences of Psychotropic Drug Use

Our in-depth interviews with 40 users offer the following insights on the motivations and consequences of using ice, ecstasy and ketamine. It is important to underscore that our respondents reported that ecstasy and ketamine were typically adulterated, and consequently, this may significantly influence the physical and psychological effects on the user. Moreover, many of our respondents combined the use of ecstasy and ketamine during a drug taking episode (almost always in a dance club) because of their desire to shift the nature of their drug experience. In this context, we have analyzed the motivations and consequences of these drugs together.

Motivations to use ice

- Relatively long high (good value for money)
- Good source of energy for concentration, work and coping with mundane tasks
- Process of using promotes sociability, talkativeness and self confidence

- Provides feeling of bravado for engaging in illegal activities
- Belief that ice is not addictive
- Belief that ice will “cure” heroin use.
- Appetite suppressant and thinness provides measure of self esteem
- Increase sexual virility (mixed reports)

Consequences of using ice

- Insomnia
- Decrease in sexual virility
- Memory lapses
- Hallucinations
- Paranoia
- Depression
- Dehydration, flushing, sweatiness
- Reproductive health problems among women
- Irritability
- Aggression and violence
- Inability to hold down a job
- Financial difficulties resulting in generating illegal income
- Arrests

Motivations to use ecstasy alone and/or with ketamine

- Curiosity
- Boredom
- Peer influence
- Fashionable, trendy and socially acceptable
- Belief that use and dancing are a form of non-threatening play or entertainment
- Belief that these drugs are not addictive
- Provides temporary state of happiness
- Energy for dancing and expressing oneself (and therefore self confidence)
- Ability to “wave” with ecstasy
- Ability to be free (fly, float) with ketamine
- Enjoy hallucinogenic feelings from ketamine

Consequences of using ecstasy alone and/or with ketamine

- Headaches
- Teeth grinding and sore jaws
- Exhaustion
- Insomnia
- Decrease in sexual virility
- Weight loss
- Memory lapse and loss
- Attention deficit
- With ketamine – depression and hallucinations
- Legal and work problems generally have been unproblematic for these users.

Summary of Overseas Experience

Global and Regional Trends

- The United Nations Drug Control Program (UNDCP) has, for some time, been monitoring the psychotropic substance abuse problem around the world, and in the mid-1990s, warned that, within the psychotropic drug groups, ATS were likely to become the drug of the 21st century.
- The UNDCP data ranks Asian countries including Republic of Korea, Japan and the Philippines, northern Europe including Denmark, Sweden, and the UK and Latin America as having the highest prevalence rates. According to UNDCP estimates from the annual reports questionnaire (ARQ), the global annual prevalence of ATS abuse is, on average, 0.6% of the population over 15 years of age. (UNDCP 1996). Europe and Asia fall below this prevalence level while the Americas are above it.
- Globally, the most popular method of ATS use is via ingestion, then injection. Methamphetamine, however, is equally as likely to be through ingestion or injection. Injection of ATS is more prevalent in the Far East/Pacific area and in North America than in Europe. Injection use is rare in Latin America and Africa (UNDCP 1996).

Country Trends

- We briefly report on available indicators of ATS drug use in Thailand, Taiwan, Japan, Philippines, Australia, the U.S., and the U.K. Available data indicate that countries in the Asian Pacific Region are experiencing increases in amphetamine type stimulant use, especially methamphetamine. Ecstasy use is also on the increase in the Asian Pacific Region but has not been as prevalent as methamphetamine consumption. Amphetamine use in the U.S. and the U.K. appears to have stabilized but has experienced growth in ecstasy use and other club drugs.

Patterns of Use – Key Issues

- Bingeing may take one of two forms, either stacking (taking several tablets at once) or boosting (taking several tablets but at intervals over a period of time). Bingeing may be related to the problem of “diminishing returns” sensation – the more they use, the less “high” they get. This desire to repeat the experience appears to be more futile given the often-repeated sentiment the “first time was the best.”
- Content, purity and strength: Although MDMA tablets are sold usually with brand names and logos, the content of individual tablets varies. Adulterants found in MDMA tablets can cause adverse reactions, additives include DXM (a cough suppressant), PMA (a psychoactive stimulant), DOB (a hallucinogen), PCP (a hallucinogen), ketamine, amphetamines and other drugs used in over the counter medications (ephedrine, acetaminophen, and caffeine), DXM, PMA and DOB.
- Poly-drug Use. “Cocktails are increasingly popular”. Studies in the U.S., U.K., and Australia suggest that most users tend to “mix and match,” and experiment with different combinations as a method for enhancing the experience.
- Setting: Dance environments are frequently one of poorly ventilated rooms where users engage in strenuous activities, resulting in dehydration, hypothermia, fainting, high blood pressure and panic attacks. In this environment, mixing and matching (alcohol and ketamine) may prove lethal.

Control

Legislation

- Penalties on businesses in which narcotic offenses occur.
- Stiffer penalties for production and trafficking.
- Tighter control over precursor chemicals.
- On-going training and review of judicial and prosecutorial response to ATS.
- Participation in regional events and activities as with the UNDCP Regional Centre for East Asia and the Pacific and ASEAN in relation to all aspects of ATS abuse from control to prevention/education and treatment.

Law Enforcement

- Arrest referral schemes.
- Drug Arrestee Monitoring Systems.
- Drug courts.
- Assisted policing with “place managers.”
- Multi-agency demand reduction strategies.
- Targeting clandestine laboratories in manufacturing of ATS.
- Law enforcement education and training programs

Treatment Issues

Characteristics of Users

- Overseas research suggests that stimulant users differ in significant ways from opiate users including range of drugs consumed, age, distinct psychopathology issues, and reluctant to access and engage treatment.

Short and Long Term Effects of Methamphetamine

- High level of attention and energy, decreased appetite, euphoria, increased respiration, hypothermia.
- Emaciation, paranoia, hallucinations, depression, mood swings, cravings for the drug, aggressiveness, severe weight loss, and possibly heart attack.
- Current research efforts looking at toxicity effects on the brain.

Treatment Strategies for Methamphetamine and other ATS

- Recognition among practitioners that treatment approaches used for opiate addiction are not appropriate or compatible with addiction to amphetamine type stimulants.
- Emergency room treatment: Hospital protocols center on immediate treatment of presenting symptoms like hypothermia with cooling baths and convulsions with anti-convulsing drugs. Guidelines have been established for acute intoxication with and without complications.
- Withdrawal management from stimulants is not the same as for opiates. Clinical reports indicate that amphetamine withdrawal may take longer than with opiates.

- Pharmacological treatment: Pharmacological agents used with stimulant users especially of amphetamine and cocaine include drugs to decrease discomfort, blocking drugs; aversive drugs and replacement drugs (Kamieniecki et al. 1998). Dexamphetamine substitution is used as a treatment for amphetamine abusers in the U.K. Japan has adopted a pharmacological therapy approach, which uses psychotropics, psychotherapy and group counseling to treat substance induced mental disorders.
- Therapeutic treatment: Eight therapeutic strategies are identified. The most promising approach for methamphetamine and ATS treatment are cognitive behavioral programs. The focus of these programs center on assisting the client to change his/her way of thinking, expectations and behaviors and to develop coping skills with life stressors (NIDA Report 2000).
- U.S. Center for Substance Abuse Treatment (CSAT) Methamphetamine Treatment Project: Matrix model implemented and evaluated in seven drug treatment centers principally in California and Hawaii where there are high rates of methamphetamine abuse. (MTP 2000) Thailand has adopted and is pilot testing the Matrix Model in seven different locations.

Short and Long Term Effects of MDMA, Ketamine, and other ATS

- Case studies and uncontrolled studies report that the drug is associated with confusion, depression, sleeping difficulties, anxiety, panic attacks, depersonalization, hallucinations, flashbacks, psychosis and dependency. In debate is the issue of whether adverse effects are due to “pure” MDMA, to adulterated MDMA or “mix and matching”.
- MDMA has also been associated with rapid heart rates and increased blood pressure. A secondary result from MDMA use in dance scenes is dehydration, hypertension and heart/kidney failure (NIDA 2000). In high dosages, it has been linked to elevated body temperatures and resulted in muscle breakdown and kidney and heart failure.
- Although MDMA is said to be physically non-addictive, users may become psychologically dependent and may subconsciously use the drug as a form of self-medication for underlying disorders. (Jansen 1999 and 2000).
- Current research suggests that MDMA is neurotoxic yet remains controversial among medical researchers (McGuire and Fahy 1991; McCann et al. 1998; McGregor and Hall 2000; see EROWID for excellent summary of varying views.)
- Ketamine shares some similar effects as PCP as both of them are dissociative anesthetics. Both drugs produce the effects of dreaminess and hallucinations. Ketamine’s adverse effects include loss of motor control, delirium, memory loss, impaired attention, depression, and high blood pressure. The long term effects of Ketamine include tolerance and possible physical and/or psychological addiction.
- GHB is noted for its sedative and euphoric attributes. It creates a feeling of relaxation, emotional warmth, drowsiness, relief of anxiety, and enhanced sensuality. In high

dosages, it can result in nausea, vomiting, impaired breathing, dizziness and loss of consciousness.

Treatment Strategies for MDMA, Ketamine and other ATS

- As yet, there are no specific treatment strategies for dealing with ecstasy and ketamine misuse. However, a London based researcher, Dr. Jansen (2000) recommends a multi-leveled approach which might involve psychotherapy and cognitive/behavioral therapy, meditation, antidepressants, antioxidants and food supplements, benzodiazepines, haloperidol and other anti-psychotic prescriptions. Specific treatment and medications are dependent on presenting issues of the user.
- Harm or risk reduction have been the main strategy used to address the consequences associated with ecstasy use. Risk reduction strategies are a realistic method for dealing with ecstasy and ketamine use, particularly since there is no established treatment approach.

Education and Prevention

- Peer leaders among groups of amphetamine users have been found to be effective in preventing heroin use and shifting to injection of methamphetamine. This peer leader – group model is useful as a form of secondary prevention (Klee 1995).
- One of the primary methods for young people to learn about drugs and the problems associated with use is to train those who work directly with them, in particular, teachers, primary care health education workers and students enrolled for teacher certification courses.
- Health professionals (drug and non-drug health care workers), particularly in emergency rooms, should be provided with training (and continually updated, perhaps through newsletters or bulletins) on presenting problems of “club drug” users.
- Most countries witnessing ATS increase have developed educational campaigns to increase the public, especially young people’s knowledge of the risks. These campaigns are largely tailored to the cultural context of those societies
- The development of websites (governmental and non-governmental) which offer in-depth information on the use and effects of ATS.
- There has been a diversification in the types of educational materials available so that pamphlets and brochures are not the only medium for providing information. Bookmarkers, posters and videos with local television and music celebrities have become very popular in Singapore, the Philippines, and Thailand. While this approach would very likely be popular in the Hong Kong context, one must consider ways in which to counter the “celebrity” image associated with local discos and clubs.
- Several countries have developed telephone hotlines for people to phone in for help or advice.

- The American and Australian experience suggests that drug education needs *to be realistic and based on safety first* prevention programs

Recommendations

Controls

- 1) Code of practice for dance clubs, discos and other entertainment venues.
- 2) Review and streamlining of licensing and de-licensing process (e.g., controls on noise and crowding enforced in timely and efficient manner).
- 3) Review, pilot testing and adoption of an arrest referral system of cautioning for possession of drug cases.
- 4) More rigorous enforcement of tobacco and alcohol control.
- 5) Workshops and training for the judiciary and prosecutors may facilitate discussion on guidelines for sentencing cases involving possession of ecstasy and ketamine.
- 6) Ongoing monitoring of psychotropic drug use is needed to assess the “market” - supply and demand. As evidenced in other countries, an effective monitoring system of the market would include urine testing of drug arrestees (along with an anonymous report on the arrestee) and of the health effects (i.e., emergency room and hospital admissions for accidents, overdoses, drug-related violence and other physical and mental health related problems).
- 7) Participation in regional events and activities as with UNDCP Regional Centre for East Asia and the Pacific and ASEAN would be an effective means to monitor and learn from other countries’ experiences in the Asian region

Treatment

- 1) Recognition that treatment approaches for opiate addiction are not compatible with addiction to amphetamine type stimulants.
- 2) Development and pilot testing of peer group education among psychotropic drug users, especially among ice users.
- 3) Review, design, pilot testing and adoption of a treatment program for stimulant abuse. This may include pharmacological and therapeutic treatment. The essential elements of an intervention strategy specifically for stimulant users would include a) emergency room protocols with guidelines for acute stimulant intoxication with and without complications; b) guidelines for withdrawal management with specifications of appropriate pharmacological agents for particular symptoms; c) a therapeutic intervention tailored to the characteristics and problems of stimulant users. There is evidence to suggest that cognitive behavior models and multi-modality models of intervention are effective in treating stimulant users. Consideration should be given to the CSAT matrix model. (Pp. 129-131)
- 4) Review, design, pilot testing and adoption of risk reduction strategies to address the problems associated with ecstasy, ketamine, and cannabis use. The essential elements of these strategies are to educate consumers on the effects and harms of these drugs and methods for reducing harms in a non-judgmental way (e.g., help-lines, brochures, first aid stations, chill out spaces).

Education and Prevention

- 1) A range of educational materials should be available for parents and caring professionals to provide them with an awareness of the range of behaviors and attitudes in young people that seem to be associated with substance use.
- 2) Teachers, primary care health education workers and students enrolled for teacher certification should receive training (including updates, perhaps through newsletters or bulletins) on the basic pharmacology of drugs, symptoms of drug use, behaviors associated with drug use, and strategies for dealing with students with drug problems.
- 3) Health professionals (especially those who work in emergency rooms) need up to date information on drug trends (e.g., purity levels of drugs seized, symptoms to look for with particular drugs, etc.) to facilitate clinical management of drug related cases.
- 4) Drug education, whether disseminated through the classroom, media, or other public mediums, should be realistic and age relevant. It should provide information on *safety first*.
- 5) Social education programs containing references to the relationship between substance use and behavior should be in place in all senior primary and secondary schools so that no child can blame society for their later addiction to a psychoactive substance.
- 6) Young people as early as Primary 4 begin to smoke (Betson et al 1998) it is therefore valuable to start any planned interventions to reduce club drug use by formulating policy relating to primary age young people.
- 7) Treatment and rehabilitation agencies should be encouraged to strive for innovation and best practices, particularly if they are to be equipped to deal with the changing nature of the addict population in Hong Kong.