

# **Strategies for Preventing Drug Recidivism** Cycle in Taiwan

Jih-Chiao Chu, Hsien-Chi Cheng, Jennifer (Lin-Lin) Khoo, Chieh-Hsiung Chang, Jin-Yi Chiou and Chun-Sheng Chien<sup>†</sup>

Drug abuse is currently a worldwide problem and Taiwan is no exception. Drug abuse is a disease that must be treated on the basis of evidence (United Nations Office on Drugs and Crime 2007; World Health Organisation 2004). In order to reduce the damage caused by drug abuse to the nation, society and people, the government not only developed two anti-drug strategies - that of supply eradication and demand reduction - but since May 1994, has mobilised relevant government departments to take assertive action. Some of the actions include law enforcement enhancement, anti-drug enforcement and drug rehabilitation utilisation. In 2005, new anti-drug programs, such as the sterile needle exchange program and substitution therapy program, were also introduced. The cities implementing the Harm Reduction Program (HR Program) showed lower HIV infection rates in comparison to others without the HR Program. The income and employment conditions of drug addicted patients receiving Methadone Maintenance Treatment have been improved. The future drug policies in Taiwan will focus on drug rehabilitation (treatment), anti-drug actions (prevention) and law enforcement (punishment). The educational system, community recovery and aftercare for drug addicts will also be indispensable (WHO/UNODC/UNAIDS 2004).

## Introduction

In recent years, the use of illegal drugs has become a major problem on which the Ministry of Justice (MOJ) continues to focus. Because the methods and sources of obtaining illegal drugs are so broad, the regulation of controlled drugs needs to be continuously revised in order to effectively control and prevent drug abuse. The

<sup>†</sup> National Bureau of Controlled Drugs, Dept of Health, R.O.C. (Taiwan)

MOJ strongly believes that the Three Reduction Strategy (World Drug Report 2007), which includes 'Demand Reduction', 'Supply Reduction' and 'Harm Reduction', is the most suitable method to solve today's controlled drug abuse problem and to stop the recidivism cycle in Taiwan. Unlike traditional imprisonment, the Three Reduction Strategy treats illegal drug criminals psychologically and physiologically. This strategy is more effective in preventing recidivism.

## Drug related crime trends and recidivism in Taiwan

Changes in the types of drugs abused in Taiwan in recent years are shown in Table 1. With the development of Taiwan's economic and social structure, drugs are easier to obtain via convenient international transmission. Table 1 shows the drug types seized by year of seizure. The amount of schedules 1 and 2 controlled drugs (heroin and amphetamines) seized by police decreased in 2005 but the schedule 3 controlled drugs (ketamine and nimetazepam) increased in recent years, while the schedule 4 controlled drug (pseudoephedrine) is now ranked in the top five, which was not the case prior to 2004.

These data indicate that the laws regulating controlled drugs need to be revised to include clear and strict regulation of schedules 3 and 4 controlled drugs as well. However, updating the controlled drug regulation policy is not enough. Anti-drugs enforcement laws need to be updated as well, to enforce the regulation. On May 20, 1998 (Laws and Regulations Database) the *Drug Prevention and Control Act* required that users of schedules 1 and 2 controlled drugs be identified as both 'patient' and 'convict'. The *Act* called these drug users 'prison patients' and stated that psychological treatment and physiological treatment are both needed to help them in their rehabilitation period. The *Act* also stated that the rehabilitation treatment should have three separate periods; the adaptation period, the psychological guidance period and the social adaptation period. In addition to these changes, the 'Conditioned Punishment but Permanent Criminal Record' policy was established by the *Act* as well.

In July 2003, the *Drug Prevention and Control Act* added an ordinance that defined schedule 4 controlled drugs. This change in the *Act* strengthened the controlled drug regulation along with the use of the *Controlled Drugs Regulation Act*. In addition to this change, the 'People Under Custody' option was removed from the *Act*.

Table 1: Rank order of drug categories based on the amount seized by police (1999 ~ 2006)

Year	Rank order of drug categories based on the weight kg									
Icai	1	2	3	4	5					
1000	(Methyl) amphetamine	Heroin	Cannabis	Secobarbital	MDMA					
1999	1,215.1	107.8	47.9	9.0	3.25					
2000	(Methyl) amphetamine	Heroin	Cannabis	Phenylpropanolamine	MDMA					
2000	835.3	277.0	74.0	6.0	4.9					
2001	(Methyl) amphetamine	Heroin	Cannabis	MDMA	Ketamine					
2001	1,421.0	362.5	107.0	44.7	9.5					
2002	(Methyl) amphetamine	Heroin	Tramadol	MDMA	Ketamine					
2002	1,298.1	599.1	147.2	132.6	63.2					
2002	(Methyl) amphetamine	Ketamine	Heroin	MDMA	Cannabis					
2003	3,980.5	600.5	532.6	405.6	121.2					
2004	(Methyl) amphetamine	Heroin	Ketamine	Ephedrine	MDMA					
2004	3,165.5	644.5	613.4	363.6	303.3					
2005	Ephedrine	(Methyl) amphetamine	Ketamine	Nimetazepam	Heroin					
2005	6,605.5	1,728.6	441.2	432.9	341.1					
2006	Ketamine	Ephedrine	Nimetazepam	Heroin	(Methyl) amphetamine					
2006	1,121.6	338.0	216.7	209.1	195.8					

Sources: MJIB(MOJ), NPA(MOI), MPC(MOD), CGA(Executive Yuan) and DGC(MOF).

#### Notes:

- (1) The table mainly covers cases in the justice system. The drugs seized at the customs are all transferred to MJIB or NPA for investigation. Total amount seized in 2006: 1,056kg.
- (2) Classifications based on 'Statute of Narcotics Hazard Control'. Some of the level 3 and level 4 drugs are not included due to the limited space.
- (3) The weights are measured by grams and rounded to kilograms. Please note that there might be slight difference to the actual weights.
- (4) For better data accuracy, for the cases executive by more than one apparatus, the performance audit will only count for the leading party.
- (5) (p) means rough statistics.
- (6) The measurements on weight of drugs seized is consistent with the international standards by weight and pure drugs since January 2006. Level 1 drug opium, Level 2 non-synthesis drugs, poppy, cocaine, and marijuana go by net weights.

The capacity of traditional imprisonment to permanently prevent illegal drug criminals from using or dealing drugs is limited (Min-Chieh Lin 2006). According to the data provided by the Ministry of Justice, the number of illegal drug criminals who relapsed after imprisonment is very high. Table 2 shows the statistics for recidivism amongst all convicted narcotics-related offenders, while Table 3 shows the statistics for recidivism amongst first time offenders in Taiwan for the years, 2002 to 2006.

Table 2: Recidivism amongst all cases for narcotics-related offences convicted by the Court in Taiwan from 2002 to 2006

	2002	2003	2004	2005	2006
Cases for narcotic-related offences convicted by the court	11,856	12,677	14,640	22,540	24,545
Recidivists for narcotic-related offences convicted by the court	9,823	10,402	12,101	19,102	21,536
Recidivists under the same accusation	7,780	8,368	9,903	15,873	18,568
Recidivism rate (%)	65.6	66.0	67.6	70.4	75.6

Source: 1st edition, June 2006, Anti-Drug Report, Ministry of Justice, Executive Yuan, R.O.C. (Taiwan)

Table 3: Recidivism amongst new cases for narcotic-related offences imprisoned in Taiwan from 2002 to 2006

	2002	2003	2004	2005	2006
New cases for narcotic-related offences imprisoned	5,844	5,988	10,946	10,988	12,419
Recidivists for narcotic-related offences	4,126	4,482	8,382	8,922	11,056
Recidivism Rate (%)	70.6	74.8	76.6	81.2	89.0
Drug Users	4,974	5,135	9,955	10,039	11,134
Drug-used Rate (%)	85.1	85.8	90.9	91.4	89.7
New cases for offences of illegal use of Schedule I Drugs imprisoned	2,842	3,867	7,587	7,428	8,953
Recidivists for narcotic-related offences	2,105	2,982	5,877	6,200	8,194
Recidivism Rate (%)	74.1	77.1	77.5	83.5	91.5
Drug Users	2,538	3,497	7,103	6,963	8,326
Drug-used Rate (%)	89.3	90.4	93.6	93.7	93.0
New cases for offences of illegal use of Schedule II Drugs imprisoned	2,965	2,080	3,253	3,466	3,265
Recidivists for narcotic-related offences	2,005	1,480	2,446	2,692	2,760
Recidivism Rate (%)	2,436	1,638	2,852	3,076	2,808
Drug Users	67.6	71.2	75.2	77.7	84.5
Drug-used Rate (%)	82.2	78.8	87.7	88.7	86.0

Source: 1st edition, June 2006, Anti-Drug Report, Ministry of Justice, Executive Yuan, R.O.C. (Taiwan)

According to data collected from the Taiwan Anti-Drug Conference in the years, 2002 to 2006, the arrest for illegal drug use is over 90%. Table 4 shows the statistics for illegal drug arrests and the percentage for illegal drug use.

Table 4: Cases only for Offences of Illegal Ues of Narcotic Drugs among the new ones for Narcotic-related Offences Investigated by Police in Taiwan from 2002 to 2006

	2002	2003	2004	2005	2006
New Cases for Narcotic-related Offences Investigated by Police	56,207	54,341	68,713	85,970	76,068
Offences of Illegal Use of Schedule I Drugs	28,616	31,383	41,969	50,107	48,854
Offences of Illegal Use of Schedule II Drugs	27,485	22,700	26,202	35,355	26,393
Offences of Illegal Use of Schedule III Drugs	67	136	306	308	490
Offences of Illegal Use of Schedule IV Drugs	0	0	0	12	41
Offences of Illegal Use of Other Illegal Drugs	39	122	236	188	290
Cases for offences of Illegal Use of Narcotics (Includes Concurrent Use)	51,409	49,490	63,281	79,076	67,944
Drug-used Rate of All Suspects (%)	91.5	91.1	92.1	92.0	89.3

Source: 1st edition, June 2006, Anti-Drug Report, Ministry of Justice, Executive Yuan, R.O.C. (Taiwan)

Among the persons convicted for illegal drug offences, convictions for drug use outnumbered convictions for drug sales and drug smuggling. Table 5 shows that more than 50% of persons convicted of illegal drug offences are drug users only. These data suggest that a law which will provide more effective regulation of illegal drug use and more effective rehabilitation is required (David 2004).

Table 5: Illegal drug use among cases for narcotics-related offences in Taiwan from 2002 to 2006

Cases for Narcotic-related	2002		2003		2004		2005		2006	
	No.	%								
Cases for offences of Illegal										
Manufacturing and Trafficking of										
Narcotic Drugs imprisoned	4,115	25.2	4,333	27.1	4,684	25.2	4,868	24.6	5,115	24.7
Schedule I Drugs	1,802		1,999		2,353		2,623		2955	
Schedule II Drugs	2,309		2,323		2,306		2,168		1,998	
Cases for offences of Illegal Narcotic	11,244	68.9	10,825	67.6	12,929	69.5	13,930	70.4	14,465	70.0)
Drugs Use imprisoned										
(include two conditions below)										
Concurrent Use	2,187	13.4	1,934	12.1	1,694	9.1	1,663	8.4	1,264	6.1
Schedule I Drugs	1,351		1,227		1,098		1,071		816	
Schedule II Drugs	7,067		7,536		9,516		10,245		11,615	
Only Use	9,057	55.5	8,891	55.5	11,235	60.4	12,267	62.0	13,201	63.9
Schedule I Drugs	836		707		594		584		441	
Schedule II Drugs	1,990		1,355		1,719		2,022		1,586	
Summary	16,321	100.0	16,013	100.0	18,599	100.0	19,775	100.0	20,671	100.0

Source: 1st edition, June 2006, Anti-Drug Report, Ministry of Justice, Executive Yuan, R.O.C. (Taiwan)

## **Drug Policy in Taiwan**

These data show that there is a need to revise and improve Taiwan's current anti-drug policy to stop recidivism. This has led the Department of Health to promote the 'Substitution Maintenance Therapy' strategy designed to help drug addicts quit drug abuse. The Substitution Maintenance Therapy strategy falls under the Harm Reduction component of the Three Reduction Strategy policy. It is believed that the use of this therapy not only benefits the addicts themselves, but also society as a whole.

Unlike traditional imprisonment, the Substitution Maintenance Therapy provides psychological and physiological assistance to drug addicts. Psychological treatment helps build confidence and physiological treatment helps addicts refrain from drug abuse slowly and with less pain. In addition to these two components,

Substitution Maintenance Therapy allows illegal drug addicts to stay as free citizens during their rehabilitation period. They usually stay with family members or friends and gain support from them. It is believed that having such supports influences the success rate of the rehabilitation and reduces the rate of recidivism. Also, data have shown that the successful rehabilitant's employment rate improved from 50% to 65%, and monthly income increased from NT\$20,000 to NT\$ 28,000 in the year of 2006. (Substitution Maintenance Therapy Program, Taoyuan Mental Hospital, Department of Health, Executive Yuan, Taiwan). This demonstrates that the Substitution Maintenance Therapy not only helps addicts refrain from illegal drug use, but also helps them build a future.

Drugs have caused extensive damage around the world, both in highly advanced countries and in developing countries as well. Drug abusers who have limited knowledge of AIDS tend to share needles, diluents and their containers and as a result, the rate of HIV infection has grown rapidly. According to statistics from the Center for Disease Control (Department of Health, Executive Yuan, Taiwan), from January to December 2006, approximately 60% of the new HIV infected patients were drug addicts.

The social issues brought about by drug abuse and the large social costs thus incurred have made drug prevention a key policy issue for every country in the world. Except where issues of criminal liability are involved, the trend has been to view drug addicts as 'patients'. Research indicates that the reason for a recurrence of drug addiction is related not just to physical needs and dependency. Instead, there are complicated factors behind the addiction, such as mental, behavioral, familial and social factors as well as personal relationships. Addiction relapse therefore needs to be viewed as a type of chronic disease, with treatment as 'long-term recovery'. Thus, in addition to the rehabilitation enforced by the judicial system or voluntary treatment provided by health institutions, a complete treatment model is strongly Treatment needs to be extended, collaborating with non-government organizations to provide drug abusers with a protective environment. In addition to helping substance abusers recreate a lifestyle and adapt to the society, we need to provide them with a comprehensive, continuous rehabilitation treatment to make sure they can return to society with a stable physical and mental status to prevent relapse.

When Substitution Maintenance Treatment (which fits under the Harm Reduction strategy) meets its mission of rehabilitation, the Reduction Triangle can reach its equilibrium position and balance with regard to the illegal drug problem in Taiwan. A demonstration is provided. In the Substitution Maintenance Treatment, a substitute drug, such as methadone or buprenorphine, is used to replace illegal narcotic drugs. In turn, this reduces the need for those narcotic controlled drugs such as heroin, and thus, demand reduction is achieved. And when demand is reduced, supply will be reduced as well, and the Reduction Triangle is balanced (Jih-Chiao Chu 2007).

Substitution Maintenance Therapy does not just benefit drug addicts but also the society. If Substitution Maintenance Therapy was enforced instead of imprisonment, then the prison over-populated problem that has been challenging many nations could be solved (Shih-Lung Yang 1995). Solving the over-population problem would allow the justice system to be more objective when sentencing, with shorter sentences being given. Jail space could be used to confine criminals who cause more serious harms and threats to the society (which accords with Harm Reduction).

Harm Reduction, Supply Reduction, and Demand Reduction together form a model called the 'Reduction Triangle' (see Figure 1). These are positioned at the three vertices while the triangle is used to demonstrate the connections between each point and to show that these three points together help explain the impact that illegal drug abuse brings to society, to its citizens and to the abuser themselves (see Figure 2). For example, cutting a single line of the triangle - reducing only a single factor (vertex) - will still lead to drug problems to the other two vertices and so will just produce heavier problems in different ways. Harm Reduction is the basis for Supply Reduction and Demand Reduction.

Figure 1: The Reduction Triangle

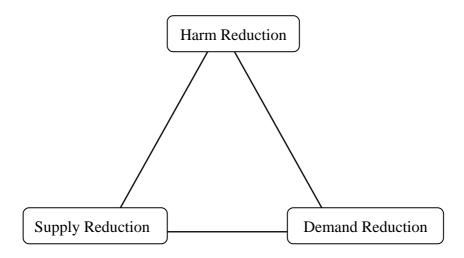
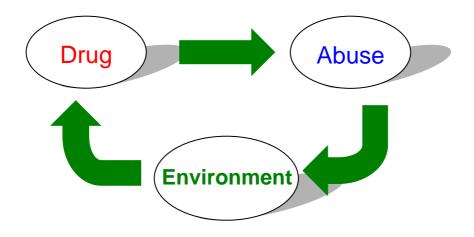


Figure 2: Three major factors for preventing drug recidivism



## Maintenance Therapy as a treatment option

From 2003 to 2005, the AIDS infection rate in Taiwan doubled, which is the worst it has been in history. The main reason is the sharing needles by drug abusers. In 2005, 70% of the new AIDS infection cases involved drug addicts, which again is the

highest level in history. Sharing needles by drug addicts has become a major crisis in AIDS prevention in Taiwan (Center of Disease Control, Department of Health, Executive Yuan, Taiwan). In response to the changing epidemic situation, the Department of Health has learnt from the successful experience of UK, Australia and Hong Kong and introduced the 'Harm Reduction' approach. This has been fully supported by Executive Yuan. On December 6th 2005, the Drug Addicts Harm Reduction Test Project was enacted with Maintenance Therapy as one of its key policies. Initially Maintenance Therapy was performed in six hospitals in Taipei City, Taipei County, Taoyuan County and Tainan County. The first review and evaluation was conducted six months afterwards and concluded in the affirmative. Due to the severe proliferation of AIDS, the second phase of the project commenced ahead of schedule in July 2006 (2007 Anti-Drug Report, Minister of Education, Minister of Justice, Department of Health, Executive Yuan, Taiwan).

Until January 4<sup>th</sup> 2007, 19 hospitals in 22 counties and cities in Taiwan provided Maintenance Therapy services. They have treated 1,146 patients and given 95,225 prescriptions (2007 Anti-Drug Report, Minister of Education, Minister of Justice, Department of Health, Executive Yuan, Taiwan).

From a medical point of view, drug addiction is a disease that needs medical care and alternative choices, such as rehabilitation, to help addicts who are unable to achieve abstinence switch to using less harmful drugs instead of injecting more hazardous drugs. In addition, follow-up counselling, education and rehabilitation are also needed to change the behavioral patterns of drug addicts. Patients can be further helped by providing them with updated information on drug abuse and providing necessary physical, mental and social supports. The patients can soon regain a normal life with complete and continuous professional services provided by the rehabilitation system.

Maintenance Therapy mainly provides the patients with long-term alternative drugs such as methadone and buprenorphine etc., as well as recovery plans, including sanitary education, routine physical and mental health checks, urine tests and group psychological counseling, etc.

To increase the feasibility of Methadone Maintenance Therapy, the Disease Control Bureau of the Department of Health has purchased 23,304 bottles of (1,000ml/bottle) of Methadone, enough for two million prescriptions. This means that AIDS patients and other drug addicts can access methadone for free. To make the best use of limited resources, the Department of Health will give priority to the AIDS patients for free medical care. It will encourage more medical institutions to adopt

Methadone Maintenance Therapy (Center of Disease Control, Department of Health, Taiwan).

In addition, the Disease Control Bureau has invested in a Methadone Maintenance Therapy information system which will audit the amount of methadone used to ensure that there are no overlaps on prescriptions among different hospitals and to control the total amount of methadone used at on national level.

To improve the effect of Maintenance Therapy, the Disease Control Bureau has promoted a Clean Needles Project since August 2005. By the end of 2006, there were 730 locations in 23 cities and counties (see Figure 3) where free clean needles and related counselling were provided, with the aim of avoiding infections via the sharing of needles and also constructing a communication channel with drug addicts, so that when they are willing to receive rehabilitation, they can be transferred to a relevant institutions (Center of Disease Control, Department of Health, Taiwan).

Chang Gung Memorial Hospital, Keelung Taipei City Hospital, Songde Campus \*/STD Control Taipei City Keelung Branch / Keelung Hospital, DOH Laoyuan County Taoyuan Mental Hospital \*/ Armed Bali Mental Hospital, DOH \*/ Cardinal Forces Taoyuan General Hospital \*/ Tien Hospital / Far East Memorial Taoyuan Veteran Hospital\* Taipei County Hospital / Taipei Hospital, DOH Hsinchu City Mackay Memorial Hsinchu County Hospital, Hsinchu Branch\* Yilan County Lo-Tung Boai Hospital oli County Hsin Chu General Hospital, DOH Wei Gong Memorial Hospital \* Taichung City ing County Caotun Mental Hospital, China Medical University Hospital\* Tong General Hospital\* Hualien Armed Forces County General Hospital Hualien County Chunghwa Christian Yunlin County Hospital Chiayi Veteran's Hospital\* Taiwan University Hospital, Yunlin Branch\*/ China Potz Hospital, DOH\* Medical University Hospital, Bei-Kung Hospital / St. Joseph Hospital Tainan County Taitung Hospital, DOH\* Kaohsiung County Chia-nan Mental Hospital, DOH\* / Yung Kang Veterans Taitung County Hospital / Shin-yin Hospital, Tainan Hospital, DOH / Cheng Chang Gung Memorial Hospital, Kaohsiung City Kaohsiung / Tzu Wei Hospital Kung University Hospital / Chi Me Hospital Kaohsiung Kai Suan Psychiatric Hospital\* Pingtung County Antai Tian-Sheng memorial

Figure 3: Geographic Distribution of the Maintenance Therapy Network

Hospital\*

As of the end of December 2006, 450,000 needles had been distributed, giving a rate of 30,000 per week. This involved 74,000 drug addicts (5,000 per week). The rate of retrieving used needles also increased from less than 1% in the beginning to 21%. (Center of Disease Control, Department of Health, Executive Yuan, Taiwan).

The Harm Reduction Project aims to change the approach to drug control amongst social security departments and health institutions via collaboration between the central and the local offices. This has resulted in a reduction in the AIDS infection rate, which is the first time this has occurred since the first AIDS case found in Taiwan. In 2006, the number of new HIV infection cases was 2,942, which was 450 cases less than the previous year, while the percentage of drug addicts in total infection cases dropped from 72% in 2005 to 60% in 2006, thereby indicating that the Harm Reduction Project is an effective prevention strategy. It is predicted that the Harm Reduction Project can reduce the number of new HIV infection cases by 50,000 by the year 2010. This will cut the costs of AIDS medical care by NT\$120 billion. (2007 Anti-Drug Report, Minister of Education, Minister of Justice, Department of Health, Executive Yuan, Taiwan).

There is also the potential to improve the workforce participation rate. In fact, the rate of employment amongst full-time workers before their involvement in the Methadone Maintenance Therapy was 50%. This increased to 70% in the six months after joining Maintenance Therapy. Over the same time period, the average income increased from NT\$20,000 to NT\$28,000 (2007 Anti-Drug Report, Minister of Education, Minister of Justice, Department of Health, Executive Yuan, Taiwan).

The program also seems to have lowered the crime rate, with a significant decrease in the number of relapses amongst heroin abusers. Prior to their involvement with Maintenance Therapy, on average individuals used heroin 36.9 times per week, but this dropped to 0.07 times a week in the six months of commencing Maintenance Therapy. The initial amount of money spent on heroin was NT\$40,000 per week, but this dropped to NT\$600 per week over the same time period (2007 Anti-Drug Report, Minister of Education, Minister of Justice, Department of Health, Executive Yuan, Taiwan).

There has also been an effect on social security. Based on Australia statistics, for every new 100 cases in Methadone Maintenance Therapy, over a one year period there is a reduction of 12 robberies, 57 thefts and 56 automobile thefts (2007 Anti-Drug Report, Minister of Education, Minister of Justice, Department of Health, Executive Yuan). Since the Taiwanese Government introduced and expanded the Methadone Maintenance Therapy from August 2006, there have been 1,066 cases in

therapy (Minister of Justice, Executive Yuan, Taiwan). On the basis of the Australian data, it is estimated that 60 robberies, 285 thefts and 280 motorcycle thefts may have been avoided in one year, which means a 1% decrease in thefts and a 27% decrease in robberies, compared to data for the previous year.

### Conclusion

Drug abuse is a worldwide problem and causes damage to health and personal safety. Taiwan is no exception. Although narcotic drugs are strictly controlled under the regulation of the Controlled Drugs Act and Statute for Narcotics Hazard Control, the situation of drug-related criminals progressively worsens. In order to reduce the damage caused by drugs to the nation, society and people, the government not only developed the Three Reduction strategy, but also took assertive actions, such as law enforcement, anti-drug enforcement and drug rehabilitation, with the emphasis on therapy that combined psychological and physiological elements (McShane and Krause 1993). Figure 4 outlines the strategic approach taken to prevent the drug recidivism cycle.

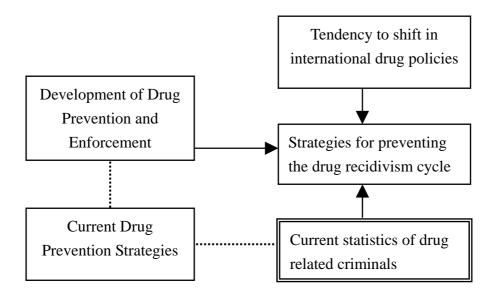


Figure 4: Network of preventing the drug recidivism cycle

The Taiwanese Government's fight against drug abuse was officially launched in May 1993. However, the level of use of 'traditional' drugs continued to increase, while new drugs kept appearing in new forms, stimulated by fast trafficking and distribution. In view of this situation, the existing anti-drug strategies that used to work were no longer proving to be effective. In order to formulate a new strategy and a new outlook, in June 2006 Premier Su from the Executive Yuan called for the first 'Executive Yuan Drug Control Taskforce', which focused on the four inter-connected strategies of 'Drug Resistance', 'Drug Rehabilitation', 'Drug Prevention' and 'Law Enforcement', in the hope that the overall response to drug use would benefit from an integration of resources. These will remain the focus in the future. Education, community recovery, aftercare for drug addicts and multidimensional family support will also be indispensable to prevent a return to drug abuse (WHO 1986).

### References

Centre for Disease Control, Taiwan (Republic of China)

http://www.cdc.gov.tw/ct.asp?xItem=11239&ctNode=1885&mp=220,2007.12.29.

and <a href="http://www.cdc.gov.tw/mp.asp">http://www.cdc.gov.tw/mp.asp</a>, 2007.12.29.

David, S., British Institute of International and Comparative Law (2004) *A Fourth International Convention for Drug Policy. Promoting Public Health Policies*, pp. 36-78, March 2004 <a href="http://www.senliscouncil.net/documents/BIICL\_HR\_Framework">http://www.senliscouncil.net/documents/BIICL\_HR\_Framework</a>

http://www.senliscouncil.net/modules/publications/International\_Convention\_for\_Drug\_Policy,2008.1.2.

Department of Health, Taiwan (Republic of China) http://www.ttpc.doh.gov.tw/,2007.12.29.

Jih-Chiao Chu, Chien-Hsiung Chang, Li-Feng Hsu and Chun-Sheng Chien (2007) *Strategies for Breaking the Drug and Crime Recidivism Cycle in Taiwan* National Bureau of Controlled Drugs, Department of Health, Republic of China (Taiwan).

http://www.nbcd.gov.tw/admin/uploads/20070531093555968753342/Strategies%20for%20Breaking%20the%20Drug%20and%20Crime%20Recidivism%20Cycle%20in%20Taiwan.pdf,2008.1.6.

Laws and Regulations Database, (2007) Taiwan (Republic of China). <a href="http://law.moj.gov.tw/">http://law.moj.gov.tw/</a>, 2007.10.10.

Min-Chieh Lin(2006) 'The Study for Establishment of Substance Abuser Re-abuse Risk Assessment Scale', Research Report of National Bureau of Controlled Drug, Department of Health, Republic of China (Taiwan).

Minister of Education, Minister of Justice, Department of Health, Executive Yuan, Taiwan. (2006) *Anti-Drug Report* June 2007, Republic of China(Taiwan).

McShane, M. D. and Krause, W. (1993) Community Corrections, NY: MacMillan.

Meisenhelder, T. (1977) 'An Exploratory Study of Exiting from Criminal Careers', *Criminology* Vol. 15, pp. 319-334.

http://www.apsu.edu/oconnort/1010/1010lect07.htm,2008.1.4.

Shu-Lung Yang (1995) 'An Empirical Study on Prison Overcrowding', pp. 29–44, Research Report of National Science Council, Executive Yuan, Republic of China (Taiwan).

United Nations Office (2007) *World Drug Report*, United Nations Office on Drugs and Crime, United Nations Publications <a href="https://www.unodc.org/unodc/en/data-and-analysis/WDR.html">https://www.unodc.org/unodc/en/about-unodc/26-June.html</a>, 2007.10.10.

United Nations Office (2003) *Drug Abuse Treatment and Rehabilitation: a Practical Planning and Implementation Guide*, United Nations Office on Drugs and Crime, United Nations Publications <a href="http://www.unodc.org/docs/treatment/Guide\_E.pdf">http://www.unodc.org/docs/treatment/Guide\_E.pdf</a>, 2008.1.5.

World Health Organisation (1986) *Ottawa Charter for Health Promotion*, First International Conference on Health Promotion, <a href="http://www.who.int/hpr/NPH/docs/ottawa\_charter\_hp.pdf">http://www.who.int/hpr/NPH/docs/ottawa\_charter\_hp.pdf</a>, 2008.1.3.

World Health Organisation (2004) *Neuroscience of Psychoactive Substance Use and Dependence*, Chapter 2: 'Brain Mechanisms: Neurobiology and Neuroanatomy' pp. 19-39, Geneva: WHO.

http://www.who.int/substance\_abuse/publications/en/Neuroscience.pdf,2008.1.2.

World Health Organisation, United Nations Office on Drugs and Crimes, The United Nations Joint Programme on HIV/AIDS (2004) 'Substitution Maintenance Therapy in the Management of Opioid Dependence and HIV/AIDS Prevention: position paper.'

http://www.who.int/substance\_abuse/publications/en/PositionPaper\_flyer\_English.pdf ,2007.10.10.