



---

# BULLETIN ON NARCOTICS

---

*Cf. vol  
61-77-970 M s. 1 & 2  
Defunct  
Date 1-15-40*

119675  
119685

the nature and extent of drug  
and social responses

UNITED NATIONS

**DIVISION OF NARCOTIC DRUGS**  
Vienna

**BULLETIN**  
**ON**  
**NARCOTICS**

**Volume XXXVIII, Nos. 1 & 2**  
**January—June 1986**

*Double issue on the nature and extent of drug  
abuse problems and social responses*

**NCJRS**

**SEP 15 1989**

**ACQUISITIONS**



**UNITED NATIONS**  
**New York, 1986**

UNITED NATIONS PUBLICATION  
ISSN 0007-523X  
00600 P

119675 -  
119685

U.S. Department of Justice  
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by

United Nations  

---

(New York)

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

## CONTENTS

	Page
Editorial note . . . . .	1
A drug policy for our times by <i>G. G. Nahas, H. C. Frick, T. Gleaton, K. Schuchard and O. Moulton</i> . . . . .	3
[ Acquired immunodeficiency syndrome and infection with hepatitis viruses in individuals abusing drugs by injection by <i>D. M. Novick, I. Khan and M. J. Kreek</i> . . . . .	119675 15
[ Drug abuse problems in countries of the Andean subregion by <i>R. Flores Agreda</i> . . . . .	119676 27
Drug use among university students in the State of São Paulo, Brazil by <i>F. V. De Carvalho</i> . . . . .	37
[ Drug abuse in Asia by <i>Charas Suwanwela and Vichai Poshyachinda</i> . . . . .	119677 41
[ Drug abuse in Africa by <i>T. Asuni and O. A. Pela</i> . . . . .	119678 55
[ Current situation relating to drug abuse assessment in European countries by <i>R. Hartnoll</i> . . . . .	119679 65
[ Study of deaths related to drug abuse in France and Europe by <i>F. R. Ingold</i> . . . . .	81
[ Drug abuse in the Republic of Ireland: an overview by <i>D. Corrigan</i> . . . . .	119681 91
[ Problems of drug abuse and preventive measures in Poland by <i>H. Tobolska-Rydz</i> . . . . .	119682 99
[ Programme base for the prevention of drug abuse in Yugoslavia by <i>M. Škrlj</i> . . . . .	119683 105
[ Extent and patterns of drug abuse and its associated factors in Egypt by <i>M. I. Soueif, F. A. Yunis and H. S. Taha</i> . . . . .	119684 113
[ Community programme in Pakistan aimed at preventing and re- ducing drug abuse by <i>K. A. Mufti</i> . . . . .	119685 121

## Drug abuse in Asia

CHARAS SUWANWELA and VICHAI POSHYACHINDA

*Drug Dependence Research Center, Institute of Health Research,  
Chulalongkorn University, Bangkok, Thailand*

### ABSTRACT

The article focuses on countries and areas of South-East Asia, which are seriously affected by drug abuse and the problems associated with it. Opium has traditionally been used for treating illnesses and alleviating physical and mental stress, as well as for recreational and social purposes. The prohibition of the sale and use of opium in Burma, Hong Kong, Malaysia, Singapore and Thailand forced many habitual opium users to switch to heroin. Over the past two decades there has been an increasing trend towards drug use, often involving experimentation with more than one substance, among youth in and out of school. For example, a survey of students at teachers' colleges in northern Thailand showed that at some time in their lives 30–40 per cent of the male respondents and 3–6 per cent of the female respondents had used cannabis, and that 18–20 per cent of the males and 12–27 per cent of the females had sniffed volatile solvents. The same survey showed that 5–10 per cent of both the males and females had used stimulants and nearly 2 per cent had used heroin. During the 1970s the abuse of heroin and other opiates emerged as a serious problem of epidemic nature, predominantly affecting young people in many countries of South-East Asia. While opiates, including heroin, have been abused by inhaling and by smoking, there has recently been an increasing trend towards injecting heroin of high purity (80–90 per cent pure heroin). Heroin addiction spread first to the populations of capital cities and then to other cities and towns and even to the hill tribes, as studies in Thailand have revealed. Most recent studies have shown that heroin abuse has spread further in Asia, both socially and geographically, involving such countries as India and Sri Lanka, which had no previous experience with the problem. Studies have also shown that the abuse of manufactured psychotropic substances has been increasing and that heroin addicts resort to these substances when heroin is difficult to find. The article also briefly reviews the history of opium use in China and the history of drug abuse in Japan, particularly with regard to the problem of methamphetamine abuse, which has appeared in two epidemic-like waves. The first followed the end of the Second World War and disappeared at the end of the 1950s; the second reappeared in 1975 and since then has gradually been increasing in size.

## **Introduction**

Asia is a densely populated continent with great ethnic and cultural diversity. There is also a wide variety of political establishments. The information available on drug abuse and the problems associated with it in Asian countries is in most instances inadequate and fragmentary. When such information becomes available, it is not published in widely circulated journals. This makes the assessment and description of drug abuse problems a difficult task. The task is further compounded by the complexity of the situation and the considerable variation of the drug problem, both within a given country and from one country to another.

In preparing this article, the authors have mainly relied on personal communications and other sources of information and reports that have been made available for this purpose, in addition to an extensive review of professional literature and the results of their own research.

Drug abuse has been present for a long time in Asia, but such abuse and its associated problems have grown in South-East Asia over the past two decades to reach alarming proportions. Among the 14 countries or areas in the world with serious narcotic problems, six are in South-East Asia [1], and it is for this reason that the focus of the present article is on this part of the Asian continent. Drug abuse problems in countries of west Asia that belong to the Middle East region have not been included in this article.

## **Historical background**

Natural drugs prepared from plants or fruits that grow wild have been abused in Asia since ancient times. The cultivation of the opium poppy, which is known for its medicinal properties, spread from Asia Minor to India and China more than 1,000 years ago. Cannabis grows wild in large quantities in many tropical areas, and alcohol is easily obtained from fermentation. Opium, cannabis and alcohol have found their way into the life of people and have been used for social, recreational and medicinal purposes. These substances have therefore been both produced and used by local people. When trade networks have developed, the use of these substances has spread to more distant areas. For example, during the colonial period, opium from India was transported by sea to China and South-East Asia, where it was exchanged for other goods.

During the nineteenth century, opium addiction became a huge problem in China, especially after the country was defeated in the Opium War, when it was estimated that there were 15 million opium addicts in China. The import of opium reached 5,000 tonnes in 1880. With the migration of Chinese to South-East Asia and other areas during that century and later, opium use and addiction continued among Chinese

immigrants and spread to the native populations of those areas. The authorities of the new lands had, from time to time, prohibited the use of opium and tried to control it, but they were not very successful. In some countries, revenue from opium led to the adoption of permissive policies. During the early twentieth century, the use of opium was legal and an opium distribution system in the form of an opium franchise, or government monopoly, was established in the countries of South-East Asia, with the exception of the Philippines. Both licit and illicit opium channels existed; the licit channel was a source of revenue in that a high tax was imposed on opium by Governments [2].

After the Second World War, a wave of sentiment in favour of opium prohibition promoted the adoption of new legislation that closed opium dens and abolished legal distribution systems throughout Asia. Such legislation was introduced in Singapore and Hong Kong in 1946, in Laos and Thailand in 1959 and in Burma in 1965 [3–5]. In the remote rural areas, the new laws prohibiting opium use could not be effectively enforced, and, as a result, the use of opium continued, with opium being supplied through the existing illicit channels. Following the opium ban, even though treatment for opium-addicted persons was offered in cities and treatment facilities were established, it soon became clear that such measures were inadequate and ineffective. Old opium addicts resorted to new substances, such as heroin and morphine, which were supplied through the enlarged illicit channels. In many countries that had banned opium use, there was an increase in the use of heroin within a year or two after the prohibition of opium use [6].

Towards the end of the 1960s, another problem appeared in South-East Asia as part of the global social changes that took place after the Second World War; in Hong Kong, Indonesia, Malaysia, the Philippines, Singapore and Thailand, there was a considerable increase in the number of young drug-addicted persons seeking treatment for their addiction in hospitals. This gave rise to alarm, and a variety of measures were adopted to deal with the problem.

During the 1970s, the quality of epidemiological information on drug abuse improved in South-East Asia. A national registry was established in most countries, mainly to collect information about addicts who entered treatment facilities. In some countries, information on addicts was also obtained through other sources, such as drug law enforcement agencies. Statistics on seizures of illicit drugs, which can indirectly indicate the availability of such drugs, were also improved. Population surveys of drug use were undertaken in different social settings. In some countries, monitoring of the street drug prices and purity was introduced as part of the assessment of drug abuse problems [7–10].

The most characteristic patterns of drug abuse are summarized below.

### Traditional drug consumption

With the licit cultivation of opium poppies in India and their illicit cultivation in the mountainous areas of Burma and Thailand, opium has become available in villages of those countries, especially in villages that are not far from opium poppy fields. The tribal people living in the mountainous areas and valleys of Thailand and Burma have used opium as medicine for the treatment of illnesses and as a mode of escape from physical and mental stress. Opium has also been used for recreational and social purposes. The rate of opium addiction has ranged from 6 to 40 per cent among the adult population [11, 12]. The complex socio-economic situation and health problems of the hill tribes have made the implementation of opium control measures a difficult task [13]. In addition to using opium, hill tribe people have been making their living from opium production. Crop substitution and community development, including the introduction of primary health care, have been the most suitable measures in the process of gradually eliminating opium production and use.

A study of 1,382 drug addicts from hill tribes admitted for treatment at Chiang Mai, Thailand, in 1977 showed that nine were addicted to heroin while the rest were opium users [14]. The results of further studies were alarming: for example, in 1984 the number of heroin addicts from hill tribes admitted for treatment increased to 120.

In rural areas of India, opium use and addiction have persisted for a long time. In 1958, it was estimated that there were over 400,000 opium addicts in India, but according to government reports to the United Nations, the number of opium addicts has been decreasing ever since. Lal and Singh [15] reported that the rate of regular users of opium in rural areas of Punjab was 3.7 per cent.

Ganja, or *Cannabis sativa*, is known for its psycho-active effect throughout South-East Asia, where it grows wild. Ganja has traditionally been used there in indigenous medicine for a number of illnesses, including asthma. Ganja curry is considered a delicacy, while ganja is smoked by villagers on a relatively small scale.

Betal nut chewing has also been widely practised in India, Sri Lanka and elsewhere, especially among older people.

### Heroin abuse by old opium addicts

The prohibition of the sale and use of opium in Burma, Hong Kong, Malaysia, Singapore and Thailand forced many abusers of opium to switch to heroin; most of these abusers were adult or elderly male, but this population has undoubtedly been decreasing [16].

### **Multiple drug use among young people**

Over the past two decades the use of drugs among youth in and out of school has been increasing. Such use may in most cases be classified as experimentation with drugs. The use of tobacco and alcohol is generally acceptable for older students, but not for younger students.

A school survey conducted at Bangkok in 1972 showed that 10 per cent of the respondents in secondary and vocational schools had tried cannabis while almost 8 per cent had tried other drugs [17]. A second survey conducted in the same schools in 1976 showed that there had been an increase in the use of most of the drugs mentioned in the survey; for example, 19 per cent of the respondents had used cannabis [18]. According to a survey conducted in 1978 among students attending teachers' colleges in northern Thailand, 30–40 per cent of the male respondents and 3–6 per cent of the female respondents had used cannabis at some time in their lives. Less than 2 per cent of the respondents had tried heroin, while 18–20 per cent of the male respondents and 12–27 per cent of the female respondents had sniffed volatile solvents (e. g. paint thinner) at some time in their lives; 5 to 10 per cent of the respondents had used amphetamines or tried other stimulants [19].

In the Philippines, a survey of 7,072 high school students at Manila in 1977 found that 4.5 per cent of the respondents had tried cannabis; 9 per cent had tried opiates; 12 per cent, inhalants; and 8.6 per cent, stimulants (including amphetamines). Another survey of high school and college students carried out in 1977 in five cities in the Philippines showed similar levels of drug use: 15 per cent of the respondents had used cannabis at some time in their lives and 10 per cent had used inhalants, while a smaller percentage of the respondents had used cough syrup or tranquilizers [20].

These and other studies substantiate the view that drug use among youth in and out of school in South-East Asia has become a serious problem in terms of the number of young people involved and the variety of substances used.

The increased demand for cannabis during the war in Viet Nam and the high profit derived from trafficking in this drug were probably the main factors that stimulated its widespread cultivation in South-East Asia, especially in the north-eastern part of Thailand. In spite of law enforcement efforts, such cultivation has persisted since the end of the war. Large quantities of dry cannabis have been seized every year in most countries of the region and a number of plantations have been destroyed. Nevertheless, cannabis is becoming more available in the cities of South-East Asia because of the increasing demand for it among youth.

Stimulants, including amphetamines, began to be increasingly used by young people at the end of the 1960s and the beginning of the 1970s.

The reasons for using stimulants ranged from "enhancing study during examinations" to "habitual abuse" and "substitution for other drugs". Amphetamines had been illicitly supplied to truck drivers and heavy labourers before the emergence of drug problems among youth.

Manufactured psychotropic substances, such as tranquillizers, hypnotics and cough syrup, are often obtained from legal sources and abused by young people.

Volatile solvents are freely available for use in households and, according to reports, have been widely abused by adolescents in Japan, Malaysia, the Philippines, Singapore and Thailand [21].

The emergence of the use of drugs among youth in Asia appears to be closely associated with the rise in drug use among youth in Western societies. Certain symbols of the youth subculture, such as blue jeans, rock and discothèque music and characteristic hair-styles, have become popular among young people in most countries and areas of Asia.

An epidemiological study of drug use in Thailand showed that only a few young persons had started using cannabis before 1967. The number of cannabis users rose gradually after 1967 to reach a peak in 1973 and since then has remained at a high level. The age at which young persons first use cannabis ranges from 13 to 17 years [16].

### **Abuse of heroin and other opiates**

During the 1970s the abuse of heroin and other opiates emerged as a serious problem of epidemic nature in many parts of South-East Asia. The increase in the production of opiates in Burma, the Lao People's Republic and Thailand in the 1960s developed partly as a response to the increased demand for those drugs in other parts of the world. In order to make huge profits, international drug trafficking organizations have extended the operation of illicit markets and trafficking to include other regions, mainly North America and Europe. In spite of law enforcement activities, opiates have become available and easy to obtain in South-East Asia. Heroin, in particular, has been pushed onto the illicit market. At the end of the 1960s, a large number of young people began abusing heroin at Bangkok, Jakarta and Manila. In the early 1970s, it was estimated that 15,000 young people were abusing drugs in the Philippines, of whom 10,000 were heroin addicts. In Singapore, only 4 heroin abusers were identified in 1972, while in 1974 the number rose to 110 and in 1975 to 2,263. By 1976, approximately 475 heroin addicts were being arrested each month. However, the figures for young known heroin addicts in South-East Asia appear to be small in comparison with those for young people experimenting with other drugs, though a certain number of heroin addicts begin their drug careers with heroin.

Studies in the mid-1970s showed that more than 90 per cent of opiate addicts admitted for treatment were under 30 years of age. The opiate addiction that occurred during the first half of the 1970s was predominantly among youth, and in the following years even younger individuals became involved [22, 24].

The mode of administering heroin varies largely and may indicate the degree of seriousness of the individual's addiction. At the beginning of the epidemic, "brown sugar" heroin, or heroin number 3 (15–30 per cent pure heroin), was abused by inhaling its fumes, or "chasing the dragon". This mode of taking heroin was widespread in Hong Kong, Malaysia, Singapore and Thailand. Later, when "white powder" heroin, or heroin number 4 (80–95 per cent pure heroin), became available in Thailand, it was mixed with tobacco, inserted into cigarettes and smoked. There has recently been an increase in heroin abuse by injection; this has become the preferred mode of using heroin number 4. In Malaysia, sniffing has become a popular mode of abusing powdered heroin. The mode of administering the dose varies depending not only on local preferences but also on the price and availability of the drug.

Heroin addiction involving a large number of people first began in the capital cities and has since then spread to other large cities and towns. Males are more affected than females, and there appears to be no ethnic or religious barrier or predilection in countries with different racial, ethnic or religious groups. The social, educational and economic backgrounds of heroin abusers and their families vary greatly.

During the second half of the 1970s, efforts to control the heroin epidemic were intensified in most countries. Regional co-operation was improved in different areas of drug control activities. New legislation was adopted, and centralized drug control agencies were established at the higher levels of Government [24].

Legal measures and special operations by the police in Indonesia and the Philippines have prevented drug traffickers from smuggling narcotic drugs into these two countries, where, as a result, the heroin epidemic has, to a large extent, been eliminated. Only a few cases of heroin addicts have been reported in the Philippines since 1980. Cannabis, tranquillizers and preparations (such as cough syrup) that contain psycho-active substances have been the main drugs abused in the Philippines in recent years. In Indonesia, the drug abuse epidemic has, to a large extent, been contained. Only a small number of drug-dependent persons have sought treatment for the abuse of opiates, cannabis or sedatives [25].

In Singapore, the Misuse of Drugs Act, 1973, provides severe punishment for drug traffickers. In addition, a two-pronged strategy called "Operation Ferret" was adopted and implemented in 1976. The purpose of Operation Ferret was to reduce the drug supply and demand and, in

particular, to identify traffickers and addicts as a step towards stopping the heroin epidemic. An estimated 13,000 heroin addicts were in Singapore in 1976, and nine months after the beginning of Operation Ferret, the authorities claimed that the heroin epidemic was contained and that the magnitude of the problems was markedly reduced. In view of the proximity of Malaysia and Thailand, however, illicit drug traffickers operating in Singapore turned to so-called "ant" trafficking, small-scale operations involving drugs difficult to detect and seize. Heroin has remained the main drug of abuse in the country. In 1982, 84 per cent of drug offenders in Singapore were involved in offences relating to heroin. Soon after the initiation of Operation Ferret, there was an increase in the abuse of flunitrazepam; however, the abuse of this substance has declined since 1982.

In Malaysia and Thailand, new drug control legislation has been adopted, and agencies dealing with policy and co-ordination have been established at the higher levels of Government to promote activities aimed at reducing the drug supply and demand. Measures for law enforcement, treatment, rehabilitation and prevention have been launched simultaneously. Many new treatment and rehabilitation facilities using modalities that have been effective in meeting particular treatment needs have been established. The extent of the drug problem, however, has not changed significantly. In 1980 and 1981, after a few years of drought in Burma, the Lao People's Democratic Republic and Thailand and a reduction in heroin output, the street price of heroin increased many times over in cities, and heroin in street samples was found to be increasingly adulterated. In north-east Thailand, amphetamine abuse gained in popularity among heroin addicts, but there was a reversal of this trend in 1982 when the price of heroin fell. During that period an increase in the abuse of manufactured drugs, such as benzodiazepines and hypnotics, was reported; some abuse of methadone, which was diverted from legal sources, was also observed [26].

In Burma, opium poppies are illicitly cultivated in the State of Kachin and the autonomous area of Shan, where opium abuse is also prevalent. Heroin addiction is a serious problem in the cities, especially at Rangoon. Of 32,705 registered drug abusers in Burma in 1979, 24,247, or 74.1 per cent, were addicted to opium; 4,277, or 12.9 per cent, were addicted to heroin; and 117, or 0.4 per cent, used cannabis. In 1982, the number of registered drug abusers increased to 39,203, of whom 72 per cent were addicted to opium and 17 per cent to heroin [5, 27, 28].

In India and Sri Lanka, traditional opium use has been known for a long time, but not heroin addiction. However, recent reports have shown that heroin abuse has begun in both countries. At the All India Institute of Medical Sciences at New Delhi, nine heroin addicts were treated in 1981, though previously none had been encountered. This number rose to 20 in

1982, 41 in 1983 and 35 in the first four months of 1984 [29]. At the University Psychiatry Unit of the General Hospital at Colombo, Sri Lanka, four foreigners were the only individuals treated for heroin addiction in the period from 1971 to 1981. The first two native heroin addicts were treated in 1982 and the number increased to 92 in 1983 [30].

**Drug abuse recorded in various countries and areas in Asia**  
(Percentage)

Year or period	Number of drug abusers recorded	Drug abused					
		Heroin	Morphine	Opium	Cannabis	Psychotropic substances	Other drugs
<i>Burma</i>							
1979	32 705	12.9	—	74.1	0.4	—	12.6
1982	39 203	17.1	—	71.6	0.5	0.4	10.4
<i>Hong Kong</i>							
1976	6 748	82.4	—	11.1	—	—	6.5
Jan. 1980— June 1980	7 186	90.9	—	7.3	—	—	1.8
Jan. 1985— June 1985	6 772	95.4	—	1.3	—	—	3.3
<i>Indonesia</i>							
1977	...	—	42.8	—	4.8	52.4	—
1983	47	—	21.3	—	38.3	—	40.4
<i>Malaysia</i>							
1975—1978	...	78.8	8.0	1.7	2.9	—	8.6
1982	...	86.3	4.2	5.2	—	—	4.3
<i>Philippines</i>							
1978	1 044	—	—	—	5.0	95.0	—
Jan. 1982— Aug. 1982	2 496	—	—	—	71.1	15.6	13.3
<i>Singapore</i>							
1977 <sup>a</sup>	7 725	96.0	—	—	—	4.0	—
1977 <sup>b</sup>	2 351	71.0	20.0	5.0	4.0	—	—
1982	...	84.0	—	9.0	4.5	—	2.5
<i>Thailand</i>							
1972	130	66.9	12.3	14.6	—	—	6.2
1976	953	78.7	1.7	16.7	2.9	—	—
1984	39 974	85.7	0.1	8.7	0.2	1.0	43

Sources: For Burma and Hong Kong: addiction registry; for Indonesia: hospital records; for Malaysia and the Philippines: records of the rehabilitation centres; for Singapore: records of "Operation Ferret" and law enforcement records; for Thailand: treatment records.

<sup>a</sup> According to records of "Operation Ferret".

<sup>b</sup> According to law enforcement records.

## **Drug abuse in Japan**

Drug abuse in Japan has, to a large extent, differed from that in China and countries of South-East Asia. There had not been any significant abuse before 1945. During the years following the Second World War, abuse of stimulants, mainly amphetamines, among young people became a serious problem, leading to crime and social disorders. It was estimated that more than one million people were addicted to stimulants. In 1951, 17,528 persons were arrested for offences relating to stimulants. A study of approximately 11,000 people addicted to stimulants showed that 28.5 per cent were female and 90.2 per cent of the total were under 30 years of age. The respondents indicated that they used stimulants mainly for social reasons. Rigorous control measures were applied, including the adoption of new legislation, the establishment of a strong national co-ordinating body, stringent law enforcement measures, public information and participation, and the expansion of treatment facilities for addicts in mental hospitals. The problem gradually declined in magnitude and practically disappeared by the end of the decade.

From 1955 to 1962, stimulants were effectively controlled, but the abuse of opiates, particularly heroin, became a problem. International narcotic trafficking organizations had become active, and Japan was not exempted. From 1946 to 1954, approximately 1,000-1,500 narcotic offences were committed each year. In 1955, 1,753 narcotic addicts were arrested, of whom 54.3 per cent used heroin. The number of arrested addicts increased to 2,442 in 1961, of whom 92.7 per cent were addicted to heroin. It was estimated that in 1961, when the narcotic addiction wave reached its peak, there were approximately 40,000 addicts and 60,000 habitual users. The reasons most often given for using narcotics were: social and recreational use; avoidance of pain and anxiety; treatment of diseases; and counteraction of the effects of stimulants. In 1963, legislation was amended to include compulsory hospitalization. Nine institutions specialized in treating narcotic addicts were established, in addition to the facilities available for treating addicts at 900 existing mental hospitals. Criminal groups involved in smuggling were disclosed and broken up. The Ministry of Health and Welfare established a reporting system to register addicts. By 1963, the authorities had considered narcotic addiction to be eradicated. No opiate-addicted person has been reported since 1966, even in delinquent quarters of large cities in Japan, except on Okinawa, where heroin abuse still exists.

Spray inhalation and glue sniffing were, however, noticed in 1963, and these practices increased dramatically in 1967. In 1968, approximately 20,000 young people were brought to the attention of the police for the abuse of volatile solvents, to which 110 deaths were believed to be related. In 1971, it was estimated that 50,000 young people were abusing inhalants, and the problem has continued among adolescents up to the present.

A second wave of stimulant abuse appeared in Japan in 1975 and since then has gradually been increasing. In 1984, 24,372 persons were arrested for violating the Stimulant Control Law [31, 32].

### Drug abuse in China

In China, the prohibition of opium use was announced at Beijing in 1946. The changes in the political system and social structures meant authoritative control and severe punishment for opium users. The abuse of narcotics was eventually eliminated. Some addicts migrated to Hong Kong, increasing the addict population there [33]. China has continued to enjoy the absence of drug abuse problems. Both the narcotic abuse and cultivation of the opium poppy have been eradicated [34].

### Future trends

It appeared that in the first half of the 1980s heroin abuse, which had been spreading quickly, was levelling off in response to concerted national and international efforts. However, the latest available information about drug addicts shows that the heroin problem is still very serious and represents a major threat to South-East Asia. The spread of heroin abuse to villages of the hill tribes in northern Thailand and to India and Sri Lanka requires careful monitoring and immediate action. Increased efforts to cope with all aspects of the heroin epidemic are necessary.

There is no doubt that the abuse of manufactured psycho-active substances is increasing, thus adding to the complexity of the problem and measures to control it. The problem of cocaine abuse has not reached Asia, but the decrease in the price and increase in the supply of the drug at the global level may lead to the spread of cocaine abuse to Asian countries and areas in the near future. Increasing drug abuse among youth is a matter of major concern; effective preventive measures are required to reverse this trend. Further research on epidemiology and the prevention of drug abuse, as well as on the treatment, rehabilitation and social reintegration of drug-dependent persons in specific social settings, is urgently needed so that more effective programmes may be developed to cope with drug abuse and the problems associated with it.

### References

1. R. E. Smart and G. F. Murray, "Narcotic drug abuse in 152 countries: social and economic conditions as predictor", *International Journal of Addictions*, vol. 20, 1985, pp. 737-749.

2. C. Suwanwela, "Drug dependence in Southeast Asia, a perspective overview", report prepared for the WHO Interregional Workshop II on Prevention and Treatment of Drug Dependence, Bangkok, 1979.
3. *A Synopsis of Narcotic Problems and Antinarcotics in Hong Kong* (Hong Kong, Narcotics Division, Security Branch, Government Secretariat, 1975).
4. Country reports (Indonesia, Malaysia, the Philippines, Singapore and Thailand) presented at the Third Meeting of ASEAN Drug Experts, Jakarta, Indonesia, 1978.
5. U Khant and Ne Win, "Drug abuse in the Socialist Republic of the Union of Burma", *The International Challenge of Drug Abuse*, NIDA Research Monograph Series 19 (Washington, D.C., Government Printing Office, 1978), pp. 51-59.
6. J. Westermeyer, "The pro-heroin effects of anti-opium laws", *Archives of General Psychiatry*, vol. 33, 1976, pp. 1135-1139.
7. *Sixteenth Report, September 1976-June 1985* (Hong Kong, Central Registry of Drug Abuse, Narcotics Division, Government Secretariat).
8. V. Navaratnam and L. B. Aun, "National data bank on drug dependence in Malaysia" (1978).
9. Office of Narcotic Control Board, Thailand, various reports.
10. Reports of the Drug Dependence Research Center, Institute of Health Research, Chulalongkorn University, Bangkok, Thailand, 1978-1985.
11. C. Suwanwela and others, "The hill tribes of Thailand, their opium use and addiction", *Bulletin on Narcotics* (United Nations publication), vol. 30, No. 2 (1978), pp. 1-19.
12. C. Suwanwela and others, "Opium use among the hill tribes of Thailand", *Journal of Drug Issues*, 1980, pp. 215-220.
13. C. Suwanwela, "Socio-economic realities and their implications in the treatment of drug dependent persons", proceedings of the Third World Conference of Therapeutic Communities, 1979, pp. 37-46.
14. C. Suwanwela, S. Kanchanakuta and Y. Onthuam, "Hill tribe opium addicts: a retrospective study of 1,382 patients", *Bulletin on Narcotics* (United Nations publication), vol. 31, No. 1 (1979), pp. 23-40.
15. B. Lal and G. Singh, "Drug abuse in Punjab", *British Journal of Addiction*, vol. 74, 1979, pp. 411-427.
16. V. Poshyachinda, C. Sitthi-Amorn and Y. Onthuam, "An interpretative epidemiology of drug dependence in Thailand", *Technical Report* (Bangkok, Institute of Health Research, Chulalongkorn University, 1978).
17. P. Sangsingkeo, S. Punahitanond and R. J. Schneider, *A Survey of Thai Student Drug Use* (Bangkok, Kurusapa Publisher, 1975).
18. S. Punahitanond, *A Survey of the Attitudes of Thai Youths Toward Drugs and the Assessment of the Effectiveness of Prevention and Education Methods* (Bangkok, Institute of Health Research, Chulalongkorn University, 1976).

19. C. Sitthi-Amorn and others, "Drug dependence in 3 teachers' colleges", *Technical Report* (Bangkok, Institute of Health Research, Chulalongkorn University, 1978).
20. E. Gorospe-Ponce, "Drug abuse assessment—results of recent studies on drug abuses in the Philippines", report presented at the Workshop on Reduction of Demand of Illicit Drugs in Southeast Asia, Penang, Malaysia, 1978.
21. H. Suwaki, "A follow-up study of adolescent glue-sniffers in Japan", *British Journal of Addiction*, vol. 78, 1983, pp. 409–413.
22. B. L. Peck, "Drug abuse in Singapore—rehabilitation strategy", *Australian Journal of Alcoholism and Drug Dependence*, vol. 6, 1979, pp. 45–50.
23. T. E. Seong and S. M. Heg, "Drug abuse in Malaysia", *Medical Journal of Malaysia*, 1973, pp. 126–130.
24. The Seventh ASEAN Drug Experts Meeting, Pattaya, Thailand, 1982.
25. N. Z. Abidin, "Drug dependence in West Java, Indonesia" (Bandung, State Mental Hospital, 1983).
26. National Registry of Drug Dependent Patients, Thailand, unpublished data, 1984.
27. Daw Sao Mya May and Pe Than Myint, "Drug abuse control programme in Burma: outlines of country profile" (1979).
28. U Khant, "Measures to prevent and reduce drug abuse among young people in Burma", *Bulletin on Narcotics* (United Nations publication), vol. 37, Nos. 2 & 3 (1985), pp. 81–89.
29. D. Mohan and others, "Changing trends in heroin abuse in India: an assessment based on treatment records", *Bulletin on Narcotics* (United Nations publication), vol. 37, Nos. 2 & 3 (1985), pp. 19–24.
30. N. Mendis, "Heroin addiction among young people: a new development in Sri Lanka", *Bulletin on Narcotics* (United Nations publication), vol. 37, Nos. 2 & 3 (1985), pp. 25–29.
31. M. Nagahama, "A review of drug abuse and counter measures in Japan since World War II", *Bulletin on Narcotics* (United Nations publication), vol. 20, No. 3 (1968), pp. 19–24.
32. *A Brief Account of Drug Abuse and Counter-Measures in Japan* (Tokyo, Ministry of Health and Welfare, 1985).
33. A. Field and P. A. Tararin, "Opium in China", *British Journal of Addiction*, vol. 64, 1970, pp. 371–382.
34. *Use and Misuse of Psychoactive Drugs*, Report of a Seminar, Beijing, 15–20 August 1983 (Canberra Publishing, 1983).