LEGAL CONSIDERATIONS IN THE MANAGEMENT OF YOUNG DRUG ABUSERS

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What are the legal considerations in the management of young drug abusers?

- Most of the time, there is no need to have too many legal considerations when managing young drug abusers. There is no difference from your daily work in managing other patients. For difficult cases, you can always seek opinions from the HKMA Duty Council Members or from lawyers.
- Areas of legal considerations include:
  - Drugs
  - Abusers
  - Consent
  - Confidentiality
  - Don't forget about: Missing the diagnosis of drug abuse
- Areas of law involved:
  - Criminal Law
    - Battery
    - Dangerous Drugs Ordinance (Cap 134)
  - Law of Tort
    - Trespass to the person
  - Professional Misconduct
    - Consent
    - Confidentiality

Drugs

What types of drugs are illegal to take or possess?

- There is a full list of drugs found in the Dangerous Drugs Ordinance (Cap 134) Schedule 1. You can check the list online if you are in doubt. Information is also available from MIMMS or MIMMS online.

Is it legal to take (but not possess) drugs?

- It is illegal both to take and to possess a dangerous drug. This is spelled out in Section 8 of the Dangerous Drugs Ordinance:
  - *Possession of dangerous drug otherwise than for trafficking, and consumption of dangerous drug*
    1. *Save under and in accordance with this Ordinance or a licence granted by the Director there under, no person shall-*
       a. *have in his possession; or*
       b. *smoke, inhale, ingest, or inject a dangerous drug.*
    2. *Any person who contravenes any of the provisions of subsection (1) shall be guilty of an offence and shall be liable-*
       a. *on conviction upon indictment to a fine of $1,000,000 and, subject to Section 54A, to imprisonment for 7 years; or*
       b. *on summary conviction to a fine of $100,000 and, subject to section 54A, to imprisonment for 3 years.*

Does the current law support compulsory drug testing?

- No. Current law does not support compulsory drug testing. Consent from the person to be tested is needed. Procedures for taking urine samples for drug testing is governed by section 54AA of the Dangerous Drugs Ordinance:

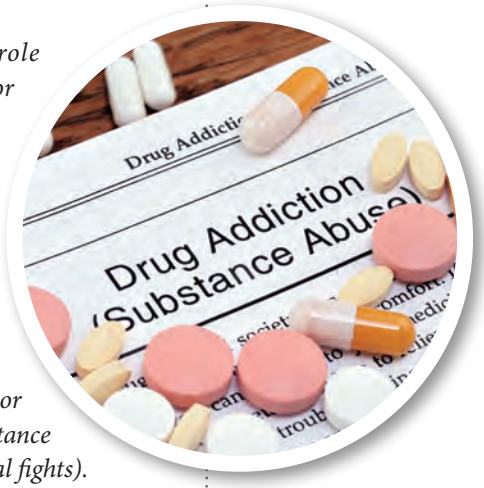
- *Taking of urine samples*
  1. *In any investigation in respect of an offence committed or believed to have been committed, a urine sample may be taken from a person only if-*
     a. *a police officer of or above the rank of superintendent or a member of the Customs and Excise Service of or above the rank of superintendent ("authorizing officer") authorizes it to be taken;*
     b. ***the appropriate consent is given**; and*
     c. *a magistrate gives approval under subsection (7) for it to be taken.*

It is also stated in Section 54AA of the Dangerous Drugs Ordinance:
(9) (a) (i) An examination of the body cavities of a person under this section shall, unless that person otherwise consents, be carried out by a medical practitioner or nurse of the same sex as that person.

Abuse

Is one time use of a dangerous drug or harmful substance considered abuse?

- Yes. Single use of a dangerous drug or substance in a harmful or inappropriate way is considered abuse in clinical context. There are some differences between this working diagnosis and the DSM definition of substance abuse:
- *DSM-IV-TR defines substance abuse as:*
  - *(i) A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:*
    - *Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g. repeated absences or poor work performance related to substance use; substance-related absences, suspensions or expulsions from school; neglect of children or household)*
    - *Recurrent substance use in situations in which it is physically hazardous (e.g. driving an automobile or operating a machine when impaired by substance use)*
    - *Recurrent substance-related legal problems (e.g. arrests for substance-related disorderly conduct)*
    - *Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g. arguments with spouse about consequences of intoxication, physical fights).*
  - *(ii) The symptoms have never met the criteria for Substance Dependence for this class of substance.*



Consent

When do we need consent from patients?

- Physical examinations, investigations and treatments require patient consent. Without consent, it is a crime of battery and a tort of trespass to the person. (*Airedale NHS Trust v Bland [1993] A.C. 798 at 882*)
- Areas of consideration about consent include:
  - Consent to have treatment
  - Consent to refuse treatment
  - Refuse to consent to treatment
  - Revoke of consent
  - Veto of consent

Who can give consent?

- The general principle is that all adults can give consent unless proved otherwise.
- In common law there is a rebuttable presumption that patients aged 16 and over have the mental capacity to consent to medical treatment. (*Re T (Adult: Refusal of Treatment) [1992] 4 All ER 649*)

- Every person being of adult years and sound mind has a right to determine what shall be done with his own body. (*Schloendorff v Society of New York Hospital (1914) 105 N.E. 92*)
- Even when his or her life depends on receiving medical treatment, an adult of sound mind is entitled to refuse treatment. (S*t George's Healthcare NHS Trust v S [1982] 2 F.L.R.728 at 739C*)
- An adult patient has an absolute right to refuse to consent to medical treatment for any reason, rational or irrational, or for no reason at all, even where that decision may lead to his or her death. (*Re MB [1997] 2 F.L.R. 426 at 432*)
- In Re C (*Adult: Refusal of Treatment) [1994] 1 WLR 290*, a schizophrenic patient refused to consent to amputation of his leg in order to treat the gangrene. The court upheld his decision, ruling that he had the capacity to refuse treatment and he could understand the consequence that he might die according to his doctor's opinion.
- A three-stage test was advocated: the patient should be able "(1) to take in and retain treatment information, (2) to believe it, and (3) to weigh that information, balancing risks and needs."

What does our Red Book say?

2. Consent to medical treatment

2.1 Consent to medical treatment is part of quality care and also a legal requirement. Consent has to be given voluntarily by the patient after having been informed of the relevant aspects of the medical procedure including the general nature, effect and risks involved.

2.2 Consent is normally given by the patient himself or by a designated person under specific circumstances. When it is not possible for an otherwise competent patient to give consent, the views of the family members should be considered provided that such views are compatible with

(i) the patient's best interests; and

(ii) the patient's right of self-determination.

2.3 Consent should preferably be recorded in writing, although in law consent in written form is not always required. In certain circumstances, written consent is required under specific statutory provisions.

2.4 A patient has the right to refuse to give consent to treatment, provided that the patient is able to exercise his judgement clearly and freely. The refusal should be respected and preferably documented.

Is consent required from young drug abusers?

- It depends on the age. Patients over 18 years old are treated as adults.
- Children aged over 16 years are presumed to have requisite capacity for most purposes with the following exceptions:
  - These do not include the donation of organs or blood or other procedures which do not constitute treatment or diagnosis. (R*e W (A Minor) (Medical Treatment: Court's Jurisdiction) [1993] Fam. 64*)
  - A parent can consent to a treatment that the child has refused. (*Re R (A Minor) (Wardship: Consent to Treatment) [1992] Fam. 11*)
- For children under 16 years, the general principle is that they cannot give consent. Consent needs to be obtained from the parents or guardian, or someone with parental responsibility.
- An exception to the general principle is the consideration of Gillick competence:
  - A Gillick-competent child under the age of 16 years may give valid consent on his or her own behalf.
  - In *Gillick v West Norfolk and Wisbech AHA ([1985] 3 AllER 402)*, there was a health departmental circular advising doctors on contraception to minors. The circular stated that the prescription of contraception was a matter for the doctor's discretion, and that contraception could be prescribed to a child under 16 without parental consent. This matter was litigated because an activist, Mrs. Victoria Gillick (a mother of 5 boys and 5 girls), ran an active campaign against the policy.

- The judge ruled that a child under 16 can give consent under the following conditions:
  - the child should have sufficient maturity to understand the moral, social and emotional impact of any decision,
  - the treatment or advice must be in the child's best interest,
  - nature of the treatment, and
  - that the doctor needs to proceed without parental knowledge and consent.

Are there any other conditions that abusers can be treated without consent?

- An example is forced treatment by law. This is a service for sentenced persons involving a compulsory placement programme run by the Correctional Services Department, for drug-dependent persons who are convicted of relevant offences, not necessarily drug-related, and are considered by the courts to be suitable for treatment under the programme.

Confidentiality

Does the rule of confidentiality apply to drug abuse patients?

- Yes. Drug abuse patients are no different from other patients. Patients have a right to expect that information about them will be held in confidence by their doctors. Confidentiality is central to trust between doctors and patients. Without assurances about confidentiality, patients may be reluctant to give doctors the information they need in order to provide good care.
- Quotes from our Code of Professional Conduct (the Red Book):

  1.4 Disclosure of medical information to third parties

  1.4.1 A doctor should obtain consent from a patient before disclosure of medical information to a third party not involved in the medical referral.

  1.4.2 In exceptional circumstances medical information about a patient may be disclosed to a third party without the patient's consent. Examples are:
  (i) where disclosure is necessary to prevent serious harm to the patient or other persons
  (ii) when disclosure is required by law.

  1.4.3 However, before making disclosure without the patient's consent a doctor must weigh carefully the arguments for and against disclosure and be prepared to justify the decision. If in doubt, it would be prudent to seek advice from an experienced colleague, a medical defence society, a professional association or an ethics committee.

Is there a duty to report drug abuse to the police?

- There is no duty for the doctor to report drug abuse of his patient to the police.

Under what circumstances should the doctor consider breaking the confidentiality between him and his patient?

- Court order
  - The courts, both civil and criminal, have power by virtue of the various pieces of legislation that govern their operation, to order disclosure of information.
  - You must not disclose personal information to a third party such as a solicitor, police officer or officer of a court without the patient's express consent.
- Public interest
  - An example of protection of public interest overriding confidentiality of patient is illustrated by the case *Tarasoff v Regents of the University of California*.
  - In 1968 two students at the University of California at Berkley, Tatiana Tarasoff and Prosenjit Poddar, met and began dating. Poddar believed the relationship to be more serious than Tarasoff did, and became preoccupied and withdrawn when she rejected him. Poddar went to the University's health service for treatment of his depression. Poddar described fantasies of hurting an unnamed girl. The psychologist also found out from a third person that Poddar had considered buying a gun and became concerned about Poddar's potential for violence. The psychologist called and wrote to the campus police asking them to apprehend Poddar. The campus police found him to be, in their judgment, rational. The police warned Poddar to stay away from Tarasoff but did not

take him into custody. Two months later, Poddar went to Tarasoff's home with a pellet gun and a butcher knife and killed her.
    - In its final ruling on the case in 1976, the California Supreme Court found that therapists have a duty to protect their patients' potential victims.
- Protection of children
    - Quote from *GMC: Guidance for doctors: Disclosures in relation to the treatment sought by children or others who lack capacity to give consent*
        - *Problems may arise if you consider that a patient lacks capacity to give consent to treatment or disclosure. If such patients ask you not to disclose information about their condition or treatment to a third party, you should try to persuade them to allow an appropriate person to be involved in the consultation.*
        - *If they refuse and you are convinced that it is essential, in their medical interests, you may disclose relevant information to an appropriate person or authority.*
        - *In such cases you should tell the patient before disclosing any information, and where appropriate, seek and carefully consider the views of an advocate or carer. You should document in the patient's record your discussions with the patient and the reasons for deciding to disclose information.*

Classification of individual drugs

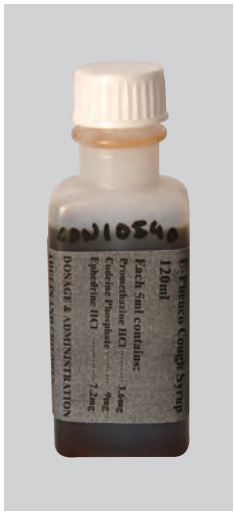
Most of the drugs can be classified under the following categories:

1.	Opiates/opioids	e.g., heroin, opium, morphine, codeine, methadone, meperidine / pethidine, fentanyl, hydromorphone, oxycodone
2.	Hallucinogens	e.g., LSD, magic mushroom, PCP
3.	Cannabinoids	
4.	Stimulants	e.g., amphetamine, cocaine
5.	Sedatives-hypnotics	e.g., benzodiazepines, barbiturates, methaqualone, zopiclone, zolpidem
6.	Volatile solvents	e.g., glue, thinner
7.	Over the counter (OTC) medication	e.g., cough mixture, cough tablet, antihistamine
8.	Others	e.g., 3,4-methylenedioxymethamphetamine (MDMA), ketamine, γ-hydroxybutyrate (GHB), anabolic-androgenic steroids

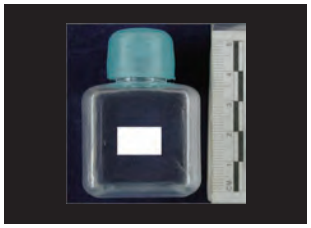
Cannabis

Cocaine Crack

Nimetazepam



Cough Medicine



GHB

Heroin

Ice

Ketamine

MDMA

Organic Solvent

Midazolam

Zopiclone

Source: Narcotics Division, Security Bureau

WHAT YOU NEED TO KNOW ABOUT ABUSED DRUGS – PART I

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When doctors are not familiar with the field of drug addiction, they commonly have some misconceptions that drug addiction is not treatable and drug addicts are difficult patients. They find themselves helpless because they do not have adequate and up-to-date training in this rapidly changing field, and they cannot find any multidisciplinary support in the community. Since the problem of drug addiction is increasing rapidly, it is important for front-line doctors to play a role in the identification and management of drug addiction. In this chapter, the basic concepts of drug addiction and some of the commonly prescribed drugs with abused potential are discussed.

Definition of substance abuse

According to the Diagnostic and Statistical Manual of Mental Disorders – 4th Ed. (DSM-IV-TR), substance abuse is defined as a maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

(i) Recurrent substance use resulting in a failure to fulfil major role obligations at work, school, or home.
(ii) Recurrent substance use in situations in which it is physically hazardous.
(iii) Recurrent substance-related legal problems.
(iv) Continued substance use despite having persistent or recurrent social, or interpersonal problems caused or exacerbated by the effects of the substance.

The symptoms have never met the criteria for substance dependence.

Definition of substance dependence

Substance dependence is defined in DSM-IV-TR as a maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

(i) Tolerance, as defined by either of the following:
  (a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect
  (b) markedly diminished effect with continued use of the same amount of the substance.
(ii) Withdrawal, as manifested by either of the following:
  (a) the characteristic withdrawal syndrome for the substance
  (b) the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms.
(iii) The substance is often taken in larger amounts or over a longer period than was intended.
(iv) There is a persistent desire or unsuccessful efforts to cut down or control substance use.
(v) A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
(vi) Important social, occupational, or recreational activities are given up or reduced because of substance use.
(vii) The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

Reasons people abuse drugs

Some people claim that they just want to search for fun and pleasure. Some would say that they seek for particular feelings e.g. numbness, calmness, drowsiness, energy, confidence, mystical experience, etc. Some self-medicate to control their physical / mental symptoms e.g. pain, insomnia, anxiety, depression, attention deficit and lack of motivation / self-confidence,

etc. Some are under peer pressure. There is usually a combination of different reasons which vary over time. When dependence occurs, avoidance of withdrawal symptoms becomes a dominant factor for continuous drug use.

Aetiology of drug abuse

The aetiology of drug abuse is complex, dynamic and multidimensional consisting of biopsychosocial factors. There are several models used to conceptualise it.

(i) Moral model

This model considers drug abuse as an infringement of societal rules. It is a punishable crime and sinful act. The abuser is responsible for his/her own action. The causes may be due to spiritual deficit or conscious choice. Treatment is by spiritual guidance, moral persuasion or imprisonment.

(ii) Characterological model

In this model the drug abuser has certain character traits which are vulnerable for drug abuse. The traits include impulsivity, sensation / novelty seeking, low self-esteem, inability to cope with stress, egocentricity, manipulative, lack of regulation, inability to bond, unconventionality, rebelliousness, tolerance of deviance, as well as need for control and power while feeling impotent and powerless. Treatment is by psychotherapy which consists of identification and modification of self-esteem, interpersonal skills, impulse control and improved boundary setting.

(iii) Learning model

Drug use can be viewed as behaviour shaped by learning process. In classical conditioning, the physiological arousal during drug intake or withdrawal becomes conditioned to specific situations. Such environmental cues can trigger strong cravings for the drugs or withdrawal symptoms, even if the person has abstained from the drugs for a period of time. The experience of excitement, increased self-esteem and social rewards commonly serve as a positive reinforcement for drug taking in the operant conditioning process. Some people can temporarily escape from their daily life problems that can act as negative reinforcement for continuous drug use. Social learning considers individuals who learn how to behave through a process of modelling and reinforcement. They assimilate and mirror behaviours by observing the actions of others and the consequences of their actions e.g. successful high-status role models. It emphasises the role of cognition in learning. It is memory based with cognitive organisation. People learn which behaviours gain desired reinforcement.

(iv) Cognitive model

Dysfunctional cognition and perception are conceptualised as factors contributing to development and maintenance of addictive behaviour. Addicts have more irrational beliefs, cognitive biases, distortions and errors. These maintain addictive behaviours despite harmful effects.

(v) Existential model

This model focuses on beliefs, attitudes, and values of addicts. The beliefs are about oneself and the role of the drug in one's life. Addicts consider that drug taking has benefits greater than cost. Drug taking can fulfil essential intrapsychic, interpersonal, and environmental needs. They use drugs to deal with specific problems they believe they have e.g. lack of confidence in social-sexual dealings. Views about oneself in regard to the addictive problem are crucial for treatment.

(vi) Expectancy model

Observation and exposure to behaviours create a set of beliefs about that behaviour. Outcome or drug effect expectancies are essential for the development of drug abuse or dependence. Outcome expectancies are expressed in physical (sensation and feeling), psychological (mood and cognition) and behavioural effects. Positive or negative outcome expectancies of the drugs can determine the level and pattern of addictive behaviour towards the drugs.

(vii) Social model

The model emphasises disruptive social forces as social stresses e.g. unemployment, poverty, violence, family dysfunction, gender and age inequities. Addiction is considered to be an adaptation to the resultant misery and unhappiness. Treatment is by environmental modification e.g. reducing social stresses and improving social functioning.

(viii) Biological/disease model

Drug abuse is considered as a unique, irreversible, and progressive disease with underlying biological disturbances in the central nervous system. Dopaminergic neurons in the ventral tegmental area that project to the cortical and limbic regions, especially the nucleus accumbens, are considered as a rewards pathway. It is essential to mediate drug abuse and dependence. Abnormality of the pathway is thought to render a person vulnerable to developing drug abuse or dependence. Taking a drug is out of the addict's own control. They are not sinful but sick. Causal factors include genetic factors, constitutional disease/dysfunction and biological effects of drugs. Treatment is by identification and confrontation of the condition. It aims at lifelong abstinence.

Commonly prescribed drugs with abuse potential

Benzodiazepines

Benzodiazepines are classified as central nervous system depressants. They exert their physiological effects by enhancing the γ–aminobutyric acid (GABA) transmission which is the major inhibitory neurotransmitter in the brain and spinal cord. Benzodiazepines are commonly divided into groups according to their half-lives. The short-acting drugs are used clinically as hypnotics, while the long-acting drugs are used as anxiolytics. They should be used on a temporary basis (less than 4 weeks) because of the risk of dependence. The underlying causes for insomnia or anxiety should be managed specifically at the same time.

(a) The half-lives ($T_{1/2}$) of benzodiazepines

Benzodiazepines	$T_{1/2}$
Short acting	
Midazolam (Dormicum)	~2 hrs
Triazolam (Halcion)	~2 hrs
Intermediate acting	
Alprazolam (Xanax)	~10 hrs
Lorazepam (Ativan)	~15 hrs
Pinazepam (Domar)	~15 hrs
Long acting	
Chlordiazepoxide (Librium)	~20 hrs
Bromazepam (Lexotan)	~20 hrs
Nimetazepam (Erimin)	~20 hrs
Clonazepam (Rivotril)	~30 hrs
Diazepam (Valium)	~40 hrs

*Source: Narcotics Division, Security Bureau

(b) Side effects

The possible side effects of benzodiazepines include headache, ataxia, dysarthria, blurred vision, confusion, memory loss (anterograde amnesia) and depression. Elderly patients are more susceptible to fall resulting in hip fracture. It may also cause paradoxical reaction (disinhibition), i.e. unexpected increase in aggression.

(c) Dependence

It is widely recognised that benzodiazepines have additive potential. Withdrawal symptoms can occur after 4 to 6 weeks of continuous use. Physical withdrawal symptoms commonly present with flu-like symptoms, paraesthesia, visual disturbance, stiffness, weakness and gastrointestinal disturbance. Psychological symptoms may include anxiety, insomnia, nightmare, depersonalisation, concentration and memory impairment, depression, hallucination and delusion.

(d) Doses equivalency

The potency of benzodiazepines varies. They are commonly compared to one another using diazepam as a dose equivalent.

Diazepam	10 mg
Chlordiazepoxide	25 mg
Clonazepam	1 mg
Lorazepam	1 mg
Alprazolam	1 mg
Bromazepam	6 mg
Triazolam	0.5 mg
Midazolam	5 mg
Nitrazepam	10 mg
Temazepam	20 mg
Pinazepam	5 mg

(e) Dose reduction

When patients are dependent on benzodiazepines, gradually reduction of dosage is recommended to avoid severe withdrawal symptoms. The following is a suggested taper schedule.

Zolpidem

Zolpidem is a selective α1-GABA receptor full agonist that potentiates GABA in the central nervous system. It is a short-acting sleep-inducing agent with rapid onset of action. Its plasma elimination half-life is about 1.3 to 1.5 hours. It induces milder and less problematic side effects than benzodiazepines. The central nervous system side effects include delirium, amnesia, nightmares, hallucinations, delusion, ataxia, euphoria, dysphoria, disinhibition and rebound insomnia. It also has dependence potential.

Zopiclone

Zopiclone binds unselectively with high affinity to benzodiazepine sites. It is a hypnotic agent with similar efficacy as Zolpidem. Its plasma half-life is about 5 hours. It may impair driving performance more than benzodiazepines. Its central nervous system side effects include agitation, anxiety, tremor, coordination abnormality, retrograde and anterograde amnesia, confusion, dizziness, euphoria, dysphoria, aggression, depression, hallucinations, delusions, nightmares and rebound insomnia. It is addictive with withdrawal symptoms such as anxiety, tachycardia, tremor, sweating, rebound insomnia, derealisation, palpitations, flushes and convulsions.

Cough medicine

Cough medicine has several common ingredients (Codeine, Dextromethorphan, Ephedrine, Pseudoephedrine) which may cause central nervous system side effects if it is not used appropriately. Codeine, which is an opioid analogue, has 20% potency of morphine as an analgesic. It can be addictive. Dextromethorphan, an opioid analogue, exerts its effect at high dose similar to phencyclidine and ketamine because of NMDA receptors blockade. It can produce feelings of dissociation, excitement and distortions of vision and bodily perception. Ephedrine / pseudoephedrine are central nervous system stimulants. They act on alpha and beta-adrenergic receptors to stimulate release of noradrenaline. They have less central nervous system effect as compared to amphetamine.

Acute intoxication of cough medicine can present with anxiety, irritability, unstable mood, impulsivity, aggressive behaviour, confusion, suspiciousness, delusion and hallucination. Prolonged use especially at doses higher than medically recommended can cause cognitive impairment especially memory and language function. It can also induce mood change such as anxiety, depression and amotivation. Ephedrine psychosis can develop at 125 mg/day. Codeine addiction develops at high dose, i.e. 1200-1800 mg /day. For example, Phensedyl contains 180 mg ephedrine and 225 mg Codeine in a 125 ml bottle. Thus daily use of 1 bottle (125 ml) of Phensedyl would develop psychosis, whereas 5-8 bottles (125 ml) would result in dependence. Withdrawal from cough medicine would present with fatigue, insomnia, anxiety, depression, loss of interest, suicidal idea, nausea, watery eyes, stuffy nose, gooseflesh, muscle spasms and increased pain sensitivity.

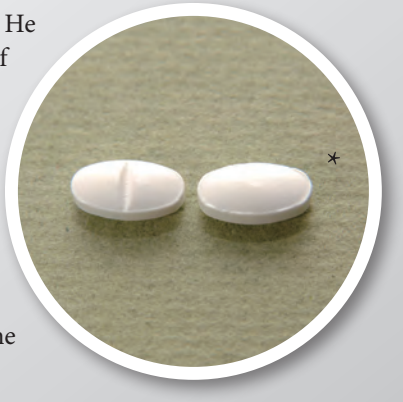
Case 1: Benzodiazepine dependence

A 42-year-old Chinese housewife had onset of her depression about 10 years ago. It was triggered by her husband's extra-marital affair. At that time, she was sad and distressed. Her appetite was impaired with significant weight loss. She felt tired, had chest compression, muscle tension and hand tremors. She found her sleep problem most disturbing to her. She attributed all her physical symptoms to her insomnia. Thus she consulted many doctors just to improve her sleep. She was prescribed various medications including Mirtazepine, Trazodone, Citalopram, Zopiclone, Alprazolam, Lorazepam and Clonazepam. However, the drugs could not improve her sleep. One day, she was prescribed Midazolam 15 mg by a family doctor. She found it very helpful for her to sleep and she continued to take it every night. After a few months, she developed tolerance and had to increase the dosage of Midazolam in order to maintain good sleep. The dosage was increased rapidly over a year. She needed to take 6 to 8 tablets of Midazolam (15 mg) each night. Her family doctor refused to give her large quantities of Midazolam. Thus she visited several family doctors and told lies to them that she only took 1 to 2 tablets of Midazolam each night. She realised that she was dependent on Midazolam. However, she found it very difficult if not impossible to stop taking it.

After several years of struggling with the drug, she agreed to see a psychiatrist for further management. She was diagnosed to have depressive disorder and Midazolam dependence. Her mood problem was managed by medications (Escitalopram 15 mg N, Pregabalin 300 mg N and Quetiapine 25 mg N) and psychotherapy. Marital counselling was also provided. After her mood was stabilised and her marital relationship improved, and she was motivated to abstain from Midazolam. The dosage of Midazolam was gradually converted to Diazepam which was subsequently tailed down over a period of about 6 months. Her husband continued to provide support to her throughout the whole treatment period.

Case 2: Zopiclone dependence

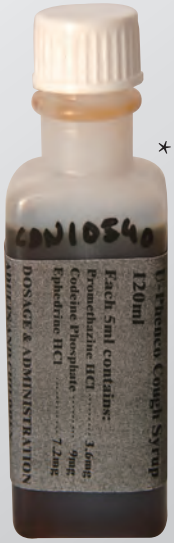
A 35-year-old Chinese man had a highly stressful job. He had shift duties from time to time. Thus his sleep schedule was disturbed. He was very frustrated by his insomnia because it affected his work performance. He initially consulted a family doctor for his insomnia. He was prescribed Zopiclone. He found it very helpful for his sleep. Thus he continued to take it to achieve good sleep. However, he developed tolerance and rapidly increased the dosage of Zopiclone to 60 tablets a day over a period of 4 years. He took 40 tablets for sleep. He also needed to take 20 tablets at work in order to avoid the withdrawal symptoms which included nervousness, restlessness, palpitation, hand tremor, headache, impaired concentration, poor memory and craving for Zopiclone. He had withdrawal seizure for several times and required hospital admissions. After a recent withdrawal seizure, he had better motivation for detoxification. He agreed to reduce the dosage of Zopiclone gradually at a rate of 2 tablets every week. He successfully reduced the dosage to 10 tablets a day. However, he refused to reduce it further. Thus the rate of reduction was slowed down to 1 tablet every 2 to 4 weeks. As a result, he further reduced the dosage to 5 tablets a day. Unfortunately, he rapidly reinstated to a higher dosage of 30 tablets a day when he encountered work stress and marital discord. Subsequently, he was motivated to try the detoxification programme again. However, he defaulted the treatment programme when he was at the dosage of 5 tablets a day.



*Source: Narcotics Division, Security Bureau

Case 3: Cough mixture dependence

A 29-year-old male designer began to abuse cough mixture since 19 years of age. Initially he felt relaxed and more creative after drinking cough mixture. The cough mixture consisted of Promethazine, Ephedrine and Codeine. He drank more regularly in the past year. He needed to drink 3 bottles of 120 ml cough mixture each day. After several months of heavy drinking, he developed delusions of reference and persecution. He was fearful, agitated and violent. At the peak of his psychotic illness, he needed to be managed in a mental hospital. He was diagnosed to have cough mixture-induced psychosis and cough mixture dependence. He was prescribed Olanzapine 10 mg daily and Clonazepam 0.5 mg before bed. His psychotic symptoms subsided after medications and abstinence from cough mixture while he was in the ward.



*Source: Narcotics Division, Security Bureau

After discharge, he was closely supervised by his girlfriend and friends. He found a job as designer about half a year later. However, he found it very stressful and drank cough mixture again. He rapidly increased the dosage to 3 bottles of cough mixture a day. His psychotic symptoms recurred. He was paranoid and agitated. He was readmitted into a mental hospital for further management. Medication was revised and he was abstained from cough mixture. His mental condition became stable without psychotic symptoms after 2 months of treatment. Unfortunately, he reinstated cough mixture abuse a year later. This time, he became violent and hit his friend in response to his psychotic symptoms. Police were called and he was sent to a mental hospital again for treatment.

Conclusions

Drug abuse and dependence are commonly encountered in clinical practice. Although patients seldom seek help from family doctors openly for their drug problems, they may consult doctors for their drug-related physical problems. Thus family doctors should be alert for the possibility of underlying drug abuse problem. The causes for drug abuse are complex. It varies from patient to patient. The biopsychosocial paradigm can provide a better understanding of the various factors interacting with each other to cause the drug abuse problem. Hypnotics and sedatives are clinically useful but can be potentially harmful. If these drugs are not prescribed appropriately, they are liable to be abused and dependent especially for those people who are at high risk for drug abuse. Thus these drugs should be prescribed stringently. They should only be used as a temporary measure. The underlying reasons for insomnia or mood problem should be managed specifically. In the community, family doctors provide first contact and open access to patients for various health problems that they can play an important role for early identification and appropriate management for drug abuse.

WHAT YOU NEED TO KNOW ABOUT ABUSED DRUGS – PART II

Dr. CHEUNG Kin Leung, Ben
Specialist in Psychiatry

Local drug scene

According to the 2009 Central Registry of Drug Abuse (CRDA) report, the total number of reported psychotropic substance abusers was higher than the number of reported abusers taking narcotic analgesics. Ketamine remained the most common drug of abuse among other psychotropic substances. Cough medicine, triazolam/midazolam/zopiclone and ice abuse were also on the rise.

Youth substance abuse is increasing. The "2008–2009 Survey of Drug Use Among Students" affirms the trends revealed by CRDA in recent years. It corroborates the increasing prevalence of youth drug abuse. According to the survey, 4.3% of secondary school students indicated that they had abused drugs, representing an increase of one percentage point from the survey conducted 4 years ago. Among the secondary school students aged 12 or below, 4.6% indicated that they had abused drugs. This is far higher than that of 4 years ago, which was 2.4%. The survey confirms the trend on the lowering of the age of drug abusers, and also affirms the hidden nature of youth drug abuse.

Risk factors for youth substance abuse

During history taking, one should also pay attention to the various risk factors of substance abuse

A. Individual factors
   - Attitudes
   - Childhood trauma and esteem issues
   - Lack of social bonding, alienation, and rebellion
   - Sensation seeking
   - Early childhood antisocial behaviour, hyperactivity
   - Early adolescent antisocial behaviour
   - Having mental problems.

B. Family factors
   - Smoking and alcoholism
   - Parents' drug use and attitudes
   - Discipline and management problems
   - Family conflicts.

C. School
   - Little commitment to school
   - Academic failure
   - Relationship problems.

D. Other social environments
   - Drug-using friends
   - Laws, norms, attitudes in social environment
   - Drug availability and accessibility.

The following common scenarios should raise the level of suspicion:
- Being a school dropout
- Being a child of a substance abuser
- Being pregnant or having a child
- Being economically disadvantaged
- Being a victim of abuse: physical, sexual, and psychological
- Facing chronic difficulties at school
- Having attempted suicide
- Having long-term physical pain due to injury
- Having committed a violent or delinquent act
- Having mental health problems.

Know the street names of common drugs of abuse

Before taking a drug history, one should keep updated on the common substances of abuse in Hong Kong. It is also important to know the street names in Chinese so that one can communicate to clients in the same language. It may be helpful to keep a checklist, like the one below, on the desk, and go through it with the patient to determine which drugs are used by the patient.

Category	Drugs	Street Names
Narcotics	Codeine	高甸, 咳水
	Dipipanone	囉囉攣, 可待因
	Heroin:	紅色菲仕通
	– No. 3 heroin  *	海洛英, 白粉, 粉, 灰
	– No. 4 heroin	三號粉, 砂仔
	Methadone	四號粉, 四哥, 四仔
	Physeptone	美沙酮, 老美
	Morphine	菲仕通, 帆船仔
	Opium	嗎啡針
		鴉片, 福壽膏
Psychedelics	Cannabis  *	Grass, pot, joint, marijuana, hashish, bush, weed
	1. Marijuana (dried leaf)	1. 草
	2. Hashish (resin)	2. 大麻精
	3. Hash oil	3. 大麻油
	Lysergic acid diethylamide (LSD)	迷幻藥, 方糖, 郵票, Micropill, 黑芝麻
	Phencyclidine (PCP)	天使塵, angel dust, hog, peace pill, horse tranquilizer
Stimulants	Amphetamines  *	安菲他命, 大力丸 speed, uppers, Bennies, black beauties, copilots, dexies, eye openers, lid poppers, pep pills, wake-ups
		冰
	1. Methylamphetamine	Fing頭, 狂喜, 派對丸仔, E仔, EVE, ecstasy, designer's drug
	2. Methylene-dioxy-methyl-amphetamine (MDMA)	
	Cocaine  *	可卡因, 可可精, C, coke, flake, snow, stardust
	Crack-cocaine	Crack, 霹靂, 可樂
Depressants	Barbiturates	巴比通
	– Amylobarbitone (Amytal)	紫心丸, 藍魔鬼
	– Quinalbarbitone (Secobarbital)	莉莉四十, 紅魔鬼
	Benzodiazepines:	
	– Brotizolam (Lendormin)	屋仔, 二拾蚊, 13A
	– Bromazepam (Lexotan)	寧神定
	– Clonazepam	白天使
	– Chlordiazepoxide (Librium)	綠豆仔, 利眠寧
	– Diazepam (Valium)	羅氏二、五、十號
	– Estazolam	舒樂安定
	– Flunitrazepam (Rohypnol 1 mg)	十字架(細十, 縮水)
	– Flunitrazepam (Rohypnol 2 mg)	十字架(大十)
	– Midazolam (Dormicum)	羅氏藍精靈, 大藍
	– Nimetazepam	五仔, 黃飛鴻
	– Nitrazepam (Mogadon)	睡覺幫, 笑哈哈, 魔鬼黨
	– Triazolam (Halcion)  *	藍瓜子, 藍精靈, 細藍
	Z drugs	
	– Zolpiclone	白瓜子, 憶夢返
	– Zolpidem	唑吡咀, 思諾施
	Mandrax	忽得, 糖仔, MX
Others	Ketamine	K仔
	Cough mixture	MB, 咳水, B仔
	Gamma hydroxybutyrate (GHB)	迷姦水, X水, G水
	Dextromethorphan (Romila)	O仔
	Organic solvents	天拿水, 打火機油, 飛機膠, 膠水, gas, glue

*Source: Narcotics Division, Security Bureau

Assessing comorbidity for substance abuse

- Undiagnosed ADHD
- Depression: substance abuse and depression co-exist in 25% of adolescents
- Physical or sexual abuse
- Chronic pain syndromes, e.g. sickle cell crisis or other painful conditions
- Eating disorder.

Taking a drug history

Taking a detailed drug history is an essential part of assessment of patients with substance abuse-related problems. One should carefully ascertain all the substance(s) ever taken by the patient. Then, obtain the relevant details for each substance one by one. The essential minimum information to gather includes:

1. Total year(s) of use
2. Route of administration
3. Frequency of use
4. Amount (quantity or money spent)
5. Circumstances (location and with whom)
6. Time last used
7. Features of dependence.

Assessing the readiness for change

Motivational interviewing is a client-centred, directive method for facilitating change by helping people to explore and work through ambivalence. This mode of interview de-emphasises labelling, emphasises that the youth take personal responsibility for change, and focuses on the health care provider eliciting the youth's concerns. Motivation can be classified into reliable, predictable and well-defined stages, as listed below. The task of the therapist is to identify the stage the patient is in, and to apply stage-appropriate counselling approaches in order to obtain the best results. With training it can be adopted by paediatricians into their clinical practices as an effective time-limited counselling approach. Those not responding to brief intervention can then be referred to specialists or agencies for more specialised treatments.

Precontemplation:

- Cognition: I have no problem, no need to quit
- Behaviour: Rejects new information
- Completion: Move to Contemplation
- Objective: Introduce ambivalence
- Strategy: Create perception of risk, raise doubt.

Contemplation:

- Cognition: I want to quit, but I really like to continue, Yes, but...?
- Behaviour: Willing to receive new information
- Completion: Move to Preparation
- Objective: Resolve ambivalence in favour of cessation
- Strategy: Elicit personal concerns and perceived need for change, evoke reasons to change, risks of not changing.

Preparation:

- Cognition: I am ready to quit
- Behaviour: Request advice and information
- Completion: Move to Action
- Objective: Work out strategies for quitting
- Strategy: Assist person to determine the best course of action and to work out a plan.

Action:
- Cognition: I don't use it anymore
- Behaviour: Accepts new information
- Completion: Move to Maintenance
- Objective: Implementing the plan
- Strategy: Help in carrying out and complying to plan.

Maintenance:
- Cognition: I am a non-user
- Behaviour: Gives information to others
- Completion: Discover the truth about his/her life
- Objective: Eliminate triggers, promote personal grow and maturity
- Strategy: Assist person to identify and use strategies to prevent relapse.

Relapse:
- Cognition: I use it again
- Behaviour: Demoralized, tendency to give up
- Completion: Move to Contemplation and further on
- Objective: Avoid getting stuck in this stage
- Strategy: Help recycle the useful strategies developed before and modify if necessary.

Tell-tale clinical signs

Clinical signs of drug use include:
- Accident-proneness
- "Allergic" symptoms: nasal discharge, epistaxis, nasal septal perforation (occurs with cocaine, inhalants)
- Behaviour, including symptoms suggestive of ADD, ADHD (stimulants, nicotine), paranoia, panic reactions, acute nudity (occurs with LSD, intoxication)
- Blackouts, including complete or partial amnesia for events during intoxication (occurs with alcohol, date-rape drugs)
- Chest pain, tachycardia, arrhythmias (occurs with cocaine, amphetamine), bronchospasm (occurs with opiates)
- Dilated or constricted pupils (stimulants or opioids)
- Gynaecomastia, irregular anovulatory periods, small testes (occurs with marijuana)
- Generalised pruritus (occurs with opiates)
- Increased appetite for sweet foods (occurs with marijuana "munchies")
- Needle tracks
- Odours of alcohol, marijuana, or organic solvents in clothes or breath
- Reddened conjunctivae (occurs with marijuana)
- Reflux "ulcer" symptoms, diarrhoea, alcoholic gastritis, abuse of laxatives by bulimic patients, constipation (occurs with opioids)
- Sores around the mouth, perioral pyodermias, red and runny eyes, runny nose, chemical burns around the mouth (from huffing and bagging), paint stains on face or clothes, unusual chemical breath odour, finding toluene bottles under bed (occurs with inhalants).

Resources for referral

1. Counselling Programmes for Psychotropic Substance Abusers (CCPSAs):

Name of centre/agency	Serving region/district	Telephone
Tung Wah Group of Hospitals CROSS Centre	Hong Kong Island	2884 1234
Hong Kong Lutheran Social Service Evergreen Lutheran Centre	East Kowloon	2712 0097
Hong Kong Christian Service PS 33	West Kowloon	2368 8269
Hong Kong Lutheran Social Service Cheer Lutheran Centre	Tai Po/North	2660 0400
Caritas HUGS Centre	Tsuen Wan/Kwai Tsing & Tuen Mun	2453 7030
Evangelical Lutheran Church Hong Kong Enlighten Centre	Yuen Long	2446 9226
Hong Kong Sheng Kung Hui Welfare Council Neo-Horizon	Shatin	8202 1313

2. Methadone clinics run by the Department of Health:

Name of centre/agency	Telephone
Department of Health	2835 1831

3. Substance Abuse Clinics:

Substance abuse clinics	Telephone
Pamela Youde Nethersole Eastern Hospital Substance Misuse Clinic	2595 7608
Kowloon Hospital Substance Abuse Clinic	3129 6710
Prince of Wales Hospital Substance Abuse Clinic	2632 2584
Kwai Chung Hospital Substance Abuse Assessment Clinic	2959 8082
Castle Peak Hospital Tuen Mun Substance Abuse Clinic	2456 8260
Queen Mary Hospital Substance Abuse Clinic	2517 8140
Kowloon East Substance Abuse Clinic	3513 5070

4. Agencies providing voluntary residential and rehabilitation treatment programmes:

Non-governmental organizations	Treatment centres/halfway houses	Telephone	Major target client
Barnabas Charitable Service Association	Lamma Training Centre	2640 1683	Female
Caritas – Hong Kong	Caritas Wong Yiu Nam Centre	2335 5088	Male
Christian New Being Fellowship		2329 6077	Male
Christian New Life Association	Christian New Life Association	2397 6618	Male
Christian Zheng Sheng Association		9027 2547	Male and female
Drug Addicts Counselling and Rehabilitation Services (DACARS)	Enchi Lodge	8104 2188, 2673 8272	Male
Finnish Evangelical Lutheran Mission	Ling Oi Tan Ka Wan Centre	2612 1342	Male
Glorious Praise Fellowship (Hong Kong)	Glorious Praise Fellowship (Hong Kong)	2451 9802	Male
Hong Kong Christian Service	Jockey Club Lodge of the Rising Sun	2468 0044	Male
Mission Ark	Yuen Long Centre	2397 6618	Male
Operation Dawn	Dawn Island Drug Treatment and Rehabilitation Centre	2714 2434	Male and female
Perfect Fellowship	Koo Tung Rehabilitation Centre	9200 8546	Male

DIAGNOSIS AND SCREENING OF DRUG ABUSE

Dr. CHOI Kin, Gabriel
Family Doctor

Family doctors are in a good position to help young drug abusers. Why?

- As reviewed by the World Health Organization (WHO) in 2003, about 85% of the population in the developed world visit a primary health care clinician at least once per year [1].
- The Harvard group reported in 1997 that Hong Kong residents had an average of nine out-patient visits per year.

Characteristics of family doctors

- Patients with substance-related problems may have more frequent consultations.
- In this sense, family doctors are usually the first point of contact with abusers.
- Family doctors therefore have the opportunity to intervene at an early stage before serious problems develop.
- Family doctors have good rapport with young people through their long-term relationship with the whole family, and by knowing them since childhood.
- Patients expect their family doctors to be involved in all aspects of their health, and are likely to share daily hassles or discuss sensitive issues like drug abuse.
- Family doctors are trained to recognise hidden problems, to handle chronic health problems and to modify behaviour.
- Patients view family doctors as a credible source of advice about health risks.
- Family doctors are reliable in ensuring confidentiality of sensitive information such as drug abuse.

The Fifth Three-year Plan on Drug Treatment and Rehabilitation Services (2009–2011)

Recommendations 5.10
Family doctors are primary health care providers at community level. They are often the first point of contact for a person who starts to develop or has developed various symptoms arising from drug abusing behaviour, and hence can play a powerful role in identifying drug abuse problems or potential problems, and intervening as appropriate.

Funded by the Beat Drugs Fund (BDF), the Professional Training Programme for Family Doctors will commence in 2009 to strengthen the role of family doctors in drug treatment and rehabilitation.

The ultimate objective should be mainstreaming and integrating drug abuse screening and intervention into the routine practice and healthcare setting of family doctors and the primary healthcare system.

Recommendations 5.29
As mentioned in paragraph 5.10, the Professional Training Programme for Family Doctors will commence in 2009. Under the programme, professional training together with a manual will be provided to participating family doctors to enhance their awareness of the drug abuse problem, equip them with the necessary drug knowledge and skills to screen, advise or refer patients who have drug abuse problems to the relevant treatment services, hence widening the community network for early intervention.

Family doctors can help young drug abusers. How?

1. Screening
2. Brief intervention

1. Screening

Screening is a simple way to:

- identify people who are experiencing substance related problems
- identify people whose substance use may be causing their health problems
- provide health workers with information to develop a plan for intervention
- provide patients with personal feedback about risks and problems
- prompt patients to consider changing their substance use behaviour.

Screening has been proved beneficial in reducing high-risk activities for people who are not dependent [2]. However, it is not a common practice.

- In one study of 241 trauma surgeons, only 29% reported screening most patients for alcohol-related problems [3].
- In a health study of 7,371 primary care patients, only 29% of the patients reported being asked about their use of alcohol or drugs in the past year [4].

Screening tools can be divided into two types:

- Self report tools include interviews and self-administered questionnaires. Self report tools provide an historical picture of drug use.
- Biological markers include breathalyzer testing, serum drug testing, saliva testing and urine testing.

Both are inexpensive, noninvasive and highly sensitive for detecting potential problems or dependence.

One type of commonly used self report tool is the **Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)** (Figures 1a and b, Tables 1a and b) [1].

1. In your life, which of the following substances have you ever used? (non-medical use only)

a. Tobacco products	☐ Yes (3)	☐ No (0)	f. Inhalants	☐ Yes (3) ☐ No (0)
b. Alcoholic beverages	☐ Yes (3)	☐ No (0)	g. Sedatives or Sleeping Pills	☐ Yes (3) ☐ No (0)
c. Cannabis	☐ Yes (3)	☐ No (0)	h. Hallucinogens	☐ Yes (3) ☐ No (0)
d. Cocaine	☐ Yes (3)	☐ No (0)	i. Opioids	☐ Yes (3) ☐ No (0)
e. Amphetamine type stimulants	☐ Yes (3)	☐ No (0)	j. Other	☐ Yes (3) ☐ No (0)

2. In the past three months, how often have you used the substances you mentioned (first drug, second drug, etc)?
☐ Never (0) ☐ Once/Twice (2) ☐ Monthly (3) ☐ Weekly (4) ☐ Daily/Almost Daily (6)

3. During the past three months, how often have you had a strong desire or urge to use (first drug, second drug, etc)?
☐ Never (0) ☐ Once/Twice (3) ☐ Monthly (4) ☐ Weekly (5) ☐ Daily/Almost Daily (6)

4. During the past three months, how often has your use of (first drug, second drug, etc) led to health, social, legal or financial problems?
☐ Never (0) ☐ Once/Twice (4) ☐ Monthly (5) ☐ Weekly (6) ☐ Daily/Almost Daily (7)

5. During the past three months, how often have you failed to do what was normally expected of you because of your use of (first drug, second drug, etc)?
☐ Never (0) ☐ Once/Twice (5) ☐ Monthly (6) ☐ Weekly (7) ☐ Daily/Almost Daily (8)

6. Has a friend or relative or anyone else ever expressed concern about your use of (first drug, second drug, etc)?
☐ No, Never (0) ☐ Yes, in the past 3 months (6) ☐ Yes, but not in the past 3 months (3)

7. Have you ever tried and failed to control, cut down or stop using (first drug, second drug, etc)?
☐ No, Never (0) ☐ Yes, in the past 3 months (6) ☐ Yes, but not in the past 3 months (3)

8. Have you ever used any drug by injection? (non-medical use only)
☐ No, Never (0) ☐ Yes, in the past 3 months (2) ☐ Yes, but not in the past 3 months (1)

Figure 1a. The ASSIST screening tool [1].

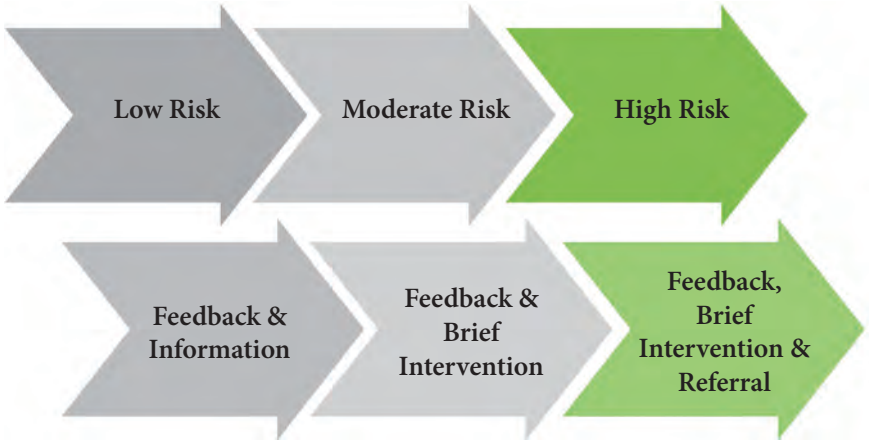


Figure 1b. ASSIST score and interventions [1].

Table 1a. Guidelines for assessing risk level using ASSIST [1].

Alcohol	All other substances	Risk level
0-10	0-3	Low risk
11-26	4-26	Moderate risk
27+	27+	High risk

Table 1b. Substance-specific involvement score [1].

Drug list	Score	Risk level		
		Low	Moderate	High
Tobacco products		0-3	4-26	27+
Alcoholic beverages		0-10	11-26	27+
Cannabis		0-3	4-26	27+
Cocaine		0-3	4-26	27+
Amphetamine type stimulants		0-3	4-26	27+
Inhalants		0-3	4-26	27+
Sedatives or sleeping pills		0-3	4-26	27+
Hallucinogens		0-3	4-26	27+
Opioids		0-3	4-26	27+
Other		0-3	4-26	27+

The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)

- The ASSIST was developed for WHO by an international research team.
- It is a useful tool for doctors to identify patients who may have harmful or hazardous, or dependent use of one or more substances.
- It provides information about the pattern, problems, risks, and dependence of patients' substance use.
- It also helps distinguish between individuals who are abstainers, problem users or dependents.
- It is a brief screening questionnaire in the form of an interview with eight questions.
- It covers all psychoactive substances, including tobacco, alcohol and illicit drugs (cannabis, cocaine, amphetamines, inhalants, sedatives, hallucinogens and opioids).

Advantages of ASSIST

- Short and easy to use
- Reliable
- Valid measure
- Different languages

Substances covered by ASSIST:

1. Tobacco products
2. Cannabis
3. Inhalants
4. Opioids
5. Sedatives or sleeping pills
6. Amphetamine type stimulants
7. Alcoholic beverages
8. Cocaine
9. Hallucinogens
10. Others

When using ASSIST, doctors:

- Use a nonconfrontational approach
- Describe the purpose of the screening
- Emphasise the time frame (across lifetime; past 3 months)
- Clarify the substances that will be recorded
- Emphasise confidentiality.

Different levels of intervention

- Information supply
- Screening
- Motivational interview
- Treatment and rehabilitation
- Withdrawal consequence
- Relapse prevention
- Referral

2. Brief interventions

- Brief interventions in primary care can range from 5 minutes of brief advice to 15–30 minutes of brief counselling [5].
- Brief interventions are not intended to treat people with serious substance dependence.
- They are a valuable tool for treatment for problematic or risky substance use.
- The WHO Brief Intervention Study Group found that 5 minutes of simple advice were as effective as 20 minutes of counselling [5].
- Empirical studies have suggested that brief interventions are effective in primary care settings for cannabis, benzodiazepines, amphetamines, opiates and cocaine [6-12].

Components of brief interventions [13]

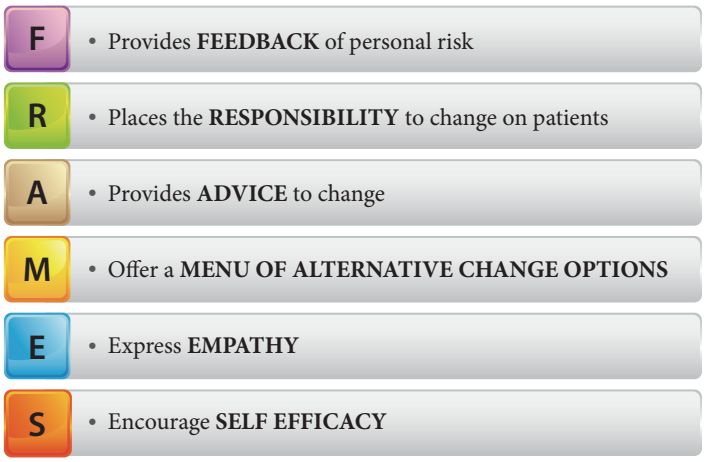


Figure 2. Components of brief interventions [adapted from ref. 1].

Affirmation/empathy

A statement of appreciation and understanding helps to create a more supportive atmosphere and helps to build rapport with the patient.

Everyone has the motivation to change. Substance abusers usually know that drugs are harmful, but they lack the initiative to change.

We can elicit and reinforce the motivation by [1]:

- encouraging patients to talk
- exploring ambivalence about substance use
- clarifying reasons for reducing or stopping substance use.

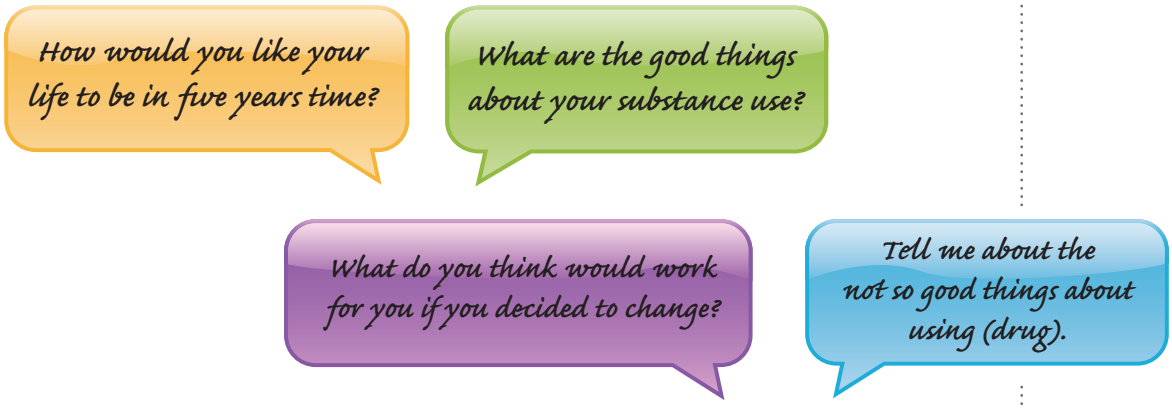
Eliciting change talk

Eliciting change talk is a strategy which helps the patients to resolve ambivalence and enables the patients to present the arguments for change.

There are FOUR main categories of change talk [1]:

1. Recognising the disadvantages of staying the same
2. Recognising the advantages of change
3. Expressing optimism about change
4. Expressing an intention to change.

- Asking direct open questions [1]



- Asking the patients to clarify or elaborate their statements [1]

- Probe the decision balance by encouraging the patient to talk about the benefits of change and the costs of staying the same (Figure 3) [1]

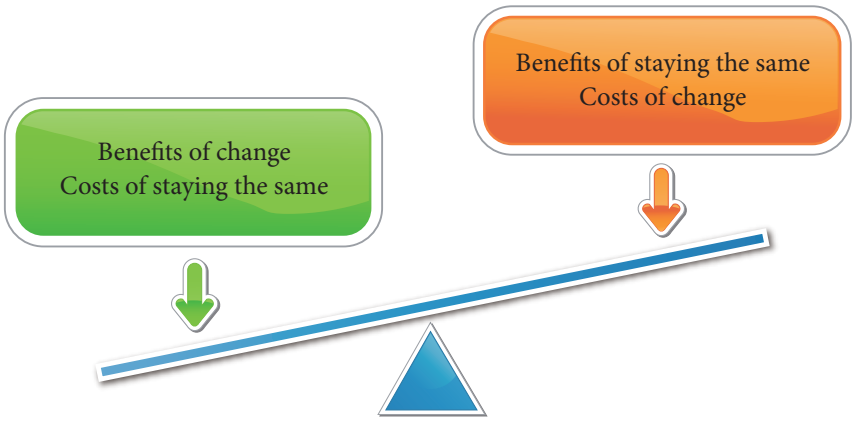


Figure 3. Decision balance [1].

- Ask the patients to imagine the worst consequence of not changing or the best consequences of changing.
- Explore the patients' goals and values in order to identify discrepancies between the patients' values and their current substance use.

Menu of alternative change options [1]

- Offers patients a range of alternative goals and strategies to cut down or discontinue substance use
- Allows patients to choose the strategies
- The selection process reinforces patient's sense of personal control and responsibility for making change. It also helps strengthen patient's motivation.

Responsibility [1]

- Remind patients that they are responsible for themselves and their beings
- Encourage patients to make choices about their substance use
- Remind patients that they retain personal control over their behaviours and its consequences.

"What you do with your substance use is up to you..."
"Nobody can make you change or decide for you..."

Self efficacy [1]

- Elicit self efficacy statements from patient
- Encourage patients to believe they are able to make changes over their substance use behaviours
- Encourage optimistic empowerment.

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DRUG TESTS: THEIR USES AND LIMITATIONS

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Introduction

In order to ascertain whether an individual has administered drugs of abuse or not, drug testing is commonly employed to check for the presence of any drug(s) of abuse or their metabolites in the donor's biological specimen such as blood, urine, oral fluid, sweat or hair.

Urine has been and remains the mostly widely used body fluid specimen for routine testing for drugs of abuse, but oral fluid, sweat and hair are gaining scientific credibility as alternative specimens following advancement of testing technology. This chapter reviews the uses and limitations of different specimens for testing with respect to their time window of detection, ease of specimen collection and likelihood of adulteration.

Purposes of drug testing

Over the past several decades, drug testing has been used worldwide in a variety of disciplines including criminal justice, emergency medicine and clinical toxicology, and workplace [1].

Criminal justice

Drug testing plays an important role in facilitating the judicial sentence of drug abusers in courts, drug surveillance programmes of inmates who are detained under the custody of drug treatment centres, as well as the enforcement of the legislation of driving under the influence by police.

Emergency medicine and clinical toxicology

Timely and reliable drug test results are of prime importance in the field of emergency medicine and clinical toxicology. The objective of testing is focused on determining the class of drugs that has been inadvertently or purposely ingested or exposed to the patients. Mortalities and morbidities would then be greatly reduced by effective, appropriate and prompt antidotal treatment or supportive care.

Workplace

Pre-employment and workplace drug testing has increased rapidly over the last decade in western countries such as United States of America and United Kingdom. Federal organisations, government agencies, military and private corporations exercise drug testing either under mandatory legislation or corporate commitment as a measure to improve safety within the workplace.

Types of specimens for testing [2]

Blood

Blood is widely used for drug testing in clinical and emergency toxicology because it offers the best correlation between drug level and pharmacological impairments to the body. The time window for drug detection in blood is shorter, mostly within several hours, than in urine. For example, at a given dosage of cocaine, blood testing can detect use within 12 hours while urine testing can detect use within 48 to 72 hours. Even though blood is a good specimen for determining the presence of drugs, the concerns about invasiveness of the collection, ease of transportation and storage, and specimen stability greatly hamper its popularity in other fields of application even though substitution and dilution of specimen to tamper with drug testing are considered impossible.

Source: First Test Ltd.

Urine

By far, urine is the most widely used specimen for drugs of abuse testing because of the advantages of large specimen volume and relatively high drug concentrations that render drug detection comparatively easier than in other specimens. In addition, the technology used in urine testing is well developed and has withstood legal challenges. Furthermore, urine collection is considered non-invasive, and specimens can be collected by non-medical personnel. Urine is a matrix that remains stable over time and can be frozen to maintain the integrity of the sample. Drugs in urine are normally detectable up to 1-3 days. However, unless the urine sample is obtained under direct observation, adulteration, substitution or dilution to circumvent drug testing is possible.

Source: First Test Ltd.

Hair

Following the advancement of technology in detecting trace quantity of drug(s) in hair, hair testing has gained attention because of its ability in providing a longer window of detection from months to years when compared to other specimens. In contrast to providing short-term drug abuse profile through blood and urine testing, hair testing provides complementary information about the long-term drug abuse history of a donor. Furthermore, sampling head hair specimen is considered non-invasive and the drugs incorporated in the hair remain stable and bound for a long time leading to no concern about specimen adulteration. Head hair sampled from the scalp is preferred in order to obtain the retrospective chronological drug abuse history of a donor. Head hair tends to grow at a rate of about 1 cm per month, so a 3 cm section of hair would represent a 3 month history. However, testing for drug in hair is comparatively time consuming and costly, and it must be performed in the laboratory because of unavailability of on-site screening kits.

1. Cut the hair for analysis

2. Weigh the hair specimen

3. Extract the hair specimen for analysis

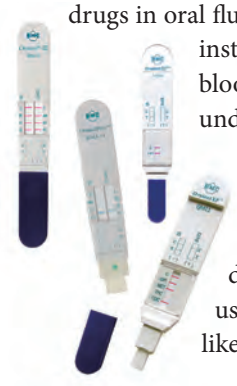
4. Hair specimen after extraction

5. Add extract to ELISA plate

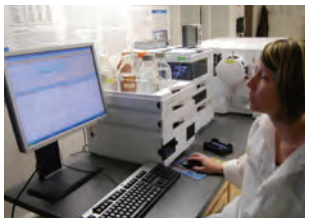
6. ELISA Automation

Oral fluid

Oral fluid is increasingly used for drug testing because the concentrations of many drugs in oral fluid correlate well with blood concentrations. Advancement of instrumental sensitivity makes oral fluid a suitable alternative to blood. Oral fluid is a non-invasive specimen that can be sampled under direct observation to prevent adulteration or substitution.



The main disadvantage of oral fluid testing is its short window of detection, with most drugs being detectable within several hours only. This characteristic renders it suitable for determining very recent drug abuse, but weakens its ability in detecting use over time. For example, someone administered heroin a day ago is likely to be tested negative by oral fluid test, but positive by urine test.



7. Confirmation by LCMSMS

Source: First Test Ltd.

Sweat

Collection of sweat is undertaken by attaching a tamper evident patch, with underlying adsorbent pad inside, to the skin over a relatively long period of time (10-14 days). Analysis of sweat must be performed in a laboratory and on-site test kits are not available. Sweat testing has not widely been used because of challenges of the potential contamination from the environment and from residual levels of drug in the skin from prior use.

Characteristics of different specimens for drug testing

The advantages, disadvantages and time window of detection of different specimens are summarised in Annex 1.

Screening test versus confirmatory test

In order to undertake drug testing, there must be a cutoff level for each type of drugs to be tested, and such cutoff point serves as an administrative breakpoint in distinguishing a positive or negative result. Any sample that contains the drug/drug metabolite of interest at the concentration levels equal to or greater than the designated cutoff level is reported as positive, whilst a negative is reported for the concentration level less than the cutoff. Generally, a drug test can be categorised as either a screening test or a confirmatory test, with respect to the detection method and testing principle being employed [3].

Screening test

Screening test refers to the initial test undertaken to test for a broad class of drugs and their metabolites in the specimen with presumptive result, i.e. positive or negative. Generally screening test is rapid, sensitive, inexpensive with acceptable levels of precision and reliability, however, it lacks precise specificity and may be subject to a false positive result due to cross-reactivity with other non-targeted drugs of similar chemical structure.

Immunoassay, which works on the principle of competitive interaction between the antigen and antibody, is the common contemporary technology employed for screening tests.

Annex 1. Specimens for Drug Testing

Specimen	Advantages	Disadvantages	Window of detection
Urine	• Highest assurance of reliable results • Least expensive • On-site testing kits are available • Acceptable in court to withstand legal challenge	• Susceptible to adulteration or substitution • No dose-concentration relationship • Test sometimes viewed as psychologically invasive or embarrassing • Biological hazard for specimen handling and shipping to laboratory	Typically 1 to 3 days, except for cannabis (1 day to 2 weeks)
Oral Fluids	• Sample obtained under direct observation • Minimal risk of tampering • Non-invasive specimen collection • Samples can be collected easily in virtually any environment • Reflects recent drug use	• Drugs and drug metabolites do not remain in oral fluids as long as they do in urine • Less effective than other testing methods in detecting marijuana use	Approximately 10 to 24 hours
Hair	• Longer window of detection • Greater stability (does not deteriorate) • Can measure chronic drug use • Convenient for transport and storage (no need to refrigerate) • Collection procedure not considered invasive or embarrassing • More difficult to adulterate than urine	• More expensive • No on-site testing kit is available • Inability to detect very recent drug use (1 to 7 days prior to test)	Months to year
Sweat	• Non-invasive specimen collection • Quick application and removal • Longer window of detection than urine (a period of days to weeks) • No sample substitution possible • Provides cumulative measure of drug exposure	• Limited number of labs able to process results • People with skin eruptions, excessive hair, or cuts and abrasions cannot wear the patch • Passive exposure to drugs may contaminate patch and affect results	1 to 4 weeks

On-site screening test

Use of on-site immunoassay screening kits are highly popular in the fields of workplace testing and emergency toxicology because results are available within several minutes, with reliability similar to laboratory screening, at the site of specimen collection. Furthermore, these kits involve no calibration or maintenance, and no special skills are needed to perform the screening test. Most kits have built-in quality control zones in each panel, which ensures reagent integrity and testing validity. Nowadays, commercially-available on-site screening test kits are usually designed for urine and saliva specimens only, but not for sweat or hair as yet.

Laboratory screening test

Instead of on-site testing, drug screening may also be performed by instrumental immunoassay method in the laboratory by automated, sophisticated and high throughput analysers. Laboratory screening test is privileged by its capability of processing large numbers of samples, along with better instrumental logged quality control and integrity assurance when compared to on-site testing.

Generally, laboratory drug screening has to take at least 1-2 days before the results are ready for collection because of time taken in delivering the specimens to the laboratory, running the tests and preparation of test reports.

Confirmatory testing

Any specimen, which has been presumptively screened positive, should be subject to confirmatory testing in order to eliminate false-positive results that arise from cross reactivity. Confirmatory testing should employ highly specific and alternate chemical technique in order to obtain unequivocal and accurate analytical results. Gas chromatography/mass spectrometry (GC/MS) or liquid chromatography/mass spectrometry (LC/MS) are preferred confirmatory techniques because of their remarkable specificity and selectivity. When compared to screening testing, confirmatory testing is time-consuming, labour-intensive and more expensive.

Kits for on-site testing

Over the past 10 years, testing kits of different designs have been marketed in order to meet the growing demand for drug screening at point of collection. These on-site test kits are commonly used by healthcare professionals, and drug treatment and rehabilitation programme supervisors to help deter drug use by the patients and supervisees, respectively.

Dipcards and cassette kits that employ lateral flow immunoassay technology have been proven to be reliable and easy to use [4]. Recently, newly designed testing cups, also employing the same technology, with integrated test strips in the interior surface have grown in popularity because of their ease of testing and sanitary protection to the test operator, with the elimination of specimen transfer or direct contact with the specimen.

Source: First Test Ltd.

Figure 1. Different kinds of kits for on-site testing.

Adulteration of specimens to interfere with testing

Amongst the four kinds of specimens discussed, urine may be subject to adulteration in order to circumvent drug detection. Meanwhile the chance of adulterating saliva, hair and sweat is relatively low because these specimens may be collected under direct observation. Adulteration and substitution of synthetic urine are the unscrupulous acts of tampering with a urine specimen with the intention of altering the test result. Generally adulterants are classified into three basic types :

i. Those that decrease the concentration of drugs through consuming detoxifying drinks/pills, and/or drinking excessive amount of water prior to urine sampling;
ii. Those that decrease the drug level in urine by covertly adding a large quantity of water soon after urine has been collected; and
iii. Those that break down the drugs or interfere with the ability of the assay through alteration of acidity (pH) by addition of household substances or detoxifying products.

Adulterants may be either household chemicals for domestic uses or detoxifying agents that can be purchased through the internet.

Consuming detoxifying drinks/pills and excessive quantity of water

A person may attempt to thwart a drug test by consuming detoxifying drinks/pills or diuretics such as herbal tea, and/or drinking excessive quantity of water so that the concentrations of drug metabolites in the urine are diluted to below detectable thresholds. However, the donor may experience water intoxication in cases of extreme conditions. Minimising the time duration allowed for the donor to drink fluids prior to testing is considered the best way to deter this unscrupulous attempt. Furthermore, the unusually low creatinine and specific gravity levels in urine may serve as indicators for alertness.

Diluting urine by adding in plenty of water

A negative result for the presence of abused drugs in a urine specimen does not necessarily mean that no drug is present. It is possible that the amount of drug is below the cut-off values used in the drug testing protocol. Diluting urine by adding in plenty of water is the simplest way to circumvent a drug test if the original concentrations of the drugs in the urine are not substantially high. The opportunity to dilute urine samples is minimised by not having a source of water in the test room or the water is coloured. Testing specific gravity and creatinine level remain as effective tools to counteract this dilution tactic.

Addition of oxidising chemicals or exogenous detoxifying agents

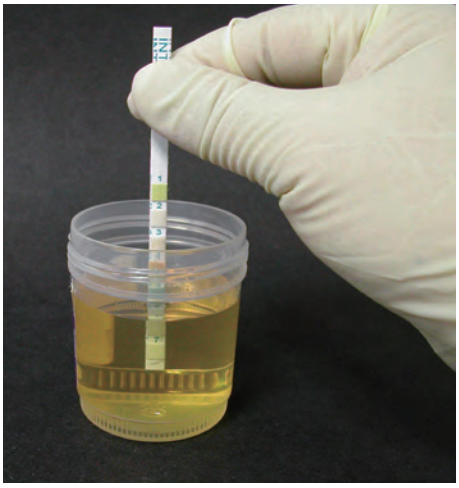
Many chemicals are often used to adulterate urine in order to avoid a positive test result. Bleach, hydrogen peroxide, laundry detergents, nitrite, pyridinium chlorochromate and iodine are the common oxidising adulterants used to break down the drugs and drugs metabolites in the urine. Also, addition of glutaraldehyde can give false negative screening results by disrupting the enzyme used in some immunoassay tests. Alteration of pH by addition of acid, lemon juice and vinegar is another way to interfere with the assay process. In addition, various detoxifying agents that are easily available through internet are alleged to be able to affect the results of a drug test after adulteration into urine samples.

Substitution by synthetic urine

Synthetic urine may be used to substitute the urine sample from a donor leading to a negative test result if sample collection is not supervised. Synthetic urine has all the characteristics of natural urine, with correct pH, specific gravity and creatinine level, but with a temperature unusually low when compared to body temperature. Some urine test kits have a built-in temperature measurement band to negate this substitution strategy, thus the testing operator should be alerted if the sample temperature is below 32 °C.

Test strips for detecting adulterants

In order to interfere with a drug test, someone may add adulterants into the urine specimen leading to the inability to run the test (an invalid test) or a false negative result. If the integrity of a urine specimen is in doubt, a urine adulteration test strip should be used to help assessment. Each test strip contains 6 to 7 chemical-treated reagent pads that will change colour upon dipping the testing strip into the specimen. Through colour comparison, the test strip can screen for irregularity of levels of creatinine, nitrite, glutaraldehyde, pH, specific gravity, oxidants and pyridinium chlorochromate in the urine specimen.



Source: First Test Ltd.

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INITIAL ASSESSMENT OF DRUG ABUSE PATIENTS BY FAMILY DOCTORS

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Scope of clients

It is clinically helpful when assessing patients to use a spectrum that includes use, misuse, abuse, and dependence. The latter two terms represent formal diagnostic categories. Use of a substance may or may not be clinically significant. If use of a substance is thought to be potentially clinically significant but does not meet diagnostic criteria for abuse or dependence, it may be characterized as "misuse," although this is not a formal diagnostic category. Even when functional impairment is absent or limited, substance misuse can be an early indicator of an individual's vulnerability to developing a chronic substance use disorder.

Brief early interventions can effectively reduce this progression [1-3], although follow-up reinforcement appears necessary for sustained utility. Most individuals presenting or referred for treatment of a substance use disorder, however, have been unable to stop using substances on their own. They often exhibit functional impairments across many categories (e.g. health, social and family, occupational, financial, and legal) and have a history of chronic or relapsing episodes of problematic substance use. This practice guideline refers primarily to the care of such individuals.

Scope of assessment

Individuals with substance use disorders are heterogeneous with regard to a number of clinically important features [4]:

1. The number and type of substances used
2. The individual's genetic vulnerability for developing a substance use disorder(s)
3. The severity of the disorder, the rapidity with which it develops, and the degree of associated functional impairment(s)
4. The individual's awareness of the substance use disorder as a problem
5. The individual's readiness for change and motivation to enter into treatment for the purpose of change
6. The associated general medical and psychiatric conditions (either co-occurring or induced by substance use)
7. The individual's strengths (protective and resiliency factors) and vulnerabilities
8. The social, environmental, and cultural context in which the individual lives and will be treated.

Assessment procedures

The assessment includes [4]:

1. A detailed history of the patient's past and present substance use and the effects of substance use on the patient's cognitive, psychological, behavioural, and physiological functioning
2. A general medical and psychiatric history and examination
3. A history of psychiatric treatments and outcomes
4. A family and social history
5. Screening of blood, breath, or urine for substance used
6. Other laboratory tests to help confirm the presence or absence of conditions that frequently co-occur with substance use disorders
7. With the patient's permission, contacting a significant other for additional information.

DSM-IV-TR [5] diagnostic criteria for substance dependence and abuse

Substance-related disorders are divided into two groups:

1. Substance use disorders, which include substance dependence and substance abuse

2. Substance-induced disorders which include substance intoxication, substance withdrawal, substance-induced delirium, substance-induced persisting dementia, substance-induced persisting amnestic disorder, substance-induced psychotic disorder, substance-induced mood disorder, substance-induced anxiety disorder, substance-induced sexual dysfunction, and substance-induced sleep disorder.

This section of the guideline focuses on the first group, substance use disorders.

Substance dependence

1. Cognitive signs and symptoms
2. Behavioural signs and symptoms
3. Physiological signs and symptoms indicating ongoing substance use despite significant problems associated with such use.

Usually this continuous use will result in tolerance, withdrawal and a pattern of compulsive use.

Substance abuse

1. Has not experienced signs or symptoms of withdrawal or tolerance or met the criteria for compulsive substance use required for a diagnosis of substance dependence
2. Has shown a maladaptive pattern of substance use that is associated with significant recurring adverse consequences.

With DSM-IV-TR criteria, patients may be classified as currently manifesting a pattern of abuse or dependence, or as being in remission. Those in remission can be divided into six subtypes—full, early partial, sustained full, sustained partial, on agonist therapy, and in a controlled environment—on the basis of whether any of the criteria for abuse or dependence have been met and over what time frame. Patients receiving agonist therapy (e.g. methadone maintenance) or living in a controlled substance-free environment are also categorised as being in remission, with the corresponding diagnostic modifier used to denote the circumstances of remission.

Clinical features: cross-sectional

The clinical picture varies with the substance used, the dosage, the duration of action, the time elapsed since the last dose, the presence or absence of tolerance, and co-occurring psychiatric or general medical conditions. The expectations of the patient, his or her style of responding to states of intoxication or physical discomfort, and the setting in which intoxication or withdrawal is taking place also play a role.

Patients experiencing substance-induced intoxication manifest changes in mood, cognition, and/or behaviour. Mood-related changes range from euphoria to depression, with considerable lability in response to or independent of external events. Cognitive changes include shortened attention span, impaired concentration, and disturbances in thinking (e.g. delusions) and/or perceptions (e.g. hallucinations). Behavioural changes include wakefulness or somnolence and lethargy or hyperactivity. Impairment in social and occupational functioning is also common in intoxicated individuals.

Other cross-sectional diagnostic features include those related to any co-morbid psychiatric or general medical disorders that may be present. Psychiatric disorders include conduct disorder (particularly the aggressive subtype) in children and adolescents [6-8], depression, bipolar disorder, schizophrenia, anxiety disorders, eating disorders, pathological gambling, antisocial personality disorder, and other personality disorders [7,9-19]. Co-morbid general medical disorders include cardiac toxicity resulting from acute cocaine intoxication, respiratory depression and coma in severe opioid overdose, and hepatic cirrhosis after prolonged heavy drinking [20]. General medical conditions frequently associated with opioid-dependent individuals who administer opioids by injection include subacute bacterial endocarditis, HIV infection, and hepatitis. Patients whose substance use disorder

is accompanied by diminished self-care and/or high levels of risk-taking behaviour are at increased risk of experiencing malnutrition, physical trauma, and HIV infection [21,22].

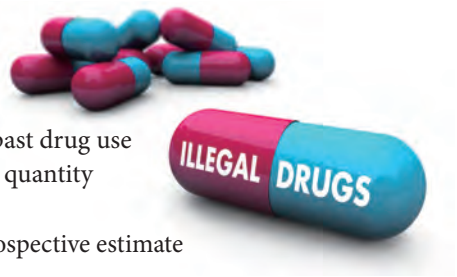
Clinical features: longitudinal

Patients with substance use disorders frequently present with a long history of repeated episodes of intoxication and withdrawal, interspersed with attempts to cease use of the substance. Substance-dependent patients presenting for treatment often have profound psychological, social, general medical, legal, and financial problems. These may include disrupted interpersonal (particularly family) relationships, absenteeism, job loss, criminal behaviour, poor academic or work performance, failure to develop adaptive coping skills, and a general constriction of normal life activities. Peer relationships often focus extensively on obtaining and using illicit substances or alcohol. The risk of accidents, violence, and suicide is significantly greater for these individuals than for the general population [23,24].

Street names of some illicit drugs

Heroin:	no. 3 三仔, no. 4 四仔
Cannabis:	草, Hashish 大麻精, Hash oil 大麻油
Lysergic acid diethylamide (LSD):	迷幻藥, 方糖, 郵票, 黑芝麻
Phencyclidine (PCP):	angel dust, 天使塵
Amphetamines:	大力丸, methylamphetamine 冰
Methylene-dioxy-methylamphetamine (MDMA):	Fing頭, E仔, 忘我, 狂喜, designer's drug
Cocaine:	C, coke, 可卡因, crack, 可樂, 霹靂
Chlordiazepoxide (Librium):	綠豆仔
Nimetazepam:	五仔
Flunitrazepam (Rohypnol):	十字架
Midazolam (Dormicum):	羅氏藍精靈
Triazolam (Halcion):	藍精靈, 藍瓜子
Nitrazepam (Mogadon):	魔鬼黨, 睡覺幫
Zolpiclone (Imovane):	白瓜子
Zolpidem (Stilnox):	思諾施
Mandrex:	忽得, MX, 糖仔
Ketamine:	K仔
Gamma hydroxybutyrate (GHB):	G水, 迷姦水, X水
Dextromethorphan (Romila):	O仔

Retrospective assessment of drug use [25-28]



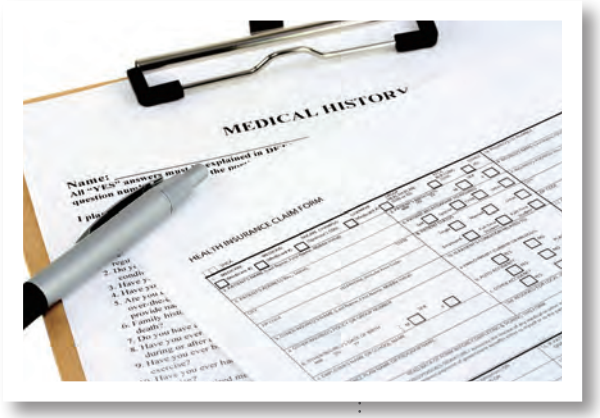
1. Timeline Follow Back (TLFB)
2. Interview technique to assist patients in recalling past drug use
3. Greater validity than simple questions about usual quantity and frequency of drug use
4. Includes a calendar to help people to provide a retrospective estimate of their daily drug use.

Memory aids for TLFB

1. Daily calendar
2. Key dates: holidays, birthdays, etc
3. Black and White days: periods of time of abstinence or using drugs in a very patterned manner
4. Discrete events and anchor points: specific events, like hospitalisation, illness, treatment participation
5. Drug use boundaries: greatest and least amounts of drug consumption
6. Exaggeration technique.

Psychoactive drug history questionnaire [29]

1. Drug category
2. Ever used
3. Total years used
4. Year last used
5. Frequency of use in past 6 months.



Screening test: WHO ASSIST

ASSIST is the Alcohol, Smoking and Substance Involvement Screening Test [30]. It is a brief screening questionnaire to find out about a person's use of psychoactive substances. It was developed for the World Health Organization (WHO) by an international group of substance abuse researchers to detect and manage substance use and related problems in primary and general medical care settings. Version 3.0 consists of eight questions. Questions one to seven ask about use and problems related to tobacco, alcohol, cannabis, cocaine, ATS, inhalants, sedatives or sleeping pills, hallucinogens, and opioids. Taken together these questions provide indications of hazardous and harmful substance use, and dependence. Scores in the mid range on the ASSIST are likely to indicate hazardous or harmful substance use. Question eight is focused on injecting and asks whether the patient has ever injected any drug. Injection is treated separately because it is a particularly high-risk activity associated with increased risk of dependence, blood-borne viruses such as HIV and hepatitis C and with higher levels of other drug-related problems.

Assessment of readiness for change

Motivational interview [31] is a client-centred, semi-directive method of engaging intrinsic motivation to change behaviour by developing discrepancy and exploring and resolving ambivalence within the client. Motivation as defined by Motivational Theory can be classified into: reliable stage, predictable stage, and well-defined stage.

The therapist identifies the stage the patient is in and applies the stage-appropriate counselling approaches to get the best results. It is non-judgmental, non-confrontational and non-adversarial. The therapist targets to diminish client resistance, resolve ambivalence with empathy and differential reinforcement of client speech, and finally to increase client change talk. Family doctors can do that with training as an effective time-limited counselling approach. If not responsive, family doctors may refer to a specialist for more specialised treatment.

Conclusion

Family physicians have important roles to play in early identification, assessment and brief intervention of youth illicit drug use. Early intervention in a non-stigmatising setting addresses a gap in service. It serves as a gateway to help the clients to quit substance abuse. Liaison by family doctors with family members, community carers, and other professional service-providers at different institution-based and community treatment settings provides a stepped-care multidisciplinary approach to manage this pertinent youth health problem in our society.

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MEDICAL TREATMENT OF DRUG ABUSE

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Management principles

As with treatment models for chronic diseases, treatment for individuals with substance use disorders occurs in temporal phases that include:

1. Initial assessment
2. Acute intervention
3. Long-term intervention and/or maintenance
4. Frequent reassessment during episodic flares in substance use.

Immediate intervention is to provide safety to the patient in a medically monitored environment. It is recommended for individuals who present with high-risk intoxication or withdrawal states or altered mental states (e.g. psychosis, suicidality, agitation) that are associated with a risk of danger to self or others.

It is recommended that individuals in the patient's family or social network be included in the treatment process so they may learn about the disorder, help monitor the patient's progress, and assist the patient in maintaining existing relationships or repairing troubled ones [1].

Treatment goals

The evidence to date suggests that substance-dependent individuals who achieve sustained abstinence from the abused substance have the best long-term outcomes [2,3]. Clinicians will, however, frequently encounter individuals who wish to reduce their substance use to a "controlled" level (i.e. use without apparent functional consequences).

Although some of these individuals, particularly those with less severe problems, may be helped to reach a stable level of use (e.g. "controlled" drinking) that does not cause morbidity, a goal of "controlled" substance use is unrealistic for most individuals presenting with a substance use disorder. Furthermore, setting "controlled" use as a primary goal of treatment may initially dissuade individuals from working toward abstinence [4]. However, treatment may be initially facilitated by the clinician accepting the patient's goal for moderation while sharing with the patient any reservations the clinician may have about the likelihood of success.

If the clinician believes that any level of substance use for the individual carries a risk of acute or chronic negative consequences, he or she should share with the patient this concern and the belief that long-term abstinence would be the best course of action. In certain circumstances it may be reasonable, however, for an individual to begin treatment by setting a short-term goal of reducing or containing dangerous substance use as a first step toward achieving the longer-term goal of sustained abstinence [5].

Three primary goals [6]

1. Treatment retention and substance use reduction or abstinence as initial goals of treatment
2. Reduction in the frequency and severity of substance use episodes
3. Improvement in psychological, social, and adaptive functioning.

Treatment principles

1. Motivating the patient to change
2. Establishing and maintaining a therapeutic alliance with the patient
3. Assessing the patient's safety and clinical status, managing the patient's intoxication and withdrawal states
4. Developing and facilitating the patient's adherence to a treatment plan, preventing the patient's relapse

5. Educating the patient about substance use disorders, and reducing the morbidity and sequelae of substance use disorders
6. A combination of general and specific treatments carried out in a collaborative manner with professionals of various disciplines
7. Occurs at a variety of sites, including community based agencies, clinics, hospitals, detoxification programmes, and residential treatment facilities
8. Many patients benefit from involvement in self-help group meetings, and such involvement can be encouraged as part of psychiatric management.

Treatment scenarios

1. Intoxication state
2. Withdrawal state
3. Dependence state.

Pharmacological treatment modalities

1. Medications to treat intoxication and withdrawal states
2. Medications to decrease the reinforcing effects of abused substances
3. Agonist maintenance therapies
4. Antagonist therapies
5. Abstinence-promoting and relapse prevention therapies
6. Medications to treat co-morbid psychiatric conditions.

Treatment plan

1. Psychiatric management
2. A strategy for achieving abstinence or reducing the effects or use of substances of abuse
3. Efforts to enhance ongoing adherence with the treatment programme, prevent relapse, and improve functioning
4. Additional treatments necessary for patients with a co-occurring mental illness or general medical condition.

The duration of treatment should be tailored to the individual patient's needs and may vary from a few months to several years. It is important to intensify the monitoring for substance use during periods when the patient is at a high risk of relapsing, including during the early stages of treatment, times of transition to less intensive levels of care, and the first year after active treatment has ceased.

Out-patient treatment setting

A comprehensive approach is optimal, using, where indicated, a variety of psychotherapeutic and pharmacological interventions along with behavioural monitoring. Clinical and research experience suggests the effectiveness of intensive out-patient treatment in which a variety of treatment modalities are simultaneously used and in which the focus is the maintenance of abstinence.

Indications for in-patient treatment setting

1. Has had a substance overdose
2. Is at risk for severe or medically complicated withdrawal syndromes
3. Has co-occurring general medical conditions that make ambulatory detoxification unsafe
4. Has a documented history of not engaging in or benefiting from treatment in a less intensive setting
5. Has a level of psychiatric co-morbidity that would markedly impair their ability to participate in, adhere to, or benefit from treatment or has a co-occurring disorder that by itself would require hospital-level care (e.g. depression with suicidal thoughts, acute psychosis)

6. Manifests substance use or other behaviours that constitute an acute danger to themselves or others; or
7. Has not responded to or was unable to adhere to less intensive treatment efforts and has a substance use disorder(s) that endangers others or poses an ongoing threat to their physical and mental health.

Cannabis

Cannabis is often considered benign, common in individuals with other psychiatric disorders including major mood, anxiety, and personality disorders [7]. It can precipitate initial episodes of psychosis in vulnerable individuals [8] and is associated with an earlier age at first psychotic episode in male patients with schizophrenia, 6.9 years younger than in non-cannabis users [9].

Evidence from animal and clinical studies has suggested that a withdrawal syndrome occurs if chronic heavy use of cannabis is discontinued [10]. Common symptoms are primarily emotional and behavioural, although appetite change, weight loss, and physical discomfort are frequently reported. Human trials of medications to ameliorate symptoms of marijuana withdrawal have included bupropion [11], divalproex [12,13], naltrexone, and nefazodone [14]. All these trials have had negative results. No pharmacotherapy trials to prevent marijuana reinstatement after abstinence have been reported. Thus, no specific pharmacotherapy can be recommended at this time.

Cocaine

Treat intoxication

Intoxication usually resolves spontaneously over time without specific treatment. There is no specific antidote to cocaine. Treatment is typically supportive and aimed at treating symptoms such as delusions or autonomic hyperactivity, like hypertension, tachycardia, cardiac arrhythmias, coronary artery vasospasm, myocardial infarction, stroke, and seizures.

Although the beta-blocker labetalol has been cited as being helpful in reducing cocaine toxicity, animal studies and some clinical experience suggest that the use of adrenergic blockers and dopaminergic antagonists should be carefully monitored when treating acute cocaine intoxication [15,16]. Benzodiazepines are used for acute cocaine intoxication in patients who become extremely agitated and/or potentially dangerous [17]. Although antipsychotic medications have been reported to be effective in treating delusions associated with cocaine/amphetamine intoxication, most individuals recover spontaneously within hours [18] and thus require no treatment [19]. There is no evidence that anticonvulsants prevent stimulant-induced seizures, and they are not recommended for this purpose.

Treat withdrawal

The clinical features and duration of the cocaine abstinence syndrome are still somewhat controversial. Many people do experience a characteristic withdrawal syndrome within a few hours to several days after the acute cessation of, or reduction in, heavy and prolonged cocaine use. Studies characterized withdrawal as progressing from a "crash" associated with intense depression, anxiety, anhedonia, fatigue, suicidal ideation, and sleep difficulties (insomnia or hypersomnia) lasting 1–10 weeks, to increased appetite and psychomotor retardation, which decrease steadily over several weeks [20-22].

Treat dependence

For many patients, pharmacological treatment is not ordinarily indicated as an initial treatment because no medication has been found to have clear-cut efficacy. There is no FDA-approved pharmacotherapy. However, a number of studies have shown promising results with pharmacotherapeutic agents, and patients with more severe forms of cocaine

dependence (e.g. those with more severe cocaine withdrawal symptoms) [23,24] or patients who do not respond to psychosocial treatment may be candidates for a pharmacotherapy trial.

Amphetamines

Pharmacotherapy of amphetamine dependence is expected to be similar to that of cocaine. Neither disorder has an FDA-approved pharmacotherapy [6]. Very few clinical trials have been completed with amphetamine-dependent patients, with none of these studies showing different results than those described for cocaine dependence [25,26]. A possible significant difference between cocaine and amphetamine is cocaine's interaction with alcohol to form cocaethylene. This metabolite has cocaine-like effects and toxicity [27].

Ecstasy

Pharmacotherapy of MDMA dependence is expected to be similar to that of cocaine [6]. Most treatment programmes offer counselling, behaviour modification, and the use of sedatives [28].

Ketamine

There is no evidence-based treatment guideline available. Most treatments are symptomatic and supportive.

Benzodiazepines

It is recommended to change to long-acting benzodiazepines, use medication for withdrawal symptoms, and tail off all medication in the long run. Pronounced respiratory depression may occur in combination with alcohol. An antidote is flumazenil.

Conclusion

Family physicians need to assess and decide a treatment plan, choose the treatment setting, treat the substance abuse disorder at different phases, and treat co-morbid medical and psychiatric conditions. Supportive and symptomatic drug treatments are the recommended treatment options. Only relatively more specific treatments were recommended by APA guidelines for opioid, alcohol, benzodiazepines and nicotine substance abuse disorders, and not for others. Combined pharmacological and psychosocial intervention for abstinence or controlled use was recommended. Referral to specialist care was warranted when necessary.

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THE ROLE OF FAMILY, SCHOOL AND PEERS IN YOUTH DRUG ABUSE

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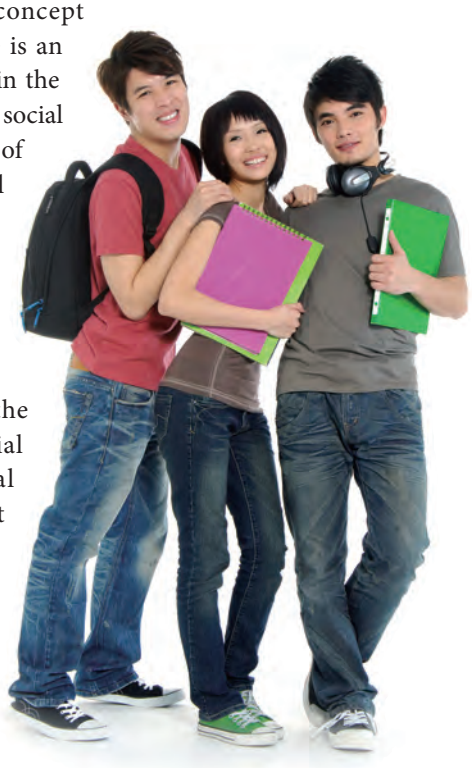
Perhaps the most salient change in the pattern of drug abuse among young people around the world since the 1990s has been the rapid ascent in popularity of "party drugs" (notably ecstasy and ketamine), which is reinforced by the emergence of a new dance club culture in the West [1-4]. The Western dance club culture and party drug use have quickly become a globalized phenomenon, spreading to Asian societies such as Hong Kong, Tokyo and Kuala Lumpur [5]. Scholars in Western societies have recently proposed the thesis of "normalization of adolescent recreational drug use" to describe such a trend [1,2,6]. In Hong Kong, a trend towards such normalization is also observed during the last decade [7]. There are various foci within this thesis of normalization. The first focus is the increasing prevalence of illicit drug use in young people. Second, the notions of pleasure and recreation characterize contemporary youth drug use. Dependent and frequent drug use does not seem very acceptable by many young drug users. Recreational mode of drug use is gradually accommodated into the lives of many young people. Third, the receptive attitude of accepting drug use as a normal part of leisure is increasingly prevalent in young people. Contrary to the traditional image of drug use as a subterranean activity, recreational drug use is perceived as normal, rather than deviant, among young people. Young recreational drug users even do not think of themselves as drug users. For them, drug use is a peripheral but normal aspect of leisure time consumption and lifestyle.

What motivates adolescents to pursue drug use? What are the potential social mechanisms underlying the impact of family, school and peer on young people's drug-using behaviour? Based on a sociological approach, this paper introduces the social capital perspective and major sociological theories of deviance to understanding the various mechanisms that family, school and peer cast influence on youth drug abuse.

The social capital framework is one of the most popular concepts in the social science literature in the past two decades. Social capital refers to those resources embodied in the structure of social relations, including interpersonal ties and institutional linkages (e.g. family, school, work, and community setting) that can facilitate social actions or achievement of goals [8]. To derive resources, embeddedness in social relations is necessary. With the growing popularity of the social capital concept particularly within the delinquency field, there is an increasing interest among delinquency scholars in the roles of the family and school in the production of social capital as well as the delinquency-reducing effect of social capital [9-11]. How are family social capital and school social capital generated? What are the specific resources that both kinds of social capital will facilitate? How does association with drug-using peers, as a form of developmental disadvantage, affect social capital acquisition?



Drawing upon the social capital framework, the following discussion will illustrate family social capital, school social capital, developmental disadvantage, and their relationships to adolescent drug use. Major deviance theories (namely, social bonding theory, anomie theory, differential association theory, and labelling theory) are also integrated within the social capital framework in explicating social capital.

Social bonding theory is widely known for its focus on social bonds in family and school [12]. These bonds are important sources of informal social control, which in turn reduce crime and delinquency. The strength of social bonds between family, school, and adolescents emphasized in social bonding theory concurs with the recent discussion of the closure of social relations in the social capital formation [13,14]. The stronger the social bonds, the more the social capital in the form of informal control can be generated.

The incorporation of Merton's classic anomie theory within the social capital framework proposes another form of social capital, that is, legitimate opportunities that can enhance an individual's attainment of socially approved goals and reduce his/her experience of strain or anomie, thereby preventing deviance [15]. Merton's classic anomie theory states that deviance is the result of strain, which stems from the disjunction between culturally defined goals and legitimate means to achieve them [15]. Such goals-means disjunction is perpetuated by the social structure, wherein the opportunities to attain the conventional goals are unevenly distributed among persons of different social positions. Those at the bottom of the class structure suffer more from the limited access to legitimate opportunities for realizing goals. Young people under these circumstances are pressured towards deviance, turning to illegitimate means like drug abuse to cope with strain. Incorporating anomie theory into the social capital framework, Hagan and McCarthy argue that the organization of social ties likewise can influence the ability to obtain legitimate opportunities for attaining socially accepted goals and the likelihood of experiencing strain [9]. Coleman recognizes the crucial role of social capital in increasing non-economic legitimate opportunities to facilitate the creation of human capital and to enhance the life prospects [8]. As found by Coleman, parents who have positive interaction with children are more capable to endow their children with conventional opportunities, and to translate human capital present in the family into their children's human capital or other favourable life outcomes. Recent research also reveals that supportive family relation with children is linked to adolescents' lessened likelihood of dropping out of school early, greater high school completion [16], greater college enrollment [17], and lower risk of unemployment in early adulthood [18].

While family social capital and school social capital can exhibit the controlling and legitimate-opportunity-producing functions, family and school can also augment a youth's access to social capital in the form of pro-social tutelage and learning of conforming behaviour. From differential association theory, deviant behaviour is viewed as the result of learning in the course of interaction with one's intimate deviant groups [19]. Indeed, differential association theory explains not only deviant behaviour, but also conforming behaviour. The more the conforming association, the more the conforming behaviour one can learn in the course of conventional learning. This argument has relevance to our understanding of the keeping of youths uninvolved in delinquency. Establishing pro-social relations between family, school and adolescents can enhance social capital in the form of pro-social tutelage and learning of conforming values and behaviours.

Rather than analyzing deviant behavior per se, labelling theory posits that deviance is socially constructed through the application of the deviant label. The labelling of deviance produces subsequent deviant behaviours on the part of the person so labelled [20]. Whilst labelling theory concentrates on the negative outcomes of deviant labels, labels are not confined to deviant ones. One can be labelled a conformist or a success at conventional activity, which should increase the likelihood of conventional behaviour while decreasing the likelihood of deviance [21]. Positive labelling would reduce delinquency by facilitating the building of conventional ties and therefore social capital. As Matsueda and Heimer argue, favourable appraisals are important elements of social capital [21]. Favourable appraisals by significant others (including teachers, parents and conventional peers) facilitate the building

of a positive self-image in adolescents. As well, they strengthen the ties with conventional others, and produce informal control through encouraging adolescents' incorporation of and commitment to conforming roles expected from significant others.

The cumulation of the theoretical and empirical works we have reviewed shows the forms of social capital that can be facilitated. The integration of social bonding theory, anomie theory, differential association theory, and labelling theory with the social capital framework points to the potential of family and school, via developing relations with children to produce social capital, which can be in the forms of informal control, increase of legitimate opportunities, pro-social learning, and the building of a positive self-image in adolescents. As the family and school are the key sources of social capital, how are family and school social capital generated?

Family social capital can be formed on the basis of direct parental informal control, parental support, and parental positive labelling. The first component of family social capital is direct parental informal control that involves the explicit efforts exerted by parents to monitor the behaviours of adolescents and recognize their misdeeds. The second component of family social capital is parental support. A recent analysis by Wright and Cullen has alerted us that parental control and parental support are equally important in parenting, as "parents who support their children are also parents who control and are attached to their children" [22]. The third component of family social capital is parental positive labelling. Adolescents who have come to see themselves as "good kids" through the eyes of parents will be relatively unlikely to violate norms, when adolescents take the role of "good kids".

With the onset of adolescence, although the family continues to be the first and most important institutional locus of social capital, schools are growing in importance and becoming the sites for the formation of social capital [8]. The three school processes suggested here are direct school informal control, school support, and teachers' positive labelling. Regarding direct school informal control, school is more effective than family in discipline management and plays a key role in promoting conforming behaviours [23]. School support – the second process of the school formation of social capital – is equally important, as it can directly establish bonds with students. Teachers' positive labelling may also contribute to the production of school social capital. When the view of "good kids" from teachers enters adolescents, the bond between teachers and students, and resulting informal control, will be strengthened by the favourable appraisal of teachers. More recent research further shows that school-based social capital representing high-quality schooling environment can serve as substitutes for poor family social capital and a lack of parental involvement in children's schooling, especially among adolescents who experience low academic achievement or report a lack of academic values. Hence, school-based social capital attenuates involvement in delinquency and drug abuse partly by compensating for adolescents who do not have adequate access to social capital in family [11,24].

In summary, family social capital can be formed by direct parental informal control, parental support, and parental positive labelling, while school social capital can be formed by direct school informal control, school support, and positive labelling by teachers. Family social capital and school social capital can enhance informal social control, legitimate opportunities, pro-social learning of conforming values and behaviours, and the development of a positive image in adolescents. The possession of family social capital and school social capital greatly enhance adolescents' tendency to conform, thereby reducing the likelihood of such delinquent acts as drug abuse.

Besides family and school, association with drug-using peers is consistently the strongest predictor of youth drug abuse. Nevertheless, it not only augments the likelihood of drug abuse by social learning of pro-drug values and behaviours, but also is a kind of developmental disadvantageous experience. There is mounting literature emphasizing developmental life experiences that mold the social capital acquisition and the life course development of adolescents [25,26]. Delinquent and drug-using peers have been shown in life-course research to have long-term adverse developmental consequences. As Simons et al report, young adults entrenching in a deviant peer network in adolescence are more likely to confront cumulative developmental disadvantages including poor job attachment, disruption of ties with conventional adult peers, solidification of adult deviant affiliations, and having an antisocial partner through assortative mating in young adulthood and marital problems [27]. These cumulative developmental disadvantages would repeatedly knife off the opportunities for a young person to be involved in conventional relationships. This would continuously impose developmental strain on youths due to the deprivation of legitimate life chances, and decrease the chances of developing social bonds, thereby leading to the deprivation of social capital (informal control, pro-social learning, legitimate opportunities, and fostering of a positive self-image) that is vital for successful development in adolescence transition. This is what Hagan and Parker conceptualize as downward life-course capitalization [25].

Yet, a point worthy of attention here is that youth drug abuse in times of increasing normalization is no longer simply an uninformed response to peer pressure [28]. Underpinning the argument of the normalization thesis introduced at the outset of the paper is a conceptualization of young people's drug use as "sensible use" involving cost-benefit drug consumption decisions [29]. Growing up in a situation where drugs like cannabis, ecstasy and ketamine are readily available in everyday social worlds demand youngsters to be reasonably drugwise (e.g. never touch heroin or crack). Contemporary young drug users, as drug researchers have observed, are more likely to be aware of being involved in dependent drug use because of the potential of severely undermining a regular life. They do report some problems of recreational/occasional use, but they consider these to be bearable consequences. They do not deny risk and yet simultaneously prioritize the purchasing of leisure through occasional use of drugs. For sure, none of this means that young drug triers and abusers have proper knowledge on drugs and make good decisions. Poor decision-making can indeed see young people slip into problem drug use.

The understanding of young people not as the victims of some externally-located peer pressure has clear implication for drug education and intervention too. Acknowledging a normalizing process and responding require attention to and meaningful reflection on hierarchies of dangerousness employed by drug users [30]. Given the potential capacity of reflexive thinking in youngsters nowadays, we should recognize the need of public health measures for equipping young people with the capability to make informed and good choices, and move beyond the message of just saying no to drugs. Likewise, drug-using peer subculture is not entirely negative, and there is possibly a positive role of this subculture. Shewan et al found social support within this subculture to be particularly instrumental in the achievement of harm minimization in drug use and health enhancement [31]. By developing a positive harm-reducing drug subculture, collective informal control can be generated among drug-using peers, thereby minimizing their likelihood of turning to problem use or stepping towards a healthy lifestyle [32].

The foregoing discussion is my outline case for conceptualizing the mechanisms of family, school and peer leading to drug abuse among young people. The social capital approach is one useful analytical tool to understanding these mechanisms. The trend towards normalization of drug use in young people also calls for more research and service development to situate these social mechanisms in the context of this broader trend.

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BEHAVIOURAL AND OTHER TREATMENTS OF DRUG ABUSE

Mr. David CHEUNG
Supervisor, Caritas Lok Heep Club & Caritas Wong Yiu Nam Centre

Our service target

We are the Caritas Wong Yiu Nam Centre, a voluntary drug treatment and rehabilitation centre helping young male substance abusers aged under 30.

Our history and profile

We established our service in March 1999. Our centre is located at Hang Hau Road, Sai Kung. We have 28 beds for young male substance abusers to undergo detoxification and rehabilitation. (the number of beds increased to 28 in 2010). The majority of our clients are aged from 16 to 27. The treatment duration is from 1–3 months. The clients usually stay 3 months in our centre. Most of our clients are referred by probation officers (90%), other sources of referral include counselling centres and self-referrals.

Source: Caritas Wong Yiu Nam Centre

What's special about our service?

We provide drug detoxification and rehabilitation services to both opiate and non-opiate abusers. Smoking is strictly prohibited in our centre and thus our clients have to quit both illicit drug dependence as well as cigarette addiction. A monthly charge of HK$3,200 has to be paid by each client and those who cannot afford the charge can apply for CSSA. Our centre has two licences: one treatment centre licence issued by the Social Welfare Department, and a nursing home licence issued by the Department of Health.

Our multi-professional team

We have a multi-professional team consisting of:

- A visiting psychiatrist – who prescribes medications to help alleviate the clients' withdrawal pains
- Nurses – who provide nursing care to our clients around the clock
- Social workers – who work with our clients, the clients' family members, and their significant others to deal with the drug problem and other related problems. Social workers perform counselling sessions, group work sessions, educational programmes as well as other support programmes to cater for the needs of our clients
- Teachers – who teach basic knowledge including Chinese language, English usage, mathematics, computer skills, video and photo editing, and physical exercises
- Peer counsellors – our wardens are recovered drug abusers. They stand as role models and help to maintain discipline in the centre. Some of them are graduates of our centre

Our objective

We help clients deal with problems related with substance abuse.

Goals

Our goals are to help our clients to:

1. Gain physical recovery – through safe detoxification, balanced diet, regular life, physical exercises and care by the multidisciplinary team.
2. Formulate a long-term rehabilitation plan – by working with the clients and their significant others to realize their potentials.
3. Learn harm reduction knowledge and skills – health and drug education on the dangers of drug abuse and blood borne diseases such as HIV and hepatitis C is provided, so that

the clients can take wise actions to minimize the harms of drug abuse even if they relapse in the future.

4. Enhance self-confidence and sense of responsibility – clients perform various tasks, shouldering duties, doing holding chores, and volunteer services to help underprivileged people.

Stages of treatment and rehabilitation

Source: Caritas Wong Yiu Nam Centre

1. Pre-admission stage: our intake worker interviews clients as well as their family members to assess whether they are suitable to undergo treatment in our centre. We also explain to the clients our house rules and regulations. If the clients decide to come for treatment, medical examinations are performed to ensure that they are physically fit and mentally stable to receive treatment. A client has to sign a treatment contract before an admission date can be set. The average waiting time is about 4–6 weeks.
2. Detoxification stage: a client has to stay in a newcomer's room for 4–7 days to ensure that he brings in no illicit drugs and receives proper medical care. The visiting psychiatrist prescribes medications to the client to alleviate their withdrawal symptoms or treat any other sicknesses as appropriate.
3. Rehabilitation stage: the clients live in the big bedroom at night and follow the regular time table. Various lessons and training are arranged daily and they have to shoulder various household duties. Counselling, group work sessions, sports, recreational activities as well as other experience are organized for their recovery. Their family members can visit them in the afternoon on Sundays.
4. Aftercare stage: clients who complete treatment at the centre can receive aftercare service for 12 months. This service includes urine tests to verify drug status, counselling as well as other supportive services, and support to their family members.

The daily timetable

The typical schedule for a day in our centre is as follows:

Time	Activity
0730	Wake up
0800	Morning exercise
0815	Breakfast
0900	Morning lesson
1000	Morning assembly
1030	Group/lesson session I
1230	Lunch and clean up
1345	Group/lesson session II
1600	House work
1630	Exercise and free time
1730	Shower
1830	Dinner and clean up
1930	Quiet time for doing assignments
2030	Watch TV or read books
2300	Go to bed

Source: Caritas Wong Yiu Nam Centre

Major activities at our centre

a. Individual counselling is provided by our social workers to enhance clients' problem solving skills and help them formulate a long-term plan.

b. There are two structured group work sessions on two topics: Relapse Prevention, comprising 6 sessions, and Self Understanding, comprising 5 sessions:

Relapse prevention	Self understanding
Meaning and process of recovery Relapse and lapse warning signs High-risk situations Cognitive restructuring Refusal skills and assertive training Plan for new life style	One's own strengths and weaknesses The many faces of one's self The relationship with family The relationship with peers Build up personal value
The aims are to help clients understand relapse, raise their self efficacy and develop skills to prevent relapse.	The aims are to help clients understand more about themselves, take up proper roles and make responsible decisions.

c. Basic life skills training: they learn basic life skills like cleansing, washing clothes and dishes, cooking, as well as taking care of their health.

d. Various training: these include adventure counselling, basic education, video taking and editing, physical exercises, sports activities, water activities, hiking and musical training. Recreational activities such as birthday parties, festival cerebrations, barbeques, and various ball games are also held.

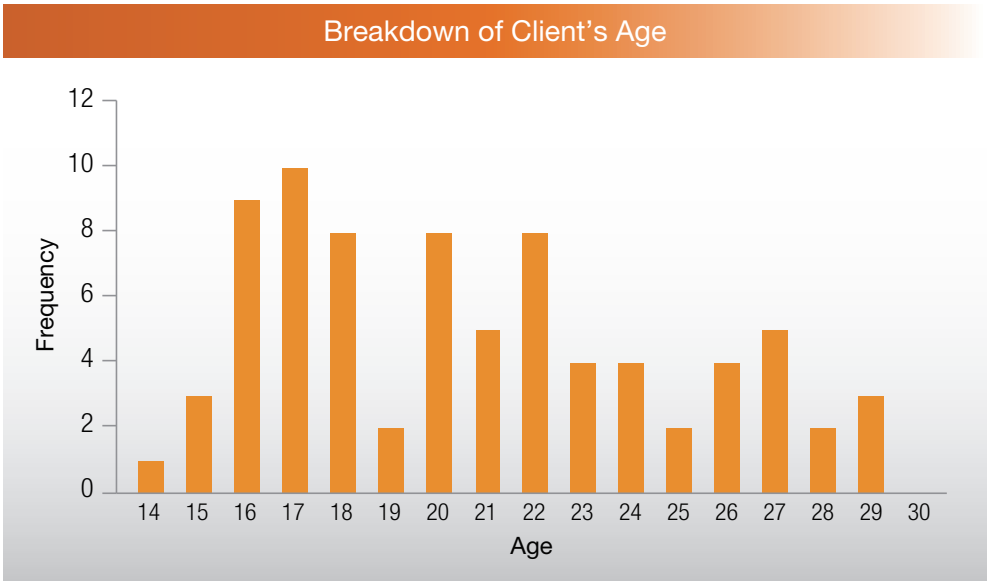
Completion rate

For the year 2007–08, the rate of clients completing detoxification (7 days) was 97.5% and the rate of those completing 1 month's programme after detoxification was 92.5%.

Client profile

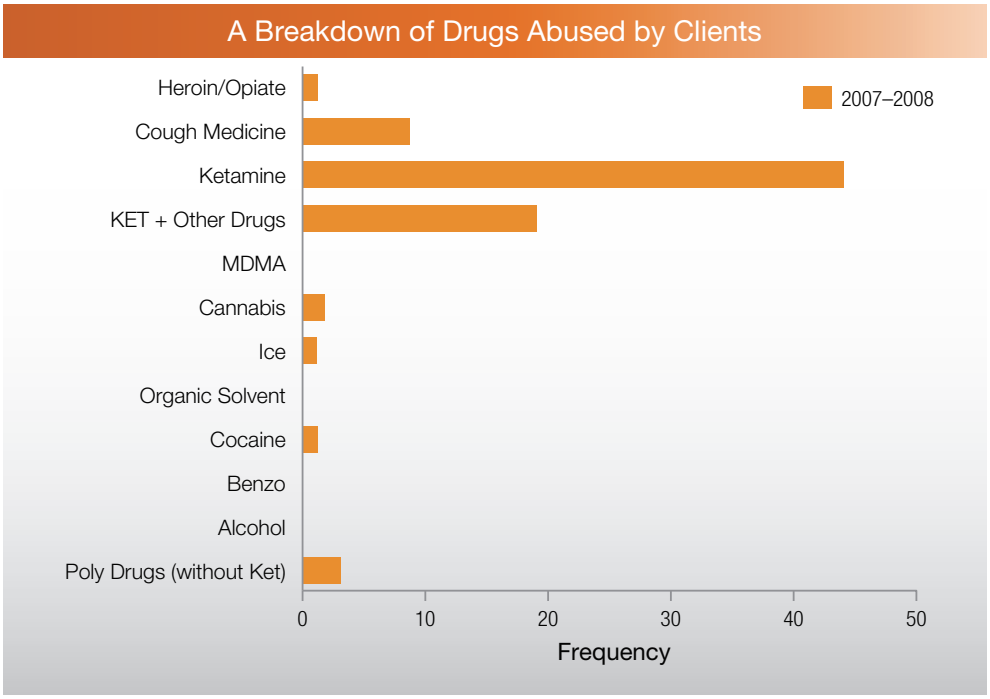
1. Age breakdown

The majority of our clients are aged from 16 to 27. There has been a downward trend in the average age of our clients.



2. Breakdown of the drug(s) abused by our clients

In the first 2 years of our operation, 80% of our clients were opiate abusers. However, ketamine has become the most popular drug of abuse by our clients. Sixty-three out of the 93 clients who entered the centre in the year 2007–08 abused ketamine, while nine clients abused cough medicine.



3. Harmful effects caused by ketamine abuse

Little has been known about the harmful effect caused by ketamine abuse since its abuse is not popular elsewhere. Ketamine was listed as a dangerous drugs here only in the year 2000. It has become the most common drug of abuse among the youngsters of Hong Kong and as more clients came to our centre because of its abuse, the harms of ketamine abuse became more obvious. The following table may reflect the harmful effects of ketamine.

Symptom onset during ketamine abuse and treatment

	Year				
	08/09	07/08	06/07	05/06	04/05
Number of admissions	84	93	80	99	97
Stomachache	25	6	0	0	0
Cystitis	47	17	13	4	1
Blood urine	8	6	4	0	0
Dieresis	44	30	7	0	0
Incontinence	2	1	0	0	0
Referral to urology	3	1	0	0	0
Delusion	2	5	0	4	0
Auditory hallucinations	0	1	0	1	1

PSYCHOLOGICAL MANAGEMENT OF ADOLESCENT DRUG ABUSE

Prof. LEE Wing Ho, Peter
Clinical & Health Psychologist

The challenges of adolescence

Adolescence is a crucial stage of biopsychosocial development paving the way for self direction, independence and adulthood. Adjusting to adolescence, however, can be tenuous, with challenges from diverse sources. Peer influence on knowledge, attitudes, values, interests, and action patterns becomes more salient. Indeed, normative preferences of peers, novelty pursuit, risk taking and pleasure seeking are important factors affecting adolescent decision making [1].

Prepared or not, the adolescent confronts starkly with the "real world", expecting and expected to achieve, at the same time striving to safeguard his/her self esteem, establish social connectedness, and deal with future challenges leading to sustainability and independence. In the process, distorted beliefs about heroism and romanticism may escalate the adolescent's sense of discontent and frustration. Vulnerability is intensified due to erratic role models, short time perspective, impatience, impulsivity, low perseverance and frustration tolerance. Proper channelling of rapid biological changes and upsurge of energy, as well as coping with intense psychosexual needs often prove daunting.

Compounding the challenges are the stresses of economic concerns, academic pressures, uncertain occupational prospects, sexual maturation and tension, peer conflicts and acceptance, family discord and parental conflicts, psychiatric/psychological problems, and increase focus on materialism and competition against a background of fading traditional Chinese values. The lure of drugs and promise of quick relief thus becomes more salient.

The high risk syndrome

Against the stormy course of adolescent development, the pathway to high risk behaviours has been more clearly mapped out in the recent literature. The classic assertion of Jesser that adolescent problematic behaviours tend to co-vary and cluster into a "risk behavior syndrome" has largely been supported by subsequent research [2]. Stronski et al in their national study noted that amongst other high risk behaviours, cigarette smoking and alcohol use were associated with subsequent marijuana use, supporting the theory of sequences of drug use and involvement, in which a legal drug such as tobacco or alcohol precedes and potentiates the subsequent use of marijuana [3]. In addition, Stronski et al reported escalation in other problem behaviours (such as antisocial acts, injuries, tobacco use, early sexual experiences, depressed mood, and suicide attempts) amongst marijuana users, compared to non-users [3]. A similar pattern of high risk behavioural development had also been noted in our own study on Hong Kong adolescents [4].

The high risk behavioural syndrome may prompt further risks for physical malaise (self harm and accidents), escalating illicit drug use, casual sex (with increased risk of abortions, sexually transmitted diseases, HIV, cervical cancer), mental health problems (depression, anxiety, low self esteem, maladjustments), and social issues (school dropouts, disadvantages, delinquency, second generation problems/issues). Without effective and timely help, the future of the budding adolescent may be destroyed with potential adverse end points, including school failure and dropout, social maladjustment, substance abuse, teenage pregnancies, abortions, unprepared motherhood, family tension and alienation, mood and other psychiatric disorders, prostitution, delinquency and criminality.

Multiple factors associated with the adolescent high risk behavioural syndrome were noted in Lee et al's study, including: limited personal/support resources; low self esteem; perceived inferior ability, appearance and popularity; low life satisfaction; family conflicts – lack of support and love; poor self rated mental and physical health; and unsatisfactory social relationship [4].

Early detection and intervention

The research so far indicates that no one single factor as being responsible for an adolescent's drug use. Instead, multiple interlinking and mutually potentiating factors inherent in the person, family, schools, and community/culture are in operation [5].

The available literature, however, points to the importance of early detection and intervention given that a high risk behaviour may potentiate another higher risk behaviour, initiate drug use and further denigration.

The complexities of adolescent drug use problem

Interventions in adolescent drug abuse have generally been difficult and yielded unsatisfactory results. The problem of relapse looms large in any intervention program. Up to 70-80% of adolescents will relapse within 1 year after quitting, and up to two-thirds of this percentage relapse after the first 3 months of treatment.

Multi-modal interventions are required including psychological, medical, community and social interventions. Effective psychological treatment has to be guided by realistic conceptualisation and understanding of the process underlying and maintaining the inception and maintenance of drug abuse.

Stages of motivation for abstinence

The motivation for drug abstinence needs to be ascertained and intensified. Different stages of readiness, from precontemplation to contemplation, action, and maintenance of a drug-free lifestyle should be noted for appropriate treatment planning [6]. Youths who use drugs are motivationally diverse. Precontemplators may pay lip service to the merits of abstaining, but basically still believe that "I have no problem, and there is no need for any change". Contemplators may be a step closer to initiating genuine change with more willingness to consider the benefits of change despite that no plans or skills are yet present. Those more genuinely prepared are inclined to resolve that "it's time to do something different", leading to attempts to abstain for at least a day or more. Those in maintenance strive to stay drug free for at least 6 months or more. Identifying the different stages of the youths' readiness guides the nature and focus of interventions.

Need to avoid stereotypes

Every youth is different with their unique developmental and family history, having diverse needs and confronting different challenges. Stereotypes must be avoided. To understand is not to categorise. Help is a joint venture, working "with" rather than "on" youths. Optimal therapeutic conditions of trust and collaboration must be established at the start. Differences should be respected and complexities expected. Multi-drug use is not uncommon. Co-existing psychiatric disorders may be present in up to one-third of drug abusing youths, the most frequent of which are mood disorders, antisocial personality disorders, mania, and schizophrenia. Drug abusing youths may also be entangled in a web of complex social, economic, legal and health problems, frequently requiring concurrent tangible help as well.

Psychological conceptualisation

To be effective, psychological interventions are best guided by a realistic conceptualisation of the underlying problem. A framework for understanding drug abuse is presented below as a basis for treatment strategy.

Understanding motivation

As a start, thoughts and beliefs relating to drug use have to be noted. The question of "what motivates you when you use drugs?" needs to be answered, whether it be for relief of dysphoric mood, booster self esteem, thrills, or enhance social acceptance. At a later stage, explorations with the youth about "what goes through your mind when you continue to use drugs in spite of their devastating consequences?" are needed so that drug-use motivating and maintaining factors may be clarified and targeted.

Pre-existing vulnerability

Pre-existing vulnerability comes to play especially during stressful times and paves the way for initial drug use and experimentation. Early negative experiences including parents who model substance use and lack of validation (in contrast to protective factors like secure personal relationships, supportive family, and validation from important others) may continue to plague the vulnerable adolescent, and serve as precursors to low self esteem, misguided values, as well as indiscriminate need for social approval and acceptance.

The youths' negative beliefs about themselves, their personal world, other individuals, and their future affect their vulnerability. When lovability and adequacy are continually put to doubt, when social acceptance remains precarious despite being much sought after, when emotional distresses are chronically experienced, the lure for quick fixes and relief of negative emotions is heightened.

Beliefs facilitating first time drug use

Conditioned beliefs concerning drugs often come to play during initiation into drug use. For example, in face with social pressure, the adolescent may believe that "If I use drugs, then I'll be popular", or "If I don't use drugs, I will be seen as a wimp". The danger of drug use may be unwisely minimised with the conviction that "A one-time use has no major consequences", "I can control myself and would never depend on it". The youth's emotional needs also influence choice of drugs. For example, numbing anxiolytic substances are often used to lower fear, as well as distresses relating to low self esteem and social incompetence.

Drug use maintaining factors

Initial drug use provides short-term positive experience that becomes chronically sought. A one-time drug use opens the flood gate to ongoing perpetuating cycles of continual use, relief reinforcement, and cravings followed by lowering inhibitions for further use. The drug use habit can be rather easily established given its rapid and intense impact, subsequent distressing craving, and short of any alternatives providing comparable seemingly effortless good feeling states and/or escape from bad ones.

Various drug related beliefs have been noted to facilitate drug use. In broad terms, two types of drug use beliefs have been noted:

a. Anticipatory beliefs: expectation of gratification, increased personal efficacy, heightened sociability.
   Examples: "I can't have fun unless I have 'x substance' in me", "go ahead", "life is short", "I'm so cool".
b. Relief-oriented beliefs: relief from unpleasant physical and emotional states.
   Examples: "I can't stand it anymore", "only drugs will do, nothing else can make me feel better".

Continual drug use makes drug-related beliefs more pervasive, salient, and accessible, and enables such beliefs to be activated by an ever increasing range of circumstances, making continual use more preferred and entrenched.

As time goes by, situations likely to trigger such beliefs and lead on to drug use increase in breath and diversity. High risk situations prompting easy triggering of such drug use beliefs have been noted as follows:

Internal: negative emotions (anxiety, depression, boredom, anger, frustration, loneliness), positive emotions (fun times and celebration), physical sensations (pain, hunger, fatigue, withdrawal symptoms);
External: interpersonal conflicts, availability of substance, peer usage, task accomplishments.

Harbouring a strong conviction of the efficacy of drugs in achieving personally desired states, together with an equally strong conviction that other things will "not do", inhibition and resistance to drug use dwindles further over time. Even after successful abstinence, three

of the most common situations conducive to relapse have been noted, including negative emotional states, social pressure, and interpersonal conflicts accounting for 35%, 20% and 16% of the relapse [6]. It should thus be noted that even after a short period of abstinence, drug use is likely to rebound under adverse mood and social situations.

Urges and cravings are intensified as drugs provide immediate regulation of mood states and where non-use leads to distressing withdrawal effects. Different drugs cater to different needs, e.g. some provide anti-anxiety effects, while others have stimulating, anti-boredom effects. Some youths use drugs to turn a good mood into an even better mood as part of a celebration ritual. Unfortunately, alongside the rapid and intense impact of drug use, healthy pursuits and simple gratifications of everyday life gradually fade into insignificance.

Cravings and urges reinforce and perpetuate reliance on drugs. Urges can become highly distressing, sometimes even described as being "very physical" in nature. Increasingly, falling prey to drugs, trapped into strong cravings during withdrawal, coupled with high risk settings, youths often find themselves being obsessed and thinking about drugs all the time, with luke warm efforts to resist, which finally leads to chronic use. With habitual use, as the conviction that "I cannot survive without it" is fortified, abstinence becomes increasingly remote.

Psychological interventions – goals and focus

Understanding the initiating and maintaining factors of drug use as detailed previously opens up new avenues and targeted areas of psychological interventions, namely, change drug use cognitions and beliefs, promote tolerance of negative emotions, build better self esteem, develop skills to resist conformity and social pressures, foster long-term aspirations in life to combat fixation on short-term relief of negative moods and unsatisfactory life circumstances.

However, for such interventions to be effective, the priority is that a genuine, open, mutually respectful therapeutic relationship be established. Youths may find it initially awkward to come forth given embarrassment, shame, sense of alienation, and distrust leading to underreporting of problems. Sometimes, they may even be convinced that "Non-users simply do not understand". Barriers have to be broken down. Our stereotypes and biases against drug using youths have to be constantly held in check. Instead, to be effective, the helper must be prepared to take on an open-minded exploration of the problem and be truly empathic towards the drug abuser's plight.

When setbacks and relapses are encountered, instead of portending that "these people are hopeless", "they can never be trusted", or that "this is a waste of time", it may be more useful to consider that "he is still struggling to overcome his problem", "his relapse is not a reflection of my inadequacies", "when he was dishonest, it's likely that he was feeling ashamed of the truth", "a relapse is not the end of the world", or "we can really learn from the relapse" [6, 7].

Having established a secure therapeutic relationship, the youth's problems need to be carefully conceptualised.

Everybody is different. For those akin to using psychiatric formulations, be aware that there is no simple psychiatric diagnosis which can adequately capture the youth's problems. Instead, the best approach is to be able to develop a genuine "feel" into the youth's life, problems and living circumstances. Background information needs to be explored, and updated every now and then. Presenting problems need to be exhausted and clarified, including drugs used, pattern of use, effects, other chronic problems and difficulties, e.g. job, relationship, mood, self esteem issues. Current and/or impending crisis needs to be anticipated. Co-existing psychiatric problems need to be addressed. An understanding needs to be established together with the youth addressing "how drugs might help with, and at the same time contribute to his emotional concerns and life problems?" Motivation needs to be

fortified, identifying and strengthening aspirations rather than be fixated on running away from pains and distresses.

The youth's beliefs related to drug use have to be thoroughly discussed and clinically addressed. A number of areas need to be routinely explored and dealt with including:

- High risk situations
- Beliefs about drugs' efficacy and functions
- Circumstances conducive to permitting oneself to use drugs
- Beliefs held which may contribute or facilitate drug use
- Negative (undesired) and positive (desired) consequences of drug use – cost/return analyses
- Build up of more realistic understanding and cost-benefit analyses of functions of drugs.

Information gathered would be used to formulate action and change plans. Motivation for change needs to be continually monitored and fortified [1]. The following areas are routinely addressed and dealt with in therapeutic sessions:

- How does drug use serve as a coping strategy? Is there any alternative and less costly strategy available?
- What motivates you to change addictive behaviours and adhere to a non-drug use lifestyle? What are the barriers?
- How do drug use and self-esteem impact on each other?
- What change strategies would be most effective? In the short-run… in the longer-term?

Interventions and the nature of the work to be conducted with the youth are best clearly set out, agreed upon and with no surprises. Periodically, the youth's mood state needs to be monitored and dealt with when needed. In terms of approach, guided discovery over preaching or lecturing is preferred. Given the youths' characteristic narrow perspectives, summaries and feedbacks are required so that useful points gained would not be easily forgotten. In between sessions, positive actions are fostered, with small goals and limited successes are targeted. Low demand homework may be built in between sessions where activity scheduling and time with drug-free peers may be introduced. Episodic relapses, particularly during intense stress must be expected and dealt with. Relapse management and prevention of snowballing effect is an integral part of any drug treatment programme [8].

Critical incidents are reviewed. A cognitive behavioural approach is useful in guiding the youth to understand that events themselves would not lead on to initiation or recurrence of drug use. Rather, a better sense of efficacy is fostered when the youth is guided to see that their cognitions and reactions to the situation may be more instrumental in leading to emotional distress and thereby weakening their resolve to stay drug free. Alternative and more adaptive beliefs and cognitions as well as assertion skills may be enhanced as when needed. In promoting skills of the youth in combating drugs, it is a useful exercise to consider the following when appropriate:

- What concrete, factual evidence supports or refutes your automatic thoughts/beliefs about drug use?
- Are there other ways you could view the situation? Could it be a blessing in disguise to stimulate you to learn more adaptive ways of handling your problems?
- In distressing and high-stress situations, what is the worst thing that could happen? What is the best thing? What is most likely to realistically happen? So are your fears too extreme and you might be reacting too impulsively?
- What constructive action can you take to deal with the situation?
- What are the pros and cons of changing the way you view the situation?
- What advice would you give your best friend in this situation?

Communication skills training has sometimes been profitably incorporated into therapeutic sessions. Targeted interventions on specific personality weaknesses had been reported to be useful [9]. Various other procedures have been found to be useful, including group sessions and support, developing a drug-free buddy system, developing a mind to seeking help when relapse is imminent, identifying with a higher power, seeking religious faith, learning to face life difficulties and accepting some things cannot be changed.

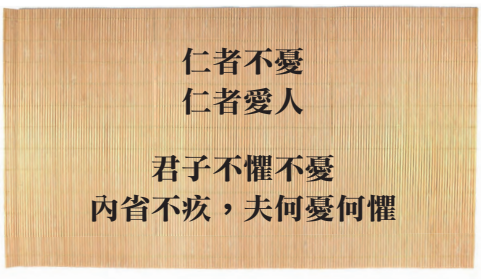
Role of positive prevention

Not all youths are susceptible to the lure of drugs. Drugs only find their leeway into vulnerable and disadvantaged youths. As a longer-term prevention strategy, character development as a lifelong enterprise would hold great promise as a useful prevention and life enhancing process. Peterson and Seligman advocated development of lifelong character strengths from childhood [10], including:

- Courage
- Interpersonal skills
- Rationality
- Insight
- Optimism
- Honesty
- Perseverance
- Realism
- Capacity for pleasure
- Altruism
- Putting troubles into perspective
- Future-mindedness
- Happiness
- Tolerance of ambiguity and negative emotions
- Finding purpose.

Likewise, Zimbardo emphasises life-long training to enhance awareness and possibilities of every youth's potential to become "ordinary" or "everyday life heroes" [11]. Armed with strengths of character and the mission to become ordinary heroes, drugs would have much less freeway into the youth's budding life.

In the richness and great depths of Chinese culture, it is also easy to find prescriptions for a good and thereby drug-free life. Confucius talks about:



In conclusion, while we have established a better grasp of the inherent pathological processes underlying a youth's drug use, prevention, ultimately, is a more cost-effective and rewarding strategy. Our modern day youths would benefit greatly starting from very early days onwards being helped to develop a sense of purpose, service, meaning, and happiness in their lives.

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TEAM APPROACH

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Combating drug abuse is a complicated issue. Let us take a teenager attending secondary school as an example for illustration. Prevention is always better than cure. We need to prevent him from coming into contact with drugs. Legislation serves to declare what types of drugs are illegal to take and to possess, while trafficking results in a much heavier penalty. The Customs and Excise Department, together with the Police, prevent the import of illegal drugs, their wholesale and their illegal uses. From school and parents, the teenager learns about the harmful effects of drug abuse. He also learns refusal techniques to stay away from peer pressure. Extramural activities and alternative life experiences are organised by various government and non-government organisations. If our teenager is so unlucky as to become addicted, there are various treatment and rehabilitation facilities for his detoxification and reintegration into school and society. Traditionally, doctors usually play a more active and important role in this part of the battle against drugs.

The five-pronged anti-drug policy of the government

Among various departments, the Action Committee Against Narcotics (ACAN) under the Narcotics Division of the Securities Bureau is one of the organisations responsible for the planning and coordination of beat drug activities. In October 2007, the Chief Executive in his Policy Address announced the appointment of the Secretary for Justice, who is also the Deputy Chairman of the Fight Crime Committee (FCC), to lead a high level inter-departmental task force to tackle the youth drug abuse problem. This illustrated the recognition of the importance of team work in the approach to drug problems. The task force consulted widely through existing fight-crime and antidrug networks to consolidate strategies to combat the problem from a holistic perspective. In November 2008, the government released its report to strengthen anti-drug policy under the five-pronged strategy as follows:

- Preventive education and publicity
- Treatment and rehabilitation
- Legislation and law enforcement
- External cooperation
- Research

Some important team members in the treatment and rehabilitation services

The medical profession can help to various extents in all of the five prongs of the beat drugs strategy. However, the traditional healing and caring images of doctors place them more in the treatment and rehabilitation prong. Within this prong, it should be stressed that team work is again very important. Like the management of other physical illnesses, the doctor alone usually will not suffice. For example, in managing diabetes, apart from the prescription of oral hypoglycemic, the patient needs laboratory tests, dietary advice, eye checks, foot care and exercise advice. He might also need social workers to take care of his social and financial problems. Managing drug problems in teenagers is no different. Let us have a look at some important members in the team, so that you know who and where to refer, and how to fit in your team. Within the team, Counselling Centres for Psychotropic Substance Abusers (CCPSAs) and Substance Abuse Clinics (SACs) are the two most useful ones.

- **Counselling Centres for Psychotropic Substance Abusers (CCPSAs)**

CCPSAs are usually run by social workers and are subvented by the Social Welfare Department. In 2010 there were eleven CCPSAs in different districts of Hong Kong. For the management of young drug abusers, if you don't know where to seek help or where to refer, CCPSA would be the first choice. We can learn about the scope of services from the website of the CROSS Centre, which is the CCPSA in Hong Kong Island:

Objectives

1. *To assist clients' drug detoxification through counseling and community medical service.*
2. *To develop resilience, self-confidence and to restructure a healthy lifestyle among those with a high vulnerability towards drug abuse.*
3. *To promote anti-drug prevention educational program in the community to enhance drug-related knowledge and awareness.*
4. *To provide professional training for social workers, teachers or other related professions to allow for a more effective management of drug abuse cases.*

Service Description

1. Counseling Service
   - *Individual and group counseling intervention on drug detoxification and relapse prevention.*
   - *Family counseling, skills training program, group activities, voluntary services and career counseling.*
2. Community Education Service
   - *To liaise with the local community and secondary schools to promote healthy lifestyle and anti-drug messages for youngsters.*
3. Professional Training
   - *To organize training programs for youth workers, teachers or other related professions to enhance their capacity on early identification and handling of adolescents' drug abuse problems.*
4. Outreaching Service
   - *Reaching out to "black spots" to provide counseling and anti-drug education to high risk individuals or youngsters with drug abuse problems.*

The Hong Kong Medical Association (HKMA) has liaised via its Beat Drugs Action Committee (BDAC) and its Community Networks with the eleven CCPSAs with doctors in the corresponding districts. You can join the regular lunch meetings with workers from the CCPSA of your district or you can ask your district network coordinators for contacts and cooperation projects with your CCPSA. Since 2009, funds have been allocated to CCPSAs for the purchase of medical services. More local cooperations between CCPSAs, doctors and the HKMA are expected.

• Substance Abuse Clinics (SACs)

The SACs are like specialist OPDs. They are usually run by psychiatrists in hospitals. The seven substance abuse clinics, run by the Hospital Authority, accept referrals from CCPSAs, voluntary agencies and other health care providers, as well as patients seeking service direct from them. Services include drug treatment, counselling and in some cases, psychotherapy. They mainly deal with drug abusers with more serious problems such as psychiatric complications and serious intoxication where in patient treatment is necessary.

There are now initiatives of better coordination and cooperation among various departments in the hospitals (these include the A&E department, the urologists and the SAC), CCPSAs and private doctors in the district.

• Drug Treatment and Rehabilitation Centres (DTRCs)

The DTRCs mainly provide residential treatment for drug abusers. They are run by 17 NGOs (20 subvented by the Department of Health or Social Welfare Department; 20 non-subvented). The voluntary in-patient / residential drug rehabilitation programmes, run by the Caritas – Hong Kong, the Society for the Aid and Rehabilitation Drug Abusers (SARDA), the Hong Kong Christian Service and Christian therapeutic agencies, cater to the needs of those drug dependant persons who wish voluntarily to seek residential treatment, rehabilitation and social reintegration. Since drug abusers from varying background have different needs for treatment and rehabilitation services, a range of programmes using different treatment models have been developed.

• Drug Addiction Treatment Centres (DATCs)

The compulsory placement programme, run by the Correctional Services Department, caters to drug dependent persons who are convicted of relevant offences, not necessarily drug-related, and are considered by the courts to be suitable for treatment under the

programme. The treatment programme aims at preparing inmates for their reintegration into society without relapsing into drug abuse.

• Methadone Treatment Programme and Clinics (MTPs)
The out-patient methadone treatment programme, operated by the Department of Health, provides both methadone maintenance and methadone detoxification programmes. By blocking their craving for opiate drugs, methadone helps to reduce illicit self-administration of such drugs by opiate abusers. Patients may choose to be maintained on methadone if they are unable to attain total abstinence, or to be detoxified through gradual reduction in the methadone consumed.

• Doctors, schools, and homes
Apart from the above named centres, don't forget about inter-specialty cooperation within the medical profession. Private psychiatrists can deal with psychiatric complications and comorbidities of the drug abusers. Some psychiatrists and centres also provide detoxification and counselling programmes.

Although confidentiality is very important in the management of young drug abusers, some abusers are accompanied by family members when they see the doctor. And at some of the stages, it is beneficial to the abusers if their family members are involved to provide support and monitoring. It may be necessary to make special arrangements with the schools so that lessons are not disrupted. All these issues are usually dealt with by social workers from the CCPSAs. However, doctors should be aware of them as team members.

Doctors as a team member in treatment and rehabilitation

Doctors have always been involved in beat drugs activities. Some of them do voluntary works in their out of office hours. They give public talks and school talks in prevention education. They visit DTRCs and help deal with the medical problems of the residents. They provide counselling for the abusers. Some doctors help abusers as part of their daily work. They can be psychiatrists in SACs, private psychiatrists or urologists in the treatment of bladder problems of ketamine abusers.

Recently, there have been insights in involving all doctors, particularly family doctors, in the battle against drug abuse during their daily work. Nearly all citizens see a doctor at some time in their lives. If there is high vigilance among doctors, we can help greatly in the identification and the management of early drug abuse. Because of the relationship with his patients, his training in behavioural modification and the confidentiality between doctor and patient, there is now recognition of the role and importance of family doctors in beating drugs, the screening, the early identification, the management, the monitoring and the rehabilitation. This strategy was also put down in the Fifth Three-year Plan on Drug Treatment and Rehabilitation Services (2009-2011):

Recommendations 5.10

- *Family doctors are primary health care providers at community level. They are often the first point of contact for a person who starts to develop or has developed various symptoms arising from drug abusing behaviour, and hence can play a powerful role in identifying drug abuse problems or potential problems, and intervening as appropriate.*
- *Funded by the Beat Drugs Fund (BDF), the Professional Training Programme for Family Doctors will commence in 2009 to strengthen the role of family doctors in drug treatment and rehabilitation.*
- *The ultimate objective should be mainstreaming and integrating drug abuse screening and intervention into the routine practice and healthcare setting of family doctors and the primary healthcare system.*

Recommendations 5.29

- *As mentioned in paragraph 5.10, the Professional Training Programme for Family Doctors will commence in 2009. Under the Programme, professional training together with a manual will be provided to participating family doctors to enhance their awareness of the drug abuse problem, equip them with the necessary drug knowledge and skills to screen, advise or refer patients who have drug abuse problems to the relevant treatment services, hence widening the community network for early intervention.*

Examples of team work projects

CCPSAs and HKMA

C 醫 PA
"C" CPSAs " 醫 " Partnership Arrangement

- Started in March 2009

CCPSAs

Tung Wah Group of Hospitals CROSS Centre – Central Western, Southern and Islands District Office

Tung Wah Group of Hospitals CROSS Centre – Eastern and Wanchai District Office

Hong Kong Lutheran Social Service Evergreen Lutheran Centre

Hong Kong Lutheran Social Service Rainbow Lutheran Centre

Hong Kong Christian Service PS33 – Tsimshatsui Centre

Hong Kong Christian Service PS33 – Shamshuipo Centre

Hong Kong Children & Youth Services – Sane Centre

Caritas HUGS Centre

Evangelical Lutheran Church Hong Kong Enlighten Centre

Hong Kong Sheng Kung Hui Welfare Council Neo-Horizon

Hong Kong Lutheran Social Service Cheer Lutheran Centre

HKMA Community Networks

- Hong Kong East Community Network
- Central, Western & Southern Community Network
- Kowloon East Community Network
- Kowloon City Community Network
- Kowloon West Community Network
- Yau Tsim Mong Community Network
- Shatin Doctors' Network
- Tai Po Community Network
- New Territories West Community Network
- Sai Kung Community Network
- North Community Network

Project MAC

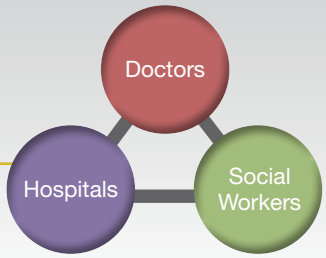
Organized by Tung Wah Group of Hospitals CROSS Centre
Funded by the Beat Drugs Fund
A pilot scheme between medical practitioners and NGOs

- Started in March 2008

The aim is to render early intervention for young drug abusers through body check-ups and consultations

*Source: Tung Wah Group of Hospitals CROSS Centre

Your Health, Our Concern



- Started in March 2009

Tai Po

Co-organizers:

HKMA Tai Po Community Network
Alice Ho Miu Ling Nethersole Hospital
Tai Po Hospital
Hong Kong Council of Social Service
Hong Kong Children & Youth Services
Hong Kong Lutheran Social Service
Salvation Army
Yan Oi Tong
Evangelical Lutheran Church of Hong Kong

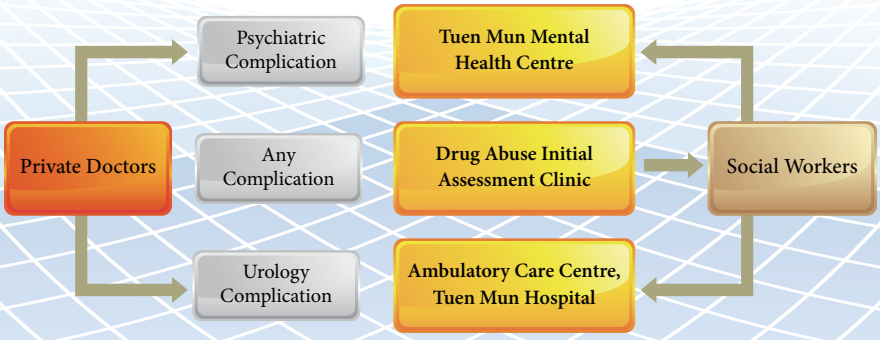
Supporting organization:

HKMA

Tuen Mun

1. Current network:
   - For psychiatric problems: refer to Substance Abuse Clinic of Tuen Mun Mental Health Centre
   - For urological problems: refer to Tuen Mun Hospital Ambulatory Care Centre Urology
2. Additional to the current network:
   - For any medical and social problems: refer to Drug Abuse Initial Assessment Clinic (DAIAC) of Accident & Emergency Department of Tuen Mun Hospital
   - call designated phone number
   - you will be given a very early appointment within 1 week
   - you will be provided clinical, laboratory and imaging assessment
   - you will then be directed to other specialties as indicated, e.g. psychiatry, urology, social workers.
   - The DAIAC can provide early initial identification of complications, and early notification of the complications to other receiving specialties. Certainly, the private doctors can keep on utilising the current referral network but the earlier waiting time of the DAIAC will facilitate earlier intervention, and the DAIAC can help with referral to social workers.

Referral pathway for drug abuse cases (from private doctors)



THE REFERRAL SYSTEM: COUNSELLING CENTRES FOR PSYCHOTROPIC SUBSTANCE ABUSERS (CCPSAs) AND OTHERS

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The Fifth Three-year Plan on Drug Treatment and Rehabilitation Services in Hong Kong (2009–2011) stated that the Hong Kong Government adopted a multi-modality approach to cater for the different needs of drug abusers from varying backgrounds and circumstances. The services can be grouped into the following categories:

1. Counselling Centres for Psychotropic Substance Abusers (CCPSAs) subvented by the Social Welfare Department (SWD) provide counselling services and other assistance to psychotropic substance abusers and youth at risk.
2. Substance Abuse Clinics (SACs) run by the Hospital Authority (HA) provide medical treatment to substance abusers with psychiatric problems.
3. Residential drug treatment and rehabilitation centres and halfway houses (DTRCs) run by 17 Non-Governmental Organizations (NGOs). Twenty of them are subvented by Department of Health or SWD whereas 19 are non-subvented. All except three are currently providing services to young drug abusers as well as adult abusers.
4. Compulsory drug treatment programme at Drug Addiction Treatment Centres (DATCs) operated by the Correctional Services Department (CSD) for persons of 14 years old or above who are convicted and simultaneously addicted to drugs.

This paper introduces the counselling services provided by the CCPSAs for and the referral procedures between the services and the medical profession.

The services of the CCPSAs

As stated in the SWD Funding and Service Agreements, the CCPSA is a non-residential drug treatment and rehabilitation service which aims at providing counselling and assistance to those who are occasional/habitual psychotropic substance abusers and to young people who are at risk, with a view to assisting them to abstain from abusing psychotropic substance.

The service objectives include the following:

1. Help the substance abusers abstain from their drug-taking habits and develop a healthy lifestyle
2. Increase the drug awareness of those vulnerable to drug abuse and to steer them away from drugs
3. Reach out to black spots frequently visited by young psychotropic substance abusers for timely and early intervention
4. Provide counselling and assistance to family members of substance abusers so as to help them deal with the problems
5. Provide professional training for allied professionals with a view to facilitating their assistance to psychotropic substance abusers.

The services of the CCPSAs include a package of individual counselling, group activities and support programmes. The service design adopts the Community Reinforcement approach and the Transtheorectical Model of Change. They also actively integrate the local frontline context in formulating treatment plans.

The major services provided by the centre include the following:

I. For target psychotropic abusers
   1. Counselling service for individuals. Activities include case assessment and treatment plan, individual counselling and family counselling, case referral for residential and vocational service and aftercare plan.
   2. Intra-personal group and inter-personal skill groups. They include orientation groups to enhance self-motivation on drug treatment, cognitive behavioural therapy (CBT) coping skill training, anger management, relapse prevention, assertiveness skills and cognitive restructuring.

3. Life and social development groups. They include social skills training, vocational counselling and training groups, band groups, and adventure base training groups.
4. Therapeutic groups. They include inpatient psychiatric care groups, pre-inpatient plan groups, and motivational enhancement therapy groups for people with co-morbidities.
5. Aftercare group. This includes spiritual support groups, peer counselling groups, life-style planning groups, volunteer groups, and Christian fellowship groups.

Source: Hong Kong Lutheran Social Service

II. For psychotropic abusers' family members
Family groups and programmes. They include parents' mutual support groups, orientation for parents, talks or intake in the community for parents, family therapy groups, and counselling groups for special needs families.

III. For the community and allied professionals
1. Drug prevention programmes for secondary schools. They include specific group and programmes tailored for high-risk students, talks, workshops, health checks on accurate drugs information, training on refusal to bow to peer pressure, assertive skills training, and training on information related to law enforcement.
2. Community education and prevention programmes. They include workshops, seminars, community programmes on harmful effects of drugs and resisting drugs skills, to be distributed to at-risk and hard to reach youth, parents, family members, general public and stakeholders.
3. Professional training. They include workshops, seminars, sharing sessions on drugs trends and effects, drugs abuse problems, strategies, and new treatment models for youth workers, teachers or allied professionals.

To meet the ever-changing drugs abusing scene and problems, the CCPSAs provide a wide range of services from prevention, education, to treatment for the general community, the occasional psychotropic substance abusers, habitual psychotropic substance abusers and their family members.

In the second part we will discuss more on the referral system.

The referral system and the collaboration

The existing CCPSAs provide services on a geographical basis. There are at present seven CCPSAs in Hong Kong which are operated by six different NGOs. The names, contacts and the location are listed below:

Agency	Major servicing district	Telephone contact
Caritas HUGS Centre	Tuen Mun, Kwai Tsing and Tsuen Wan	2453 7030
Hong Kong Christian Service PS33	West Kowloon District	2368 8269
Hong Kong Lutheran Social Service Cheer Lutheran Centre	Tai Po, North District	2660 0400
Hong Kong Lutheran Social Service Evergreen Lutheran Centre	East Kowloon District	2712 0097
Tung Wah Group of Hospitals CROSS Centre	Hong Kong Island	2884 1234
Hong Kong Sheng Kung Hui Welfare Council Neo-Horizon	Shatin	8202 1313
Evangelical Lutheran Church of Hong Kong – Enlighten Centre	Yung Long, Tin Shui Wai	2446 9226

The existing referral procedures may vary slightly at different NGOs. In general, all CCPSAs accept telephone contacts as the first contact points. However, most of the service recipients will go through the following procedures:

	Abusers self referral	Referral by professional
First contact	– to make first contact by telephone – arrange the first interview appointment	– to make first contact by telephone – referral form sent by referrer – to arrange the first interview appointment by a CCPSA social worker
Initial assessment	– interview by social worker to assess the abuser's situation and problems – physical assessment by medical professionals may be required	– interview by social worker to assess the abuser's situation and problems – with the abuser's consent, health situation of the abuser may be provided by medical professionals
Contracting	– treatment plan to be agreed with clear treatment objectives	– a mutually agreed treatment plan by the clients and the professionals
Treatment plan	– individual counselling, groups, activities, family and other professional involvement	– a mutually agreed treatment plan by the clients and the professionals
Relapse prevention and integration into the community	– mentoring, supportive groups, relapse–prevention groups, and or vocation trainings	– follow – up with after – care plan

As the services of CCPSAs are going through rapid changes in the past few years, the collaboration between medical professionals and social workers of CCPSAs has increased significantly. New mechanism and collaboration are deemed not just desirable but necessary. This paper can only serve as an initial discussion between two stakeholders. With the urgent tasks of helping the substance abusers, their families, and the community, we believe that continual collaboration will bring along the improvement and better coordination for the services.

Source: Hong Kong Lutheran Social Service