CENTRE FOR
DRUG
RESEARCH

9

INTERNATIONAL
MONOGRAPH
SERIES

IMS

REPORT OF THE ASIAN MULTICITY EPIDEMIOLOGY WORK GROUP 1996

Pusat Penyelidikan Dadah dan Ubat-Ubatan
(Centre for Drug Research)
W.H.O. Research and Training Centre
Universiti Sains Malaysia
11800 USM Penang
MALAYSIA

REPORT OF THE ASIAN MULTI-CITY EPIDEMIOLOGY WORK GROUP 1996

Edited By :

V. NAVARATNAM

FOONG KIN

VEMALA DEVI

This program was supported primarily through grants from the Bureau of International Narcotic and Law Enforcement Affairs (INL), Department of State, U.S.A., and the Government of Malaysia.

INTERNATIONAL MONOGRAPH SERIES NO. 9

The city drug abuse indicator trend reports contained in this document are substantively the same as originally submitted by the authors. However, reports have been edited to enhance the presentation. The National Center for Drug Research (NCDR), USM acknowledges the contributions made by the members of the Asian Multi-City Epidemiology Work Group (AMCEWG) who have invested their own time and resources in preparing the reports presented at the meetings.

CENTER FOR DRUG RESEARCH

UNIVERSITI SAINS MALAYSIA

MINDEN, PULAU PINANG

MALAYSIA

ISBN NO: 967 - 9979 - 45 - 8

ACKNOWLEDGMENT

This Asian Multi-City Program is organized and implemented by the Center for Drug Research, Universiti Sains Malaysia in conjunction with the National Institute on Drug Abuse (NIDA), USA.

The Program Management Team is particularly indebted to Y.A.B. Dato' Seri (Dr.) Mahathir Mohamad, Prime Minister and Chairman, National Council Against Drug Abuse for his interest and support for this program.

The Program Management Team is indebted to Y. Bhg. Dato' Professor Ishak Tambi Kechik, Vice Chancellor, Universiti Sains Malaysia (USM), Penang, Malaysia for his continuous support and interest in this program.

The Program Management Team expresses its sincere gratitude to its major sponsors - the Bureau of International Narcotic and Law Enforcement Affairs, Department of State, USA; and the Government of Malaysia.

We thank the participants from the various countries as well as their Governments for their support and participation in this program. Their contribution has made this program in Asia a success. We also extend special thanks to Mr. Nicholas Kozel, Associate Director, Division of Epidemiology and Prevention Research, NIDA.

The team also expresses its appreciation to Dr. Wayne Wiebel, University of Illinois, at Chicago; Dr. Alfred Pach, University of Georgia, Atlanta; Dr. J. Fred E. Shick, Northwestern University School of Medicine, Chicago; and Mr. Walther Gulbinat, United Nations International Drug Control Program, Vienna, for their valuable presentations during the meetings of the Asian Multicity Epidemiology Work Group.

Last but not least, we express our sincere appreciation to the support staff at the Center for Drug Research, for their tireless efforts to make this program a success.

CONTENTS

INTRODUCTION

The Asian Multi-City Epidemiology Study Program has entered its third year in 1996. The Asian Epidemiology Work Group (AEWG), now consisting of 22 cities has been established. A city based surveillance system has been developed in twelve cities. These cities are Bangkok, Thailand; Kuala Lumpur, Malaysia; Manila, Philippines; Hanoi, Vietnam; Yangon, Myanmar; Vientiane, Laos; Phnom Penh, Cambodia; Colombo, Sri Lanka; Dhaka, Bangladesh; Madras, India; Islamabad, Pakistan and Istanbul, Turkey.

Two Regional meetings and a joint meeting were held in 1996. The East Asian Work Group meeting was held in Penang, Malaysia from 15 - 18 April, 1996, while the South Asian Work Group met in Colombo, Sri Lanka from 30 July - 1 August 1996. The two Work Groups met together for the first time in a Joint Meeting held in Langkawi, Malaysia from 11 - 15 November 1996.

During the meetings, participants reported on the problem of drug abuse in their cities/countries. The drug abuse indicator instrument for standardized reporting developed earlier was reviewed and modified.

Training sessions on drug abuse epidemiology, information and network development were conducted. Concepts on ethnography and its application in drug-related studies were also reviewed. Small group discussions were held during the meetings to identify a common research topic where the application of qualitative techniques for data collection can be carried out on a small scale by each participant. Participants had worked on these common areas decided by the group and the findings of these small studies were presented in the follow-up meeting within the year. Generally participants have found these small investigations very useful and the meetings provide a venue for further discussion and sharing of findings and first hand experiences in utilizing qualitative research methods. Interesting reports of these small studies have been produced by individual participants. The program has also published a collection of the findings of these small investigations.

Since the meetings were held in participant countries, the Work Group took the opportunity to invite the host of the meetings to present the findings on drug research carried out in their countries. These presentations are very useful in providing other countries/cities a more detailed understanding of the drug abuse problem in the respective countries. This publication presents a collection of the update of the drug abuse problem in the respective cities/countries.

This program has been carried out by the Center for Drug Research, Universiti Sains Malaysia in conjunction with the Division of Epidemiology and Prevention Research, National Institute on Drug Abuse, National Institute of Health, United States of America. This program has received financial support from the Bureau of International Narcotic and Law Enforcement Affairs (INL), Department of State, USA; and the Government of Malaysia. Technical support was provided by the Center for Drug Research, Universiti Sains Malaysia. Technical advice was also received from the Information Technology Section, United Nations International Drug Control Program (UNDCP) Vienna.

PART 1: SECTION ONE

EAST ASIAN COUNTRY REPORTS
(January - December 1995)

DRUG ABUSE SITUATION IN BANGKOK

Panporn Liewtiwong
Technical & Foreign Affairs Division
Office Of The Narcotics Control Board
Bangkok, Thailand

1. AREA DESCRIPTION

Bangkok metropolis comprised of 38 incorporated districts in 1995. The total population from registration records was about 5,570,743 of which males were about 2,745,431 and females 2,825,312. The area of Bangkok is about 1,565 square kilometers. A survey indicated that there are over 1,000 slum areas. The large population in Bangkok Metropolis causes a lot of problems in the city such as traffic, environment as well as criminal cases. Bangkok metropolis has the highest number of criminal cases when compared with various other provinces in the country.

2. DATA SOURCES AND TIME PERIOD

Data for this report was obtained from Narcotics Case Registration System of the Office of the Narcotics Control Board (ONCB), Division of Epidemiology, Ministry of Public Health and Aids Control Division, Department of Health, Bangkok Metropolitan Administration. These systems gathered data from public health agencies, and law enforcement agencies throughout the country.

This report outlines the:

- drug abuse situation in Bangkok in 1995
- Acquired Immunodeficiency Syndrome (AIDS) among injecting drug users (IDUs)

3. CURRENT DRUG ABUSE SITUATION IN BANGKOK

According to the ONCB law enforcement data, the situation on drug abuse in Bangkok in 1995 is as follow:

3.1 Drug seizures in Bangkok in 1995, involved 33,304 drug cases with 33,764 offenders. Marijuana cases was about 58.4% of drug cases throughout Bangkok. Other drug cases were heroin (19.8%), volatile substance (17.8%), and methamphetamine (3.7%).

Table 1: The Number Of Drug Seizures In Bangkok Classified By Type Of Drugs

Drugs	No. of Cases	No. of Offenders
Heroin	6,591	6,689
Opium	9	9
Marijuana	19,427	19,602
Kratom	110	133
Methamphetamine	1,229	1,387
Volatile Substances	5,928	6,013
Others	16	17
Total	33,355*	33,827*

* 1 case could be charged with more than 1 charge.

3.2 In heroin and methamphetamine cases, most of the offenders were charged as possessors and distributors respectively. Most of the marijuana offenders were charged as consumers, followed by possessors and distributors. In the case of volatile substances offenders, they were charged as consumers and distributors respectively.

Table 2: The Number Of Drug Seizures Classified By Charges And Type Of Drugs

Charge	Drugs						
	Heroin	Opium	Marijuana	Kratom	Metamph-etamine	Volatile Substance	Others
Production	4	0	0	1	14	3	0
Import	0	0	3	0	0	0	0
Export	54	0	7	0	1	0	0
Distribution	312	0	81	4	232	13	2
Possession for distribution	218	0	58	4	169	0	0
Possession	6,148	7	1,858	102	1,066	3	16
Consumption	67	0	17,652	6	37	5,994	0

3.3 The statistics on drug offenders showed that most of them were male. But the proportion of female offenders charged with methamphetamine case was higher than any cases. Of the total number female drug offenders charged, 16.3% were methamphetamine cases.

Table 3: The Number Of Drug Offenders In Bangkok Classified By Sex And Type Of Drugs

Type of Drugs	Sex		Total
	Male	Female	
Heroin	6,765 (92.3%)	511 (7.7%)	6,676
Marijuana	18,338 (93.6%)	1,249 (6.4%)	19,587
Methamphetamine	1,161 (83.7%)	226 (16.3%)	1,387
Volatile Substances	5,202 (86.5%)	801 (13.5%)	6,012

3.4 Most of offenders charged for heroin, marijuana, and methamphetamine cases were in the age group of 21 - 30 years. As for volatile substances offenders, most of them were in the age group of < 20 years and 21 - 30 years.

Table 4: The Number Of Drug Offenders In Bangkok Classified By Age And Type Of Drugs

Type of Drugs	Age				Total
	< 20	21 - 30	31 - 40	> 40	
Heroin	1,385	3,329	1,509	455	6,77
Marijuana	4,911	9,407	4,191	1,079	19,588
Methamphetamine	355	517	337	178	1,387
Volatile Substances	2,793	2,789	361	71	6,012

4. ACQUIRED IMMUNODEFIENCY SYNDROME (AIDS) AMONG INJECTION DRUG USERS (IDUs)

According to the report of the Epidemic and Planning Sub-division of Aids Control Division, Department of Health, Bangkok Metropolitan Administration, the situation of AIDS and the number of AIDS patients and symptomic HIV infected patients in hospitals from both the government and private sector since September 1984 to December 31, 1995 is as follows:

4.1 There are 3,023 cases of full blown AIDS patients. The number of living patients is 2,306.

4.2 Only 1,591 of symptomic HIV infected patients from the total of 1,693 are still alive.

4.3 There are 4,716 AIDS patients and symptomatic HIV infected patients. Of this total, 88.36% are males (4,167) and 11.64% or 549 patients are female. Most of the patients are in the age group of 25 - 29 years comprising 1,309 patients or 22.03% followed by the age groups of 30 - 34 years and 35 - 39 years.

4.4 According to risk factors causing people to become AIDS or symptomatic HIV infected patients, sexual activity is the most important factor followed by intravenous drug use. There are only a few cases of AIDS infection from the mother or blood transfusions.

Table 5: The Number Of Full-Blown AIDS And Symptomatic HIV Infected Patients Since September 1984 To December 31, 1995

Survey Area	AID Patients			HIV Patients			AIDS Patient (Estimation)
	Total	Dying	Living	Total	Dying	Living	
Bangkok	3,023	717	2,306	1,693	102	1,591	120,000
Throughout the country	31,439	8,736	22,703	13,267	1,556	11,711	750,000

Table 6: The Number Of AIDS Patients And Symptomatic HIV Infected Patients Since September 1984 To December 31, 1995

Risk factor	AIDS Patients		Symptomatic HIV Infected Patients	
	Total	%	Total	%
Sexual Activity	1,770	58.3	1,057	62.4
Intravenous Drug Use	655	21.7	326	19.3
Blood Transfusion	5	0.2	2	0.1
Infection from mother	183	6.0	20	1.2
Unknown risk factors	410	13.5	288	17.0
Total	3,023	100	1,693	100

DRUG TRAFFICKING SITUATION IN CAMBODIA: 1995

Dr. Doung Socheat
National Malaria Center
Ministry Of Health
Phnom Penh, Cambodia

1. INTRODUCTION

The Kingdom of Cambodia is situated in the south-west of the Indochina Peninsula and bordered by Thailand, Laos and Vietnam. The country has approximately 10.5 million inhabitants with a land area of 181,035 square kilometers.

Before 1992, there was no information about the drug abuse situation in Cambodia. Following the change in the social economic system in 1993, drug trafficking and drug abuse have become problems in Cambodia. For the last two years, the amount of drug seized has continued to increase drastically compared with the previous years.

In order to cope with these problems, the anti-drug office was formed in late 1994. The Cambodian Royal Government is also paying more attention to these serious problems by requesting assistance from other countries both technical and financial.

2. DRUG SITUATION

2.1 Cannabis Plants

The cultivation of cannabis plants remains widespread in Cambodia because of its availability and affordability. These plants grow easily and abundantly due to the Cambodian climate and soil. Cannabis has been planted in some provinces, especially in Kandal, Koh Kong Banteay Meanchey, Stung Treng and Preas Vihear province (**Appendix 1**).

Cannabis production is partly used for domestic consumption and the rest is exported to Thailand and other countries. In 1994, more than one ton of cannabis dried leaves and 47 bottles of cannabis resin were seized. During 1995, there were 79,500 kgs and 320 packets of cannabis confiscated by anti-drug police. In addition, 26,130 bushes of cannabis (approximately 9.91 hectares) in Kandal and Koh Kong and 1,530 cannabis plants in Preas Vihear were destroyed.

2.2 In-Transit Smuggling

At present, Cambodia is becoming an important transit area for Southeast Asian heroin and opium. The drug couriers are both Cambodian and foreigners.

The quantity of drug seizures during these last two years rose significantly from 4 kilos of heroin in 1994 to 75.4 kilos in 1995. Opium seizure increased from one kilo

(1994) to 21.7 kilos (1995). In 1994, 4 kilos of cocaine were seized by anti-drug police.

There is little information about opium or heroin production in Cambodia up to now nor has any manufacturing or refining laboratory been identified in the country. All of the above-mentioned drugs seized had been manufactured abroad and were on transit through Cambodia.

2.3 Psychotropic And Stupefying Substances

Following the change of the economic policy of the government in the early 1990s, the private pharmacies and drug import / export companies started to mushroom rapidly and uncontrollably. As a result, it is very difficult to evaluate and supervise their activities as to whether they completely follow the regulation of the Ministry of Health.

In 1994, there were more than 1,000 packets of aphrodisiacs and 200 packets of amphetamines seized. In 1995, 800 packets of aphrodisiacs, 2.15 kilos of amphetamine and 2.7 kilos of lidocaine were confiscated.

The following are the amount of psychotropic drugs licensed in 1995:

Pethidine	-	2,439.35g
Morphine	-	21.05g
Fentanil	-	413.50g
Bromazepan	-	54.00g
Chlordiazepoxyde	-	15.00g
Clorazepate	-	3,878.70g
Diazepam	-	9,629.00g
Flunitrazepam	-	53.70g
Midazolam	-	6.00g
Nordazepam	-	2,198.25g
Oxazepam	-	700.00g
Pentaxocin	-	1,419.00g
Phenobarbital	-	150.00g

2.4 Illicit Drug Trafficking

The methods of smuggling illegal drugs into, through and out of Cambodia are various. Some drugs were hidden in hand-carried luggages, bottles of wine, goods, etc. Most of the cases were arrested in hotels, drug stores, at home and on boats.

The smugglers prefer trafficking in drugs by sea rather than by air, especially in Koh Kong province which is near to Thailand and very easy to reach by motor-boat. The drugs seized in illicit drug trafficking in Cambodia during these last few years were opium, heroin, aphrodisiac, lidocaine, amphetamine, cannabis dried leaves and cannabis resin.

1994	Opium	-	1 kg
	Heroin	-	4 kg
	Aphrodisiac	-	>1000 packets
	Amphetamine	-	> 200 packets
	Cannabis dried leaves	-	> 1 ton
	Cannabis resin	-	47 bottles
1995	Opium	-	21.7 kg
	Heroin	-	75.4 kgs
	Aphrodisiac	-	800 packets
	Amphetamine	-	2.15 kgs
	Cannabis dried leaves	-	79,500 kgs

2.5 Source Of Drug Import / Export

Drugs are imported from:

- Laos through Stung Treng, Rattanakiri and Kratie
- Thailand via Poy Pet and Koh Kong

Drugs are exported from Cambodia to:

- U.S.A.
- Europe
- Singapore / Kong Kong

2.6 Drug User And Drug Addict

Drugs are reported to be used mostly in brothels and by some vagabonds. Drug smoking is reported to be used in some hotels and guest houses. The anti-drug police estimate that there are more than one hundred drug users and drug addicts in Phnom Penh city. Most of them are foreigners.

3. DRUG RELATED ARRESTS

In 1994, 27 drug dealers (19 Cambodian, 8 foreigners) and 40 drug addicts were arrested by the anti-drug team. As for 1995, 86 smugglers (8 of them were women) were caught.

4. SITUATION IN CAMBODIA REGARDING HIV AND AIDS

In 1993, there was the first case of AIDS in Cambodia. By mid 1995 a total of 86 persons with AIDS had been reported. Nine of them died, including one child. By October 1995 more than 3,000 people have been reported as having antibodies to HIV.

In 1991, HIV was first detected at the National Blood Transfusion Center (NBTC) in Phnom Penh with 0.08% (3 of 3,972) of donors testing positive for antibodies to HIV.

By October 1995, 6.6% (326 of 4,947) of donors in Phnom Penh and 4.2% (623 of 14,778) of donors country-wide tested positive for HIV.

Surveys conducted by the Cambodian AIDS program in 1992 found 9.5% (25 of 262) of Commercial sex workers (CSWs) and 4.5% (36 of 805) patients with STD to be HIV positive. In the 1994 survey of these high risk groups, it was seen that 39.4% (84 of 213) of CSWs and 9.1% (98 of 1,072) of STD patients tested positive. In 1995, the surveillance in eight provinces and Phnom Penh showed HIV seropositivity of 38.0% (382 of 1,007) among CSWs, 8.1% (76 of 824) among military and 8.1% (77 of 954) among police tested. 2.6 % (23 of 870) of pregnant women tested in six provinces were found to be HIV positive. From the above data it is estimated that 50,000 to 90,000 people may have antibodies to HIV.

To date, the gender ratio of HIV infection is three men for one woman and approximately 90% of persons infected are 15 - 35 years old. This trend poses serious risk to the labor force of Cambodia.

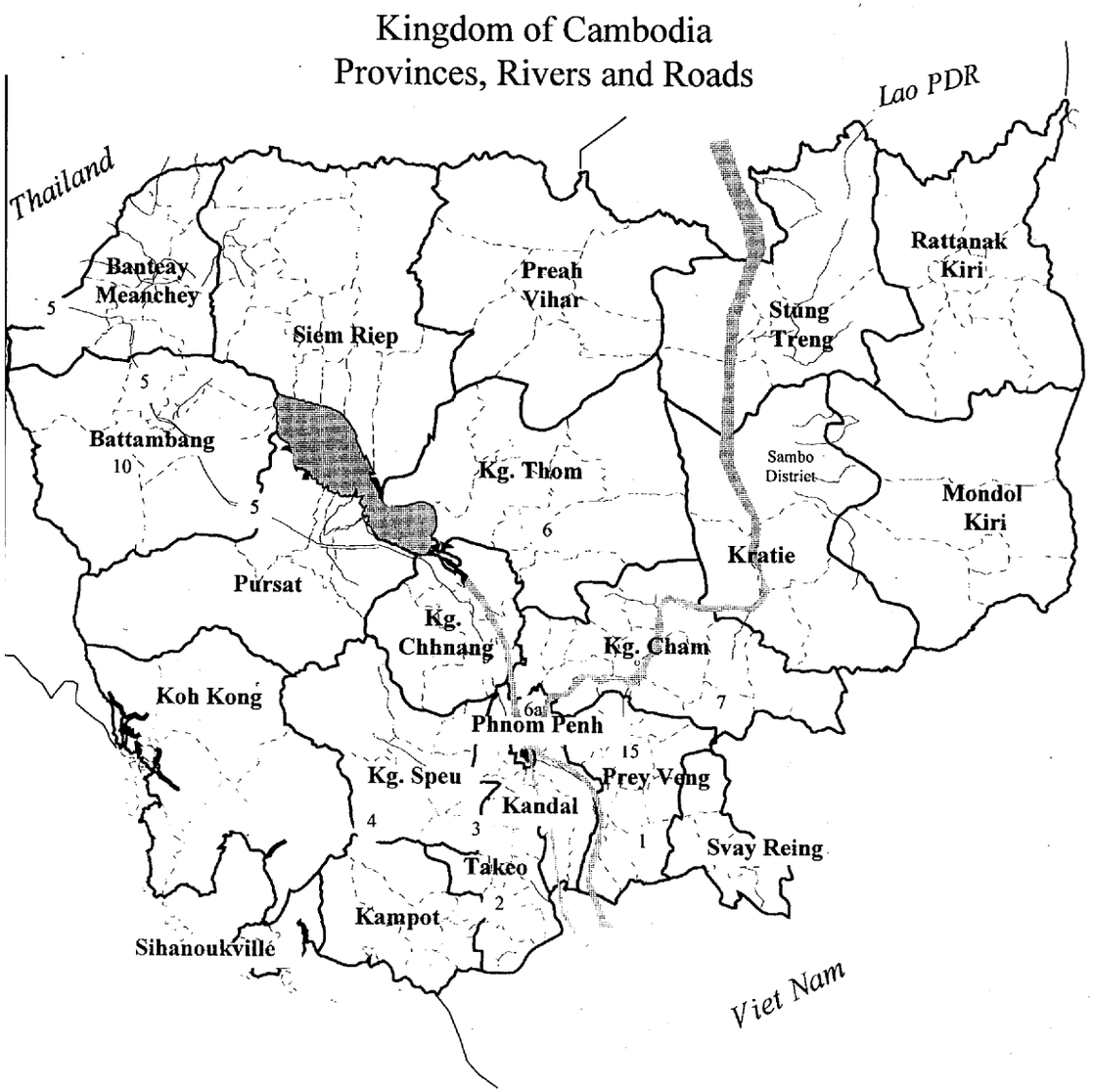
5. LAW ENFORCEMENT

Cambodia does not yet have the anti-drug laws. The UNTAC's law is being used in the country. In accordance with that law, article 39 and 65, the cultivation of opium poppy, cocaine and marijuana are forbidden. The drug user will be sentenced from one month to one year's imprisonment. The transaction, stock, import / export and receiving of dangerous drug (e.g. opium) will be punishable from 5 years to 15 years imprisonment and a fine of ≥50 million riels, (1 USD equals 2,500 riels).

The new anti-drug law will be adopted soon by the Cambodian National Assembly and it will be more severe than the UNTAC's law. In Cambodia there is no law that sentences the wrong-doer to death. Last year, the Phnom Penh Municipal Court sentenced one Nigerian drug trafficker to ten years' imprisonment and a Ganarian and a Zairian drug trafficker to five years' imprisonment.

6. CONCLUSION

Nowadays, illegal drug trafficking and drug abuse are increasing continuously and becoming a very complicated problem in the country. The Royal Cambodian Government is making a strong effort to try and contain this problem, and wishes to cooperate with neighboring countries to stop the trafficking of illegal drugs in the region.



SOME CHARACTERISTICS OF THE DRUG PROBLEM IN CHINA

Cai Zhi-Ji
National Institute On Drug Dependence
Beijing Medical University, China

After a long period (more than 30 years) of disappearance of the drug problem in China since early 1950s, it resurged in late 1980s, influenced by global drug situation. The situation has worsened in the first half of 1990s, thus becoming the scourge of society

At present, the major drug of abuse is heroin (more than 95%), the main source of this drug is from the "Golden Triangle" by smuggling from Myanmar into Yunnan province (south-west part of China) and spreading to several parts of the country. Seizures of heroin sharply increased in 1990s, as shown in **Table 1**. The proportion of heroin seizures in recent years was over a quarter of total seizures and ranked the first or second in the world.

Table 1: Heroin Seizures In China In Recent Years

Years	Heroin seizures (kg)	Proportion of world seizures	Rank
1991	1959	17.5%	1
1992	4075	25.4%	2
1993	4489	28.9%	1
1994	4086	28.4%	1

It is difficult at present to get national statistics of drug abuse because the nation-wide network for monitoring the epidemiology of drug abuse is just being started. The following figures were summarized from reports of participants in three national conferences on drug dependence held in 1991, 1993 and 1995; and from papers published in scientific journals during recent years.

Results of the 65 reports collected from 18,578 heroin addicts in 31 cities of 17 provinces were summarized. The following are the demographic features:

- males formed the majority of abusers (84.3%)
- the average age of the addicts in different reports ranged from 22.2 to 30.5
- the education level was low; 81.7% of them were at the level of junior middle school or lower
- two thirds of the abusers were self-employed (36.7%) and unemployed (29.8%)
- 37.1% were married

As mentioned in the former report, the number of addicts (government's official reports) increased significantly during recent years, it was fivefold in 1994 (380,000) compared with that in 1990 (70,000).

Diversion of licit drugs into illicit channel or misuse of licit drugs for non-medical purpose also happened in the 1990s. Dihydroetorphine (DHE) and pethidine were two of the most diverted drugs. DHE was a new domestic narcotic analgesic development and marketed in 1991. It is a derivative of etorphine, the latter is the drug in Schedule I and Schedule IV of the Single Convention on Narcotic Drugs, 1961. DHE is a strong pain-killer with analgesic dosage at microgram level, it is short-acting and administered by sub-lingual route or injection. Both tolerance and psychic dependence potentials are high. Animal self-administration experiments showed that psychic dependence potential of DHE was stronger than heroin (100-500 times). It was experienced and accepted by heroin addicts soon after its marketing and showed a high abuse liability. The abuse of DHE appeared and spread out very fast to several parts of the country, diversion of the drug into illicit channel took place in an increasing manner during the past 2 - 3 years. It has been put under strict control by drug authorities.

An epidemiological survey on 297 DHE addicts was undertaken by NIDD in 1995, data was obtained from five provinces located from the north-east to south-west part of China. Demographic features of DHE abuse were shown in **Table 2**. In situations where heroin was not available, the addicts used DHE as a substitute.

Table 2: Demographic Characteristics Of The DHE Abuser

Item	Number of addicts	%
Sex		
Male	244	82.1
Female	53	17.9
Age		
Mean	28.14 ± 4.92 (SD)	
Ethnicity		
Han	257	86.5
Man	3	1.0
Meng	6	2.0
Hui	12	4.0
Others	6	2.0
Not certain	13	4.4
Educational Level		
Primary school	23	7.7
Junior middle school	264	88.8
High school	8	2.7
Not Certain	2	0.7
Occupation		
Worker	53	17.8
Farmer	8	2.7
Server	7	2.4
Student	1	0.3
Self-employed	136	45.8
Unemployed	45	15.1
Others	28	9.4
Not Certain	19	6.4
Marital Status		
Single	82	27.6
Married	119	40.1
Divorced	38	12.8
Separated	2	0.7
Widowed	5	1.7
Cohabiting	51	17.2

The survey also revealed the main reasons for misuse or abuse of DHE, data was shown in **Table 3**.

Table 3: Main Reasons For Misuse Or Abuse Of DHE

Item	Number of cases	%
For initial use		
Curiosity	160	53.9
Heroin substitute and avoiding withdrawal syndrome	159	53.5
Influenced by others	78	26.3
Medical treatment	16	5.4
Others	29	9.8
For current use		
Avoiding withdrawal syndrome	246	82.8
Seeking euphoria	75	25.3
Relief of trouble	60	20.2
Medical treatment	6	2.0
Increase efficiency	5	1.7
Others	3	1.9

One of the severe consequences of drug abuse was drug-related disease. AIDS problem in China started in the late 1980s. HIV infection initiated by intravenous injection of heroin were focally distributed in Yunnan province in areas neighboring Myanmar. Statistics at the end of 1994 showed a total number of 1,774 HIV / AIDS cases, with 1,426 cases (80.4%) found in Yunnan province and 1,132 (63.8%) of the total 1,774 cases as drug abusers. Hepatitis B was another complication of intravenous drug abuse, a recent report showed that the positive rate of HIV infection in a sample of 135 heroin addicts was 65.9%.

PROFILE AND RECENT DATA OF DRUG ABUSE IN DRUG DEPENDENCE HOSPITAL JAKARTA

Dr. Asliati Asril
Drug Dependence Hospital
Department Of Health
Jakarta, Indonesia

ABSTRACT

The most substance abuse in Jakarta Metropolitan for several years has been the same; benzodiazepine, cannabis and alcohol with the majority abuse being multiple form. Only about 1% use opiates like pethidin, heroin etc. At the end of 1994 and early 1995 there was a new variation in the type of substance use such as heroin, amphetamine and small amounts of cocaine. Most of the addicts are 15 - 24 years old and mostly male. Recent trends show that the number of new abusers are on the increase; some of them are injecting drug users. However, there is no data about AIDS among drugs users. The positive results of urinalysis for opiates and amphetamine have also increased.

1. INTRODUCTION

1.1 Area Description

Jakarta has an area of 66.26 square kilometers. The total population (at state registration) in 1995 was 9.2 million; a rapid growth from 7,394,996 in 1993. The population density is 12,288 per kilometer. State registration in 1993 mentioned that there were 46,994 (68.8%) from a total of 75,959 job seekers, who were not employed. They are classified into senior high school or an equivalent level. Socio-economic levels vary widely.

The five municipalities in Jakarta Metropolitan have two Drug Abuse Treatment Center and a Hospital:

- Drug Dependence Hospital, under the Department of Health, is located in South Jakarta. This is the only government hospital for drug abuse and drug related problems in Indonesia.
- Juvenile Delinquency and Drug Abuse Treatment and Rehabilitation, located in East Jakarta region, operates under the Jakarta Metropolitan Police.
- Treatment and Rehabilitation Center, under the Department of Social Welfare is located in South Jakarta.

Beside these, the Jakarta State Mental Hospital provides 10% of its bed capacity for drug abuse patients. But usually, the patients are reluctant to go because of the social stigma.

Because there is only one of its kind in Jakarta and Indonesia, the Drug Dependence Hospital gets patients from Jakarta and the surrounding areas as well as from the other cities and provinces in Indonesia. 28% of total inpatient (57) in 1995 were referred from the other provinces.

1.2 Data Sources

The sources of the data for this report are:

- Jakarta Statistical Office
- Bakolak Inpres no 6/1971
  This is The National Coordinating Body for Narcotics in Indonesia
- Drug Dependence Hospital
  Most of the data is from the Drug Dependence Hospital

1.3 Problems In Data Collection

- There are different areas of focus/interest of the department/ Institution in data collection.
- Incomplete and incoherent data records, includes lack of skill, lack of capable and trained personnel in each institution and private sector organizations which are involved in drug abuse problem.
- There is no center which records all the data related to drug problems.

1.4 Drug Dependence Hospital

The total number of visiting drug users in Jakarta increased from 2,333 in 1994 to 2,645 in 1995. There is also an increase in the number of new patients, from 831 in 1994 to 999 in 1995.

1.5 Type Of Drug Users:

1994	Multiple drug user	-	48.50%
	Benzodiazepine	-	38.30%
	Cannabis	-	4.40%
	Alcohol	-	7.21%
	Opiate	-	1.44%
	Cocaine	-	no reporting
1995	Benzodiazepine	-	36.70%
	Multiple Drug Use	-	53.92%
	Cannabis	-	2.68%

Alcohol	-	5.04%
Opiate	-	1.57%
Cocaine	-	no reporting

This shows that multiple drugs and benzodiazepine always rank high in types of drugs used.

1.5.1 The Age Of Drug Users:

15 - 24 years	-	60.00% in 1994 44.65% in 1995
15 years	-	13.40% in 1994 8.70% in 1995

1.5.2 Educational Level:

Students from senior high schools, are the highest number of abusers

56.24% in 1994
48.92% in 1995

This is followed by students from junior high schools:

23.37% in 1994
22.60% in 1994

Lastly a small number of students from primary schools used drugs:

0.22% in 1993
1.50% in 1994

1.5.3 Route Of Administration:

The favorite choice among drug abusers in Jakarta is the oral route of administration (54% in 1993, 43.9% in 1994); whereas injections are only used in small groups (0.99% in 1993, 0.26% in 1994).

2. DRUG SEIZURES

Data from the Jakarta Metropolitan Police shows seizures of drugs in 1994:

Opium	-	4 gm
Cannabis	-	1,275.5 gm
Heroin	-	804 gm

3. AIDS AMONG INJECTING DRUG USERS (IDUS)

Although cumulative data from the Department of Health mention that 312 cases have been identified since 1987 (257 cases HIV positive and 75 cases AIDS positive), there is no report of AIDS among injecting drug users in Indonesia.

From blood screening in the laboratorium of the Drug Dependence Hospital, there are no positive results from the 44 samples.

4. SPECIAL STUDIES

The profile of the result of urinalysis is not different from the profile of the patient. Benzodiazepine shows the highest positive result. Opiate and amphetamine have increased especially during last year (1995).

PATTERNS AND TRENDS OF DRUG ABUSE IN KUALA LUMPUR

Ismail Bin Haji Ahmad
Anti Narcotics Task Force,
Ministry Of Home Affairs,
Kuala Lumpur, Malaysia

1. AREA DESCRIPTION

Malaysia consists of fourteen states and has an estimated land area of 329,757 square kilometers. The main ethnic groups, i.e. Malay, Chinese and Indian, make up its population of 18,180,853 (from the 1991 population census).

The capital city of Kuala Lumpur has an area of 243 square kilometers with an estimated population of 1,257,662 (in 1991) or approximately 6.9 % of the total population of Malaysia. In 1991, the age group distributions were 416,038 persons (33.1 %) in the 0 - 14 years age bracket, 800,552 persons (63.6 %) in the 15 - 64 year age bracket and 41,072 persons (3.3 %) in the 65 + year age brackets.

2. SOURCES OF DATA

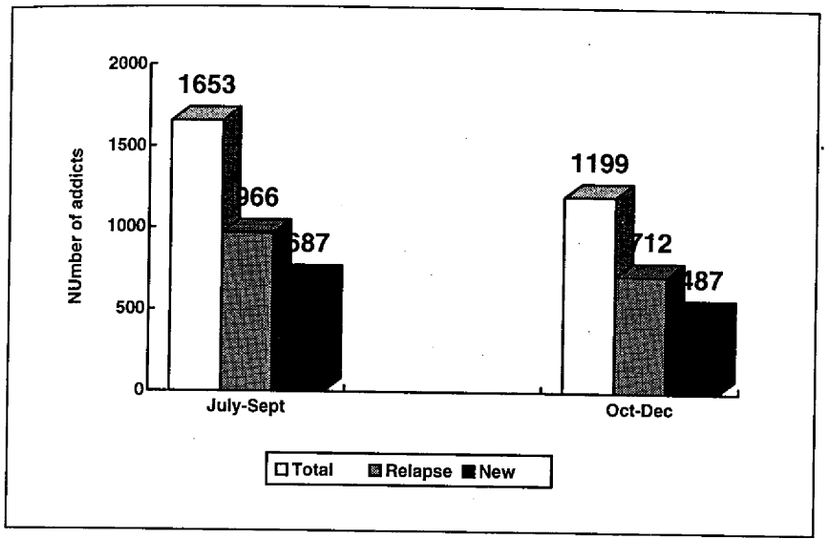
The National Drug Information (NADI) System maintained by the Anti Narcotics Task Force, Ministry of Home Affairs provided data for this report. The system collates all data submitted by anti drug and health care agencies throughout the country. These include hospitals, police, prisons and treatment and rehabilitation services. This report in an update on the drug abuse situation in Kuala Lumpur between July and December 1995.

3. NUMBER OF ADDICTS IDENTIFIED

The number of cases detected for July - September 1995 was higher than for October-December (**Figure 1**). The total number of cases detected decreased by 27.5% in the following October-December period. This could possibly be due to a few reports being received late from hospitals and supervision programs.

The proportion of new to repeat cases remained the same for the two periods, i.e. about 41% new cases and 59% repeat cases. As in the past, most of the cases detected in Kuala Lumpur were males (98%).

Figure 1: Number Of New And Relapse Cases And Total Number Of Addicts In Kuala Lumpur July - December 1995



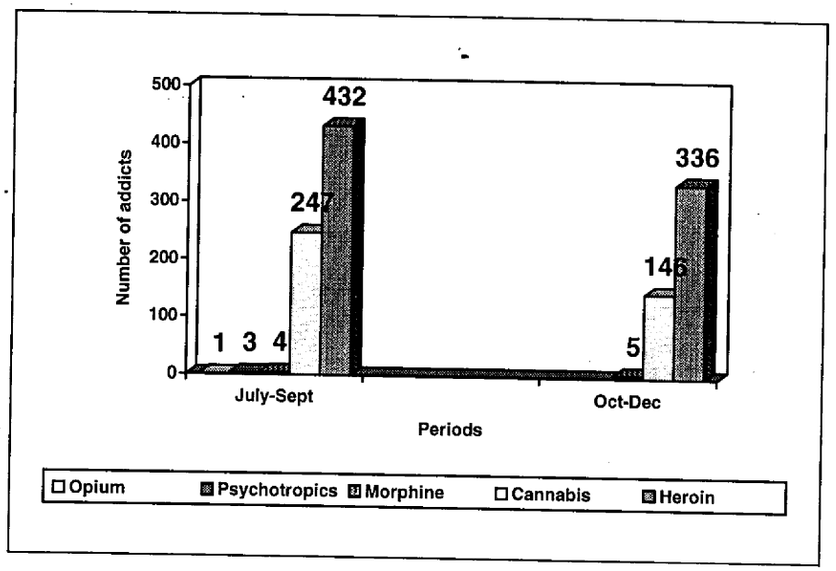
4. TYPES OF DRUG USED

The main types of drugs abused by new addicts were heroin and cannabis **(Figure 2).** Heroin remained the dominant type of drug used, as reported by an average of 68 % of the cases.

The number of heroin users had increased when comparing the prevalence during July-September period and October-December period of 1995. This was accompanied by a parallel increase in a few morphine users. Cannabis users recorded slightly lower for October-December period as compared to July - September period by 5.97%. No other types of drugs were reported for October-December period although a small proportion (0.15%) of new cases were detected between July-September, using opium and 0.44% using Psychotropic pills.

The main route of administration was smoking (cannabis) and 'chasing the dragon' (heroin). A very small percentage (3.08%) of new cases was detected in October-December 1995. The percentage of IVDUs showed a decline of 6.72% in October-December period against July-September period. Only three routes of administration were recorded in October-December period compared to July-September which recorded inhalation (0.15%) and sniffing (0.15%).

Figure 2: Type Of Drugs Used By New Addicts In Kuala Lumpur July - December 1995

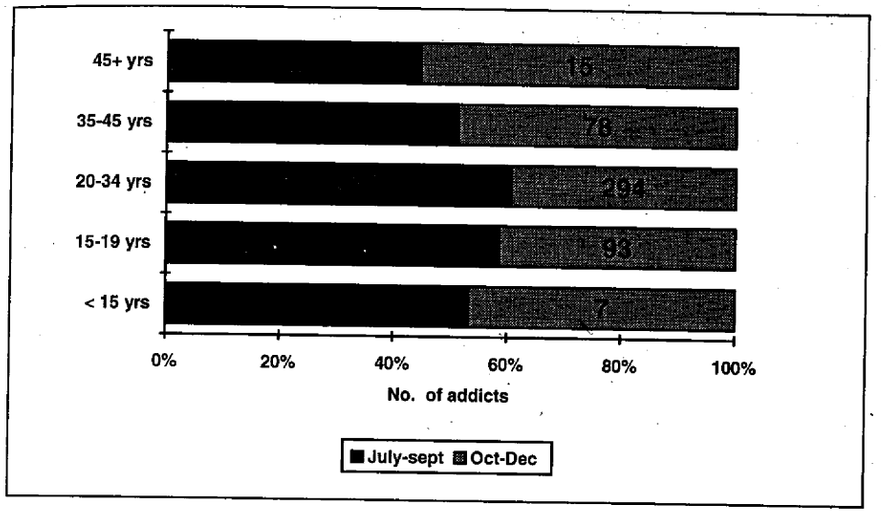


5. AGE GROUPS

As shown in **Figure 3**, most of the cases detected were of ages between 20 and 34 years old (average of 63% across the two periods). The second largest age group detected was the 15 to 19 years old. Both recorded lower percentages in October-December period as compared to July-September period.

While the proportions on the two age groups remained somewhat constant, a slight upward trend in the percentage of 35 to 45 years old (+ 4.1%) under 15 years old (+ 0.4%) and more than 45 years old (+ 1.3%) were detected.

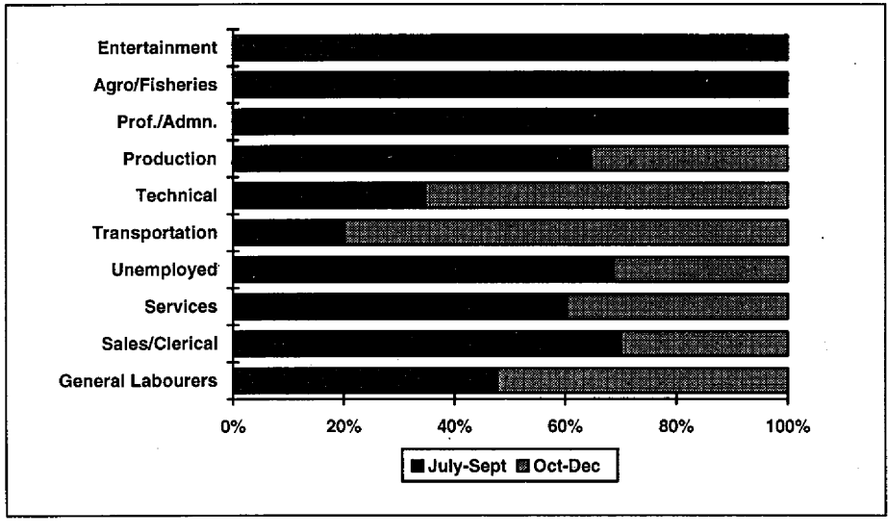
Figure 3: Age Of New Addicts In Kuala Lumpur July - December 1995



6. OCCUPATION

Laborers and workers in the service industry formed most of the cases detected **(Figure 4)**. However, between October-December 1995, the proportion of the drivers and transport workers detected (12.9%) was prominent when compared to subsequent periods (5.34%). During the October-December period, there were no professional and administration, agricultural based workers and entertainment workers reported although unemployed, production, sales and clerical workers were recorded for both periods.

Figure 4: Occupation Of New Addicts Detected In Kuala Lumpur
July - December 1995



7. DRUG SEIZURES AND ARRESTS

Opiate drug seizures peaked in the October - December period (**Table 1**). Large seizures of cannabis were also made between the two periods. Seizures of psychotropic pills recorded higher in the last quarter as compared to July-September period. Heroin seizures showed a decline of 2.645 kg. in October-December period as compared to July-September period although most of heroin addicts are in Kuala Lumpur.

The total number of people arrested for the October-December period increased by 11.8% against July-September period (**Table 2**). Many were arrested for use and consumption offenses during the two periods. Due to extensive police raids, the number of traffickers arrested recorded higher numbers in the October-December period as compared to the previous period.

Table 1: Seizures Of Drugs In Kuala Lumpur
July - December 1995

Type Of Drug	Amount Seized (kg)	
	3rd Q 95	4th Q 95
Opiate	0.060	51.705
Heroin	6.805	4.160
Cannabis	51.780	67.012
Psychotropic (pills)	530	985

Table 2: Number Of Drug Arrests In Kuala Lumpur
July - December 1995

Type Of Offense	Number Of Arrests	
	3rd Q 95	4th Q 95
Use/consumption	95	89
Possession	33	44
Sales	46	49
Trafficking	37	54
Conspiracy	0	0
Others	0	0
Total	211	236

REPORTING AGENCIES

1. Detection and Detoxification Centers, Hospital of Kuala Lumpur.
2. Institute of Medical Research, Kuala Lumpur.
3. Prisons Department, Kuala Lumpur.
4. Narcotics Department, Royal Malaysian Police, Kuala Lumpur.
5. Pharmacy Division, Ministry of Health, Kuala Lumpur.
6. Narcotics Unit, Prevention Division, Customs Department.
7. The Treatment and Rehabilitation Division, Ministry of Home Affairs.
8. Private Rehabilitation Centers in Kuala Lumpur.
9. The Armed Forces.

Appendix 1: Number Of New And Repeat Cases And Total Number Of Addicts In Kuala Lumpur July - December 1995

Addicts Detected	October - December 1995		July - September 1995	
	N	%	N	%
New	487	40.62	687	40.62
Relapse	712	59.38	966	59.38
Total	1199	100	1653	100

THE DRUG ABUSE SITUATION IN THE PHILIPPINES CY 1995

Diony V. Varela
Dangerous Drugs Board
Manila, Philippines

1. INTRODUCTION

The problem of drug abuse and trafficking continued to proliferate in the Philippines during 1995. Inspite of multi-kilos drug seizures effected by drug law enforcement agencies, illicit drug trafficking and drug abuse still existed in almost all strata of Philippines society from posh subdivision areas to slum dwellings of the country. This shows that the Philippines is also suffering the experience of other developing and highly developed countries worldwide.

The Philippines government, through the Dangerous Drugs Board (DDB), attacked the problem in almost all fronts with the main objectives of minimizing, if not totally eradicating, the drug menace in the country. Like in previous years, the government received positive responses and cooperation from both government and non-government organizations, as well as technical support from other regional and international counterpart agencies.

2. DRUG ABUSE PROBLEM IN THE COUNTRY

Polydrug intake among the country's drug abuser population continued during the period under review. Although "shabu" emerged as one of the drugs of choice among drug abusers in rehabilitation centers, marijuana still remains as the number one drug of abuse among drug abusers and traffickers arrested by drug law enforcement agencies. The easy availability of marijuana in illicit drug market and its least cost forced the drug abusers to maintain their drug of choice, compared to the soaring prices of amphetamine and opiate drugs. Middle and upper-income groups of drug abusers, however, preferred "shabu". There was no documented abuse of opiate preparation encountered during 1995.

3. ILLICIT TRAFFIC

Cannabis and "shabu" (methamphetamine HCL) trafficking dominated the illicit drug market in the country. Concealment used were that of conventional methods like body-carry, hand-carried luggage's, fishing boats, and in car compartments. Foreign-based sophisticated and well-financed drug trafficking syndicates with local connections controlled the international drug smuggling operation, while local illicit traffic was managed independently by small, fly-by-night groups.

Outgoing drug smuggling from the Philippines involves cannabis dried leaves and Hashish oil. These drugs were concealed in hand-carried luggages, intercepted in Hong Kong, Malaysia, Korea, and Japan enroute from Manila.

A single incident of trafficking of methylphendicate, a regulated drug, was encountered in Hong Kong enroute the Philippines.

Heroin trafficking was documentedly absent during 1995, although there were intelligence reports for the existence of such.

Cocaine trafficking in very significant quantities was reportedly encountered lately during the year. However, qualitative chemical analysis yielded negative results after the specimen were transferred to Metro Manila from Cebu city.

The Philippines continued to be one of the major transshipment points for international drug syndicates. The country's easily penetrable air and sea ports and long irregular coastline provide ideal entry and exit points for drug smuggling. The situation is aggravated by the Philippines' strategic geographical location and closeness to the major source of illicit drugs - The Golden Triangle, as well as major illicit drug markets, such as Japan and Australia. Likewise, the Philippines has become one of the major producers of high grade cannabis. Foreign trafficking of cannabis and cannabis products is mostly undertaken by unknown groups, and their bases of operation are still undertermined.

3.1 Drug In Production/Manufacture

Cannabis

Cannabis remains the major illicit drug in the Philippines due to its availability and affordability. The cannabis plant grows easily and abundantly nationwide, because of its suitability to the Philippines climate and soil. The best variety of cannabis is grown in the mountainous northern and central parts of the country where the terrain and the perennial low temperature favor best its growth. During 1995, a total of 29,291,430 cannabis plants/seedlings were seized and destroyed in 55 cultivation sites with 35 cannabis cultivators arrested.

Cannabis production in the Philippines is not only for domestic distribution/consumption, but also for illegal export to Japan, Korea and Australia and other Southeast Asian countries and Europe, as well.

Seizures of herbal cannabis totaled 1,455.52 kilos representing a decrease of 86.57% over 1994 seizures which totaled 10,839.93 kilos only. This significant decrease was the indicator of the fiscal constraints undergone by the cannabis plant eradication program in 1995.

Shown below is the table of comparative annual seizures of cannabis plants/seedlings and bulk herbal cannabis for the past three years (1993 to 1995).

Year	Cannabis Plants/ Seedlings (number)	Herbal Cannabis (Kilograms)	Seizures Incidents (Number)	
			Plants/ Seedlings	Herbal
1995	29,291,430	1,455.52	55	496
1994	4,034,221	10,839.93	33	762
1993	7,522,238	4,637.81	74	2,611

Cannabis Resin (Hashish)

In 1995, the presence of hashish (cannabis resin) in the Philippine illicit drug market persisted. A total of 5.79 kilos of hashish resin was seized by the Philippine authorities while 900gms. of hashish oil from Manila were seized by Japanese operatives at Narita Airport. These seizures gave validity to intelligence reports claiming the existence of clandestine hashish laboratories actively operating in the northern Philippines.

Arrest/seizure reports showed that in nearly all cases of hashish manufacture/trafficking, foreign nationals were involved.

Hashish produced in the Philippines are intended solely for illegal export to Asian and European countries such as Japan, Germany and the U.S. Locally manufactured hashish from Northern Philippines can compete with the world's best in quality.

The table below shows the comparative annual seizures of cannabis resin (in kilograms) for a four-year period (1992 - 1995).

Year	Quantity Seized (Kilograms)	Seizure Incidents (Number)
1995	5.79	4
1994	126.590	15
1993	3.810	6
1992	11.130	3

3.2 Drugs Imported Into The Country

Methamphetamine Hydrochloride ("shabu")

During the period under review, the total supply of methamphetamine in the Philippines came from illegal importation, through smuggling, utilizing the various air and sea ports that practically dot the coastline of the country.

With relentless law enforcement action during the past years, clandestine manufacturing laboratories involving methamphetamine totally stopped their operations. What still exist though, are so called "laboratories" used for "cutting" the drug, that is adding adulterants such as talc, alum or glucose, to reduce drug purity making it suitable for street-level distribution.

In 1995, total seizures amounted to 114.58 kilos of methamphetamine HCL in 1,219 seizure incidents, involving a total of 2,005 persons arrested.

Source countries of methamphetamine HCL in the Philippines have been identified as Taiwan, Hong Kong and the Peoples' Republic of China.

Criminal syndicates controlling international methamphetamine trafficking were foreign-based, which control the illegal importation and the international traffic both to and from the Philippines. Sino-Filipino groups control the domestic trafficking of "shabu" in the country.

The total annual seizures of "Shabu" during CY's 1992 to 1995, are shown below.

Year	Quantity Seized (Kilograms)	Seizures Incidents (Numbers)	Persons Arrested
1995	230.43	1,219	2,005
1994	114.580	1,243	–
1993	160.740	2,137	–
1992	129.460	652	–

3.3 Drugs In Transit

Heroin

Although the Philippines remains a transit/transshipment area for Southeast Asian heroin directly coming from Thailand and destined mostly for the USA and Europe, trafficking of heroin was documentedly absent in the Philippines' illicit drug trafficking during the year. However, recorded heroin seizures during the 90's which showed an increase of at least 67% annually, is an indication that heroin trafficking groups are still using the Philippines as a transit country for the international traffic of the drug.
The table below shows the annual comparative seizures of heroin for the past three years (1993 to 1995).

Year	Quantity Seized (Kilograms)	Seizure Incidents (Number)
1995	-	-
1994	23.000	3
1993	17.380	2

Cocaine

The comparative annual seizures of cocaine for CYs 1992 to 1995 are as follows.

Year	Quantity Seized (Kilograms)	Seizure Incidents (Number)
1995	1.421	10
1994	9.020	10
1993	8.130	4
1992	66.570	2

4. ILLEGAL CONSUMPTION

According to 1995 statistics culled from various rehabilitation centers nationwide, multiple drug intake continues to be the unique characteristic of drug abuse in the Philippines, although cannabis remains the principal and most popular drug of choice. Cannabis is taken usually in combination with other drugs such as tranquilizers/anxiolytic preparations and/or alcohol; as well as with other pharmaceutical preparations which are not controlled but which act as substitute drugs; which ever drug combination is available and affordable to the abuser.

"Shabu" remains a very close second to marijuana and is abused by itself without resorting to combinations; however, it is also a fact that Filipino drug abusers may switch from "uppers" to "downers" depending on the availability and affordability of their drugs of choice in that particular moment.

5. ARRESTS AND SEIZURES

In 1995, there were 2,022 arrests/raids conducted by various drug law enforcement agencies nationwide with a total of 3,113 persons arrested for various violations of the Dangerous Drugs Act, as amended. Of this total arrested persons, 35 were cannabis cultivators. Fourteen foreign nationals were arrested either as traffickers or users.

DRUG ABUSE SITUATION IN VIETNAM

Tran Xuan Nhat
Department For Social Evils Prevention
Ministry Of Labor, Invalids & Social Affairs
Hanoi, Vietnam

1. INTRODUCTION

Drug abuse has become a major and widespread problem in recent years with serious implications on many aspects such as health, social security and socio-economic affairs. The government as well as social organizations have put all efforts to deal with this problem; but it is still prevalent and serious.

2. DRUG ABUSE SITUATION

According to the information from drug treatment facilities throughout Vietnam, the number of addicts who had been treated at the drug treatment facilities had increased by about 5 - 10 percent annually.

The number of drug addicts who came for treatment on both voluntary and compulsory basis under the charge of the Ministry of Labor, Invalids and Social Affairs were 9,916 in 1994 and 7,490 in the first nine months of 1995. The data from drug treatment units showed that the number of new admissions in the urban area was about 15 - 20%, while the number of re-admissions was 80 - 85 percent.

Drugs abuse in Vietnam were mainly opium, residues of opium and other addictive substances such as heroin, morphine dolagane and seduxen. There were some cases of cocaine abuse in the provinces and Langson, Dongnai and Ho Chi Minh city and cannabis in the Cantho and Angiang province. It is worth mentioning that recently heroin abuse reappeared in some localities such as Langson and Hanoi city.

The way of drug abuse in the mountainous areas was mainly smoking and chewing while in the urban areas the route of administration was both opium smoking and drug injection. In the urban areas most addicts used prepared opium for injecting (residue of opium mixed with some addictive substances like morphine, dolagane, seduxen...); around 70 to 90% of addictive population in the urban areas were IDUs. Most of addicts in the urban areas were in age group of 19 - 45 years, unemployed and had very low level of education. Many of them had ever been sentenced or had police records. The situation at drug treatment centers in Hanoi and Ho Chi Minh city is shown in the table below:

Admissions To The Drug Treatment Center

Ho Chi Minh City July 1994 - September 1995	Number	Total	Hanoi July - December 1995	Number	Total
Admission:			**Admission:**		
New	434		New	530	
Relapse	1,155	1,589	Readmission	54	584
Sex: Male	1,490		**Sex:** Not Available	–	–
Female	99	1,589			
(82 involved in prostitution before)					
Age: 19-45 yrs	1,511		**Age:** 18-19 yrs	117	
>45 yrs	78	1,589	20-34 yrs	205	
			35+ yrs	262	584
Education: 1-6 yrs	926		**Education:** 1-6 yrs	263	
7-12 yrs	614		6-12 yrs	321	584
13+ yrs	49	1,589			
Marital Status:			**Marital Status:**		
Single	49.91%		Single	440	
Married	38.26%		Married	140	
Separated/Div.	7.99%		Separated/Div.	4	
Widowed	3.84%	100.00%	Widowed	0	584
Occupation:			**Occupation:**		
Drivers/trans.	32		Unskilled laborers	263	
Unemployed	1,120		Unemployed	321	584
Public servants	32				
Others	405	1,589			
Drug of Abuse:			**Drug of Abuse:**		
Opium	91.63%		Opium	458	
Morphine	5.4%		Morphine	60	
Heroin	2.97%	100.00%	Heroin	42	
			Dolargan	24	584
Route of Admin.:			**Route of Admin.:**		
IDUS	1,538		Inhalation	30	
Smoking	43		Injection	410	
Chewing	8	1,589	Oral	0	
			Smoking	144	584
Conviction	84.39%		**Conviction:**		
			Not Available	–	–

Using opium by injecting was prevalent among the addict population, and there was a trend of using heroin by inhalation in Hanoi.

The main activities of the centers were to help the addicts to overcome bouts of drug hunger, to get rid of drug taking for ever as well as to provide the former addicts with counseling services for social reintegration. In respect of therapy, Vietnamese traditional medicine is being mainly used for drug treatment. Recently the Ministry of Public Health has issued provisional instructions in the use of tranquilizers for drug treatment at the centers/facilities.

The average relapse rate was rather high (70 percent); some reasons for this could be:

- the addicts themselves were not determined enough to abstain from drugs;
- the activities of management and drug control were still not strict enough;
- the capability and conditions for vocational training, job creation and social reintegration for the aftercare services at centers as well as community-based facilities were very limited.

3. HEALTH INDICATORS

Drug addiction is one of the major factors that have caused an increase in the number of HIV positive patients in Vietnam. According to the National AIDS Committee, as at 29 November 1995 there was a total of 3,243 HIV infected cases including 80 foreigners. Two hundred and ninety-three (293) AIDS cases were identified of which 134 persons died of AIDS. Ho Chi Minh City (1,537) and Khanh Hoa province (295) in the South had the highest incidence. Among the 3,163 Vietnamese HIV carriers, 2,438 were injecting drug users (77.1%); and as at 31 December 1995 this number rose to 3,541. However, authorities believe the real number of HIV infected patients could be as many as 17,000. It is estimated that if prevention measures are not effective enough, about 350,000 Vietnamese will be infected with HIV virus by the year 2000.

4. SUPPLY REDUCTION ACTIVITIES

4.1 Opium Cultivation

- In the Northern mountainous areas (12 provinces) opium poppy cultivation by ethnic minority people is an inherent tradition. Eradicating this practice is one of the main targets set by the ongoing national program for drug control. In the past three years the program brought about encouraging results: the poppy acreage was reduced from 20,000 hectares in 1992 to 3,700 hectares to date. However, appropriate crop substitution remains a hard nut to crack. In this regard, the target for the year 2000 is the complete eradication of all opium poppy cultivation areas.

4.2 Law Enforcement Activities

The drugs involved in illicit drug traffic seized in the country were opium, heroin, cocaine, cannabis, morphine, and other addictive substances.

- In the 1993 the enforcement forces detected and arrested 904 cases, while seizures were 1,954 kg of opium, 10.55 kg heroin and 475 kg cannabis. In 1994, 2,778 cases were arrested with 8,179 offenders who included organizers of drug use, traffickers and drug den owners. A total of 2,019 kg opium, 3 kg morphine, 32.3 kg heroin, 2.1 kg cocaine, 2,394 kg cannabis, 2,674 vials of morphine and 616,133 vials of other addictive drugs were seized. In the first six months of 1995, 673 cases were arrested with 2056 offenders, 106,677 kg opium, 14.5 kg heroin and over 10,000 vials of other addictive drugs.
- In 1994, a total of 1,993 drug-related offenders were brought to the courts at all levels: sentenced to death; 2 to life imprisonment: 9, from 10 to 20 years imprisonment: 73, from 7 to 10 years imprisonment: 35 under 7 years imprisonment: 1,135. In the first nine months of 1995, there was 1427 drug-related offenders, sentenced to death 4, to life imprisonment 8, from 7 to 10 years imprisonment 35, under 7 years imprisonment 1,135.
- From 1982 to 1992: 7,388 kg opium, 8.2 kg heroin, 2.0 kg morphine and about 50,000 kg cannabis; were destroyed in the presence of the law enforcement authorities and the public. Similarly from 27 March 1993 to 15 January 1995, 2,100 kg opium and 7.1 kg heroin were destroyed.

5. CONCLUSION

The activities of prevention of drug abuse had been executed for many years but it gained real momentum only since the VNDCP set up a multi-faceted policy and strategies. The fight against drug problems has recorded considerable initial success in recent years. However the situation of illicit drug trafficking, production and drug abuse is still very complicated and is of great concern to the entire society. The challenges facing the VNDCP are many.

Vietnam wishes to maintain close cooperation and support with international organizations and community in order to translate the goals of the VNDCP into reality, thus contributing to the common struggle of the world community against drug abuse, illicit trafficking and production.

NATURE AND PATTERN OF DRUG USE IN YANGON

Dr. Hla Htay
Yangon Drug Treatment Center
Union Of Myanmar

ABSTRACT

A cumulative total of 9,013 drug addicts were admitted to the Yangon Drug Treatment Center as of 31st December 1995. Among the 317 new cases in 1995, 313 were males and 4 were females. The mean age of the addicts was 26.1 years. The majority of new cases were in the age group of 20 to 34 years constituting 81.4 percent. The occupational status was found to have no association with drug use. The majority had 7 to 12 years of education, that is, 76 percent. Of the 317 cases, 64.4 percent were single and 35 percent were married. Among the new cases, Bamar constituted 72.5 percent, followed by Indian 11.4 percent and mixed Bamar and Foreign nationals, 7.6 percent. Heroin is the most popular drug among drug addicts. Seventy three percent were injecting users while 21 percent choose snorting or smoking methods. Duration of drug use before admission was found to be highest between 1 to 2 years, that is, 25.5 percent. The types of drugs first used by new cases were heroin (59.3%), opium (13.9%), codeine containing cough tablet and cough syrup (12.0%), marijuana (9.8%), minor tranquilizer (3.5%), and methaqualone (1.5%). On admission, heroin became a major type of drug accounting for 90.2%. In 1995, 13 death cases reported were due to overdose and septicaemia. Out of 317 new cases, 22 cases admitted that they were arrested by the police under section 15 before admission. Biannual average HIV positive percents started to decline from 70.3% in 1993 to 51.5% in 1995.

1. INTRODUCTION

1.1 Area Description

Myanmar has seven states and seven divisions covering 318 townships with an estimated population of 43.13 millions in 1993 - 1994. Among 135 ethnic groups Kachin, Kayah, Kayin, Chin, Bamar, Mon, Rakhine and Shan are the dominant races. The land area is 678,932 square kilometers.

Yangon, the capital city of Myanmar, covers an area of 350 square kilometers and is composed of 31 townships. According to the recent census, the total population of Yangon City which is administratively divided into four districts, is 3,100,570. There are 1,550,572 males and 1,549,998 females which shows a slightly excess of males over females. Yangon City is the most densely populated area of the country. The population density is 8,858 persons per square kilometer.

1.2 Data Sources And Time Period

- Data on the amount and type of seized drugs were collected by the Central Committee for Drug Abuse Control, Ministry of Home Affairs.

- HIV Seroprevalence rates were collected by AIDS Pevention and Control Project, Department of Health Services.
- Hospital data were collected by Drug Dependency Treatment and Research Unit, Yangon.
- Time Period: January 1995 to December 1995.

2. DEMOGRAPHIC CHARACTERISTICS OF DRUG ADDICTS

Yangon Drug Treatment Center admitted 317 new cases in 1995 (**Table 1**). Out of this, 313 were males and 4 were females. With regard to age group, the youngest was 15 and the highest 58 with a range of 43. The mean age of drug addicts admitted was 26.1 years. The majority of new cases were in the age group of 20 to 34 years. The age group of 15 to 19 years constituted 12% of the total while those over 35 years were 6.6%. Of the 317 cases, 48.6% cases were currently employed, 42.9% cases unemployed and 9.5% were students. The majority (76%) had 12 years of education followed by 9.5% with 1 to 6 years of education, while 0.6% were found to be illiterate. The next highest group, 13.9% had more than 12 years of education. Among new cases, 64.4% were single, 35%, married and 0.6% were separated. Regarding ethnic groups, Bamar constituted 72.5%, followed by Indian 11.4% and mixed Bamar and Foreign nationals, 7.6%. Fifty two point seven, the highest in the series has a family size of 6 to 10.

Table 1: Demographic Characteristics Of Drug Addicts In Yangon (1995)
N = 317

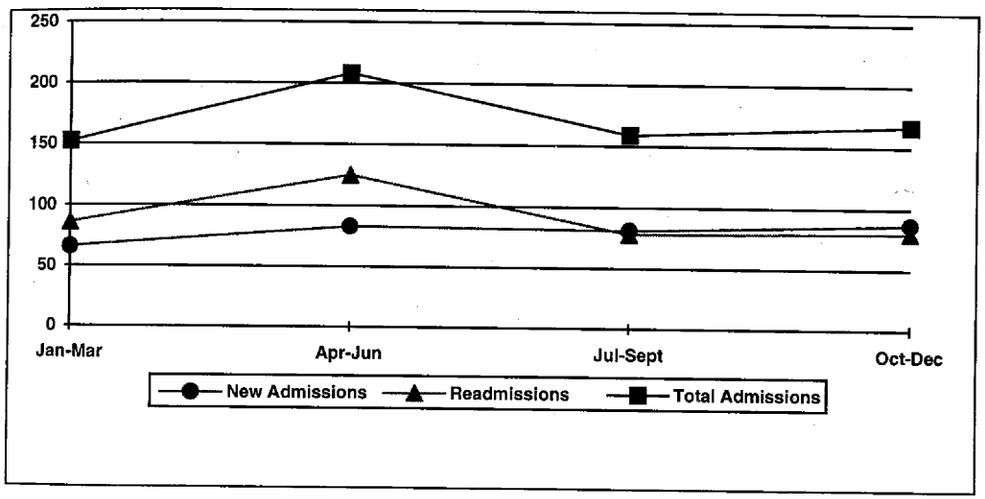
Characteristic	No.	Percentage
Sex of the Patient		
Male	313	98.7
Female	4	1.3
Patient Age		
15 - 19	38	12.0
20 - 34	258	81.4
35+	21	6.6
Patient Occupation		
Employed	133	41.9
Unemployed	154	48.6
Student	30	9.5
Number of Years of Education		
Zero	2	0.6
1 - 6	30	9.5
7 - 12	241	76.0
13+	44	13.9
Patient Marital Status		
Single	204	64.4
Married	111	35.0
Separated	2	0.6
Patient Ethnicity		
Bamar	230	72.5
Indian	36	11.4
Chinese	5	1.6
Mixed	24	7.6
Other	22	6.9
Number of People in Household		
2 - 5	125	39.4
6 - 10	167	52.7
11+	25	7.9

3. NATURE AND PATTERNS OF DRUG USE

3.1 Number Of Patients Admitted

The total number of drug addicts admitted to Yangon Drug Treatment Center during 1995 was 686, of which 317 cases were new and 369 old cases. The average number of admissions per quarter was 171.5. A marked increase was found in the second quarter, after which no prominent changes were observed (**Figure 1**).

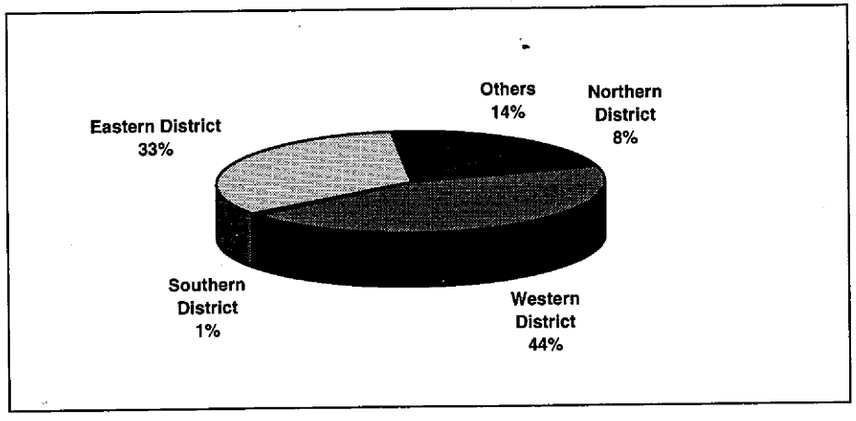
Figure 1: Number Of Treatment Admissions In Yangon (1995)



3.2 Geographical Distribution

Yangon City was primarily populated in Eastern and Western districts and this is still dominant even after the new urbanization program. In the study of new cases as shown in **Figure 2** it can be seen that the number of addicts were dominantly highest in the western and eastern districts, 44 and 33% respectively.

Figure 2: New Cases Of Drug Addict By Geographical Distribution (1995)



3.3 Drug Type

The drug used dominantly is heroin amounting to 90.2 % in 1995. The others were opium 5.4 % and marijuana 3.5%.

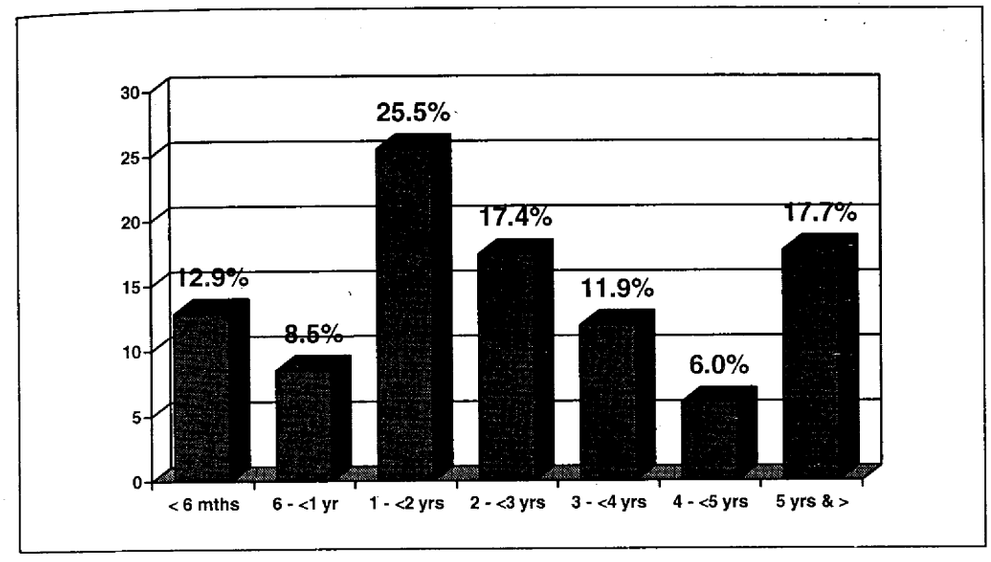
3.4 Route Of Administration

Among the 286 cases of heroin addicts, 81.1% were injecting users while 8.9% choose snorting or smoking methods. All marijuana addicts admitted that they use the smoking habit. Opium addicts are oral users. Chasing the dragon is classical among female addicts.

3.5 Duration Of Drug Use

Duration of drug use among the addicts studied from Yangon Drug Treatment Center as at 1995 depicts a remarkable feature which is shown in **Figure 3**. The highest percent of duration used was found between 1 to 2 years which is expected. Duration of use for 5 years and above (17.7%) was the second highest in the study. In this study two remarkable cases were observed where one opium user started to use at an age of 16 and registered for first treatment at an age of 46 years. The other is a heroin user who started to use at age 20 and submitted to be registered at age 32 years.

Figure 3: New Cases Of Drug Addict By Duration Of Current Drug Use



3.6 Modal Age Of Addicts At Admission And First Use

Out of 317 registered drug addicts admitted, 294, that is, 92.7%, recognized their age at first drug use. The modal values of age at admission and first use are shown in **Table 2**.

It will be seen that adolescents mostly started to abuse marijuana (15.4 years), diazepam (15.7 years) and cough tablet and syrup containing codeine phosphate (17.5 years), on the contrary opium (23.5 years) and heroin (21 years), the drug to which most young adults are addicted.

It will be observed that the pattern changes on admission due to exposure where the productive age group used opium and others (alcohol mixed with other narcotics and psyhotropic substances). Marijuana and heroin are mostly used by the youngest productive age groups.

Table 2: Modal Age Of Addicts At Admission And First Use By Type Of Drug

Type of Drug	Time	
	Admission	1st Use
Heroin	26.15	21
Opium	32.5	23.5
Marijuana	20.7	15.4
Others	32.0	-
Diazepan	-	15.7
Cough tablets and Syrup	-	17.5

3.7 The State Of Drug Abuse As At First Use And On Admission

Among 317 addicts studied it will be seen that 188 (59.3%) used heroin as the first drug of use when they first used drug, the second major types of drugs are opium 44 (13.9%), codeine 38 (12.0%) and marijuana 31 (9.8%). On admission the major type of drug abuse became heroin, 286 (90.2%) as shown in **Table 3**. The changing pattern over types of substances abuse is shown in **Table 4**. Among first heroin users 1.6 percent switched over to opium, marijuana, 0.5% and others, 0.5%. Among first opium users 22.7% stayed at opium but 72.2% changed over to heroin and 4.6% to other drugs. The same type of switch over from marijuana to heroin was also observed as shown on the diagonal of **Table 4**. It is quite natural that from the point of view of effectiveness, cost-benefit and security, heroin becomes the most popular drug abused.

Table 3: Substances At First Use And On Admission

Substance	First Use		Admission	
	No.	%	No.	%
Heroin	188	59.3	286	90.2
Opium	44	13.9	17	5.4
Marijuana	31	9.8	11	3.5
Other	-	-	3	0.9
Tranquilizer	11	3.5	-	-
Methaqualone	5	1.5	-	-
Codeine	38	12.0	-	-
Total	317	100.0	317	100.0

Table 4: Changing Patterns Of Type Of Drugs Used

First Use		Admission								
		Heroin	Opium	Marijuana	Others	Tranquilizer	Methaquolone	Codeine	No.	%
Heroin	No.	183	3	1	1				188	59.3
	%	97.4	1.6	0.5	0.5				100	
Opium	No.	32	10	-	2				44	13.9
	%	72.7	22.7		4.6				100	
Marijuana	No.	23	1	7					31	9.8
	%	72.7	3.2	22.6					100	
Others	No.	-	-	-						
	%									
Tranquilizer	No.	9	-	2					11	3.5
	%	81.8		18.2					100	
Methaquolone	No.	5	-	-					5	1.5
	%	100							100	
Codeine	No.	34	3	1					38	12.0
	%	89.5	7.9	2.6					100	
Total	No.	286	17	11	3				317	100
	%	90.2	5.4	3.5	0.9				100	

3.8 Comparison Of The Period Of Hospitalization/Police Arrest And The Number Of Cases Instuitionalized

To observe the dependency of period of hospitalization cum police arrest and the number of persons instituitionalized it was found that the two factors are statistically independent where $P > 0.05$. It is suggested that Yangon, the transit city, which is away from cultivation/production area has a distinct characteristic incompatible to the production area due to the power of dumping. See **Table 5**.

Table 5: Number Of Cases Instituitionalized By Period Of Hospitalization/Police Arrest

Period	Treatment Admission		Police Arrest Cases		Total	
	No.	%	No.	%	No.	%
Jan - Mar	152	22.2	413	23.6	565	23.2
Apr - Jun	208	30.3	558	31.9	766	31.4
Jul - Sep	159	23.2	422	24.1	581	23.8
Oct - Dec	167	24.3	358	20.4	525	21.5
Total	686	100.0	1751	100.0	2437	100.0

4. DRUG RELATED PROBLEM

4.1 History Of Drug Related Arrest Before Admission

Among the 317 cases studied, 22 cases (6.9%) had self admitted that they had committed offense under the Narcotics and Psychotropic Substance law and were arrested by the police before admission.

4.2 Drug Related Medical Complications

Thirteen medically complicated and deceased cases were studied. Among the new cases it was found that 3 cases were reported death due to overdose. Six old cases were also deceased due to overdose. Four cases died of septicaemia. Among them one case had brain tumor which was diagnosed previously.

4.3 Prevalence Of HIV Infection Among IDUs

A comparison between the biannual HIV sentinel surveillance rate and the injection route in percents is shown in **Table 6**. Biannual average positive percents started to decline from 1993 to 1995, that is from 70.3 to 51.5. For injection route percentage started to decline markedly in 1993, from 69.6 to 56.0, but the decline in subsequent year 1994 was not so pronounced. On the contrary abrupt increase in the rate was observed in 1995 from 53.3% to 73.0%, nearly 20 percent. It was therefore expected that even though the IDUs were aware of the harmful effects of use of unsterile needles they could not persist the feeling of high to the extent that they could not change their behavior.

Table 6: Comparison Of Biannual HIV Average Percent And Percent Of Injecting Route By Year

Year	Examined	Positive	Biannual HIV Average Positive	Injecting Route	
				Percent	No.
1992	186	123	66.1	69.6	298
1993	222	156	70.3	56.0	192
1994	200	115	57.5	53.3	225
1995	200	103	51.5	73.0	232

5. LAW ENFORCEMENT ACTIVITIES

5.1 Destruction Of Seized Drugs

The destruction of seized drug by the whole country as at 9th February 1996 is shown in **Table 7**. The contents destroyed from Yangon seizure is shown at serial number 14 of **Table 7**.

Table 7: Narcotics Drugs Destroyed At The Tenth Destruction On 9 February 1996

Sr. No	SUBMITTING AGENCY	OPIUM		HEROIN		OPIUM OIL		OPIUM LIQUID		MARIJUANA		PHENSEDYL		COUGH MIXTURES CONTAINING OPIUM		INJECTION CONTAINING OPIUM
		Case	Kilo	Case	Kilo	Case	Kilo	Case	Kilo	Case	Kilo	Case	Litre	Case	Litre	Amp.
1	Tatmadaw	71	906.764	113	44.822	5	9.270	-	.653	13	19.479	45	612.850	3	23.870	
2	Military Detention Camp	-	-	-	-	-	-	-	-	5	3.505	-	-	-	-	
3	Anti - Narcotic Task Forces	115	120.497	276	18.956	14	.948	1	.140	70	13.503	35	163.62	3	35.520	
4	Kachin State MPF	70	192.889	96	15.182	2	.177	-	-	3	.312	11	106.375	2	12.240	
5	Kayin State MPF	-	-	-	-	-	-	-	-	6	5.453	1	.250	1	30.135	
6	Chin State MPF	3	693	-	-	-	-	-	-	1	1.200	11	294.125	-	-	-
7	Sagaing Div. MPF	29	29.401	9	.311	-	-	-	-	2	.037	29	562.000	1	1.625	
8	Tanintharyi Div. MPF	-	-	2	.021	-	-	-	-	5	2.763	40	46.572	4	8.946	
9	Bago Div. MPF	3	.009	4	.086	-	-	1	.003	40	37.901	3	28.250	-	-	
10	Magway Div. MPF	11	2.073	-	-	-	-	-	-	17	27.099	2	.625	-	-	
11	Mandalay Div. MPF	11	13.483	12	.348	-	.200	1	.080	5	.164	12	51.250	-	-	
12	Mon State MPF	4	119.900	-	-	-	-	-	-	5	.991	-	-	-	-	
13	Rakhine State MPF	1	.457	-	-	-	-	-	-	9	5.660	6	33.625	-	-	150
14	Yangon Div. MPF	4	1.240	77	.595	16	.834	-	-	198	72.284	1	4.750	-	-	
15	Shan State MPF	45	44.854	38	.974	1	.701	-	-	1	.287	-	-	-	-	
16	Ayeyarwaddy Div. MPF	1	.073	-	-	-	-	-	-	9	1.374	-	-	-	-	
17	Railways MPF	4	39.004	2	1.082	-	-	-	-	4	5.361	3	14.250	-	-	
18	Weightless Packets	63	.035	871	.330	3	.001	-	-	67	.023	-	-	-	-	
	TOTAL	435	1471.372	1500	82.707	41	12.131	3	.876	460	197.396	199	1918.552	11	112.336	150

5.2 Arrest And Seizures

During the year 1995, a total of 1,751 arrests were made by Myanmar Police Force and medico-legal assessment of those arrested were done by the Yangon Drug Treatment Center. Among them, 1,552 (88.6%) were male and 199 (11.4%) were female.

The following are the contents seized in 1995

Opium	0.8012	Kilograms
Heroin	4.421	Kilograms
Marijuana	61.6295	Kilograms
Phensedyl	0.25	Liters
Opium Oil	2.6811	Kilograms
Comethazine	0.04	Liters

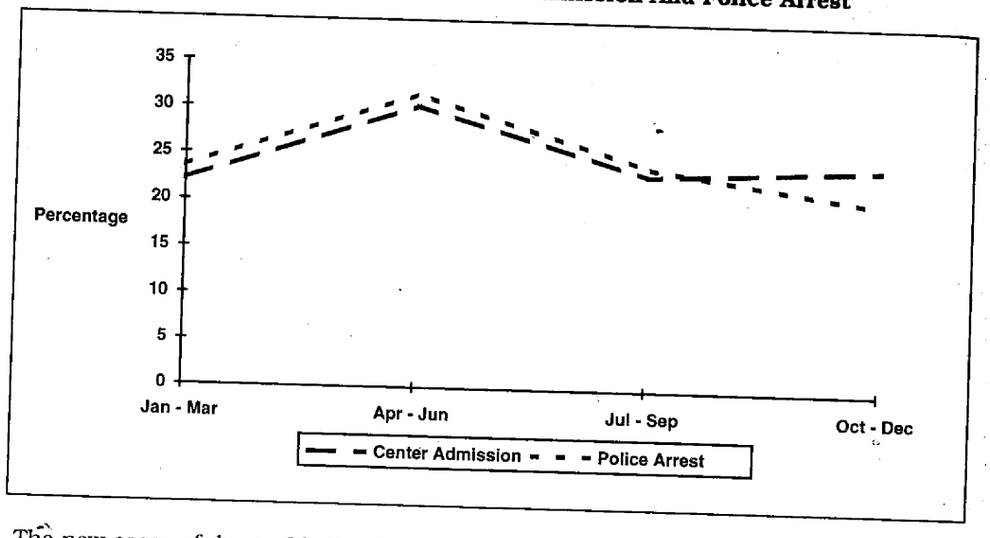
5.3 The Effect Of Police Arrest On Treatment Admission

The number and percentage of cases admitted to the Treatment Center and by police arrested in 1995 are shown in **Table 8**. The percentages of cases attended by quarters of admission and arrest in 1995 are shown in **Figure 4**. Parallelism is observed in the three quarters that whenever there are more police arrests the number of cases admitted also increased accordingly. The pattern was reciprocated in the last quarter of 1995. However, the correlation coefficients of percentages of admission and arrests is found to be 0.889 which is statistically significant where it clearly demonstrates that when more arrests are made more addicts are going to register at the center so as to have a temporary asylum from penalizable action at that particular moment.

Table 8: Number Of Cases Admitted And Arrest By Quarter In 1995

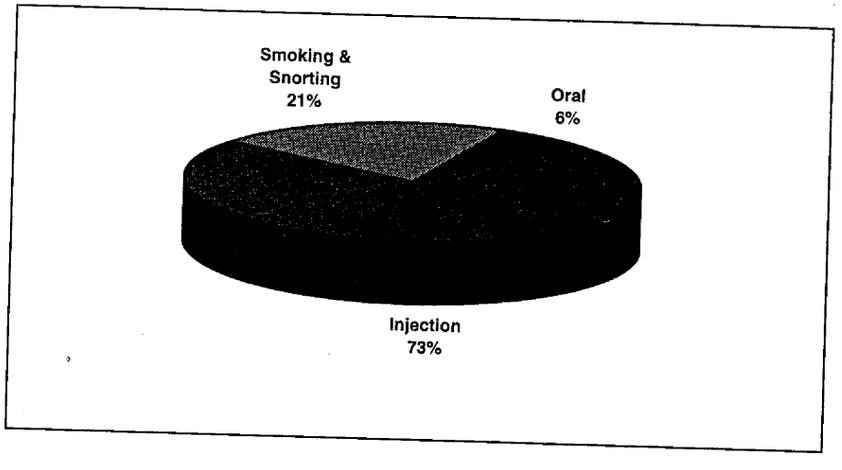
Quarters of 1995	Institutionalization		Percent Institutionalization	
	Center Admission	Police Arrest	% Center Admission	% Police Arrest
Jan - Mar	152	413	22.16	23.59
Apr - Jun	208	558	30.32	31.57
Jul - Sep	159	422	23.18	24.10
Oct - Dec	167	358	24.34	20.45
Total	686	1751	100.0	100.0

Figure 4: Comparison Of Center Admission And Police Arrest



The new cases of drug addiction by route of administration in Yangon during 1995 is shown in **Figure 5**. The common route of drug administration is by injection contributing 73%, followed by smoking and snorting which makes up 21%.

Figure 5: New Cases Of Drug Addiction By Route Of Administration In Yangon (1995)



PART 1: SECTION TWO

SOUTH ASIAN COUNTRY REPORTS (January 1995 - March 1996)

DRUG ABUSE MONITORING SYSTEM IN RAWALPINDI/ISLAMABAD OCTOBER 1995 – MARCH 1996

Dr. Kamran Niaz
Integrated Drug Demand Reduction Project
Islamabad, Pakistan

ABSTRACT

The drug abuse monitoring system for Rawalpindi/Islamabad was initiated on an experimental basis in March 1995. This report covers the six months period from October 1995 - March 1996, and looks at the drug abuse trends and other indicators for this period. During the reporting period there have been a total of 891 drug addicts in for treatment. 86% of the addicts were using heroin as their primary drug of abuse, while 64% were poly drug users. 75% were smoking or chasing the dragon, while 6% were injecting drugs. 99% of the clients were male, 57% were between the ages of 20 - 34 years and 30% between 35 - 44 years, 47% were married and 85% living with their families. 37% of the drug addicts were illiterate, while 30% had 1 - 6 years, and 28% 7 - 12 years of education. 80% were employed, the major category within the employed drug addicts was of drivers and transport workers (26%), followed by laborers (17.8%), self-employed (13.7%), and 11.7% agrobased. The law enforcement agencies arrested 724 people on drug related offenses. With 565 seizures the agencies seized 3.869 kg. of opium, 6.817 kg. of heroin, 902.481 kg. of cannabis and 12,365 bottles of alcohol during the six months.

1. RAWALPINDI / ISLAMABAD

Rawalpindi and Islamabad referred to as the twin cities are situated in the north east of the country. Rawalpindi is an old city which emerged from a village founded in around the 14th century, while Islamabad was founded in 1965 when it was decided to move the capital from Karachi in the south.

The total population of Rawalpindi and Islamabad according to the 1981 census is 1,159,916, with 628,565 males and 531,351 females. The majority of population living in Rawalpindi are Punjabi Muslims, while very few people in Islamabad can say that they belong to this area. Most of the people residing in Islamabad are civil servants belonging to different parts of the country. Being the capital there is also a sizable number of foreign diplomats and representatives of international donor agencies in Islamabad.

The major occupation groups in Rawalpindi are production and related workers, transport workers and laborers. Other occupations in which people are engaged are government service, business, agriculture, and overseas employment. A large number of people from the area also serve in the military. The literacy rate of the cities according to 1981 census is 58.8% while the male literacy rate was 68.8% as compared to 31.2% female.

Administratively, Rawalpindi comes in the Punjab province, while Islamabad and some areas around it are termed as the Federal Territory. Generally better medical, educational facilities and other amenities are available to the population in Rawalpindi and Islamabad, than rest of the country.

Rawalpindi and its adjoining areas also serve as a transit point for drugs originating from the North West Frontier Province to other parts of the country or abroad. An interesting feature of the area is that cannabis grows wildly in the area. Cannabis plants can be seen even around houses and pathways in the twin cities.

2. DATA SOURCE

There are 14 drug treatment facilities in Rawalpindi / Islamabad, as reported in the National Directory of Treatment Services. One program is being run in the Central Jail, two in the Government Hospitals, three self help groups and eight treatment centers run by NGOs or commercial interests.

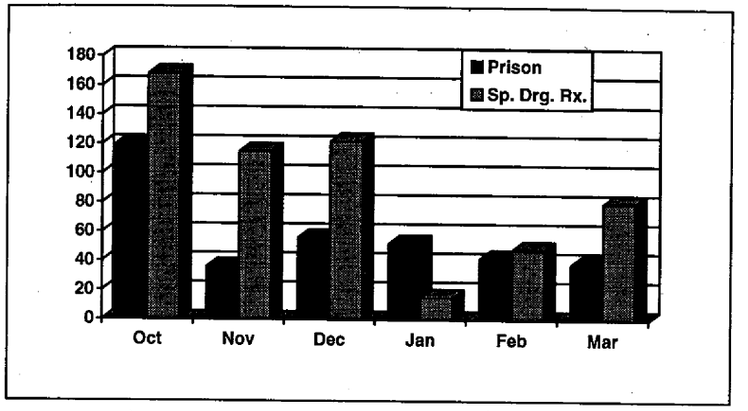
During the reporting period, October 01, 1995 to March 31, 1996, the data has been collected on a monthly basis by drug treatment centers and the Central Prison in Rawalpindi. For the period October to December 1995, the data was provided by 6 specialized drug treatment centers, for January by 3, and for February and March by 4 centers. The specialized drug treatment centers included, Imran Center, Islamabad Christians Against Narcotics (ICAN), Naya Janam, and Department of Psychiatry, Rawalpindi General Hospital. The District Headquarters Hospital's Department of Psychiatry which provided data up to December 1995 has been closed since then.

The law enforcement data was provided by the Police and Excise Department through the District Narcotics Control Committee, which is headed by the Deputy Commissioner of Rawalpindi.

3. DRUG ABUSE TRENDS

During the reporting period, 891 clients came for treatment in the participating centers. Out of these 62% were reported from the treatment centers and the rest from the prison in Rawalpindi. The total number of clients reported for each month is given in the chart below.

Chart 1: Total Numbers In Drug Treatment



For the month of October there was a high influx of clients both in the prison and the drug treatment centers. This is ascribed to increased police activity in rounding up the drug addicts, which was lessened or decreased for the next months. These numbers dropped considerably in the next month, and have been fluctuating ever since. Moreover, for the drug treatment centers from October to December 1995 six centers were providing data, whereas for January it was 3, and 4 for the next two months.

Out of 891 clients who came for treatment, 83.3% (742) were institutional admissions, while 16.7% (149) were non institutional admissions. From the 742 institutional admissions 66% were new admissions while 34% were readmissions. Out of 149 non institutional admissions 68.5% were new admissions while 31.5% were readmissions. The number of institutional admissions in this quarter is more as compared to the previous quarter (April - September 1995) i.e., 83% as compared to 79% respectively.

4. PRIMARY DRUG OF ABUSE

While heroin has remained the main drug of abuse for which the majority (85%) of clients came for treatment, this percentage has decreased from the previous quarter where it was 90%. Moreover, the number of clients for other drugs has increased during this period. The main increase has been in the number of clients using morphine, buprenorphine, sedative and minor tranquilizers as primary drug of abuse. The percentage comparison of the primary drugs of abuse for the two quarters is given in **Table 1.**

Table 1: Primary Drug Of Abuse

Category of Drug	Apr. - Sep. (%)	Oct. - Mar. (%)	↑ ↓
Heroin	90	85.9	↓
Cannabis	3.7	3.7	□
Opium	2.16	2.92	↑
Buprenorphine	1.6	2.47	↑
Morphine	0.7	1.35	↑
Tranquilizer	0.57	1.57	↑
Alcohol	0.34	0.56	↑
Pethidine	0.23	0.11	↓
Sedatives	0.23	1.01	↑
Solvents	0.11	0	↓

5. POLY DRUG USERS

Of the total clients, 64% were poly drug users. Again this number is higher as compared to the previous quarter where 55% of the clients were reported to be poly drug users. The majority (36.57%) of this group were using cannabis as the secondary drug, followed by tranquilizers (24.8%) and opium (10.85%). Most of the clients have been reported to use more than one substance as their secondary drug. The breakdown of secondary drugs with their percentage and comparison with the previous quarter is given in **Table 2**.

Table 2: Secondary Drug Of Abuse

Category of Drug	Apr. - Sep. (%)	Oct. - Mar. (%)	↑ ↓
Cannabis	47.3	36.57	↓
Opium	18.8	10.85	↓
Tranquilizer	17	24.83	↑
Buprenorphine	1	2.8	↑
Morphine	0	0.33	↑
Alcohol	15	22.25	↑
Heroin	0.56	0.44	↓
Codeine/Pethidine	0	1.45	↑

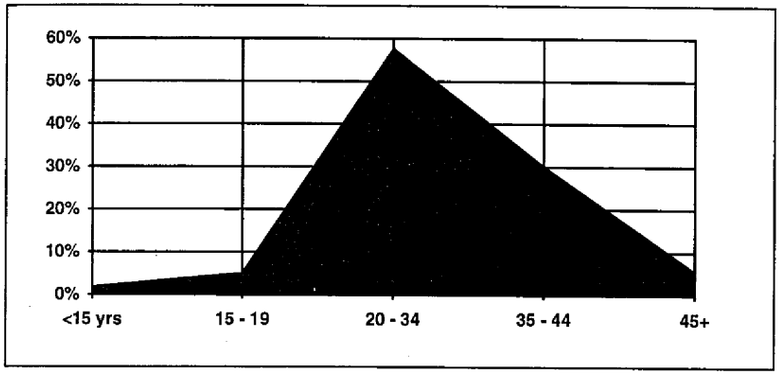
5.1 Sex Of The Clients

While the majority (99.8%) of drug addicts were male, 2 female clients have been reported during these six months' period.

5.2 Patients' Age

57.6% of the clients who came for treatment were 20 - 34 years old, while 30.1% were between 35 and 44 years of age. The percentage of 20 - 34 years old drug users during this quarter has dropped from 62.8% in the previous quarter to 57.6% in the current quarter. The breakdown of clients by age is given in **Chart 2.**

Chart 2: Distribution By Age



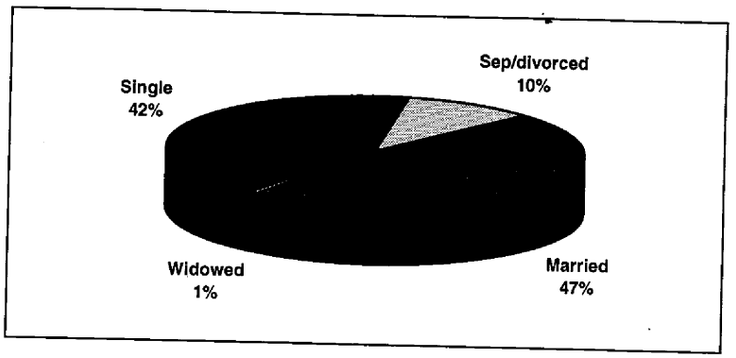
5.3 Patients' Ethnicity

While not all the participating centers have given data on the ethnicity of the clients, of those that have been reported 85% were Punjabis. 10.6% were Pathans, and 2.44% were reported as Sindi. Four foreigners (Iranian and Nigerian) have also been reported from one treatment center.

5.4 Marital Status

The majority (47%) of clients coming for treatment were married, while 42% were single or never married. As compared to the previous quarter, the number of married clients has reduced from 52% to 47%. Similarly those who were single has increased from 40% to 42%, and those separated or divorced has increased from 6% to 10%. The distribution of clients by marital status is given in **Chart 3**.

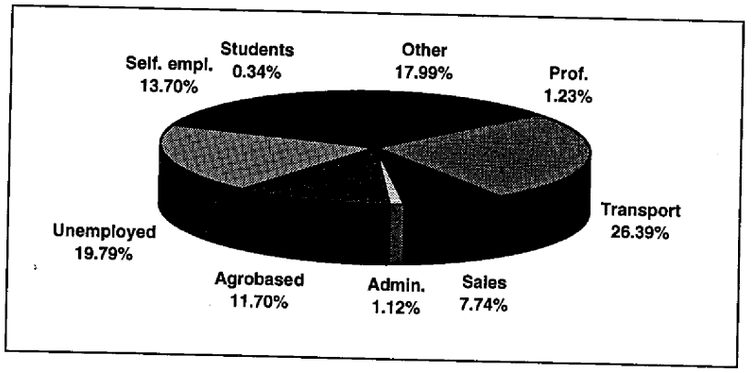
Chart 3: Marital Status



5.5 Occupational Status

Among the clients who come for treatment during the reporting period 80% were employed. Within the employed drug addicts, the major occupational category (26.4%) was of "drivers and transport workers", followed by "Others" 18% which mainly consisted of laborers. Similarly, 13.7% were self employed, and 11.7% agrobased. The occupational categories of the clients is given in **Chart 4** below.

Chart 4: Occupational Status

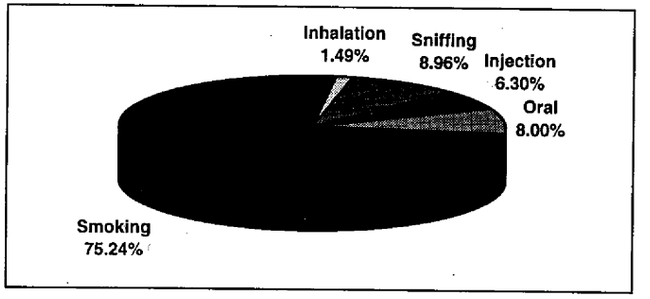


As compared to the previous quarter the percentage of drivers and transport workers, unemployed and those who are agrobased has increased i.e. from 23% to 26.4% for drivers and transport workers, from 7% to 11.7% for agrobased and from 15% to 19.8% for the unemployed. The percentage of professionals has decreased from 3% to 1.23%, and students from 2% to 0.34% in this quarter.

5.6 Route Of Administration

The route of administration of drugs for the majority (75%) of clients has remained smoking or chasing the dragon, but the percentage of clients has decreased from 82% in the previous quarter. Injection use was reported by 6.3% of the clients, which has increased from 5% in the previous quarter. It may be noted that injection use reported here is not primarily of heroin. Also, oral use of drugs, primarily tranquilizers and sedatives, has increased from 3% in the previous quarter to 8% in the current quarter. The breakdown of clients by route of administration is given in **Chart 5**.

Chart 5: Route Of Administration



5.7 Drug Sources

84.7% of the drug addicts obtained their drugs from street sources, while 7.2% bought from the tribal areas or local dens. 5.77% of the drug addicts got their drugs from "over the counter sale", while 1.55% from diversion of legal prescription and 0.78% from legal prescription. Again, the source of drugs from streets has decreased, while "over the counter" has increased in this quarter. These figures were 90% and 2% respectively for the previous quarter.

5.8 Living Arrangements

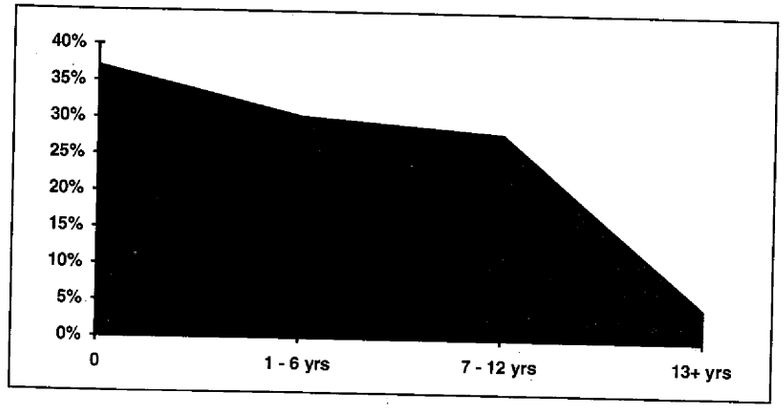
85.6% of the drug addicts were living with their families, while 11.7% were living alone and 2.6% with friends and colleagues. The changes that have occurred from the previous quarter are: as compared to 4% of the clients living alone, this percentage has increased to 11.7% in this quarter, while the percentage of those who were living with family and relatives, and friends and colleagues has decreased from 91% and 5% respectively for the previous quarter.

5.9 Years Of Education

37% of the drug addicts reported were illiterates. Among the literate 30.3% had one to six years and 28.1% seven to twelve years of education. 4.63% had thirteen or more than thirteen years of education.

Comparing the years of education for the clients for the two quarters, the percentage of illiterates and those with 13 years or more of education has decreased from 42% to 37%, and 5.3% to 4.6% respectively, while the percentages of those with 1 - 6 years has increased from 28.6% to 30.3% and for the percentage of those with 7 - 12 years of education from 23.5% to 28.1% respectively in the current quarter. The educational status of drug addicts is given in **Chart 6**.

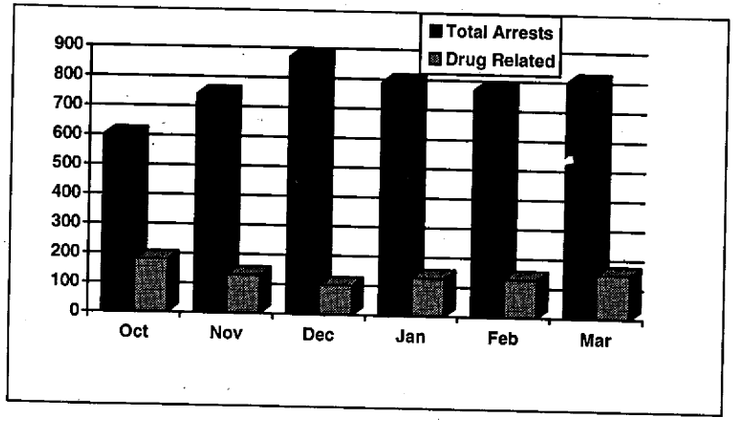
Chart 6: Educational Status



6. LAW ENFORCEMENT INDICATORS

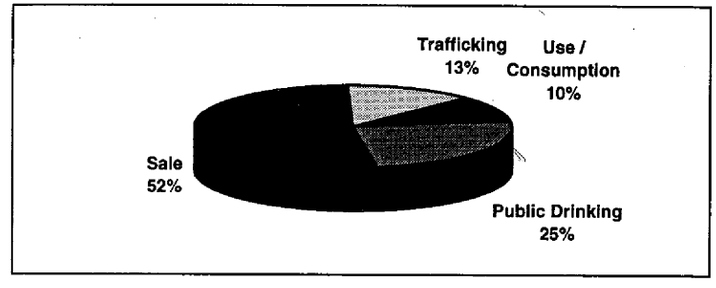
During the six months' reporting period 4,558 arrests were made for criminal offenses. Out of these, 724 arrests were for drug related charges. While the total number of arrests for this quarter has increased, arrests for drug related charges has decreased from 801 to 724 in this quarter. The monthly arrests for criminal and drug related offenses is given in **Chart 7**.

Chart 7: Total And Drug Related Arrests



Out of the 724 drug related offenses, 380 arrests were related to sale of drugs, 94 for trafficking and 72 for use/consumption of drugs. Other offenses for which arrests were made include public drinking (of alcohol) 178. As already mentioned except for arrests related to public drinking which increased from 9% to 24%, arrests related to all other drug related offenses decreased during this quarter. The percentage wise breakdown of drug related arrests in given in the chart below.

Chart 8: Arrests For Drug Related Offenses



As compared to the previous quarter where 463 seizures were made in this quarter, 565 seizures of different drugs were made. The drugs and the quantities seized for each month is given in the table below.

Table 3: Seizures And Quantity Of Drugs Seized

Drugs	Seizures	Drugs Seized Quantity (kilograms/liters)						
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total
Opium	9	0.00	2.30	0.015	1.525	0.029	0.00	3.869
Heroin	284	0.932	0.349	1.505	0.745	2.555	0.731	6.817
Cannabis	162	2.526	6.948	2.465	668.835	106.102	115.605	902.481
Alcohol	110	1182	2937	416	551	4253	3026	12365

For alcohol, it should be noted that the quantity given is number of bottles seized. The actual quantity is not determined by the police. Again, except for alcohol and heroin the number of seizures of all other drugs in this period has decreased. However, the quantity of opium seized is more in this quarter as compared to 0.25 kg. from 15 seizures in the previous quarter. For cannabis 902.481 kg. was seized through 162 seizures as compared to 14.548 kg. through 197 seizures in the previous quarter.

During the same period a total of 183 traffic accidents were reported. The breakdown of accidents by each months is given in the table below.

Table 4: Number Of Accidents

	October	November	December	January	February	March
# of accident	18	38	36	31	23	37

However, no accidents as a result of drug intake have been reported by the police for this period.

7. HEALTH INDICATORS

There is no system of reporting or collecting data of psychological, or emergency room cases in hospitals. However, the number of drug related psychological cases as reported by the treatment centers were 38 out of the total 891 drug addicts. Similarly, 7 drug related emergency room cases and 1 drug related death have been reported by the treatment centers. Some treatment centers have reported pulmonary tuberculosis in the clients coming for treatment.

7.1 HIV/AIDS

The total number of HIV/AIDS cases for the city have not been collected during this period. Also, the treatment centers do not have the facilities for HIV screening of their clients. However, some of the drug treatment centers are now looking into the possibilities of having their clients, especially those who have been injecting drugs, screened for HIV/AIDS.

8. OPERATIONAL ISSUES

The drug abuse monitoring system in Rawalpindi / Islamabad now has been operational for a year. All the treatment centers contributing data in the system are participating through voluntary interests. Similarly, the Police and Excise Departments through the District Narcotics Control Committee have been very helpful in providing the law enforcement data for the system.

The number of treatment centers providing data on a regular basis has decreased. The drug treatment center in the District Headquarters Hospital in Rawalpindi has been closed down, while one private center run by an organization is no longer providing data due to their own reasons.

Overall, the parties who are participating in the data monitoring system perceive it to be quite useful and informative.

DRUG ABUSE IN MADRAS CITY, INDIA

M. Suresh Kumar
Punarjeevan Drug Treatment Center
Madras, India

MADRAS OR CHENNAI:

The universe considered for this study is Madras city, the gateway to South India. The origin of the city's name has never been conclusively established, but is probably linked to the names of a small 17th century establishment, Madrasapatman and a weaver colony, Chennapatnam, which later merged into what is now called Madras (in English) or Chennai (in Tamil). Madras is a cosmopolitan city. It is the capital of the Tamil speaking region (Tamil Nadu State) of the country, India. The state of Tamil Nadu is rich in ancient culture and civilization. It abounds in art, architecture and scenic beauty.

Madras is situated on the north east end of Tamil Nadu on the coast of Bay of Bengal. It lies between 12.9° and 13.9° of the Northern latitude and 80.19° of the Southern longitude on a "sandy shelving breaker swept beach". It stretches nearly 25.6 kms long along the Bay coast and runs inland in a rugged semi-circular fashion. It is bounded on the east by the Bay of Bengal and on the remaining sides by the district of Chengalpattu. This irregular shape covers 172 sq. kms.

Madras City Census Details

Characteristics	Male	Female	Total
Area in km			172
No. of occupied residential houses			794,322
No. of household			798,279
Total population (including institutional and homeless population)	1,986,278	1,855,118	3,841,396
Total literate	1,535,351	1,216,990	2,752,341
Total population (0 - 6 years)	238,782	229,726	468,508
Scheduled caste	271,549	258,163	529,712
Scheduled tribe	4,087	3,843	7,930
Total main workers	1,015,704	156,035	1,171,739
Marginal workers	822	501	1,323
Non-workers	969,752	1,698,582	2,668,334

1. DRUG ABUSE SCENARIO FROM THE 1960'S TO THE PRESENT IN MADRAS CITY: SOME HISTORICAL PERSPECTIVES:

In Tamil Nadu the use of *ganja* (cannabis) has been in vogue for many centuries. *Ganja* was used by *Sadhus* (Sages) and there were even *ganja mutts* (akin to clubs) where *sadhus* and *sanyasis* assembled and smoked *ganja*. Obviously, drugs were not among the pleasures the *sanyasis* had renounced. In the 1960s, western music was becoming popular and cannabis became an important drug of abuse, in particular among college going youth. The 1970's constitute a momentous decade as it was the time when drug abuse was felt as a problem afflicting many residential campuses in the metropolitan cities. Drug became the "in-thing" in the university campuses. Apart from cannabis, dextroamphetamine (Dexedrine) and methaqualone (mandrax) were the popular drugs of the decade. At the same time, injectable opiates like morphine, Pethidine abuse was increasingly seen in medical and para medical professionals. The growing problem of drug abuse among the youth, particularly, students was evident by the Ministry of Welfare, Government of India's initiative at a multi centered study of drug abuse among students in metropolitan cities in the year 1975-77. The study indicated that drug abuse was not uncommon and was prevalent among students and in Madras a sample of 3,588 students were interviewed and 22.2% of the population has ever used drugs and the commonest drug of abuse was cannabis. Hospital statistics (Institute of Mental Health, Madras) showed that many people who sought help for cannabis dependence were from the lower socio-economic class and comprised of rickshaw-pullers, auto drivers, casual laborers, and others engaged in unskilled work. Fishermen and painters also used cannabis more than others. Certain pockets of Madras were popular for cannabis such as Clive Battery, Royapuram, Kasimedu, Vepery and St. Thomas Mount.

Moving into the 1980's, one finds a different drug scenario. With the rigorous control measures and ban on methaqualone and dextro-amphetamine, these two drugs became rare drugs of abuse in the mid and late 80's. The year 1983 was a significant landmark in the history of drug abuse in Tamil Nadu. Brown sugar is available in Madras from 1983 and the availability of the drug can be linked to the July 1983 ethnic crisis at Sri Lanka. Following the ethnic crisis, a large number of refugees landed in Madras from Jaffna, Sri Lanka. The drug introduced and sold by the Sri Lankan refugee youths soon became an important drug of abuse in Madras. Until 1985, the drug problem was predominantly confined to the college students and money handling youth; in 1985, a gram of brown sugar cost Rs. 40/ and it was sold in doses of 5 and 10 gms. From 1985 onwards this drug abuse spread to the low income groups and the slum dwellers.

Also, a change occurred in the marketing strategy as the drug was sold in quantities of 1/4 gm and 1/2 gm, facilitating access to the drug by low income groups. The incidence of drug abuse among slum youths in the age group 15 - 25 increased dramatically and alarmingly from the year 1985. A stringent law, Narcotics and Psychotropics Substances Act (NDPS) was enacted in the year 1985 and the enforcement authorities were vested with greater powers to deal with drug traffickers, dealers, pushers and addicts. The concern of the Government was evident in the opening of the Deaddiction Ward at the Institute of Mental Health, Madras in the year 1986. From 1986 onwards many voluntary agencies initiated counseling and treatment services for the drug abusers.

Up to the year 1988, most drug users were using brown sugar by chasing (inhaling the vaporized heroin) and the few drug users who injected heroin then were either heavy drug users who have graduated to injecting or drug users from North-Eastern India. In 1988, a significant change occurred. Since brown sugar was increasingly difficult to obtain, the cost of brown sugar was escalating and the cost of a gram's quantity of brown sugar ranged from Rs. 100 to Rs. 200/- and so more number of heroin abusers were looking for substitutes and many people became poly drug users. Prescription drugs like nitrazepam (Dromin or Nitravet), diazepan (Valium or Calmpose), dextropropoxyphene (Proxyvon) were increasingly abused. At this time, some medical practitioners were using buprenorphine injection to treat the agonizing heroin withdrawal symptoms. The practitioners believed that the drug "Buprenorphine" did not have addiction potential and were using the drug liberally. This information that buprenorphine is a good drug to alleviate withdrawal symptoms spread fast among the addicts' network and some of them administered the drug with the help of some friends who had experience in injecting. This led to drug users seeking buprenorphine as a treatment for their dependence; they used it when they wanted to stop the drug. The drug was often sought by drug users at times of street heroin scarcity. Following raids and seizure of drug from key selling locations, drug users would seek buprenorphine from pharmacies or visit the clinics of doctors prescribing this drug freely. There were instances in which drug users will request some practitioners to prescribe and administer this drug. It is interesting to note that many doctors practicing in the areas like Royapuram and Vepery were educated about the usefulness of this drug for treating withdrawal symptoms by the drug users. There was a dramatic change in the drug use pattern in Madras City following the assassination of former Prime Minister of India Mr. Rajiv Gandhi at Sri Perumbudur near Madras. Since it was established that Sri Lankan terrorists were involved in the assassination, there was a very heavy crackdown on the Sri Lankan militants living in Tamil Nadu. The result was an acute heroin drought and during that time of acute scarcity and shortage of heroin, a number of brown sugar users shifted to the easily available synthetic opiate preparation, buprenorphine. By then the injectable preparation of buprenorphine was well known to many drug users and they used the drug by needle. For many, this was their first mode of administration by injecting. The transition from brown sugar to buprenorphine was facilitated by the following factors: knowledge that buprenorphine is a good substitute that can effectively control withdrawal symptoms compared to other drugs used to control and alleviate symptoms during abstinence; easy availability of the drug in the pharmacies even without a prescription; the fact that some seasoned medical practitioners were indeed treating their drug abusing clients with buprenorphine; lack of any serious drug control measures for the drug at that time; the relatively less cost of the drug compared to heroin; and the belief that the drug users were indeed treating their chronic dependency on heroin. It is to be stressed that many drug users seriously believed that the drug is much less harmful as it is pure (comes in ampoule) and there are no legal hassles involved in procuring the drug.

After having been initiated to buprenorphine by needle, many realized that they are only substituting it for heroin. It is not easy to stop buprenorphine after having the drug for few days; they do experience withdrawal symptoms but they are much less agonizing but tend to persist for a long period. Also, the withdrawals may be delayed. The former heroin chasers were now using buprenorphine and injecting the same regularly. While some continued to use buprenorphine, some shifted back to brown

sugar when the drug became available again in the illicit market; some used both. As the abuse of buprenorphine escalated among drug users the drug was subjected to stricter drug control at least in Madras and with this the drug became available in the illicit market. An ampoule of 2 ml buprenorphine costs Rs. 40 in the illicit market and even this is cheaper compared to heroin. With the widespread use of buprenorphine in the community, some persons were getting initiated to drugs through buprenorphine. At present there are many current users who are regularly using buprenorphine and are currently dependent on buprenorphine.

2. DEVELOPING A COMPREHENSIVE DRUG MONITORING SYSTEM:

It is proposed to develop a comprehensive drug abuse monitoring system for Madras and the present study is an attempt at this direction. There are ten agencies involved in drug abuse treatment in Madras (listed below)

- Institute of Mental Health
- Arogyam Drug Treatment Center
- Punarjeevan Drug Treatment Center
- Society for Aid and Help of Addictive Illnesses (SAHAI) Drug Rehabilitation Center
- Sri Ramachandra Medical College Hospital
- TTK Hospitals
- Aashiana Drug Treatment Center
- Stanley Medical College Hospital
- Turning Point
- St. Paul's Educational Society - Drug Treatment Center

Apart from this, the psychiatrists and physicians manage some drug abusers who seek help with them. There are few agencies involved in drug abuse prevention and these agencies are:

- Stella Maris College - Drug Prevention Program
- Anti Drug Abuse Movement (ADAM)
- Addiction Commission Concerns

An umbrella organization consisting of all the above agencies working in the field of drug/alcohol abuse have been formed and is functioning as a registered body. This organization is called Society for Prevention Research, Education on Alcohol and Drugs (SPREAD) and in future this will facilitate the data collection from all the drug treatment/prevention agencies. Efforts at initiating a drug surveillance and monitoring system has been done and the system will be named Madras Alcohol and Drug Abuse Surveillance (MADRAS) and this system will collect data from the networking partners of SPREAD on a monthly basis.

3. DATA SOURCE

The current paper focuses on the data obtained from the Institute of Mental Health, a major treatment center for drug/alcohol dependence in Madras City. The hospital is state run and the services are offered free of cost for the patients. The hospital has a

specialized deaddiction center where all drug/alcohol dependents are admitted for a minimum period of 21 days. The treatment program consists of detoxification, psycho-educational approaches, individual and group psychotherapy and family therapy. Dependents are followed up at a special follow-up clinic at the outpatient department of the Institute of Mental Health. The reporting period for the participating agency is January 1995 to December 1995.

4. DRUG ABUSERS IN TREATMENT

During the above period there were 1749 persons admitted for alcohol/drug dependence and related problems at the Institute of Mental Health, Madras. Of the 1749 patients admitted for treatment 308 (17.6%) had a significant psychiatric morbidity.

5. PRIMARY DRUG OF ABUSE

Alcohol ranks high as the primary drug of abuse (64.6%) among those seeking treatment at the Institute of Mental Health. Heroin is the next primary drug of abuse (14.6%) and Cannabis (12.6%) and Buprenorphine (8%) are placed third and fourth respectively. The opiates comprising of heroin, buprenorphine and others like pentazocine constitute 22.8% of all the cases.

Table 1: Primary Drugs Of Abuse

Primary Drug	N	%
Alcohol	1130	64.6
Heroin	255	14.6
Cannabis	220	12.6
Buprenorphine (Injectable preparation)	140	8.0
Others (Pentazocine etc.)	4	0.2

5.1 Poly Drug Users

A total of 436 (24.9%) of the people admitted to the hospital were poly drug users. Most of the opiate users were abusing a number of other drugs and cannabis was the commonly abused secondary drug by the opiate users. Use of buprenorphine, sedatives and pain killers were very common among the heroin users. Buprenorphine users often abused diazepam and diphenhydramine (avil) and also alcohol. Some primary cannabis users abused alcohol and some primary alcohol users abused cannabis.

Table 2: Rank Order Frequency Of Secondary Drug Of Abuse

Secondary Drug	N	%
Cannabis	214	49.1
Nitrazepam	156	35.8
Alcohol	132	30.3
Buprenorphine -Injectable	128	29.4
Diazepam - Injectable	114	26.2
Diphenhydramine (Avil) - Injectable	98	22.5
Heroin	52	11.9
Pain-killers (Dextropropoxyphene)	23	5.3

5.2 Socio-Demographic Characteristics

Gender

The number of women abusers in treatment is disproportionately low. Only seven women (0.4%) sought treatment during the reporting period and all of them were primary alcohol dependents.

Age

33.1% of the persons were in the age group of 18 to 30 years and 29.8% were in the age group of 31 - 40, 27% were in the age group of 41 - 50, 8.8% were between the ages of 51 - 60 and 2.3% were aged above 60 years.

Majority of the other than alcohol users were in the age group of 18 - 30 years and majority of alcohol users were in the age range of 31 - 50.

Table 3: Age Distribution Of The Alcohol/Drug Users

Age Range	N	%
18 - 30	579	33.1
31 - 40	521	29.8
41 - 50	472	27.0
51 - 60	154	8.8
> 60	23	1.3

Religion

Majority of the drug users in treatment are Hindus (62%) followed by Christians (33%), Muslims (4%) and others (1%).

Table 4: Distribution Of Drug Users By Religion

Religion	N	%
Hindus	1084	62
Christians	577	33
Muslims	70	4
Others	18	1

Education

The number of illiterates were 11.1% and 36.2% have primary schooling and 49% had completed secondary school level. The percentage of persons with collegiate level education was 3.7%.

Table 5: Distribution Of Drug Users By Education Level

Education Level	N	%
Illiterate	194	11.1
Primary School	633	36.2
Secondary School	857	49.0
Collegiate Education	65	3.7

Occupational Status

21% of the persons were unemployed and 79% were gainfully employed.

Table 6: Distribution Of Drug Users By Occupation

Occupation	N	%
Unemployed	367	21
Casual Laborers	350	20
Fishermen	245	14
Auto Drivers	140	8
Rickshaw Pullers	122	7
Small Business (e.g. petty shops)	122	7
Artists	70	4
Mechanics	69	4
Agricultural Workers	51	3
Electricians	37	2
Others	176	10

Marital Status

70.7% of the drug users in treatment are married.

Table 7: Marital Status Of Drug Users

Marital Status	N	%
Married*	1237	70.7
Unmarried	512	29.3

* Includes divorced, widowed and separated.

Living Arrangements

About three fourths of the drug users (74.5%) live with their family members - parents or spouses or close relative.

Table 8: Living Arrangements Of Drug Users

Living Arrangement	N	%
Living with parents/spouse	1086	62.1
Living with close relatives	217	12.4
Living alone	105	6.0
Living with friends	53	3.0
Living in hostels/hotels	31	1.8
No accommodation	257	14.7

5.3 Route Of Administration

The routes of administration for drugs other than alcohol were: Injecting (48%); Chasing (5.2%); Smoking (38.1%); and combination (8.7%). It is interesting to note that majority of the opiate users are using and preferring injecting as the route of administration.

Table 9: Route Of Administration Among Other Than Primary Alcohol Users (N = 619)

Route of Administration (primary route)	N	%
Injecting	297	48.0
Smoking	236	38.1
Chasing	32	5.2
Combination of the above*	54	8.7

* State more than one route as their primary routes of administration.

5.4 Law Enforcement Indicators

Table 10: Narcotics Control Bureau - Madras (South Region)

Drugs (in Kgs.)	1987	1988	1989	1990	1991	1992	1993	1994	1995
Opium	7.0	41.105	10.10	-	-	-	-	-	-
Heroin	7.721	12.317	13.903	20.743	45.5	7.872	11.86	16.82	12.54
Metha-qualone	1.36	-	-	-	-	-	-	-	-
Hashish Oil	-	9.0	-	2.77	-	-	-	-	-
Morphine	-	-	-	356 amp	-	-	-	-	-
Ganja	401.8	13924.4	7520.0	1625.35	429.0	50	5518	3216	4267

5.5 Health Indicators

HIV / AIDS

HIV infection was first documented in India in the year 1986 at Madras in a commercial sex worker. There is evidence for HIV infection among drug users at Madras City and an unlinked anonymous sero-prevalence study done at Madras indicates a prevalence rate of 15% among injecting drug users. There is evidence for hepatitis B and hepatitis C infection among injecting drug users.

PATTERNS AND TRENDS OF DRUG ABUSE IN SRI LANKA - 1995

Y. Ratnayake
National Dangerous Drugs Control Board
Colombo, Sri Lanka

ABSTRACT

Until 1980s, opiate abuse or similar drug abuse was not considered as a problem in Sri Lanka, where only some older males continued their traditional opium use. The use of ganja (cannabis) had a limited clientele and was confined mainly to the working class of those engaged in hard work in rural and in urban areas. This class bias or the low 'value' given to the drug has been a major control over its spread to other segments of the society. With the arrival of heroin in early 1980s, the country began to face a serious opiate problem which was indicated by increase in heroin related arrests, heroin seizures, related crime, and imprisonment of drug related offenses. In Sri Lanka there is no compulsory reporting system in respect of drug abuse. An event reporting system called Drug Abuse Monitoring System (DAMS) was established in early 1990s by the National Dangerous Drugs Control Board (NDDCB) with UN assistance. Although in its infancy, it is the 'official' source of epidemiological information on drug abuse in the country. The drug abuse pattern recorded in 1995 seems some what similar to that of the pattern observed during the recent years. Increases have occurred of incidents reported, and the types of drugs used. The most commonly used illicit drugs were cannabis and heroin during 1995. There were evidence to indicate that psychotropic substances are also abused either as additives, or in the belief that they could be synergists.

1. AREA DESCRIPTION

Sri Lanka is comparatively a small (62,337 sq.km) tropical island close to the southern end of India. The central hill country rises a little south of the center of the island and is surrounded by a low-lying coastal plain. Sri Lanka had been ruled over a period of almost 24 centuries by a continuous monarchical chain, and the capital city has been moved from place to place within the island. Foreign domination began in Sri Lanka in 1505 with the advent of the Portuguese who ruled certain parts of the country until 1657, when the Dutch took over. The period of domination of the Dutch was 137 years, then they yielded to the British, who ruled the entire country for 150 years. In 1948, Sri Lanka got her independence. The mid year population estimate for 1996 was 18.2 million, with a marginal male preponderance. The population is multi ethnic and multi religious. Most of the people (78%) live in rural areas. The Sri Lankan family is traditional of the extended type. However, urbanization, population pressure, life style trends, employment of women, rising cost of living, difficulties in housing etc., have been contributing to rapid shift towards the nuclear type.

Traditionally an agricultural country, Sri Lanka has recently began to expand into other areas of production and export. Tourism is another economic area into which the country is moving rapidly. Recent years have seen many people seeking long term

employment abroad. Many of them go abroad for low-income jobs. Due to this reason, many families have temporarily become single parent units. The health status of the country is better compared to that of other countries in the southern hemisphere. Education is provided free and schooling is compulsory in Sri Lanka. The country has a literacy rate of 91% for males and 83% for females.

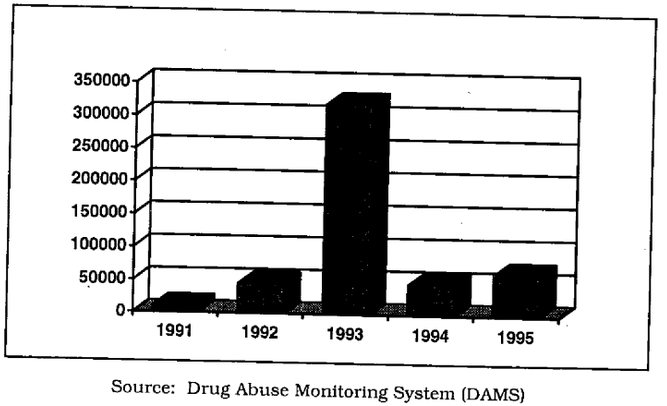
2. DATA SOURCES

The main source of the data presented in this paper is from the Drug Abuse Monitoring System (DAMS), which is the official source of epidemiological information on drug abuse in Sri Lanka. The DAMS is an event reporting system. Even though, it is not compulsory to report treatment events, Police Narcotics Bureau, all local police stations, and main treatment centers (GOs/NGOs) in the country send their information to the system, in specific forms, on a monthly basis. Other sources of information include Department of Prisons, Outreach Workers of the NDDCB stationed in several of the major cities, National Narcotics Laboratory of the NDDCB, key informants and newspaper reports.

3. CANNABIS (*GANJA*)

Cannabis is believed to be the most prevalently used illicit drug in 1995. Illegal cultivation of cannabis continued as in previous years in the jungle areas of Sri Lanka. Traditionally, it is mostly grown in the South Eastern region in the country. Although no survey has been done in 1995 (or in the recent past) on the extent of illicit cultivation of the cannabis plant; some useful information is available with the Annual Report 1994 of the Police Narcotics Bureau (PNB). According to the report, the cannabis plantations are mostly confined to an average of 1/4 acre plots in the jungles and is also grown as a "side crop" by the cultivators of vegetables. Cannabis cultivators are mostly controlled by the local businessmen in their respective areas.

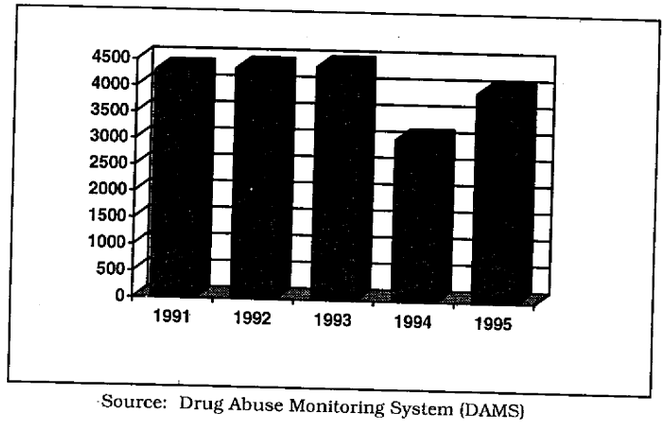
Exhibit 1: Quantity Of Cannabis Seized (In Kg.) During The Past Five Years



Source: Drug Abuse Monitoring System (DAMS)

The trafficking of locally produced cannabis is from outstations to Colombo. From the jungles, it is first brought to villages, then to towns and via provincial capitals to Colombo, mostly along with vegetables and other consumer goods. During the period January to December 1995, cannabis seized was 59,448.900 Kg. Cannabis is inexpensive, compared to heroin or opium. Street value of cannabis was around Rs. 2.20 per gram. Most of the cannabis offenders were young male adults in 1995.

Exhibit 2: Number Of Persons Arrested For Cannabis Related Offenses From 1991 - 1995



Source: Drug Abuse Monitoring System (DAMS)

Whilst smoking of cannabis is mostly confined to low income groups of the city and villages; some reports suggests that even affluent youth in the city engage in it regularly at "parties". Annual Report 1994 of the PNB reported that the cannabis smoked at the "parties" is of higher quality than that of the street level, prepared mostly from the inflorescence of the cannabis plant. An Outreach Assistant of the NDDCB reported in December 1995 that he had met a group of about 10 students (attending private tuition classes) in Ratnapura, who frequently smoke "malpacket" which is a preparation of packeted dried tender cannabis leaves and inflorescence which is considered to be of "higher quality".

4. HEROIN

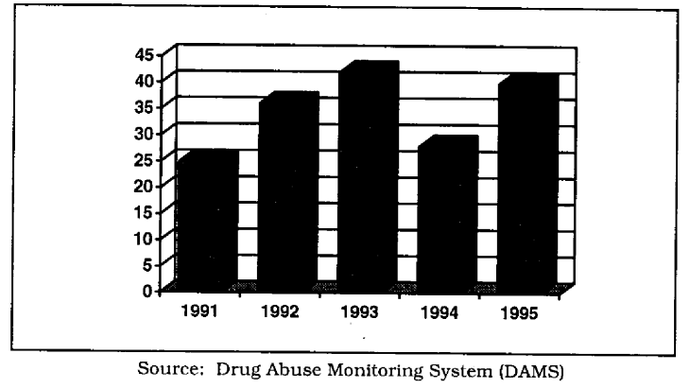
Heroin was the most frequently abused illicit opiate. 'Brown Sugar' (number 3 heroin) was available in most parts of the island as in the previous year. In 1995 the quantity of heroin seized was 40.332 Kg by the drug law enforcement officers. Bulk of it came from India and lesser quantities of it from Pakistan. The average purity of heroin seized in bulk was about 50% to 55% morphine and that of street level heroin was around 40%. The average street price of no. 3 heroin ranged between Rs. 1,000 to Rs. 1,200 per gram.

Charas, also know as "halape" (black tar heroin), which is a lower quality heroin, was sold in Colombo for Rs. 20 - 30 a packet (10 - 15 mg). According to the users, unlike

good quality heroin it does not "run" on the tin foil when heated instead it would "burn" in one spot on the foil. Its availability was limited to Colombo.

Methods of heroin administration: Inhaling of heroin vapor or "chasing the dragon" (locally known as "Chinese method') was the much preferred method of use as in the previous years. Very few injecting drug dependents were reported. However, the reported number of IV drug users was less than that of the previous year.

Exhibit 3: Quantity Of Heroin Seized (In Kg) From 1991 - 1995

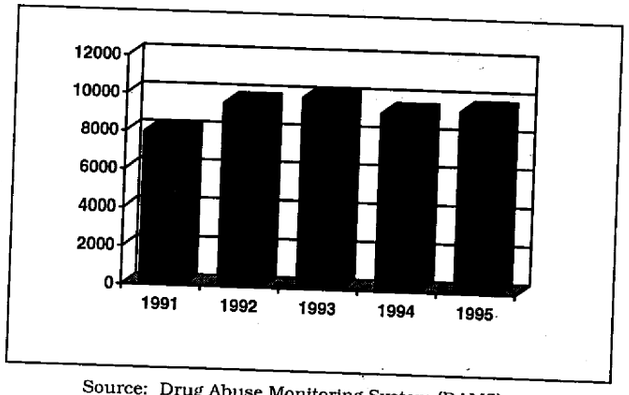


Source: Drug Abuse Monitoring System (DAMS)

IV Drug use: Details are not available on specific characteristics of injectors but a case reported by an Outreach Assistant on a regular injector gives a "snap shot" of them; it is as follows. The drug injector had needle marks in his body which confirm his drug injecting career. According to him, he could cut down on his heroin costs from Rs. 600 to 200 per day (i.e. by about 75%) by resorting to injecting heroin. He had revealed that he used to go to a heroin injecting "doctor" in his area for his shots. However, after some time he had stopped going to the "doctor" because he was cheated - the "doctor" had given only half the dose for a price of one. Presently he injects drug on his own. "... a packet of heroin would be emptied into a spoon, dissolved by adding some water and a bit of lime juice. Then, it would be boiled in a spoon with a flame. The content of the spoon will be sucked into a syringe through a unused cigarette filter. Using a staple around his arm, having locating a vein (it would confirmed by dragging some blood from the vein to the syringe) the drug is injected into the vein...".

Heroin market: The heroin dealing in towns outside Colombo was apparently done by small scale traffickers who travel between Colombo and outstations. They supply heroin mostly to local street level pushers-cum-users who would generally resell the stock for a commission of 1-2 packets of heroin for every 25 - 30 packets sold. The traffickers use buses, night train or sometimes 'three wheelers' from Colombo to transport heroin with them.

Exhibit 4: Number Of Persons Arrested For Heroin Related Offenses From 1991 - 1995

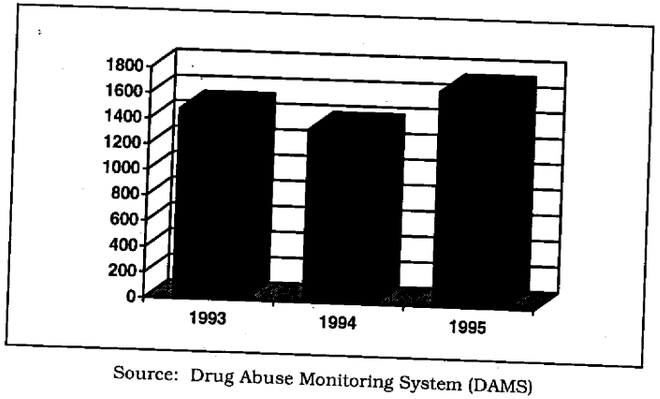


Source: Drug Abuse Monitoring System (DAMS)

There appeared seasonal variations in heroin sales. According to Outreach Assistants, during Wesak-Poson season (May - June) in Anuradhapura, Sri Pada pilgrimage season (December - May) in Ratnapura the demand for heroin was very high because many users traveled there with other pilgrims.

Heroin use in Colombo: Colombo city and its suburb report the highest number of heroin users. Many heroin users from Colombo come from "garden"s (shanty/slum areas) and densely populated lanes who are generally considered as "poor" by the main-stream of the society. However, many of the users earned between Rs. 200 - 400 a day as wages during the period under review. Many worked in the informal sector of the city's work force and their employment were generally seasonal. The profile of the heroin users in Colombo more or less fit their counterparts in other towns as well.

Exhibit 5: Admission For Treatment By Heroin Dependents From 1991 - 1995



Source: Drug Abuse Monitoring System (DAMS)

Treatment: Heroin dependents in the country sought a variety of treatment. These treatments ranged from popular inpatient detoxification and rehabilitation at NDDCB treatment centers, out patient treatment from allopathic medical practitioners, homeopathic treatment, Ayurvedic treatment, self medication by drugs obtained from pharmacies and other outlets, seeking spiritual help from religion, deities based treatment, making vows at various places of worship, and changing their place of residence. Some heroin dependents had taken treatment at psychiatric wards without identifying themselves as heroin users. It was reported in Anuradhapura that three heroin users had attempted to commit suicide.

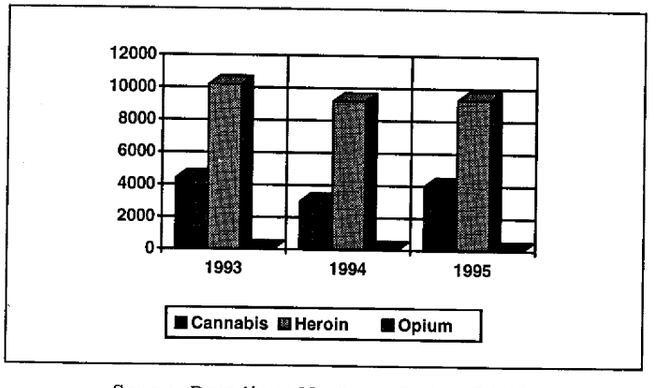
Attitudes/Practices: Most of the drug dependents and their families were in the belief that alcohol is "safer" than heroin. It was not uncommon for a mother, wife or a family member of a heroin dependent to yell at him "why don't you stop that 'kudu gehima' (meaning stop taking heroin) and take some arrack instead".

Profile: Majority (64.2%) of treatment seekers reported were from Colombo district. The largest number (56%) of heroin dependents were between 25 - 34 years of age. They were all male except one. According to ethnic distribution of them 81% were Sinhalese, 9% Moors, and 7% Tamils. Among the treatment seekers 70% were Buddhists, 13% Christians, 11% Muslims and 3% Hindus. Of them, 44% were married persons. According to educational level, 27% had completed General Certificate of Education (Ordinary Level). The group who had studied year 5 and above up to year 10 is the largest group representing 54% of drug dependents.

5. OPIUM

Opium abuse has taken a downward trend with the dawn of the 1980s. However, opium continues to be available and abused in Sri Lanka over a long period of time. The abuser obtains his requirement from the stocks of opium which are imported for medicinal purposes, or from the stocks which are illegally brought into the country.

Exhibit 6: Number Of Persons Arrested For Cannabis Related Offenses From 1993 - 1995



Source: Drug Abuse Monitoring System (DAMS)

6. PSYCHOTROPIC SUBSTANCES

Flunitrazapam, Mandrax, Diazepam, Codeine, Methadone, Amphetamine, Valium and Rohypnol were the widely abused psychotropic substances during the year. According to reports some pharmacies in Colombo and outstations sold most of these substances over the counter for drug dependents charging high prices. There were occasions reported that some tablets were given free with heroin to enhance the effect of heroin. Furthermore, unofficial reports confirmed the occasional use of *Ecstasy* by a certain group of youth as in the previous year.

7. COCAINE

There were no arrests or official reports on cocaine related incidents in 1995. However, unofficial reports confirmed the limited availability and use of cocaine by some foreign nationals (non tourists) in Colombo. The local price of cocaine is not known. The drug was not available in the "open" drug market.

PART 1: SECTION THREE

REGIONAL REPORTS
(January 1994 - March 1996)

A COMPARISON OF DRUG ABUSE PATTERNS OF SELECTED EAST ASIAN CITIES – 1994 - 1995

Center for Drug Research
Universiti Sains Malaysia

ABSTRACT

Drug treatment and law enforcement data were collected using a standardized instrument in five East Asian cities: Bangkok, Kuala Lumpur, Manila, Hanoi, Yangon and Phnom Penh. Information from treatment sources indicates significant variations in drug abuse patterns between these cities. Heroin was the most widely used illicit substance among drug dependents who were admitted into drug treatment in Bangkok, Kuala Lumpur and Yangon. In Hanoi, opium use was the predominant problem. Polydrug abuse of amphetamines, alcohol, cannabis and cough syrups was widespread in Manila. Injection drug use was the main feature in Bangkok, Yangon and Hanoi. In Kuala Lumpur smoking or "chasing the dragon" was the main route of drug administration. There are some variations in the socio-demographic profile of drug dependents contacted by treatment agencies between the cities. The number and rate of drug-related arrests varied between the six cities. Differences in the types and quantity of drugs that were seized were also observed.

1. METHOD

Using a standardized instrument, members of the Asian Multicity Epidemiology Work Group collect information on a number of epidemiological indicators. These include drug treatment and law enforcement data, drug-related health indicators and social factors. Data in these core categories are reviewed on a quarterly basis.

2. SOURCES AND TYPES OF DATA REPORTED

The number of quarterly reports received from participating cities varies. Manila and Kuala Lumpur had provided the most up to date reporting (July 1992 - December 1995). Bangkok had reported data from 1992 to December 1994. Hanoi had submitted annual figures for 1994 and 1995. In the case of Yangon information was available for 1994 only. Phnom Penh had reported only some law enforcement data for the months of June and October 1995.

Data sources varied between these six cities. Kuala Lumpur reported aggregated data on all drug dependents who were contacted by governmental agencies (i.e. police, prison, treatment centers, etc.) for the first time over the reporting period. The sources of information on treatment indicators of the other cities include both specialized drug treatment facilities and primary or general health facilities (in the case of Bangkok and Hanoi). Data on law enforcement indicators were obtained from law enforcement agencies such as the police and prisons. Comparability of the nature of drug abuse between the cities was limited due to variation in sources of

information and the types of cases from which data on treatment indicators were collected from new or first admissions, or total, which included both new and readmissions. Nonetheless the use of a standardized data collection instrument had facilitated the collection of data of selected core drug abuse indicators. Inspite of these differences some common features, as well as city variations could be inferred from the available information.

This paper presents a comparison of the socio-demographic profile and drug abuse patterns of drug dependents who were admitted into drug treatment in the five cities in 1994/95. Law enforcement indicator data of the cities that were reported for the same period are also described.

3. DEMOGRAPHIC CHARACTERISTICS OF CITIES

A comparison of selected demographic features of the cities is presented in **Exhibit 1.** Bangkok has the largest population size of about six million followed by Yangon (2.5 million) and Hanoi (2.2 million). Both Manila and Kuala Lumpur have less than two million people each. The proportion of male and females is almost similar within each city. There are variations in the distribution of age groups between the cities. For example, Hanoi and Bangkok have a larger proportion of the population who are above thirty four years of age. Both Kuala Lumpur and Manila have a relatively younger population. This is indicated by the larger proportion of people who are below twenty years of age. There are vast differences in the distribution of marital status of the city populations. Hanoi has a larger percentage who are married. The cities of Manila, Kuala Lumpur and Yangon have a larger proportion of people who are single. The number of people in the household varies among the cities where data are available. Bangkok and Hanoi have comparatively smaller household sizes. Comparison of the level of education of the city populations is limited by the variation in categories that are used by the cities.

4. CROSS-CITY COMPARISON

4.1 Total Number Of Drug Dependents Reported

The sources of data varied between the cities. Kuala Lumpur had reports of all drug dependents identified by both treatment and law enforcement agencies. No distinction was made between the two categories. Since most of the newly identified drug dependents are channeled into some form of treatment facilities in Malaysia because of mandatory treatment, reports are thus basically reflective of the treatment population. In the case of the other cities, information was obtained from treatment admissions. The number and capacity of treatment facilities available within each city differ. This is indicated by the substantial variation in number of treatment admissions between the cities.

In 1994 a total of 25,551 persons were admitted into treatment, (20,301 or 79.5% in specialized drug treatment facilities and 5,250 or 20.5% in primary or general health care) in Bangkok. Of the treatment admissions, 31% were new and the rest were readmissions. In 1992 and 1993, a total of 12,455 and 15,423 individuals were

admitted for drug treatment, respectively. There was a marked increase in total admissions in 1995 compared to the two previous years.

From January to December 1995, a total of 1,955 new drug dependents were detected for the first time in Kuala Lumpur. In Manila, a total of 288 new treatment admissions were reported for period January to December 1995.

A total of 149 drug dependents were admitted into drug treatment facilities in Hanoi for the first half of 1995. In the second half of 1995, 584 drug dependents were treated, significantly higher than the first six months. A total 733 were treated in 1995. A majority of the cases were reports from the community based treatment facilities. Since a gross figure was reported, there was no breakdown by quarters. Similarly in Yangon an aggregated total of 843 drug dependents were treated in 1994 of which 422 (or 50%) were new admissions.

4.2 Patient Socio-Demographic Characteristics

Although the distribution of the total population showed that the proportion of male and female citizens within each city was almost equal, the distribution of patients admitted into drug treatment facilities showed a predominance of males. More than 95% of the patients, with the exception of Manila (90.3%), were male (**Exhibit 2**). This is suggestive of the severity of the drug abuse problem among the male population in all the cities. It must also be noted that the extent of the problem among females may not be reflected here because the existing treatment facilities in most of the cities are mainly for male drug dependents.

A comparison of the other characteristics of drug abusers among the cities indicated a rather wide variation, particularly with regard to employment status, number of people in the household and the level of education. **Exhibit 3** shows the distribution of drug abusers of each city by age groups. Hanoi and Manila have a larger percentage of teenagers who were admitted into treatment (about 25%) when compared to the other cities. Hanoi also recorded the highest percentage of patients who were thirty five and above years of age (36.7%). Overall the age distribution of the drug abusers contacted within each city differ from that of the general population of the city. Comparing these two age group categories it is evident that the reported age-specific incidence rates of drug abuse cases is significantly higher among those between twenty and thirty four years of age when compared to the other age categories.

The distribution of employment status differed significantly between the five cities (**Exhibit 4**). Kuala Lumpur and Manila have the largest percentage of patients who were employed (94.2% and 65.3%, respectively) prior to entry into treatment. Yangon (59.4%) and Hanoi (52.2%) reported a larger percentage of unemployed. Students who were admitted for drug treatment were reported in Bangkok (10%) and Manila (7.6%).

Information on years of educational attainment revealed that a majority of drug abusers who were treated in most of the cities had between six and twelve years of education. Hanoi has a larger proportion (52.1%) of those who had less than six years of education (**Exhibit 5**). Manila has the highest percentage (34.4%) of

patients who had more than twelve years of education. A majority of the drug abusers from each city were unmarried.

The differences in the background characteristics of drug abusers is an indication of the types of drug abusers that were contacted by treatment facilities or other governmental agencies in each city. They may or may not represent the general drug abuser population within each city.

4.3 Pattern Of Drug Use

Opiate type drugs were widely abused in all cities with the exception of Manila (**Exhibit 6**). Heroin was the primary opiate and drug of abuse among drug dependents who were contacted by treatment facilities in Bangkok (97.3%), Kuala Lumpur (69.4%) and Yangon (88.6%). A variety of opiates were abused among treatment admissions in Hanoi. Opium use was predominant with 73.8% who have reported the use of this substance. Opium addiction is rare in the other cities. Only Yangon reported a larger percentage (8.5%). Reports on morphine abuse was mainly from Hanoi (8.1%).

Cannabis abuse among treatment admissions is widespread in Manila (43.4%). The abuse of cannabis was also observed in Kuala Lumpur (29.9%), Bangkok (1.2%) and Yangon (2.1%).

Manila is the only city which recorded a highly varied pattern of drug abuse. A variety of other non-opiate drugs were abused. Amphetamines was top on the list with 87.8% of patients reporting its use, followed by alcohol (46.5%) and cough syrups (32.0%). Solvents (2.8%) were also abused, but to a much lesser extent. Other types of drugs (10.1%) such as benzodiazepines and analgesics were also abused. Poly-drug use was widespread with 100% of patients who had reported such a feature of use.

The mode of drug administration varied substantially among the cities where heroin was the primary drug of abuse. Smoking or "chasing the dragon" was the most common route of administration in Kuala Lumpur (83.4% of patients) with a lesser extent in Bangkok (29.3%), Yangon (37.3%) and Hanoi (23.7%). Injecting drug use was the main feature in Bangkok, Hanoi and Yangon. In Bangkok and Hanoi more than two-thirds of patients mentioned injecting drug use (67.9% and 72.2%, respectively). And in Yangon, more than half of patients mentioned such a method of use. Only 14.5% of patients in Kuala Lumpur reported injecting use. Data on route of administration was not collected in Manila.

Street sales was the primary source of drugs in all the cities where information was available.

4.4 Drug-Related Offenses

Law enforcement indicators such as drug seizures and drug-related arrests are influenced by enforcement priorities, availability of resources as well as policy . Thus changes in these indicators may be a result of changes in the above factors rather

than real changes in the extent of the problem. The total number and rate per 100,000 of persons arrested for drug-related offenses varied substantially between the cities. These differences may be a reflection of the extent of police activity or law enforcement in each city. The wider policy and legal aspects associated with drug abuse may also be influencing factors.

Bangkok has the highest number (37,569) and rate (638.66 per 100,000 population) of arrestees for drug-related offenses when compared to the other cities (**Exhibit 7**). Among the rest of the cities, Yangon and Kuala Lumpur recorded much higher rates (77.24 and 73.1 per 100,000 population, respectively). Manila, Hanoi and Phnom Penh reported the lowest figures, i.e. 38.11, 26.43 and 16.16, respectively. Variation in duration of reporting should be considered in comparing the rates.

The types of drug-related offenses also differed greatly between the cities. Arrests for use/consumption is the most predominant form of offense in the cities of Bangkok (66.1%,) Manila (67.0%), Hanoi (94.6%), Yangon (100%) and Kuala Lumpur (38.7%). Arrests for possession is also common in Bangkok (30.0%), Kuala Lumpur (19.9%) and Manila (11.8%). In the other three cities (Hanoi, Yangon and Phnom Penh) offenses were for drug trafficking. Kuala Lumpur had reported a sizeable percentage (19.4%) of arrests for sale of drugs.

4.5 Drug Seizures

The types and quantity of drugs that were seized varied between the cities. A wider range of drugs were seized in Bangkok between January and December 1994. They include 845.71 kilograms of opiates, 369.97 kilograms of cannabis, 144.69 kilograms of amphetamines, 135.76 liters of solvents and 1,471 pills of psychotropic drugs and 40.41 kratom plants. In Kuala Lumpur 71.66 kilograms of opiates, and 156.48 kilograms of cannabis and 5,159 psychotropic pills were seized between January and December 1995. Cannabis (179.55 kilograms) and amphetamines (1.37 kilograms) were seized in Manila over the same period.

In Hanoi 96.72 kilograms of opium, 1.15 kilograms of heroin and 69,000 pills of psychotropic substances were seized in the whole of 1995. Yangon and Phnom Penh had reported cannabis seizures of 79.22 and 1,585 kilograms, respectively. Phnom Penh also reported sizeable amounts of opium and heroin seizures.

4.6 Health and Social Indicators

Information on these indicators was incomplete in most of the cities. Drug-related HIV cases were reported by Bangkok, Yangon and Manila. In Bangkok a total of 1,032 drug-related HIV cases and 1,704 AIDS cases were detected over the period September 1984 to December 1994. In Yangon, 115 drug-related HIV cases were detected in 1994. There were also reports of 79 drug-related psychological cases and 4 drug-related deaths. By December 1995, Hanoi recorded a total of 11 HIV cases, out of which four were drug injectors. So far there were only two AIDS deaths. Manila had reported data on drug-related psychological cases detected over the period January to December 1995 which amounted to 97 cases. Over the same period a

total of 16 HIV and AIDS cases were also recorded. In Phnom Penh, 1,225 HIV positive and AIDS cases were detected by June 1995. Two of these cases were drug related. Another 3 cases of deaths were also reported.

Exhibit 1
A COMPARISION OF SELECTED CITY DEMOGRAPHIC INDICATORS

INDICATORS	BANGKOK 1990	KL 1991	MANILA 1991	HANOI 1989	YANGON 1994	PHNOM PENH 1995
TOTAL POPULATION OF CITY/METROPOLITAN	5,882,411	1,145,075	1,876,195	2,255,000	2,513,023	823,103
	%	%	%	%	%	%
SEX						
MALE	48.1	51.0	47.8	49.0	50.2	49.3
FEMALE	51.9	49.0	52.2	51.0	49.8	50.7
AGE						
< 15	21.5	36.8	43.4	31.0	33.6	
15 - 19	11.3	13.2	10.1	10.1	12.1	(<18) 44.4
20 - 34	36.2	37.5	22.9	25.3	26.9	
> 34	31.0	12.5	23.6	33.6	27.4	(>18) 55.6
NO. OF PEOPLE IN HOUSEHOLD						
1	7.9		3.0	6.2		
2-5	68.0	NA	41.7	71.5	NA	NA
6-10	22.2		48.2	(6-9) 21.5		
11+	1.8		7.1	(9+) 0.8		
NUMBER OF YEARS OF EDUCATION						
0	6.7	24.7		(0) 9.5	(0) 19.2	
1-6	46.2	34.2	(0-6) 65.9	(1-5) 39.0	(1-4) 34.7	
7 -12	29.4	37.5	21.9	(6-9) 31.5	(5-8) 28.8	
>12	17.6	3.6	11.9	(10-12) 10.5	(9-10) 11.3	
				(12+) 9.5	(10+) 5.9	
MARITAL STATUS						
SINGLE	45.8	50.6	44.8	32.0	46.8	
SEPARATED	2.6	0.8	0.5	1.3	1.6	
MARRIED	47.4	44.8	50.6	61.0	45.6	NA
WIDOWED	3.9	3.8	4.0	5.1	5.1	
OTHERS	0.3	0.0	0.1	0.4	0.9	

NA - Not Available

Exhibit 2
Demographic Characteristics of Drug Abusers Reported By City

CHARACTERISTIC	BANGKOK	KL	MANILA	HANOI	YANGON
	Jan - Dec 1994	Jan - Dec 1995	Jan - Dec 1995	Jan - Dec 1995	Jan - Dec 1994
	N=25551 Total %	N=1955 New %	N=288 New %	N= 733 Total %	N=422 New %
SEX OF PATIENT					
MALE	95.8	98.3	90.3	99.7	99.1
FEMALE	4.2	1.7	9.7	0.3	0.9
PATIENT AGE					
< 15	0.3	0.9	1.4	3.0	0.0
15 - 19	18.8	16.2	25.0	25.4	12.3
20 - 34	56.8	66.3	63.9	34.9	82.9
> 34	24.0	16.6	9.7	36.7	4.8
PATIENT EMPLOYMENT STATUS					
EMPLOYED	58.2	94.2	65.3	47.7	38.9
UNEMPLOYED	31.8	5.8	27.1	52.2	59.4
STUDENTS	10.0	-	7.6	0.0	1.7
NUMBER OF YEARS OF EDUCATION					
< 6	35.3	31.3	10.4	52.1	8.5
6-12	46.3	66.8	54.9	46.7	81.1
> 12	17.4	-	34.4	1.2	9.7
0	1.0	1.9	0.3	0.0	0.7
PATIENT MARITAL STATUS					
SINGLE	59.5	NA	57.3	73.4	79.4
SEPARATED	6.3	NA	5.9	19.8	0.2
MARRIED	29.9	NA	24.0	6.8	20.4
WIDOWED	4.2	NA	1.4	0.0	0.0
LIVE-IN	0.0	NA	11.4	0.0	0.0

NA - Not Available

Exhibit 3

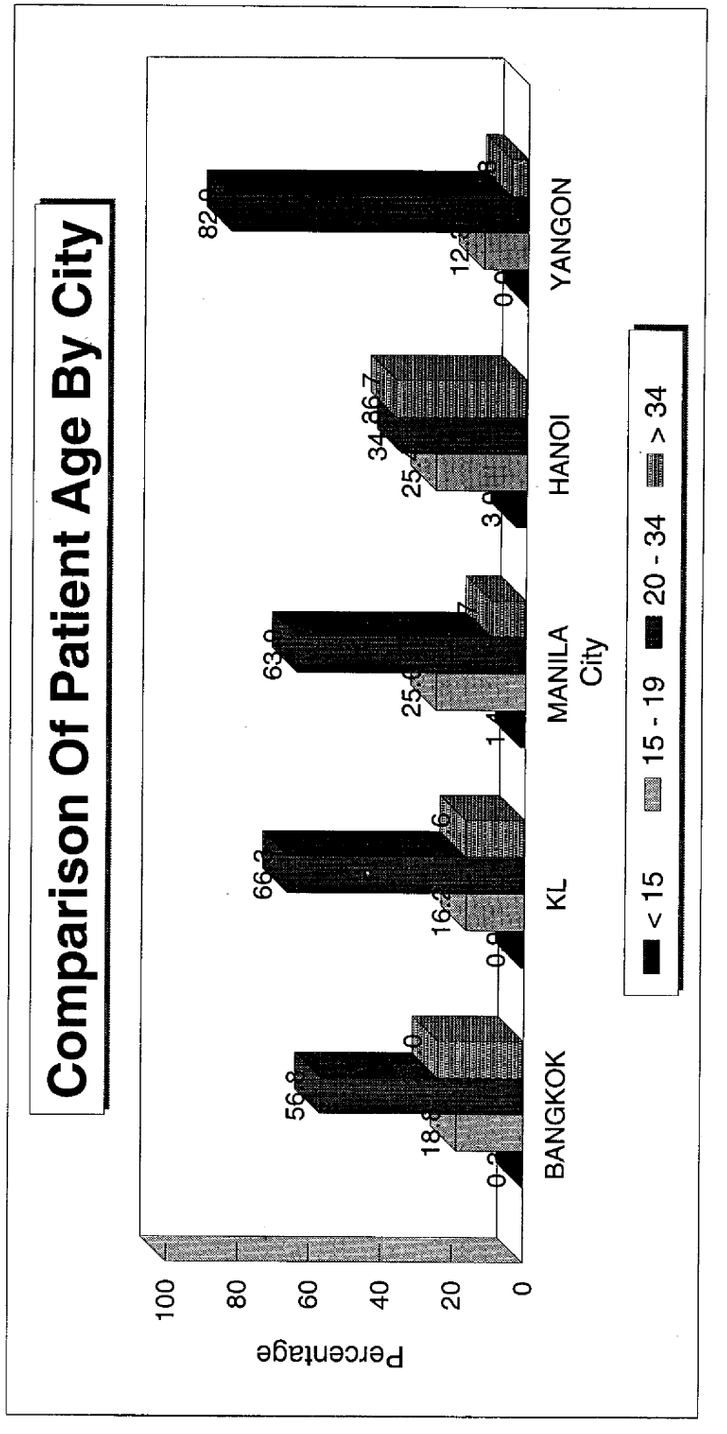
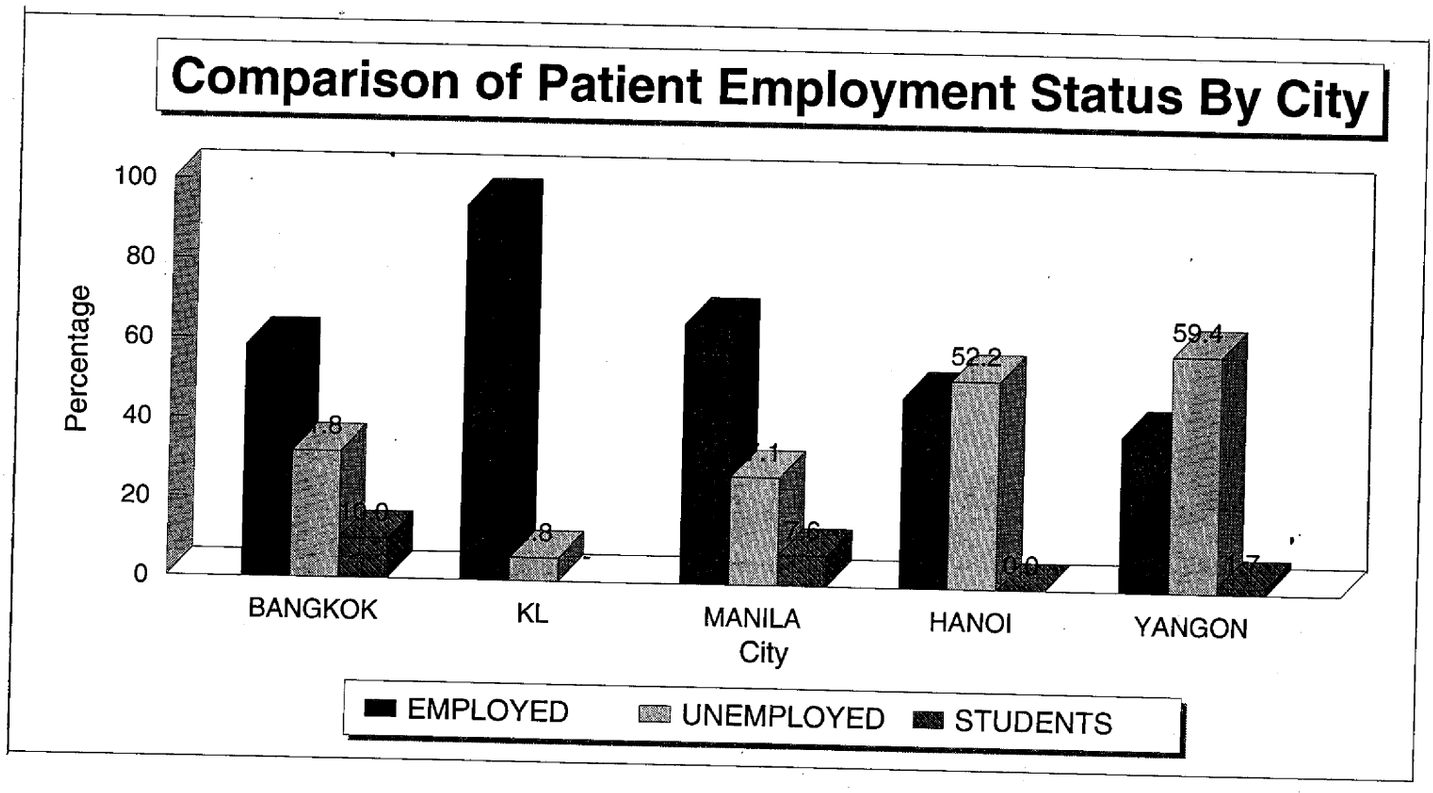
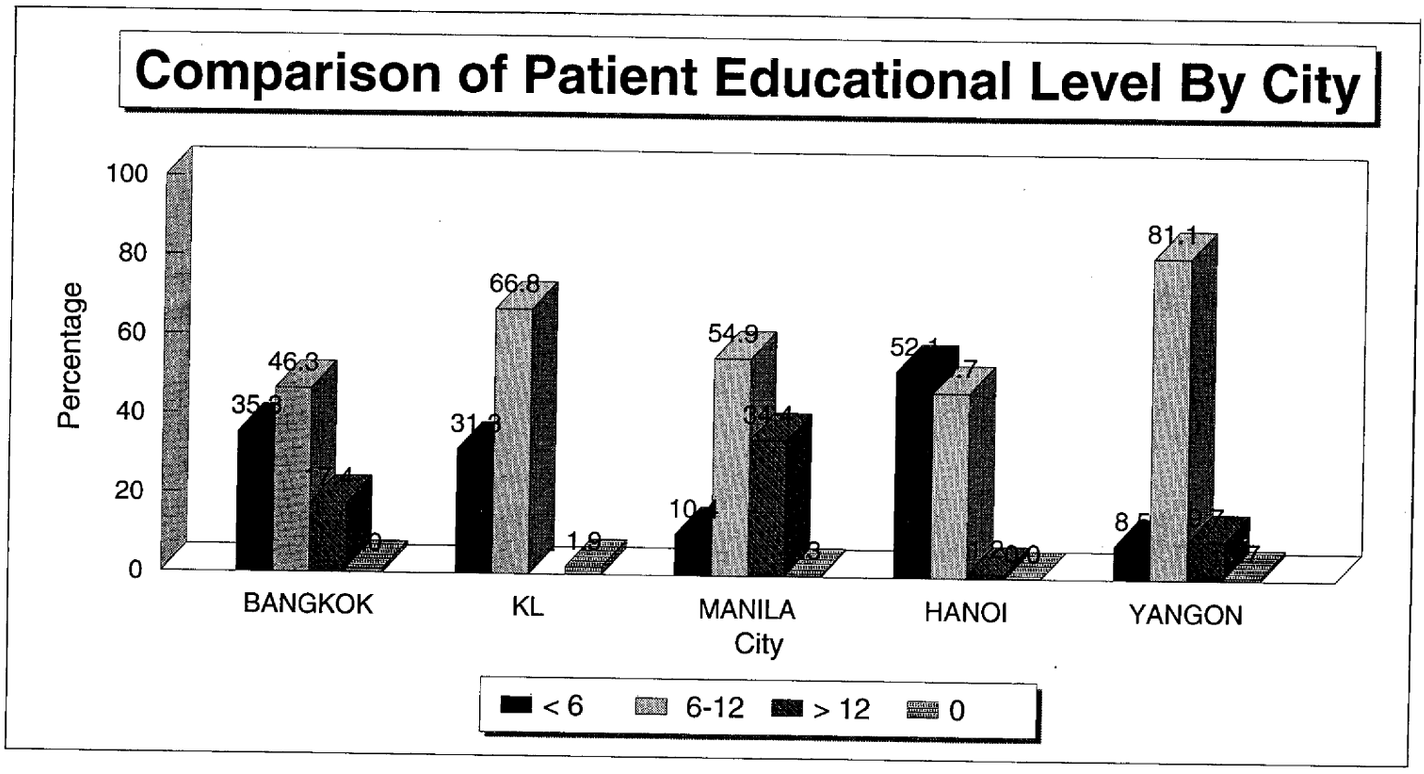


Exhibit 4



82

Exhibit 5



83

Exhibit 6
Types of Drugs Abused, Route of Drug Administration and Drug Sources By City

CHARACTERISTIC	BANGKOK Jan - Dec 1994	KL Jan - Dec 1995	MANILA Jan - Dec 1995	HANOI Jan - Dec 1995	YANGON Jan - Dec 1994
	N=25551 %	N=1955 %	N=288 %	N=733 %	N=422 %
PRIMARY DRUG OF ABUSE					
OPIATE TYPE					
OPIUM	0.2	-	2.8	73.8	8.5
MORPHINE	-	0.1	-	4.8	-
HEROIN	97.3	69.4	-	6.0	88.6
OTHERS	-	0.0	-	7.1	0.7
CANNABIS TYPE	1.2	29.9	43.4	-	2.1
COCAINE TYPE	-	-	-	-	-
AMPHETAMINES	0.3	-	87.8	-	-
SOLVENTS	0.9	-	2.8	-	-
ALCOHOL	0.1	-	46.5	-	-
COUGH SYRUPS	0.0	-	32.0	-	-
OTHER	0.1	-	10.1	-	-
POLY-DRUG USERS	7.5	-	100.0	-	-
ROUTE OF ADMINISTRATION					
INHALATION	1.0	-		4.1	-
INJECTION	67.9	14.5		72.2	53.3
ORAL	0.4	2.1	NA	-	9.2
SMOKING/CHASING	29.4	83.4		23.7	37.5
SNIFFING	0.0			-	-
OTHER	0.5			-	-

Exhibit 7
LAW ENFORCEMENT INDICATORS BY CITY

INDICATORS	BANGKOK Jan - Dec 1994	KL Jan - Dec 1995	MANILA Jan - Dec 1995	HANOI Jan - Dec 1995	YANGON Jan - Dec 1994	PHNOM PENH Jan - Dec 1995
NO. OF PERSONS ARRESTED FOR DRUG-RELATED OFFENCES	37569	837	715	596	1941	133
RATE PER 100,000 POPULATION	638.66	73.1	38.11	26.43	77.24	16.16
ARRESTS FOR USE/CONSUMPTION	66.0	38.7	67.0	94.6	100.0	-
ARRESTS FOR POSSESSION	30.0	19.9	11.8	-	-	-
ARRESTS FOR SALES	3.6	19.4	3.6	-	-	-
ARRESTS FOR TRAFFICKING	0.3	22.0	17.6	5.4	-	100.0
OTHER DRUG-RELATED OFFENCES	0.1	-	-	-	-	-
QUANTITY OF DRUG SEIZED (KG)						
OPIATE-TYPE	845.71	71.66	-	-	7.62	-
OPIUM	-	-	-	96.72	2.05	40.9
HEROIN	-	10.97	-	1.15	5.58	75
CANNABIS-TYPE	369.97	156.48	179.55	-	79.22	1585
COCAINE-TYPE	-	-	0.02	-	-	-
AMPHETAMINE-TYPE	144.69	-	1.37	-	-	2.15
SOLVENTS/INHALANTS	135.76	-	-	-	-	-
OTHER DRUGS (Psychotropic Subs.)	1,470.94	5,159	-	69,000	-	(Lydocaine) 2.7
KRATOM PLANT	40.41	-	-	-	-	-
PHENSEDYL (Litre)	-	-	-	-	17	-
COMETHAZINE	-	-	-	-	1.2	-

A COMPARISON OF DRUG ABUSE PATTERNS OF SELECTED SOUTH ASIAN CITIES JANUARY 1994 - MARCH 1996

Center For Drug Research
Universiti Sains Malaysia

1. DEMOGRAPHIC CHARACTERISTICS OF CITIES (EXHIBIT 1)

1.1 Population

The population data from each city varies by year. New Delhi has the largest population size of 9.4 million (in 1991) followed by Dhaka (3.4 million in 1991), and Kathmandu (almost 1 million people in 1992). Population data for Colombo and Islamabad were available as at 1981 only, 1.7 million and 1.2 million for the two cities respectively.

1.2 Gender

The proportion of males and females is almost similar among the five cities with slightly more males.

1.3 Age Groups

The age group distribution is not available for New Delhi while Kathmandu has different age group categories. The distribution of age groups is rather similar for Colombo, Dhaka and Islamabad except for the under 15 (29.7%, 39.3% and 40.6% respectively) and the above 35 years age group (30%, 21.2%, and 25.7% respectively). Dhaka and Islamabad have more people in the under 15 years age group and Colombo has more people in the 35 and above years age group.

1.4 Marital Status

Information on the marital status of the population is not available for Kathmandu and New Delhi. A larger proportion of the population (59%) in Colombo are not married compared to Dhaka (41%) and Islamabad (29.4%). A higher percentage (54.8%) of the population in Dhaka and Islamabad (65%) are married compared to Colombo (36%).

2. DEMOGRAPHIC CHARACTERISTICS OF DRUG ABUSERS BY CITIES (EXHIBIT 2)

2.1 Reporting Period

The aggregated data of each city which are used for this cross-city comparison differ. The reporting period for each city is as follows:

Colombo:	January - December 1995 (12 months)
Dhaka:	January - August 1995 (8 months)
Islamabad:	March 1995 - March 1996 (13 months)

Kathmandu:	January - December 1994 (12 months)
New Delhi:	January - December 1994 (12 months)

During the current reporting period, data for Kathmandu and New Delhi available up to the year 1994 only.

2.2 Total Number Of Drug Dependents Reported

Except in the case of Islamabad where data were reported from both specialized drug treatment facilities and prison, the rest of the other cities have data from only specialized drug treatment facilities. The total number of drug treatment admissions are as follows:

Colombo	-	1,686 (no breakdown by new and readmissions)
Dhaka	-	673 (79.81% are new admissions)
Islamabad	-	1,400 (63.3% are new admissions)
Kathmandu	-	149 (96.6% are new admissions)
New Delhi	-	258 (89.9% are new admissions)

2.3 Reporting Agency

Colombo	:	The Drug Abuse Monitoring System / Research and Publication Divisions, Dangerous Drugs Control Board.
Dhaka	:	Central Treatment Center (Drug Addiction Cure Hospital)
New Delhi	:	Narcotics Control Bureau
Kathmandu	:	Community Recovery Center (CRC). Data from CRC's rehabilitation programs both day care and prison.
Islamabad	:	Integrated Drug Demand Reduction Project

2.4 Sex of Patients

Almost all of the patients from each city were males (99 - 100%)

2.5 Patients Age

The age groups of the patients were almost similar for all the five cities. Majority (between 61% and 80%) of the patients were in the 20 - 34 years age group. In Islamabad, however nearly one third of the total number of drug abusers (30.1%) were over 35 years old, while Kathmandu had the lowest number of abusers (4.7%) in this age category.

2.6 Patients Marital Status

The proportion between the marital status of single and married among the drug abusers were almost similar with the exception of Islamabad and New Delhi where slightly more were married (47% and 55% respectively).

2.7 Employment Status

The unemployed featured quite prominently in the occupational status in all five cities (between 22% and 47%). In Colombo and Islamabad a sizeable proportion (36% and 27% respectively) fell under the 'others' category which were mostly laborers. In Islamabad, drivers made up 25 percent of the total occupation profile of drug abusers.

Small business accounted for a sizeable proportion of employment among abusers in Colombo (17%), Dhaka (25%) and Kathmandu (20%). A significant proportion for both Dhaka and Kathmandu were students (12% and 13% respectively).

2.8 Education Attainment

Information on years of educational attainment revealed a similar proportion among all the cities (with the exception of Islamabad) where over 50% of the patients had between 6 - 12 years of education. Colombo had the largest (87%) proportion of patients who had between 6 - 12 years of education. In Islamabad, a slightly higher proportion (35%) of the patients had no formal education while almost one third proportion each had less than 6 years and between 6 - 12 years of formal education.

3. PATTERNS OF DRUG USE (EXHIBIT 3)

3.1 Primary Drug Of Abuse

Heroin was the primary drug of abuse among drug dependents in the treatment facilities of all the five cities. Almost all (97%) of the patient in Colombo and most of the patients in Kathmandu (86%) and Islamabad (84%) abused heroin. On the other hand, only about half of the patients in New Delhi and slightly less than half of the patients in Dhaka abused heroin. In Dhaka, increasing abuse of other opiate drugs such as pethedine, phensedyl and buprenorphine which were categorized under the "others" category (47%) were detected.

Cannabis was abused by a small percentage of patients in all cities. Alcohol consumption was high in New Delhi (23%). In this city too, consumption of opium (8%) and solvents / inhalants (6%) was highest among the five cities.

Most of the patients (89%) in Kathmandu and Islamabad (62%) were polydrug users, while only a small percentage in New Delhi and Dhaka were polydrug users. Data were not available from Colombo.

3.2 Route Of Drug Administration

The route of drug administration varied among the cities. (Data were not available from New Delhi). Smoking or 'chasing the dragon' was the most popular route of drug

administration in Islamabad (77%) and Dhaka (44%). In Kathmandu, the majority of patients (67%) were injecting while only 28 percent were smoking or 'chasing the dragon'. In Dhaka a growing number (40%) were using other routes of drug administration. This diverse pattern is attributed to the varied types of drugs that were abused.

4. LAW ENFORCEMENT INDICATORS (EXHIBIT 4)

4.1 Drug-Related Arrests

The number of drug-related arrests of each city for the reporting period was: Colombo 3,150, Dhaka 1,623, Islamabad 1,571, Kathmandu 266 and New Delhi 114. Dhaka did not report by type of arrest. The types of drug-related arrests varied among the cities. All of the arrests in New Delhi were arrests for drug possession. In Colombo, the majority were arrests for drug use / consumption (70%) and sales (26%). In Islamabad, about half were arrests for sales, followed by arrests for trafficking (19%) and arrests for use / consumption (15%). The pattern of arrests was similar in Kathmandu with 46% for sales, followed by trafficking (34%) and use / consumption (18%).

4.2 Rate Of Drug-Related Arrests

The rate of drug-related arrests per 100,000 population was highest for Colombo (185.4 per 100,000) followed by Islamabad (135.4 per 100,000), Dhaka (47.2 per 100,000), Kathmandu (28.5 per 100,000) and New Delhi (1.2 per 100,000). The differences may be a reflection of the variation in extent of police activity or law enforcement in each city.

4.3 Drug Seizures

Opiates and cannabis were seized in all cities with cannabis being the main drug seized. (Data were not available from Colombo). The quantity of these two drugs that were seized varied among the cities. Dhaka recorded the largest amount of cannabis seizures (3,609.0 kg) followed by Islamabad (1,036.0 kg), New Delhi (637.0 kg) and Kathmandu (186.6 kg). New Delhi recorded the largest amount of opiates seized (276.3 kg) while smaller amounts were recorded by Islamabad (67.7 kg), Kathmandu (10.4 kg) and Dhaka (4.5 kg).

In addition to opiate and cannabis seizures, Islamabad and Dhaka reported sizeable seizures of other types of drugs such as alcohol, phensedyl, buprenorphine, solvents / inhalants and poppy heads.

Exhibit 1
General Population Demographic Indicators

Characteristics	Colombo 1981	Dhaka 1991	Islamabad 1981	Kathmandu 1992	New Delhi 1991
Total Population	1,699,241	3,440,147	1,159,916	932,427	9,420,644
	%	%	%	%	%
Sex					
Male	52.6	58.0	54.0	51.6	54.6
Female	47.4	42.0	46.0	48.4	45.4
Age					
< 15	29.7	39.3	40.6	(0-14) 34.7	NA
15 - 19	10.8	10.4	10.4	(15-24) 23.8	
20 - 34	29.5	29.1	23.3	(25-34) 16.1	
35+	30.0	21.2	25.7	(35-44) 10.2	
				(45-54) 7.0	
				(55-64) 4.5	
				(65+) 3.6	
Marital Status					
Single	59.0	41.0	29.4	NA	NA
Separated/Divorced	0.3	0.3	5.6		
Married	36.0	54.8	65.0		
Widowed	2.7	3.9			
Others	1.9				
Years of Education					
Zero	(0) 18.0	NA	(0) 41.2		NA
1 - 6	(1- 5) 14.6		(1 - 5) 15.8	(1 - 5) 42.1	
7 - 12	(6-12) 63.8		(6 - 10) 26.0	(6 - 10) 41.0	
13+	(13+) 3.6		(11+) 17.0	(11+) 16.9	

Exhibit 2
Demographic Characteristics Of Drug Abusers By Cities

Characteristics	Colombo Jan - Dec 95	Dhaka Jan - Aug 95	Islamabad Mar 95 - Mar 96	Kathmandu Jan - Dec 94	New Delhi Jan - Dec 94
	N = 1686	N = 673	N = 1400	N = 149	N = 258
	%	%	%	%	%
Sex of Patients					
Male	99.9	99.9	99.2	100.0	100.0
Female	0.1	0.1	0.8	0.0	0.0
Patient Age					
< 15 years	1.8	0.0	1.7	0.0	0.0
15 - 19 years	9.5	5.5	7.4	7.4	2.7
20 - 34 years	77.8	80.5	60.8	87.6	88.8
35+ years	17.9	14.0	30.1	4.7	8.5
Patient Marital Status					
Single	53.9	54.7	41.4	55.3	31.4
Separated/Divorced	1.1	4.0	9.8	0.0	12.8
Married	44.5	41.2	46.9	44.7	55.0
Widowed	0.2	0.0	1.9	0.0	0.8
Other	0.2	0.0	0.0	0.0	0.0
Patient Occupation					
Professionals	3.1	5.9	2.9	6.0	12.4
Administrators	1.3	0.0	1.8	4.7	0.0
Sales & Clerical	3.8	8.8	8.6	0.7	18.2
Drivers	8.1	6.8	25.2	2.0	5.0
Cultivators	0.1	0.1	5.0	7.4	0.0
Unemployed	29.0	35.7	21.9	37.6	46.9
Small Business	16.5	24.7	5.7	20.1	10.5
Students	2.0	12.5	2.1	12.8	0.0
Others	36.0	5.5	26.8	8.7	7.0
Years of Education					
Zero	2.7	18.3	34.6	2.0	5.4
< 6 years	10.5	10.7	31.3	35.6	24.4
6 - 12 years	86.6	58.5	28.3	61.7	50.8
> 12 years	0.2	12.5	5.8	0.7	19.4

Exhibit 3
Types Of Drugs Abused And Route Of Administration By Cities

Characteristics	Colombo Jan - Dec 95	Dhaka Jan - Aug 95	Islamabad Mar 95 - Mar 96	Kathmandu Jan - Dec 94	New Delhi Jan - Dec 94
	N = 1686	N = 673	N = 1400	N = 149	N = 258
	%	%	%	%	%
Primary Drug of Abuse					
Opium	0.1	0.0	3.4	0.0	8.3
Morphine	0.0	0.0	2.0	1.3	0.0
Heroin	96.6	41.3	83.9	85.9	54.2
Other Opiates	1.0	2.1	2.6	2.7	0.0
Cannabis Type	0.3	5.8	4.8	5.4	8.0
Alcohol	0.4	1.3	0.9	0.0	23.1
Minor Tranquillisers	0.0	2.4	1.5	0.0	0.0
Other	1.6	47.2	0.1	4.7	6.4
Polydrug Users	NA	7.1	61.9	88.6	11.6
Route of Admin/Use					
Inhalation	0.1	0.0	1.0	0.0	NA
Injection	0.5	16.5	7.3	67.1	
Oral	1.2	39.8	6.6	5.4	
Smoking/Chasing	32.3	43.7	77.4	27.5	
Sniffing/Snorting	0.8	0.0	7.7	0.0	
Other	65.1	0.0	0.0	0.0	

Exhibit 4
Law Enforcement Indicators By Cities

Offenses	Colombo Jan - Dec 95	Dhaka Jan - Aug 95	Islamabad Mar 95 - Mar 96	Kathmandu Jan - Dec 94	New Delhi Jan - Dec 94
Number of Arrests	N = 3150	N = 1623	N = 1571	N = 266	N = 114
	%	%	%	%	%
Arrests for Use/Consumption	69.7		15.4	18.4	0.0
Arrests for Possession	0.0		0.0	0.0	100.0
Arrests for Sales	26.0	100*	51.0	45.5	0.0
Arrests for Trafficking	4.3		18.9	33.8	0.0
Arrests for Conspiracy	0.0		0.0	0.0	0.0
Other	0.0		14.7	2.3	0.0
Rate of Drug-Related Arrests Per 100,000 Population	185.4	47.2	135.4	28.5	1.2
Quantity of Drug Seized					
Opiate Type (kg)	NA	4.5	67.7	10.4	276.3
Cannabis Type (kg)		3609.0	1036.7	186.6	637.0

*Dhaka Showed The Total Of All Offences

PART 2: SECTION ONE

ASIAN COUNTRY REPORTS (JOINT MEETING)
(January - September 1996)

AN EPIDEMIOLOGY OF DRUG ABUSE IN BANGKOK

Technical And Foreign Affairs Division
Office Of The Narcotics Control Board
Bangkok, Thailand

ABSTRACT

Comparing with other cities of Thailand, Bangkok has the most serious problem of drug abuse. Each year the extent of drug abuse continues to rise sharply and seriously in many districts of Bangkok. Though there is a widespread abuse of many principal drugs at present such as heroin, cannabis, methamphetamine, inhalants and other drugs, the proportion of heroin is the highest. A crisis of heroin scarcity in early 1996 affected the heroin situation of Thailand - the price of heroin skyrocketed, its quality and purity were lower than the past. Though cannabis abuse involved a large number of people, it appears to decrease in terms of proportion. The abuse of methamphetamines and inhalants has increased rapidly over the past 2 years. Methamphetamines have been the most popular drug in terms of new users and dealers. The change in the route of administration of methamphetamines from oral taking to smoking caused an increase of admissions in treatment centers. Inhalant abuse is also widespread, however, it appears not to be as serious a problem as methamphetamine because inhalant abusers usually grow out of it or change to other drugs. As for AIDs epidemic, narcotic related HIV infection comes second to the infection caused by sexual practices.

1. AREA DESCRIPTION

Bangkok, the most developed city, has been the capital of Thailand for more than 200 years. Under National Economic and Social Development Plan, Bangkok city has earned the most income for the past 40 years. It is not only the center of communication, transportation, telecommunication, education, but also the target city where most people from all parts of the country migrate to work. The population in Bangkok city has increased sharply from 2 - 3 million 20 years ago, to 8 - 10 millions people or 1/6 of the total population now. Presently there are more than 1 million people below poverty line, living in 1,246 congested communities.

Compared to other cities of Thailand, Bangkok has the most problems such as environment, pollution, traffic, crime and family disruptions which are the important factors of drug abuse epidemic. Thus drug abuse is spread most widely and seriously in Bangkok.

2. DATA SOURCES AND TIME PERIODS

Data in this paper is derived from the following sources:

- Narcotic case register in Bangkok, 1991 - 1995 from law enforcement agencies
- Voluntary treatment register in Bangkok, 1992 - 1995 from treatment centers

- AIDs situation in Bangkok, 1984 - 1995 from Ministry of Public Health
- 1996 Bangkok communities survey from ONCB

Note: Data from the first of 3 sources were collected according to calendar year.

3. DRUG ABUSE TRENDS IN BANGKOK

3.1 An Overview of Drug Epidemic

As Thailand is situated in a strategic area of the drug problem, it encounters all dimensions of the problem such as production, trafficking in both export and import, as well as epidemic of drugs abuse which is now becoming a major problem of the country and will continue to be serious in the future. The number of drug cases in Thailand increased continuously every year from 53,900 in 1988 to 139,840 in 1995 or about 159%. Cannabis epidemic seems to decrease annually, the proportion of opium and heroin abuse have been stable. Inhalants and methamphetamines are the only drugs that tend to increase continuously. It appears that these two types of drugs will be a major problem for Thailand in the future (**Chart 1**).

The problems of drug abuse in Bangkok are somewhat different from the overview of drug epidemic in the whole country. In Bangkok, an epidemic of heroin, methampetamines and inhalants increased rapidly each year, but cannabis tended to be declining. It is clear that heroin is an increasing problem in Bangkok **(Chart 2).**

Chart 1: Percentage Of Heroin, Opium, Cannabis, Methamphetamine And Inhalant Offense In Thailand

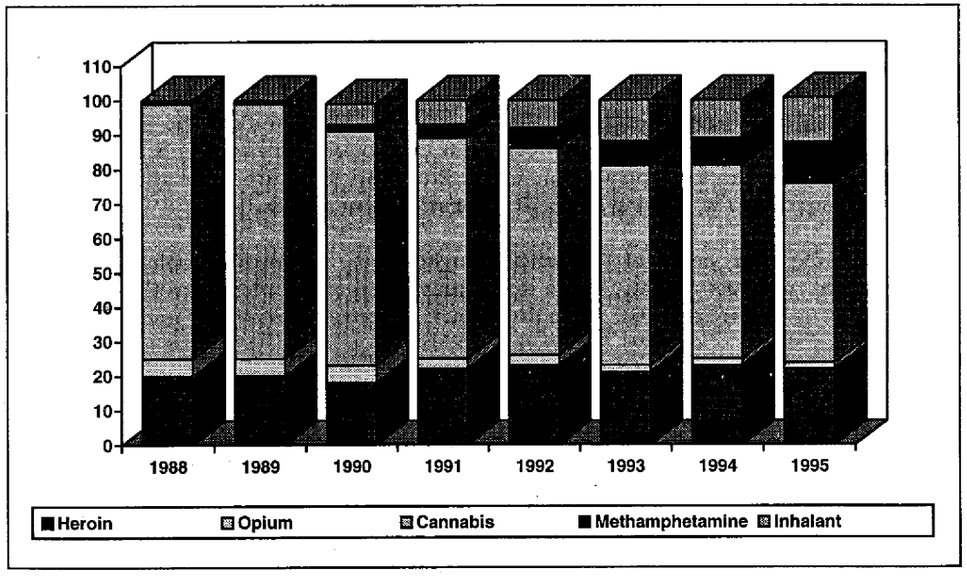
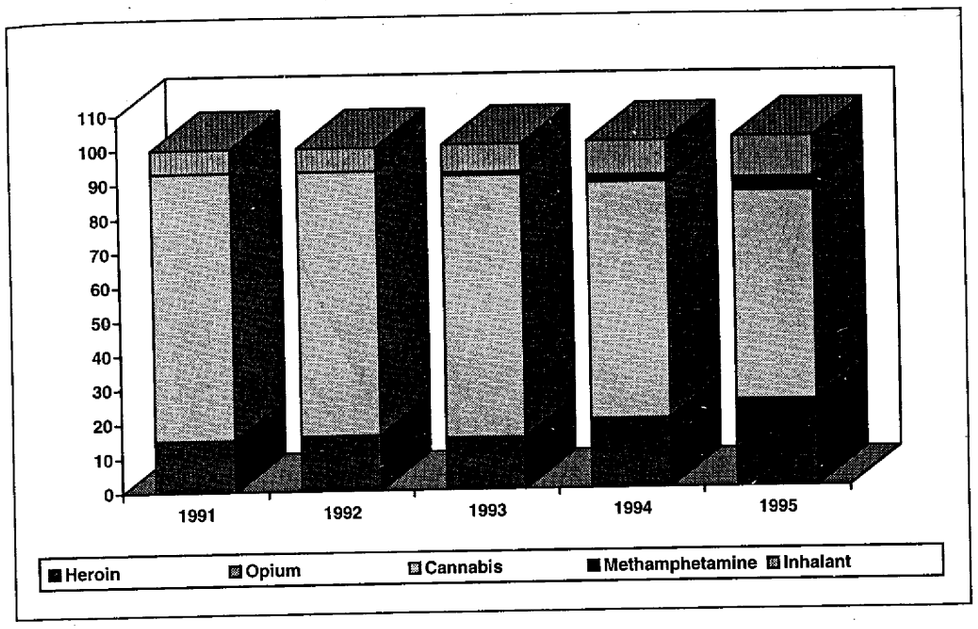


Chart 2: Percentage Of Heroin, Opium, Cannabis, Methamphetamine And Inhalant Offense In Bangkok



The numbers of new drug offenders as producers, dealers, and users that increase sharply each year are the result of the growing drug problem. According to the 5 -year statistics of narcotics cases, new offenders made up more than 50% of the total **(Chart 3).** When classified by types of drug we found that cannabis related cases constituted the largest number of new offenders follow by heroin. However, methamphetamine and inhalant cases have larger proportion of new offenders **(Table 1).**

Chart 3: Percentage Of New Offenders (Thai Nationality) Arrested In Bangkok Classified By Types Of Drugs

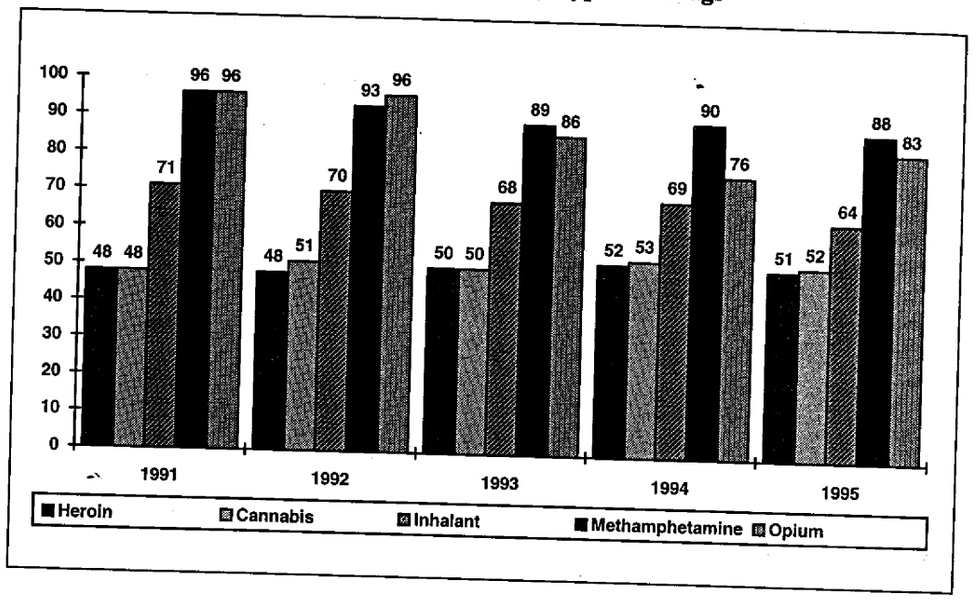
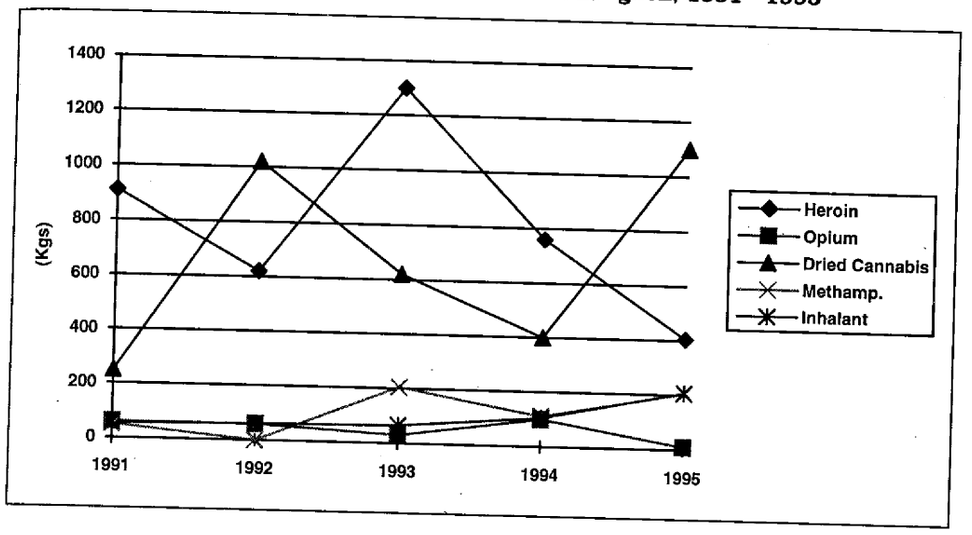


Table 1: Number Of New Offenders (Thai Nationality) Arrested In Bangkok, 1991 - 1995 Classified By Types Of Drugs

Types of Drugs	Year				
	1991	**1992**	**1993**	**1994**	**1995**
Heroin	2,470	2,807	3,373	5,185	6,512
Opium	31	31	13	20	15
Cannabis	11,399	12,079	13,436	12,900	12,312
Methamphetamines	108	203	432	768	1,772
Inhalants	1,558	1,678	2,152	3,199	4,379

Bangkok is a center of drug trafficking network especially international trafficking, therefore, it becomes a center of communication, negotiation, money transferring, and transit route for drug couriers especially at Don Muang airport and Klong Toey harbor. Large drug seizures in Bangkok composed of drugs for export, trafficking to target areas, and distributing to Bangkok users. During the past 5 years, the seizure of methamphetamine and inhalants continued to rise. While the quantity of heroin and cannabis seized were not stable, it depended on the numbers of cases involving international traffickers since in these kind of cases there is normally a large amount of drugs **(Chart 4).**

Chart 4: Quantity Of Drugs Seized In Bangkok, 1991 - 1995



3.2 Problems Of Drug Epidemic In Bangkok

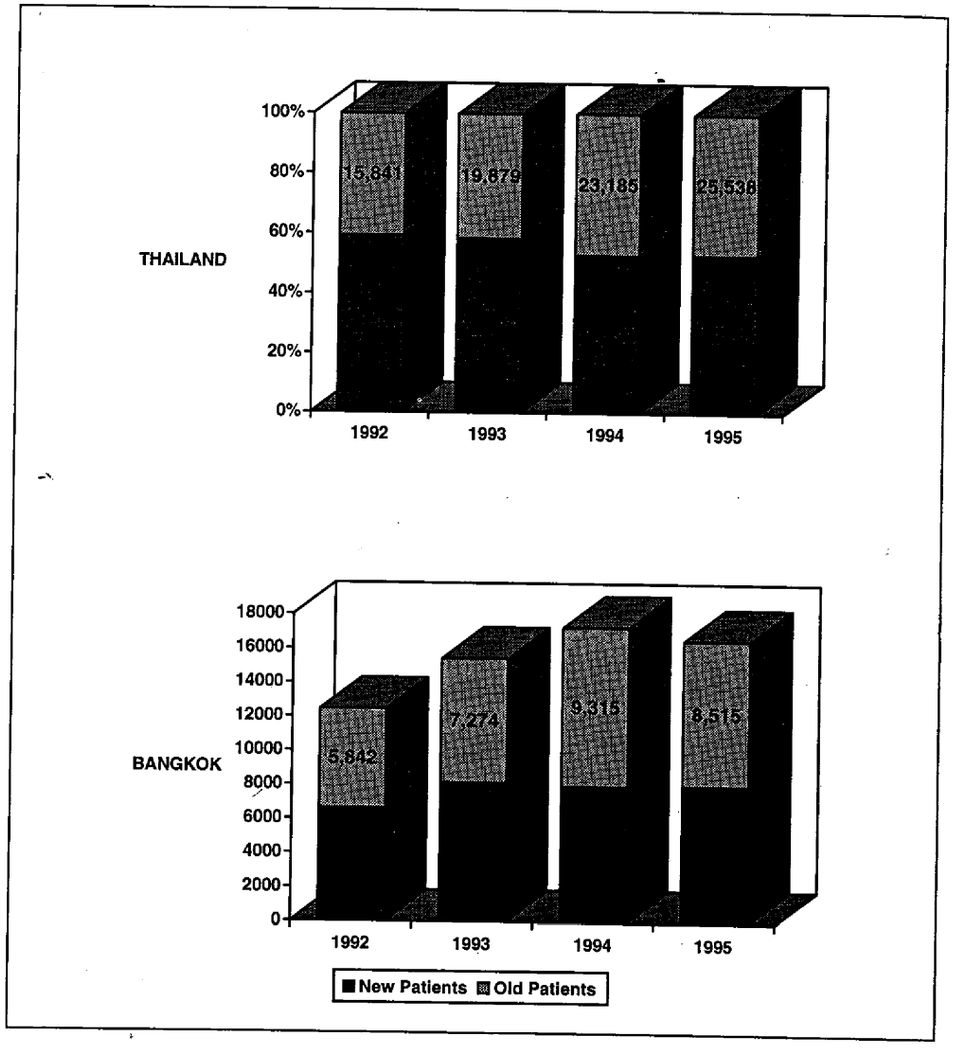
3.2.1 Areas

There has been an increase of drug epidemic both in terms of area and population. The drug epidemic has expanded from 2 districts in 1992 to 9 districts in 1995. The problem areas concentrate at the inner area and the outskirts of Bangkok and expand outwards, the reasons for this concentration of the problem may be the congestion of people and communities, the existing drug trafficking networks, etc. In the suburban area of Bangkok, drug problems are not serious because of its rural life society and scattered population. However, drug problems seem to be more serious in many districts especially Thonburi district **(Appendix 1).**

3.2.2 Population

Bangkok treatment data could be used as an indicator of the drug problem. The number of drug users in treatment centers increased continuously from 12,456 in 1992 to 16,518 in 1995 or about 30% of total number of drug patients in the country. In Bangkok, new drug patients were about 50% in every year, this percentage dropped a little in the last 2 years. This data suggests that half of drug patients in Bangkok are old users **(Chart 5).**

Chart 5: Percentage Of New And Old Drug Patients In Treatment Centers, 1992 - 1995



In studying the age group of drug patients, it is found that the group of 15 - 19 and 20 - 24 years tend to increase every year and constitute about 40% of the total patients, while the group of > 25 years tends to decrease **(Table 2).**

Table 2: Number Of Drug Patient Resident In Bangkok, 1992 - 1995 Classified By Age

Year	Age						
	<15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	> 39
1992	19	1,086	2,487	2,827	2,747	2,079	1,241
	0.2%	8.7%	19.9%	22.6%	22.0%	16.7%	9.9%
1993	69	2,242	3,413	3,134	2,804	2,238	1,463
	0.4%	14.6%	22.2%	20.4%	18.2%	14.6%	9.5%
1994	59	3,077	3,803	2,803	2,417	2,056	1,441
	0.4%	19.6%	24.3%	17.9%	15.4%	13.1%	9.2%
1995	61	3,848	4,551	2,610	2,136	1,824	1,439
	0.4%	23.4%	27.6%	15.8%	13.0%	11.1%	8.7%

As for first year of use, it is found that the 15 - 19 age group is the largest or about 50%, it also appears to increase every year. The proportion of the group of < 15 years is stable. But the group of > 20 years seems to drop. It is quiet clear that youths at 15 - 19 years remain a target group of drug epidemic since its number continue to rise. Meanwhile, the proportion of other age groups appears to be stable or decrease **(Table 3).** If this persists, youths at 15 - 19 will increasingly became new drug users.

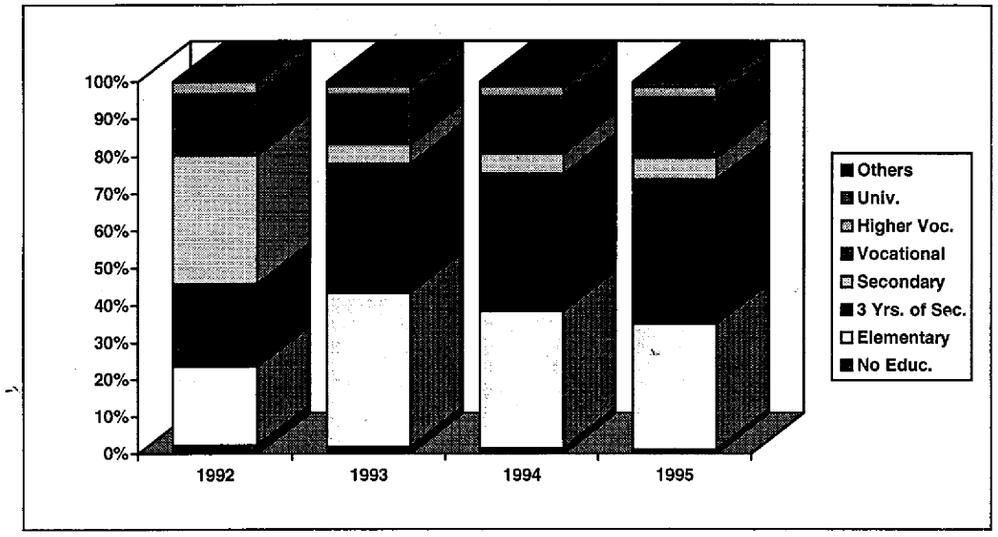
Table 3: Number Of Drug Patients Resident In Bangkok, 1992 - 1995 Classified By Age Of First Use

Year	Age						
	<15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	> 39
1992	1,177	6,715	2,648	966	355	164	93
	9.7%	55.4%	21.8%	8.0%	2.9%	1.3%	0.8%
1993	1,609	8,478	3,041	1,074	449	180	106
	10.8%	56.8%	20.4%	7.2%	3.0%	1.2%	0.7%
1994	1,878	8,964	2,802	981	409	168	95
	12.3%	58.6%	18.3%	6.4%	2.7%	1.1%	0.6%
1995	2,044	9,549	2,957	946	401	1456	117
	12.6%	59.1%	18.3%	5.9%	2.5%	1.0%	0.7%

Regarding education status of drug users, nearly 100% have formal education. Most of them or 40% are secondary school graduates. These numbers have been stable while

the numbers of users with elementary school education tends to decrease. However, the group that is on the increase are users at vocational level **(Chart 6).**

Chart 6 : Percentage Of Drug Patients Resident In Bangkok Classified By Education Level



On the issue of occupation of drug users in Bangkok, we found that drug epidemic was serious among a regularly employed group. Even though it tends to drop each year, its proportion is still more than half. Unemployed users and students are the only two principal groups that appear to rise continuously every year **(Table 4).**

Table 4: Numbers Of Drug Patients In Bangkok, 1992 - 1995 Classified By Occupation

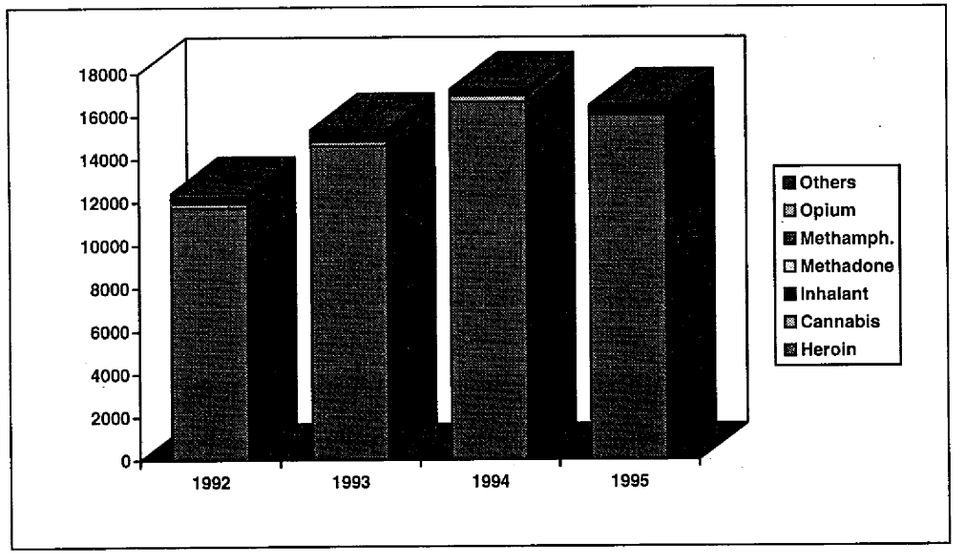
Year	Occupation					
	Had Salary	No salary				
		Student	Unemployed	Priest	Housewife	Gangster
1992	8,759	492	3,136	12	18	28
	70.4%	4.0%	25.2%	0.1%	0.1%	0.2%
1993	10,076	1,218	3,967	4	10	36
	65.8%	8.0%	25.9%	0.0%	0.1%	0.2%
1994	9,150	1,619	4,757	7	8	29
	58.80%	10.40%	30.60%	0.0%	0.1%	0.2%
1995	9,021	1,943	5,370	7	17	37
	55.0%	11.9%	32.8%	0.0%	0.1%	0.2%

3.2.3 Type Of Drugs And Route Of Administration

Most of the drug users or 90% of the total in treatment centers both in Bangkok and throughout the country are heroin addicts. Even though there is widespread abuse of drugs like cannabis, methamphetamines and inhalants in the country, only a small number of these users seek treatment.

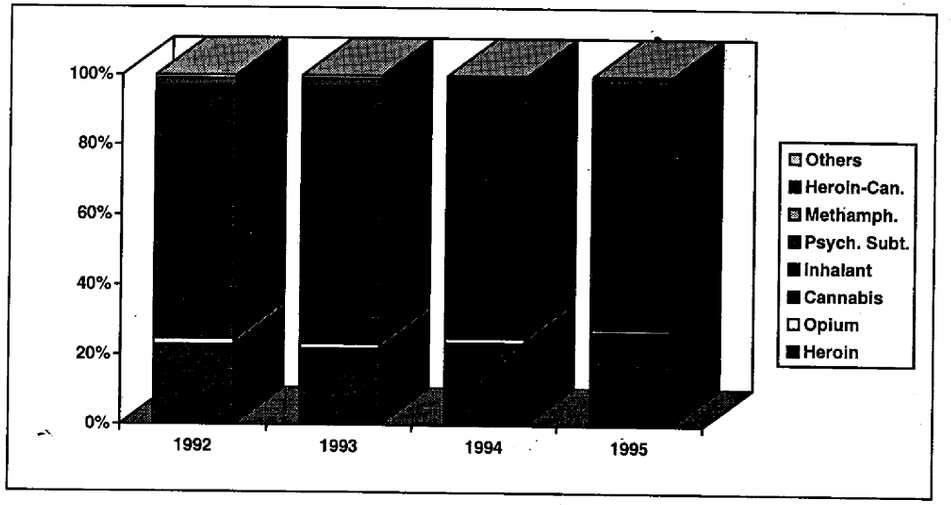
Heroin epidemic is a major problem in Bangkok. The number of heroin addicts coming in for treatment has remained stable as the highest group of a long time **(Chart 7).** Considering new drug users, an interesting event we found was the reduction of number of cannabis addicts in treatment centers during the past 4 years. Meanwhile, inhalant addicts remained at the same level. But the number of methamphetamine addicts in treatment centers increase a continuously every year and tend to be high.

Chart 7: Percentage Of Drug Patients Resident In Bangkok Classified By Types Of Drug



The situation of drug problem is dynamic. Various factors may cause the change from one drug to another. Drug addicts in Bangkok are also dynamic and charge drugs. For first drug use, cannabis remains the most popular drug, however, the number of addicts who began the habit with cannabis has reduced. Meanwhile, the numbers of addicts who start with heroin and inhalants increased annually **(Chart 8).**

Chart 8: Percentage Of Drug Residents In Bangkok Classified By Drug Of First Use



In Bangkok, over 90% of drug addicts used only one type of drug. The numbers of one-drug user began to rise after being stable for many years. Regarding two-drugs users, both combined and alternated use, appeared to drop for the past 2 years, while, the number of poly-drug users have been stable and constitute the smallest group **(Table 5).**

Table 5: Number Of Drug Patients Resident In Bangkok, 1992 - 1995 Classified By Types Of Drug Use

Type Of Drug Use	Year			
	1992	**1993**	**1994**	**1995**
Use one drug	10,568 84.9%	13,028 84.9%	13,991 89.3%	15,195 92.4%
Use 2 drugs (combined)	888 7.1%	1,379 9.0%	1,172 7.5%	826 5.0%
Use 2 drugs (alternately)	824 6.6%	700 4.6%	461 2.9%	356 2.2%
Use more than 2 drugs	170 1.4%	239 1.6%	42 0.3%	71 0.4%

3.3 An Epidemic Of The Important Drugs In Bangkok

3.3.1 Heroin

The problem of heroin epidemic increased rapidly in Bangkok. Data from law enforcement stated that the number of heroin cases rose sharply during the past 5 years. Most of the heroin cases or about 85 - 88% are arrested on charge of use and possession at the same time, offenders under the charge of production and disposal appear to be low **(Table 6).** Considering the age group of heroin offenders being arrested, the 21 - 30 age group is the largest or about 46 - 48% and tended to increase followed by the age group of < 20 years that seems to rise rapidly every year **(Table 7).**

Table 6: Number Of Heroin Cases Arrested In Bangkok, 1991 - 1995 Classified By Charges

Year	Charges					Total
	Product	**Import**	**Export**	**Dispose/ Possession for disposal**	**Possess/ Consume**	
1991	4 0.07%	- -	136 2.4%	819 14.6%	4,668 83.0%	5,627 100%
1992	6 0.1%	1 0.0%	164 2.6%	628 10.0%	5,457 87.2%	6,256 100%
1993	2 0.03%	- -	89 1.2%	731 10.2%	6,329 88.5%)	7,151 100%
1994	11 0.1%	- -	87 0.8%	1,103 10.4%	9,389 88.7%	10,590 100%
1995	1 0.01%	- -	53 0.4%	1,472 11.0%	11,857 88.6%	13,383 100%

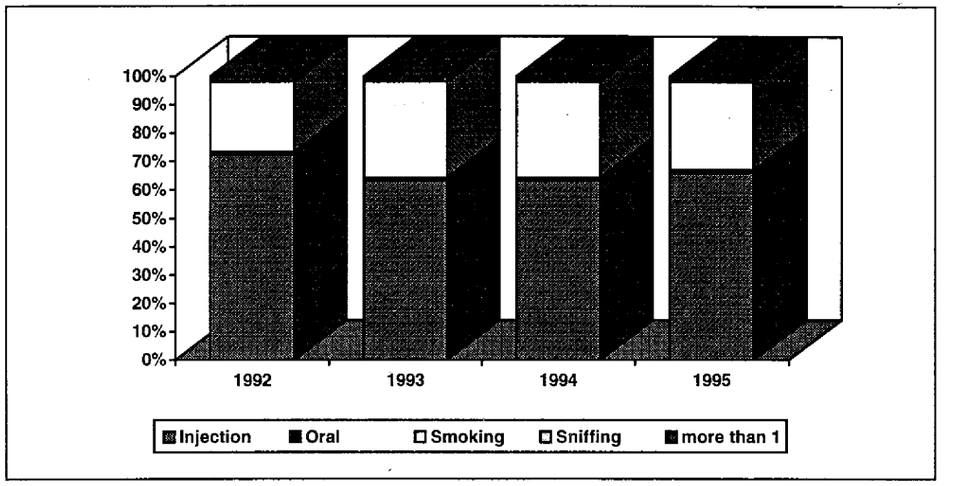
Table 7: Numbers Of Heroin Offenders Arrested In Bangkok, 1991 - 1995 Classified By Age

Year	Age				Total
	0 - 20	21 - 30	31 - 40	>40	
1991	348	1,574	2,555	792	5,269
	6.6%	29.9%	48.5%	15%	100%
1992	424	2,128	2,596	780	5,928
	7.2%	35.9%	43.8%	13.2%	100%
1993	609	3,038	2,490	704	6,841
	8.9%	44.4%	36.4%	10.3%	100%
1994	1,787	4,917	2,713	681	10,098
	17.7%	48.7%	26.9%	6.7%	100%
1995	3,344	5,988	2,657	793	12,782
	26.2%	46.8%	20.8%	6.2%	100%

Demand of heroin in Bangkok is related to the Northern border area which is the most important supply source. Drug traffickers in Bangkok have good connection with those in the Northern area. Heroin is illicitly trafficked from the North to the wholesalers in Bangkok for forwarding to the retailers. In Bangkok, there are groups of wholesalers who reside in the areas where the epidemic is very serious, thus making suppression by law enforcement officials difficult. Retailers who are scattered throughout the community, distribute drugs to users directly. In 1996, the ONCB conducted a survey of drug epidemic of 60 communities in Bangkok through leaders of those communities, the results showed that there were distributors in 40 communities and the number of retailers were 135. We also found that those retailers provided not only heroin, but also methamphetamines and cannabis.

In studying route of administration of heroin users in Bangkok, we found that injection was still the most popular way for users or about 70%. Smoking appeared to be low **(Chart 9)**. The situation of heroin epidemic in Thailand has changed drastically since April 1996 after Khun Sa, the Myanmar drug lord surrendered to enforcement along the Thai and Myanmar border by both Thai and Myanmar governments, and the success of Thailand in destroying the Khun Sa network in Thailand. This halted the process of drug production and trafficking along the border for a period of time. Traffickers could not transport heroin into Thailand. As a result, there was a scarcity of heroin in many parts of Thailand for a certain period of time. This heroin crisis situation can be summarized as follows:

Chart 9: Percentage Of Heroin Patients Resident In Bangkok Classified By Route Of Administration



- *Heroin Price Escalation Throughout The Country*

In Bangkok, the price for 1 gram of heroin increased from 800 to 10,000 baht in the month of May, 1996. This price decreased to 2,000 - 3,000 Baht per gram at present, but it is impossible to go down to the same price prior to April 1996.

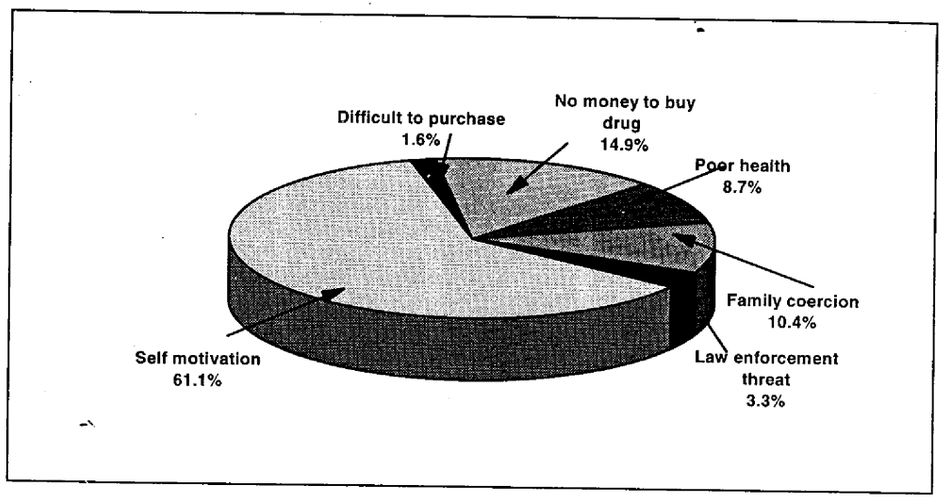
- *Changes Of Heroin Addict Behavior*

During the time of scarcity, many heroin addicts could not find heroin or could not afford to buy it at a high price. Some of the heroin users turned to use opium, inhalants, methamphetamines and tranquilizers. The addiction behavior became more complicated; some used various drugs alternately; some mixed drugs. It was found that some used small amounts of heroin alternately with tranquilizers believing that this method would help prolong the effect of heroin.

- *Social Effects During The First Period Of Heroin Scarcity*

In many provinces of Thailand including Bangkok, there was an increase of crime such as burglary and theft committed by addicts. Noticeably, a large number of addicts applied for treatment because they could not find heroin. According to the study of patients' reasons for treatment, it was found that during the normal time over 60% of patients came in for treatment on self motivation, i.e. they wanted to quit, but during heroin scarcity time over 50% of patients stated that they came in for treatment either because they could not find heroin or they could not afford to buy heroin at exorbitant prices **(Chart 10).**

Chart 10: Percentage Of Drug Patients Resident In Bangkok, 1992 - 1995 Classified By Reason For Treatment



- *The Change Of Heroin Quality*

In the past, the purity of heroin available in Thailand was very high, at over 80%. However, during the heroin crisis the purity of heroin decreased. According to the sample test of heroin during that period, it revealed that the purity dropped to about 25 - 30%; some foreign substances may be added to dilute the purity of heroin in order to cut cost and increase profit. This may have an effect on the addicts in the long run.

3.3.2 Cannabis

Cannabis abuse was found throughout Bangkok and the abusers mostly were of 21 - 30 years of age, followed by < 20 years of age **(Table 8).** The number of cannabis abusers tend to decrease and smoking was the usual route of administration.

Table 8: Number Of Cannabis Offenders Arrested In Bangkok, 1991 - 1995 Classified By Age

Year	Age				Total
	0 - 20	**21 - 30**	**31 - 40**	**> 40**	
1991	1, 481	9,559	9,558	2,851	23,449
	6.3%	40.8%	40.8%	12.2%	100%
1992	2,740	10,185	8,377	2,359	23,661
	11.6%	43%	35.4%	10%	100%
1993	3,508	12,715	8,120	2,125	24,468
	13.3%	48%	30.7%	8%	100%
1994	4,537	11,829	6,261	1,706	24,333
	18.6%	48.6%	25.7%	7%	100%
1995	6,029	11,102	5,118	1,325	23,574
	25.6%	47.1%	21.7%	5.6%	100%

3.3.3 Methamphetamines

For the past 10 years, amphetamine abuse was widespread and serious in Thailand as well as in Bangkok which was the main area of precursor trafficking before forwarding to other target areas. Due to the most profit gained from this drug, the proportion of new offenders in methamphetamine cases tended to skyrocket, when compared with other drugs. According to the statistics on the arrests of methamphetamine cases in Bangkok over the past 5 years, 90% of the offenders were new comers to the trade. The proportion of offenders charged with methamphetamine possession and disposal which was about 71% and respectively, 28% appeared to be high when compared to other drug cases **(Table 9)**. The offenders were 21 - 30 years of age followed by < 20 years of age **(Table 10)**. Heroin shortage crisis in early 1966 was also the factor pushing methamphetamine epidemic in many areas of Bangkok, even in areas which never had this problem before.

Table 9: Number Of Methamphetamine Cases Arrested In Bangkok, 1991 - 1995 Classified By Charges

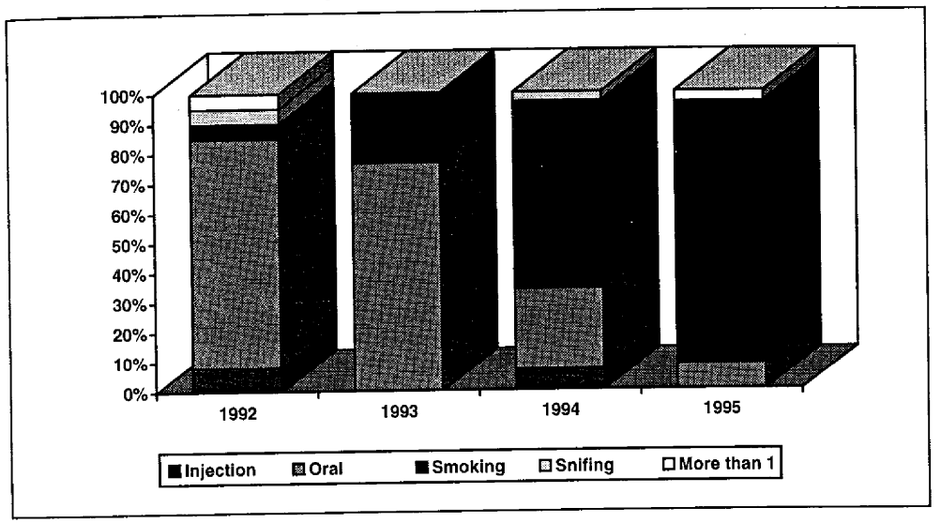
Year	Charge					Total
	Product	Import	Export	Dispose/ Possession for disposal	Possess/ Consume	
1991	2 2.2%	-	-	39 41.9%	52 55.9%	93 100%
1992	-	-	-	28 14.0%	172 86.0%	200 100%
1993	11 2.3%	-	-	128 26.9%	337 70.8%	476 100%
1994	5 0.6%	-	-	251 28.1%	637 71.3%	893 100%
1995	14 0.7%	-	1 0.05%	587 28%	1,498 71.3%	2,100 100%

Table 10: Number Of Methamphetamine Offenders Arrested In Bangkok, 1991 - 1995 Classified By Age

Year	Age				Total
	0 - 20	21 - 30	31 - 40	> 40	
1991	10 13.2%	18 23.7%	26 34.2%	22 28.9%	76 100%
1992	16 8.4%	66 34.7%	63 33.2%	45 23.7%	190 100%
1993	41 9.3%	170 38.7%	129 29.4%	99 22.6%	439 100%
1994	158 19.5%	351 43.2%	183 22.5%	120 14.8%	812 100%
1995	485 26%	754 40.4%	424 22.7%	204 10.9%	1,867 100%

According to data from treatment centers, the number of methamphetamine users in Bangkok continued to increase every year **(Chart 11)**. Changing habits of methamphetamine administration from oral taking to smoking which brought more effects resulted in a sharp increase in the number of methamphetamine addicts. Smoking methamphetamines was also most popular for users of which about 80 - 90% were using this method.

Chart 11: Percentage Of Methamphetamine Patient Resident In Bangkok Classified By Route Of Administration



3.3.4 Inhalants

Inhalant abuse was just as widespread as the epidemic of methamphetamines. The number of inhalant offenders appeared to rise sharply and more than half of them were new comers **(Table 11)**. Inhalant offenders were second in rank after methamphetamine cases and lately they were mostly < 20 years old. The number of inhalant abusers who came for treatment was decreasing every year since they turned to other drugs.

Table 11: Number Of Inhalant Offenders Arrested In Bangkok, 1991 - 1995 Classified By Age

Year	Age				Total
	0 - 20	21 - 30	31 - 40	> 40	
1991	44	1,865	251	44	2,204
	2%	84.6%	11.4%	2%	100%
1992	51	2,036	271	31	2,389
	2.1%	85.2%	11.3%	1.3%	100%
1993	170	2,614	300	50	3,134
	5.4%	83.4%	9.6%	1.6%	100%
1994	838	3,444	315	46	4,643
	18%	74.2%	6.8%	1%	100%
1995	3,230	3,054	398	80	6,762
	47.8%	45.2%	5.9%	1.2%	100%

3.3.5 Other Drugs

Two categories considered according to legislation are:

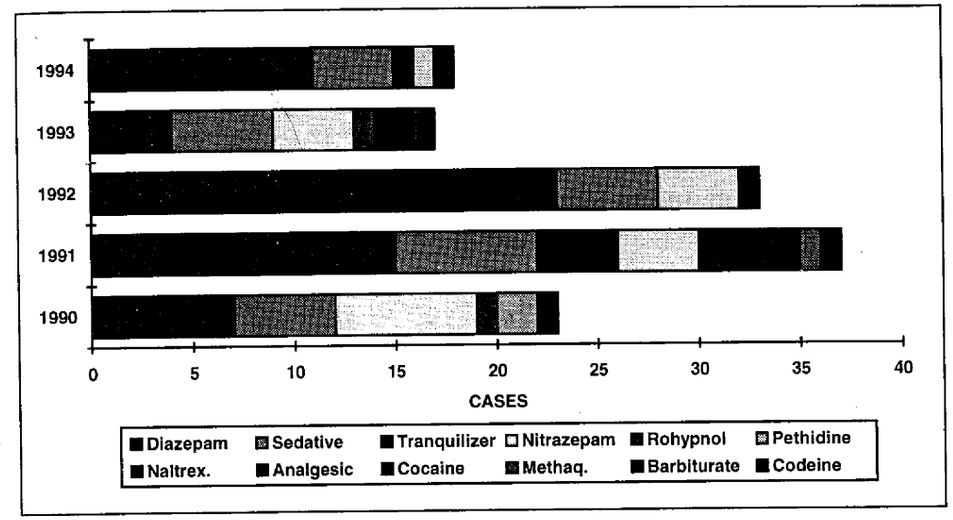
- *Illicit Drug by Itself*

Cocaine entered Thailand many years ago, but the epidemic situation was still limited to only the "high class" and groups of people who had Western educational background. The number of cocaine offenders and patients was very low. At present, the problem of cocaine both in terms of disposal and abuse were still limited only to people involved entertainment and among youths.

- *Not Illicit Drug by Itself*

The appearance of tranquilizers has made many addicts to become dependent on it. According to data from treatment centers during the past 5 years, there were many types of tranquilizers such as Diazepam, Sedative, Nitrazepam, Codeine, etc. which were abused **(Chart 12).**

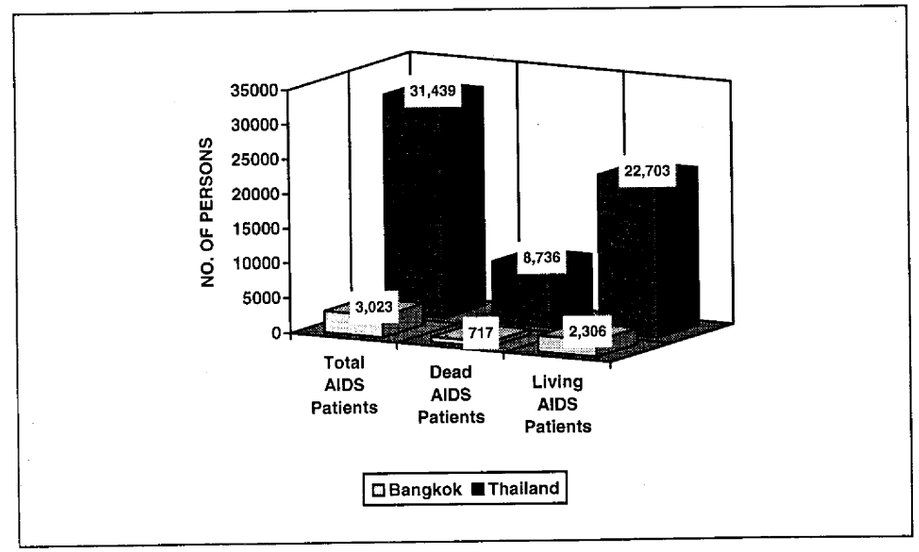
Chart 12: Number Of Other Drugs Patients Resident In Bangkok



4. AIDS EPIDEMIC

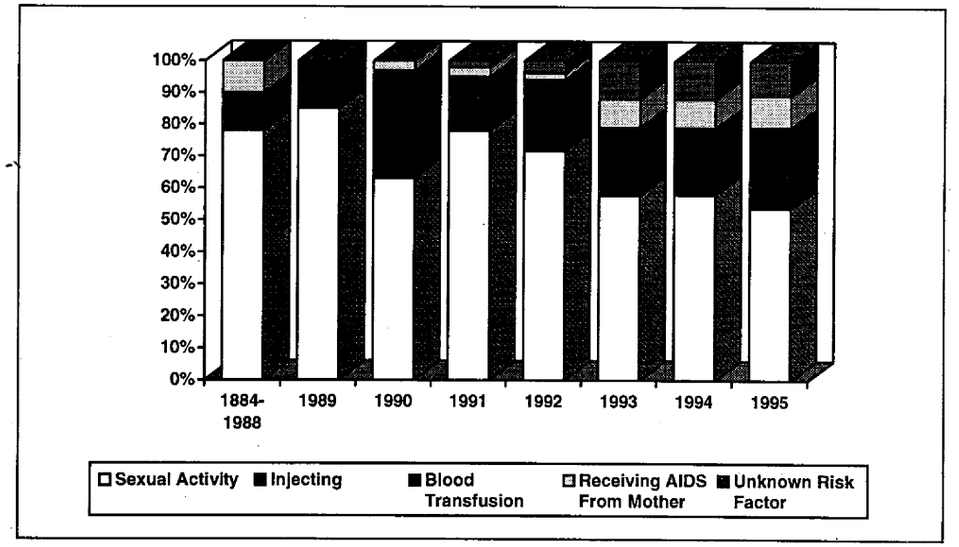
Data from Ministry of Public Health recently showed 750,000 AIDS patients throughout Thailand. About one sixth of the total number of AIDs patients or 120,000 cases were in Bangkok. During 1884 - 1995 the number of AIDS patients who reported to treatment centers throughout the country were 31,439. Out of the number, 3,023 or 10% were in Bangkok, some of them were dead **(Chart 12).**

Chart 12: Number Of AIDS Patients In Bangkok And Thailand Since 1884 - December 31, 1995



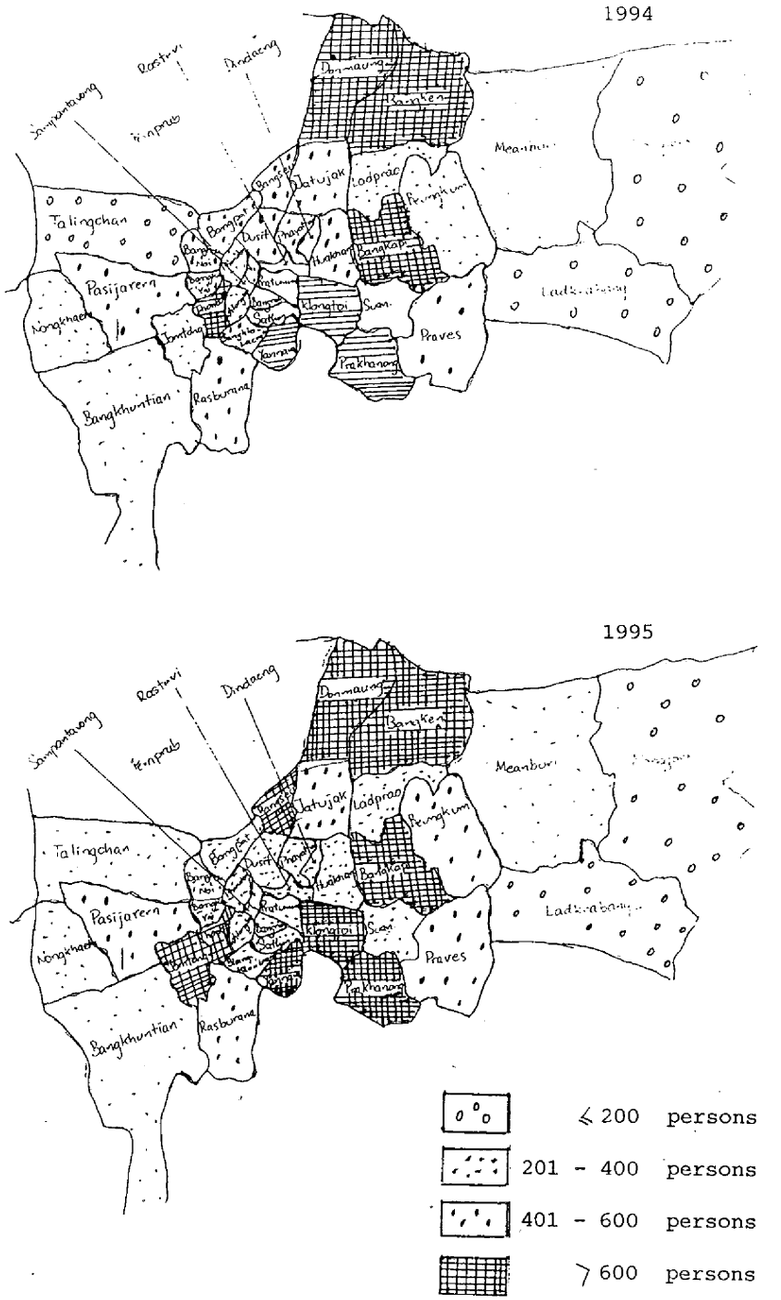
From the study of risk factor and health records of AIDs patients in Bangkok during 1884 - 1995, it was found that sexual practices continued to be the main factor of AIDs epidemic, even though its proportion tended to be decreasing in the past 2 - 3 years. The second factor was injecting which appeared to be stable in the past but seemed to rise this year. Meanwhile the proportion of AIDs patients by blood transfusion and infecting from mother were very low **(Chart 13).**

Chart 13: Percentage Of AIDS Patients In Bangkok Classified By Risk Factor And First Use



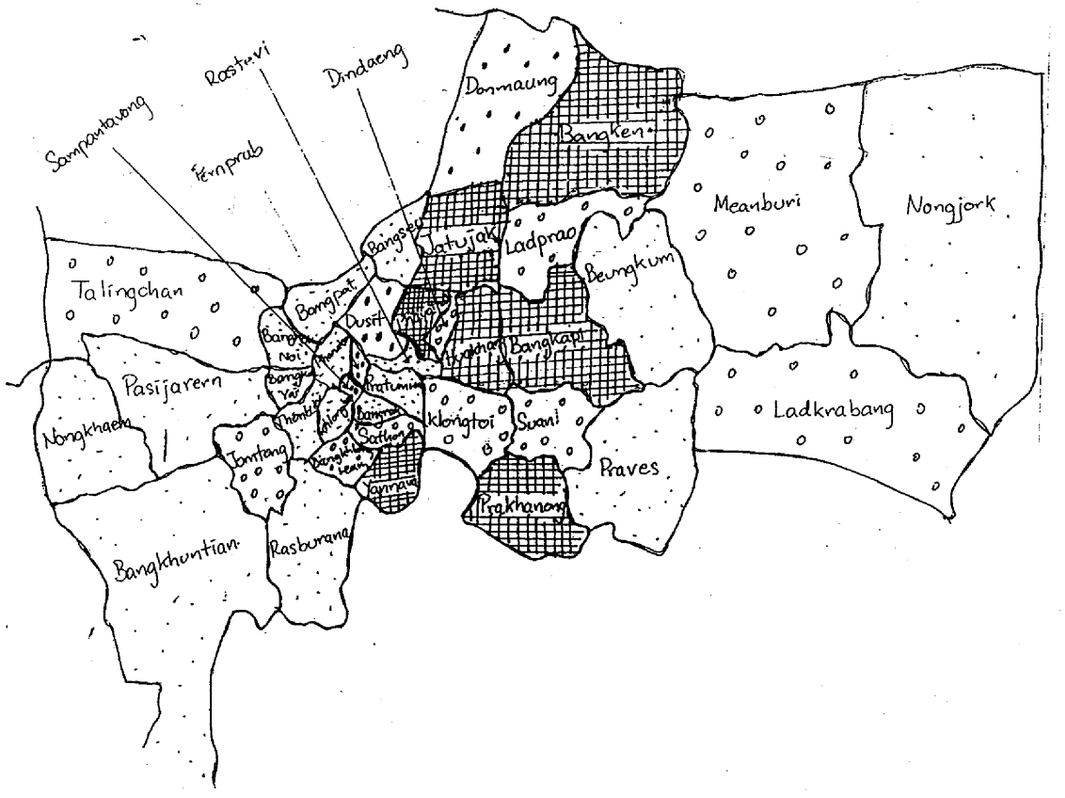
In considering the areas of AIDs epidemic in Bangkok city, it was found that the rim of the most upper and most lower areas of Bangkok were remarkable places of AIDs epidemic and also had drug problems **(Appendix 2).**

(Treatment data)



Appendix 2

AIDs epidemic in Bangkok, 1984 - 1995



	⩽ 70	persons
	71 - 140	persons
	141 - 200	persons
	⩾ 200	persons

DRUG TRAFFICKING SITUATION IN CAMBODIA, 1996

Dr. Chea Nguon
National Malaria Center
Ministry Of Health
Phnom Penh, Cambodia

1. INTRODUCTION

The Kingdom of Cambodia is situated in the south-west of the Indochina Peninsula and surrounded by Thailand, Laos and Vietnam. The country has approximately 10.5 million inhabitants with a land area of 181,035 square kilometers.

Before 1992, there was no information on drug abuse in Cambodia. Following the change in the social economic system in 1993, drug trafficking and drug abuse have become serious problems in Cambodia. For the last two years, the amount of drug seized has continued to increase rapidly compared with the previous years.

In order to cope with these problems, the anti-drug office was formed in late 1994. The Cambodian Royal Government is also paying more attention to these serious problems by requesting technical and financial assistance from other countries.

2. DRUG SITUATION

2.1 Cannabis Plants

The cultivation of cannabis plants remains widespread in Cambodia because of its availability and affordability. These plants grow easily and abundantly due to the Cambodian climate and soil. Cannabis has been planted in some provinces, especially in Kandal, Koh Kong, Kampong Cham, Banteay Meanchey, Stung Treng and Preas Vihear provinces.

Cannabis production is partly used for domestic consumption and the rest is exported to Thailand and other countries. In 1994, more than one ton of cannabis dried leaves and 47 bottles of cannabis resin were seized. During 1995, there were 79,500 kgs and 320 packets of cannabis confiscated by anti-drug police. In addition, 26,130 bushes of cannabis (approximately 9.91 hectares) in Kandal and Koh Kong and 1,530 cannabis plants in Preas Vihear were destroyed. In 1996, there were 2,381.1 kg of cannabis seized.

2.2 In - Transit Smuggling

At present, Cambodia is becoming an important transit area for Southeast Asian heroin and opium. The drug couriers are both Cambodian and foreigners.

The quantity of drug seizures during these last two years rose significantly from 4 kilos of heroin in 1994 to 75.4 kilos in 1995. Opium seizure increased from one kilo (1994) to

21.7 kilos (1995). In 1994, there were 4 kilos of cocaine seized by anti-drug police. In 1996, however, the amount of seizures – heroin (15 kg) and opium (1.1 kg) had decreased.

There is little information on opium or heroin production in Cambodia up to now, nor has any manufacturing or refining laboratory been identified in the country. All of these above-mentioned drugs seized had been manufactured abroad and were on transit through Cambodia.

2.3 Psychotropic And Stupefying Substances

Following the change in economic policy of the government in the early 1990s, private pharmacies and drug import/export companies started to mushroom rapidly and uncontrollably. As a result, it is very difficult to evaluate and supervise their activities to check if they closely followed the regulation of the Ministry of Health.

In 1994, there were more than 1,000 packets of aphrodisiacs and 200 packets of amphetamines seized. In 1995, there were 800 packets of aphrodisiacs, 2.15 kilos of amphetamine and 2.7 kilos of lidocaine confiscated.

The following are the amount of psychotropic drugs licensed in 1995.

Pethidine	2,439.35g
Morphine	21.05g
Fentanil	413.50g
Bromazepan	54.00g
Chlordiazepoxyde	15.00g
Clorazepate	3,878.70g
Diazepam	9,629.00g
Flunitrazepam	53.70g
Midazolam	6.00g
Nordazepam	2,198.25g
Oxazepam	700.00g
Pentaxocin	1,419.00g
Phenobarbital	150.00g

2.4 Illicit Drug Trafficking

The methods of smuggling illegal drugs into, through and out of Cambodia are various. Some drugs were hidden in hand-carried luggages, bottles of wine, goods, etc. Most of the cases were arrested in hotels, drug stores, at home and on boats. The smugglers prefer trafficking in drugs by sea rather than by air, especially in Koh Kong province which is near to Thailand and very easily accessible by motor-boat. The drugs seized in illicit drug trafficking in Cambodia during these last few years were opium, heroin, aphrodisiacs, amphetamines, cannabis dried leaves and cannabis resin.

Below are the annual seizures of illegal drug traffic for the last two years:

1994	Opium	1 kg
	Heroin	4 kg
	Aphrodisiac	> 1,000 packets
	Amphetamine	> 200 packets
	Cannabis dried leaves	> 1 ton
	Cannabis resin	47 bottles
1995	Opium	21.7 kgs
	Heroin	75.4 kgs
	Aphrodisiac	800 packets
	Amphetamine	2.15 kgs
	Cannabis dried leaves	79,500 kgs
1996	Opium	1.1 kgs
	Heroin	15 kgs
	Cannabis	2,381.1 kg

2.5 Source Of Drug Import/Export

Drugs are imported from:
- Laos through Stung Treng, Rattanakiri and Kratie
- Thailand via Poy Pet and KohKong

Drugs are exported from Cambodia to:
- U.S.A
- Europe
- Singapore/Hong Kong

2.6. Drug User And Drug Addict

Drug are reported to be used mostly in brothels and by some vagabonds. Drug smoking is reported to be used in some hotels and guest houses. The anti-drug police estimate that there are more than one hundred drug users and drug addicts in Phnom Penh city. Most of them are foreigners.

3. ARRESTS

In 1994, 27 drug dealers (19 Cambodian, 8 foreigners) and 40 drug addicts were arrested by the anti-drug team. In 1995, 86 smugglers (8 of them were women) were caught, while 23 drug dealers were arrested in 1996.

4. SITUATION IN CAMBODIA REGARDING HIV AND AIDS

In 1993, there was the first case of AIDS in Cambodia. By mid 1995 a total of 86 persons with AIDS had been reported. Nine of them died, including one child. By October 1995 more than 3,000 people have been reported as having antibodies to HIV. In August 1996 a total of 240 persons with AIDS have been reported. 59 of the patients have died, including one child.

In 1991, HIV was first detected at the National Blood Transfusion Center (NBTC) in Phnom Penh with 0.08% (3 of 3,972) of donors testing positive for antibodies to HIV. By October 1995, 6.6% (326 of 4,947) of donors in Phnom Penh and 4.2% (623 of 14,778) of donors countrywide tested positive for HIV.

Surveys conducted by the Cambodian AIDS program in 1992 found 9.5% (25 of 262) of CSWs and 4.5% (36 of 805) of patients with STD to be HIV positive. In the 1994 surveys of these high risk groups, it was seen that 39.4% (84 of 213) of CSWs and 9.1% (98 of 1,072) of STD patients tested positive. In 1995, the surveillance in eight provinces and Phnom Penh showed HIV seropositivity of 38.0% (382 of 1,007) among CSWs, 8.1% (76 of 824) among military and 8.1% (77 of 954) among police tested. 2.6% (23 of 870) of pregnant women tested in six provinces were found to be HIV positive.

In 1996, sentinel surveillance program in 18 provinces with 4 groups showed HIV seropositivity of 48.88% (760/1,859) among CSWs, 5.95% (85/1,429) among military, 5.46% (97/1,775) among police, 1.73% (68/3,929) of pregnant women. From the above data it is estimated that in 1996, 70,000 to 120,000 people may have antibodies to HIV. To date the gender ratio of HIV infection is three men for one woman and approximately 90% of persons infected are 15 - 35 years old. This trend poses a serious risk to the labor force of Cambodia.

5. ACCIDENTS

The recent political and economic opening of the country has been accompanied by a very rapid increase in the number of vehicles in Cambodia. This influx of vehicles in the absence of any enforced traffic laws is a major cause for concern. Another factor that contributes to this problem is the large import of alcoholic drinks. From January to June, 1996, there were 88 traffic accidents. Among these numbers, 19 cases were caused by drinking alcohol. Six people died, 11 badly injured and the other 6 were not very serious. In addition, 16 vehicles were damaged.

6. LAW ENFORCEMENT

Cambodia does not yet have the anti-drug laws. The UNTAC's law is being used in the country. In accordance with that law, article 39 and 65, the cultivation of opium poppy, cocaine and marijuana are forbidden. The drug user will be sentenced from one month to one year's imprisonment. The transaction, stock, import/export and receiving of dangerous drug (e.g. opium) will be punishable with 5 years to 15 years imprisonment and fined a minimum of 50 million riels. (1 USD equals 2,500 riels).

The new anti-drug law will adopted soon by Cambodian National Assembly and it will be more severe than the UNTAC's law. In Cambodia there is no law that carries death sentences for drug trafficking. Last year, the Phnom Penh Municipal Court sentenced one Nigerian drug trafficker to ten years imprisonment and a Ganarian and a Zairian drug trafficker to five years imprisonment.

7. CONCLUSION

Currently, illegal drug traffic and drug abuse are increasing continuously and becoming a very complicated problem in the country. The Royal Cambodian Government is making major efforts to try and contain this problem, and wishes to cooperate with neighboring countries to stop the trafficking of illegal drugs in the region.

TRENDS OF DRUG PROBLEM IN CHINA DURING RECENT YEARS

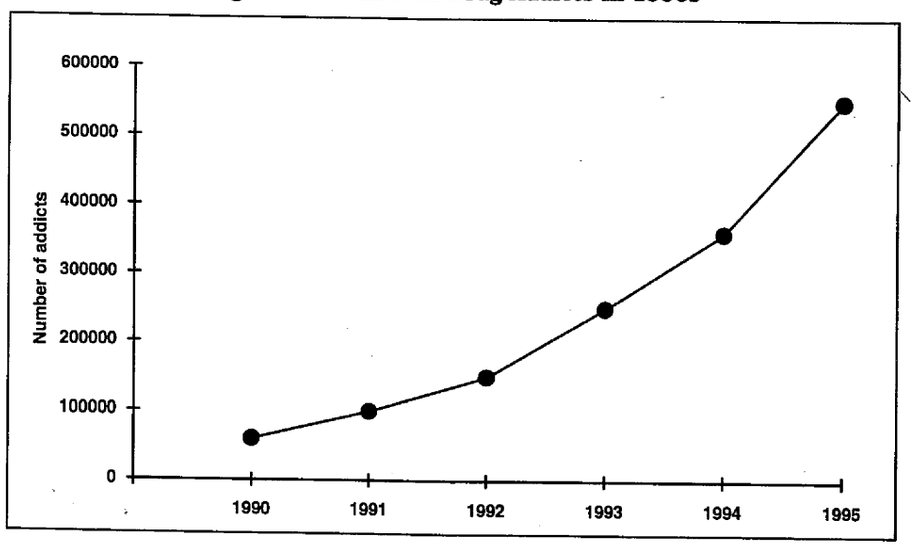
Cai Zhi-Ji
National Institute On Drug Dependence
Beijing Medical University
Beijing, China

Drug problems resurged in China during the 1980s and worsened during recent years with the following manifestations:

- ***Increase In Number Of Drug Addicts***

According to the Government's reports, number of drug addicts (mainly heroin) in 1990s increased every year **(Figure 1)**, the number of addicts in 1995 (520,000) was 7.4 times greater than that in 1990 (70,000).

Figure 1: Number Of Drug Addicts In 1990s



- ***Increase In Proportion Of Female Addicts***

The majority of addicts was male, but there was a tendency of increase in proportion of female addicts since 1993 **(Table 1)**.

Table 1: Proportion Of Male And Female Addicts

	Male		Female		
Year	No.	%	No.	%	Total
1991	1,104	87.5	158	12.5	1,172
1993	1,467	85.3	252	14.7*	1,719
1995	946	80.0	237	20.0**	1,183

* $P > 0.05$, compared with 1991;
** $P < 0.01$, compared with 1991 and 1993

A report from Shanghai city in 1995 with a sample of 109 female addicts indicated that 82.8% of them were less than 25 years old, and 91 (87.2%) were involved in prostitution; majority of them obtained heroin from male addicts.

- ***Spread Of Drug Abuse To Most Parts Of The Country***

Drug abuse started in Yunnan province neighboring Myanmar in the late 1980s and spread quickly to provinces located in south-west and north-west parts of China in the early 1990s, now almost every part of the country is experiencing the drug menace in varying degrees.

- ***High Relapse Rate***

In China the majority of treatment units only conducted detoxification for the addicts without rehabilitation, so the relapse rate was high. **Table 2** shows the data from three reports from Guangdong province in 1993 and 1995.

Table 2: Relapse Rate In Three Reports From Guangdong

Year	No. of addicts	Relapse rate (%)	
		in 1 month	in 3 months
1993	266	-	94.0
1995	582	89.6	93.2

- ***Poly Drug Abuse***

There was a tendency of poly drug abuse in recent years, the most frequent combination of drugs being heroin, dihydroetorphine (DHE) and diazepam.

- ***Increase In Seizures Of Heroin***

The seizures of heroin in China during 1990s ranked first or second order in the world, the proportions of heroin seized in China were 17.5 - 28.9% of the world seizures. The amounts of heroin seized in 1993 (4,459kg) and in 1994 (4,086kg) were 2.3 and 2.1 times that seized in 1991 (1,959kg).

- ***Diversion Of Licit Drugs Into Illicit Channel***

The most frequent licit drugs diverted to illicit channel were dihydroetorphine and pethidine.

- ***Substances Of Abuse At Present In China***

Opioids: heroin, dihydroetorphine, pethidine, buprenorphine
Other analgesics: tramadol, aspirin
Sedative-hypnotics & anxiolytics: diazepam, triazolam, secobarbital
Stimulants: caffeine sodium benzoate (CNB), ephedrine
Alcohol and tobacco

PATTERN AND TRENDS OF DRUG ABUSE IN DHAKA, BANGLADESH

Dr. Md. Abdus Sobhan
Dr. Khaleda Begum

Central Drug Addiction Treatment Center
Department Of Narcotics Control
Government Of The People's Republic Of Bangladesh

Abstract

Information regarding demographic and other drug related data has been collected from patients attending the Central Drug Addiction Treatment Center over the period Sept. 1995 to Sept. 1996. The total number of patients were 1,657. The number of readmissions was 334. Trends of drugs abused virtually remained similar to those of the previous year. Heroin ranks first (44.84 %) and alcohol is least abused (1.32 %). Age groups also show similar pattern, where the 20 - 34 years group had the most number of addicts (78.75%). The single and unemployed group are highest among the abusers 54.13 % and 36. 39 % respectively. Almost all the drugs were procured from street sales. The number of arrests are higher this time (2,931) where the majority are due to possession of alcohol (51%). Other trends are almost similar to those of previous periods.

1. INTRODUCTION

Drug abuse is a growing problem in Bangladesh and its socio-economic effects are being felt throughout society. To understand the nature and extent of the problem, it is necessary to take into account and analyze different sources of data on the incidence, prevalence, morbidity, and other consequences associated with the problem.

Data sources in the current situation are quite scarce. Moreover, at an organization level the scourge of drug abuse which poses a positive threat to the very fabric of our society and its tradition and values, encouraged the government to launch a five-year master plan for drug abuse prevention. Under its sector plan for treatment and rehabilitation, there is an urgent provision for a rapid assessment survey and development of client monitoring network. Without baseline information about the extent of the problem, we would not be able to address an issue whose nature we are not fully aware of, and struggle often counter productively, to implement programs which may not be suitable to the issue. With a national and regional database we can pool all our available information to establish a sound understanding of the nature of the problem. Programs generated thereby would be able to address the issue more effectively. The rapid assessment survey has been completed and a national strategy for the 5 year plan is also ready to be adopted by the Government.

1.1 Area Description

Dhaka, the capital of Bangladesh, encompasses an area of 116 square miles. It is one of the most densely populated cities in South-East Asia and metropolitan Dhaka has a population of 6.54 million. The male and female ratio stands at 1.27:1. 46.3% population is below 15 years of age and more than 30% between 25 and 30 years. Most of the employed population above five years of age do not have any formal education. A large portion of the city population are self-employed. Nearly half of the households have 6-9 members in the family and 43.2% population above five years of age do not have any formal education. Per capita GDP of the city population is Tk. 7,617.00. The city is well connected with the rest of the country by air, marine, rail and road transport system. There is regular container service to the city from two seaports and communication is easy from districts having common border with neighboring countries and long unguarded beach. Dhaka has air routes to most of the major cities of the world. The city is now in the grip of massive internal migration.

2. DATA SOURCES

The data relating to treatment indicators are collected solely from the Central Treatment Center, the only public establishment of such kind, from both outpatient clinic and in-patient facilities. A semi-structured questionnaire, meant for routine information collection was mainly used. Both the clients and their accompanying relatives were interviewed. Information from other data sources like private treatment centers, other public facilities and emergency rooms could not be made available because of various reasons.

Those sources usually do not have any organized data collection system and they usually do not entertain each and every case walking into their clinic. However, efforts are being taken to form a continuous liaison and stable net working between the different prisons dealing with the drug abuse problem. Data from prison source could not be made available as it is barred for the time being due to administrative reasons. The channel would be reestablished very soon. Data relating to arrests and seizures are obtained from the Department of Narcotics Control and those for traffic accident from the Central Treatment Center. Health and social indicators are collected from the treatment seekers. A uniform and reliable questionnaire is being developed for better monitoring.

3. DRUG ABUSE TRENDS

3.1 Overall Drug Use

Data collected over 13 months (from Sept. 95 to Sept. 96) shows almost the same trend as observed over the past years. Number of abusers seeking treatment shows a gradual rise. Opiates are still the most frequently abused drug and heroin use remains the highest among them followed by codeine phosphate in the form of cough-syrup phensedyl. However, number of parenteral drug users shows a definite rise. 84.4% of the parenteral drug users are currently using buprenophine injections. There is no remarkable change in the trend of cannabis, sedatives hypnotics, alcohol or polydrug abuse.

Table 1: Number Of Patients By Primary Drug Abuse

Type of Drugs	N	%	Previous Year (%)
Heroin	743	44.84	38.34
Other Opiates	642	38.74	45.91
Codeine	406	24.50	29.27
Buprenorphine	199	12.10	14.71
Pethidine	37	2.23	1.93
Cannabis	78	4.70	5.35
Sedatives	28	1.69	2.08
Alcohol	22	1.33	1.19
Poly Drugs	144	8.69	7.13

None of the treatment seekers is below 15 years of age and nearly 79% are between 20 and 34 years (**Table 2**). The treatment seekers were predominantly male, 99.75% (**Table 3**). About 43% had 7 to 12 years of education (**Table 4**), and among those who are currently employed, petty business clerical jobs, driver and transport workers, professionals and students are more in number although more than 36 % of abuser population are unemployed (**Table 5**).

Table 2: Age-Wise Distribution Of Treatment Seekers

Age in Years	N	%	Previous Year (%)
Under - 15	1	0.06	0
15 - 19	100	6.03	5.50
20 - 34	1,308	78.75	80.53
45 +	45	2.71	–

Table 3: Sex-Wise Distribution Of Treatment Seekers

Sex	N	%	Previous Year (%)
Male	1653	99.75	99.85
Female	4	0.24	0.15

Table 4: Number of Years of Education

Years	N	%	Previous Year (%)
Zero	332	20.03	–
1 - 6	410	24.74	–
7 -12	705	42.54	–
13 +	210	12.67	–

Table 5: Occupation Wise Distribution Of Treatment Seekers

Occupation	N	%	Previous Year (%)
Professionals	6	0.36	5.94
Sales/Clerical Workers	175	10.56	8.77
Driver/Transport Workers	121	7.30	6.84
Self Employed (Petty Business)	533	32.16	24.67
Agriculture Workers (Agrobased)	1	0.06	0.15
Unemployed	603	36.39	
Students	195	11.76	–
Other	23	1.38	–

There is no significant difference between married (44%) and unmarried population (54%) among drug users (**Table 6**). However, it may be assumed that married population are more under family and social pressure to seek treatment. Most of the drug abusers included in this study population are currently living with their families and majority of them come from crowded families (**Table 7**).

Table 6: Marital Status Of Treatment Seekers

Status	N	%	Previous Year (%)
Unmarried/Single	897	54.13	54.68
Divorced/Separated	26	1.56	4.01
Married	732	44.17	41.31
Widowed	2	0.12	0

Table 7: Living Arrangement

Type Of Living	N	%	Previous Year (%)
Alone	5	0.30	–
Living with Family	1,652	99.69	–

Heroin in this country is almost always smoked or chased. So is most of the preparation of cannabis. As mentioned earlier, parenteral use of buprenorphine is showing a gradual rise (**Table 8**). Alarmingly, more and more drugs are available on the street nowadays (**Table 9**).

Table 8: Route Of Drug Administration

Route	N	%	Previous Year (%)
Parenteral	236	14.24	16.49
Oral	456	27.51	39.82
Smoking	821	49.54	43.69
Other	144	8.69	0

Table 9: Drug Sources

Source	N	%	Previous Year (%)
Street Sale	1,648	99.45	95.84
Legal Prescription	0	0	–
Diversion of Prescription Drugs	9	0.54	4.16

According to the information available from Department of Narcotics Control, 2,931 persons were arrested for drug related offenses over these 13 months, mostly for possessing, trafficking and vending. Most of the arrests were for alcohol related offenses. Similarly most of the seizures recorded were for alcohol followed by cannabis and phensedyl.

Road traffic accident among treatment seekers shows a little rise and most of those were related to narcotics use (**Table 10**). Similarly, cases having associated psychological illness and other health issues like HBsAG positive is also showing a rise (**Table 11**). School dropouts, job loss and family disruption are increasing although not remarkable (**Table 12**).

Table 10: Road Traffic Accidents

	N	%
Total No. of accidents	310	100
Related to Alcohol	1	0.32
Related to narcotics	290	93.55
Related to psychotropics	19	6.13

Table 11: Health Indicators

	N	%	Previous Year (%)
HIV Positive Cases	0	0	0
Psychiatric Cases	108	6.51	6.98
Hepatitis B Cases	57	1.93	4.75
Death	0	0	0

Table 12: Social Indicators

	N	%	Previous Year (%)
Job Loss	187	11.29	11.79
Family Disruptions	26	1.57	4.31
School Dropouts	275	16.60	12.33

3.2 Heroin

Heroin is still the most frequently abused drug among the treatment seekers, although opiates in other forms are showing a more rapid increase. It appears from the information available on the abuser population that heroin in the form of brown sugar has different qualities and it is reported that the purity of heroin, in general, is falling. Heroin is cheaper and quite easily available on the street. The demographic characteristics and other drug use parameters are not very different from those of other drug users.

Heroin use is frequently incriminated for drug related crimes. Number of seizures and quantity recovered over the defined period is, however, relatively less. But most of the road traffic accidents, job loss, family disruption and school dropouts are related to heroin and other opiates abuse.

3.3 Other Opiates

Codeine phosphate, buprenorphine and pethidine are the substances of this category used by the study population. Demographic and other characteristics are not different from those of heroin abusers. Codeine phosphate is available in the form of a branded cough syrup (trade name: phensedyl). Phensedyl is a contraband pharmaceutical drug always available in black market. It contains a combination of codeine, ephedrine and promethazine. Its widespread use is a big concern. More so is the noticeable rise in the use of buprenorphine. Most of the buprenophine users are previous heroin users. This drug is also available only in black market and can be procured from the street. Recently an ethnographic study has been done to understand the nature of its abuse. Almost all of the parenteral drug abusers share needles and/or use unclean needles more than once.

3.4 Cannabis

Cannabis is not available in legal market since 1989. Still its use remains static. There is very little difference in demographic and other parameters of its users from those of other drug abusers. However, road traffic accidents, social disruption and crime is less frequently reported by this cohort of abusers. Seizure reports indicate that although there is prohibition on its cultivation, sporadic illicit cultivation of cannabis is still prevalent.

3.5 Polydrugs

Polydrug abuse among the treatment seekers is relatively less over the last few months. The drugs they use include opiates, cannabis, sedative-hypnotics and occasionally alcohol. However, it should be mentioned here that many buprenophine abusers also combine diazepam, promethazine ephedrine.

3.6 Sedative-Hypnotics

There are only few cases who use sedatic-hyprotics. However, many of the opiate or cannabis abusers used sedative-hypnotics sometime in their life. The users are relatively younger and some of them get the drug by diversion of prescription. There is no seizure of this category of drugs, neither is there any reported drug related crime or arrest. However, few of the abusers reported that they met with traffic accidents while they were under influence of those drugs.

3.7 Alcohol

Alcohol use alone is relatively rare among the treatment seekers. Only 1.19% of reported cases sought treatment for alcohol abuse. All the users mostly use country liquors and foreign branded liquors produced in local distilleries. The users are mostly from lower socio-economic background.

Highest number of seizures and quantity of substance recovered are related to alcohol. A total of 1,495 seizures amounting to 670,368 liters of alcoholic beverages were recovered during the reporting period (**Table 13**).

Table 13: Number Of Seizures And Quantity Of Drugs Seized By Types

Drug Type	No of Seizures	Quantity
Opiate Opium	1	60 gm/0.06 kg
Heroin	125	3.89 kg
Codeine	447	4.433 liters
Pethidine	5	505 amp (100mg)
Buprenorphine	41	7,924 amps
Cannabis	925	1,541 kg
Cocaine	0	0
Hallucinogens	0	0
Amphetamines	0	0
Sedatives	0	0
Solvents/Inhalants	0	0
Alcohol	1,495	670,368 liters

One of the abusers reported of road traffic accident under the influence of alcohol. This figure does not, however, reflect the true picture of road traffic accidents due to drinking and driving. No alcohol related health problem except temporarily raised liver enzymes is detected and only a few cases of disruption of family cohesion is reported.

3.8 Solvents/Inhalants

No case of solvent/inhalant abuse has been reported for treatment during the defined period.

3.9 Cocaine

There is no current abuse of cocaine among the treatment population. However, some of the other drug abusers of cocaine used it when they were living abroad. There is no report of seizures.

4. ACQUIRED IMMUNODEFFIENCY SYNDROME (AIDS) AMONG INJECTING DRUG USERS (IDUs)

The number of injecting abusers is on an alarming rise with the accentuated availability of injectable buprenorphine in black market. Needle sharing is quite frequent and so is the use of unclean needles. According to National AIDS Committee Bangladesh, so far 169 cases of sero-positive HIV infection have been detected and 10 of them already died. Drug use, specially IV drug use history of those seropositive cases are not known. However, small studies aimed at detecting seropositivity among different target population could not find any such case. Since December 1994, the Center has access to the HIV screening program of National AIDS Committee and so far no seropositive case could be detected.

5. OPERATIONAL ISSUES

5.1 Individual

The Central Drug Addiction Treatment Center (CTC) is under administrative control of the Department of Narcotics Control which is again a directorate under Ministry of Home Affairs, Government of Bangladesh. Most of the health staff (doctors and nurses) are deputed to this Center from the Ministry of Health and Family Welfare, over which the department has little control. The positions (including that of the chief consultant) is transferable and frequent change of principal investigator always impedes the proper functioning of any ongoing project. Beside there is difference of research interest between individuals.

5.2 Organizational

The following limitations were identified during the course of conducting this study:

- Lack of proper liaison between different treatment facilities including those of prison
- Lack of uniformity in information gathering system
- Difficulties in gathering information related to law enforcement indicators according to the format outlined in the project protocol

- Health indicator data could not be made available due to lack of central register facility, absence of liaison, referral and financial constraints
- Emergency room data are specially lacking in the report due to nonavailability of data from relevant sources. The Center (CTC) does not provide any emergency service
- Lack of logistic support (both manpower and equipment) interfere with data collection, compilation, analysis
- Limited transportation facility
- Lack of adequate fund to meet contingency expenses.

NARCOTIC DRUG ABUSE IN HANOI

Tran Van Xuyen
Center For Study Of Experiment Of Social Evils
Prevention And Vocational Training For Street Children
Ministry Of Labor, Invalids And Social Affairs
Hanoi, Vietnam

I. GENERAL SITUATION

Narcotic drugs are a problem of great concern for all countries in the world. The damaging and destroying power of narcotic drugs for the economy, society and culture in each nation is uncountable. Therefore, there should be an annual statistical data system of narcotic drug prevention on a global and regional scale.

In Vietnam, statistical data up to July, 1996, show that there are about 185,000 drug addicts (98% of them are of working age and over 50% of them are under 30 years old).

For the first 6 months of 1996, special missions resisting drugs in Vietnam have nabbed 644 cases of transporting, trading and storing narcotic drugs, arrested 1,948 subjects, impounded 95kg of opium, 10.7 kg of heroin, 1.1kg of morphine, 193.8 kg of cannabis, 11,900 opium pills and small bags of heroin. Of this, Hanoi city has arrested 561 subjects, 499 storing and organizing drug smoking and 62 subjects transporting and trading drugs, impounded 27kg of opium, 9.8 kg of heroin and 1.1kg of morphine. In actual fact, the volume of drug that has been transported into Vietnam, and the quantity that has been consumed is likely to be much higher.

Even though the Vietnamese Government has made many attempts and applied severe measures to prevent the development of drug addicts, transporting, trading and storing, there are still many problems that should be considered and researched. The key issues should address supply and demand reduction.

2. ACTUAL SITUATION OF DRUG ABUSE IN HANOI CITY

With a total population of 2.5 million people, Hanoi is one of the most populous cities of Vietnam, with a high level of education; 42% have general education, 8.8% are graduates from university and vocational college. But Hanoi is also one of the main points of social vice, of which the ratio of drug addiction accounts for the highest in the whole country.

The number of drug addicts is always on the rise. The number of new addicts has not reduced while there is no effective solution toward re-addicts (the readdiction ratio accounts for 75 - 85%; these people have been helped by state and private centers to give up smoking opium).

Below are some data of the drug addict situation of Hanoi city in 1995 and the first 6 months of 1996. These data are collected from reports at grass-roots level following the management decentralization system; they have not reflected entirely the actual situation of the drug problem. Recently, there has not been any official or large investigations on this social vice form.

	1995	1996 (For the first 6 months)
Total addicts	1,887	1,951
Age < 30	948	983
Opium addicts	1,388	851
Heroin addicts	0	1,064
Addict of other kinds	52	36
Using form		
Smoking	1,186	67
Inhaling	9	1,209
Injection	640	661

From the above table, some preliminary comments could be made as follows:

- The addicts aged below 30 account for rather high ratio: over 50%
- Changing from "smoking" into the popular "inhaling" form
- The acceleration in number of addicts is at the warning level.

Some observations from management on drug addict prevention in 1996 is summarized below:

- Addict subjects in the teenage group is increasing
- Addict phenomenon is appearing in pupils and students (30 subjects are of general education schools and 60 subjects are students)

- Ratio of male addicts is higher than female addicts (in 1995: 1,605 addicts were men and 24 addicts were women)

- Hanoi is not only a place of consuming narcotic drugs and smuggling but also a source of drug 'self-sufficiency' production and processing on the spot.

- New tricks of drug consuming and trading appeared:

    - Changing from popular 'smoking' into 'inhaling' that is easy to use and difficult to trace

    - Drug trading gangs going directly to basic general education schools and using tricks of cheating, inveiling and manipulating juvenile pupils into addiction habit by blending heroin into coffee and snacks, soaking cigarettes with heroin, giving drugs free of charge, selling cheaply, and providing hideouts for the pupils to become drug dependents.

3. SOME MEASURES TAKEN BY THE GOVERNMENT

- Strengthening effectiveness of law system, adding and improving some provisions of law implementation, especially punishing severely the gangs of drug trading, transporting, storing and drug injecting.

- Propagandizing, motivating and educating people intensively on the harm of drugs and calling all people to take part in drug prevention.

- Making humane policies and encouraging drug addicts to give up. Implementing enforcement toward re-addicts repeatedly.

Besides, these there are existing difficulties that could not be solved quickly:

- Investment for implementation of social and humane programs is still very restricted. The effectiveness of this limited expenditure for curbing the drug problem should be taken into consideration

- Lack of officials to implement and manage projects, deploying officials in communes, quarters, and in fact, these officials need to be trained in various aspects of dealing with the drug problem.

Vietnam urgently needs to solve predominant social problems listed below:

- The number of unemployed laborers, especially young laborers. There are about 6% of urban unemployed laborers and 30 - 35% of rural underemployed laborers. Mean while the population growth rate is still high at 2.2%

- Social stratification and differentiation of rich and poor among regions, areas and between population segments are taking place and the trend is increasing. The ratio of poor and hungry households is rather high, accounting for about 20%

- Social justice policy has been formulated and implemented, but education and training is still low, especially in remote and desert regions.

In order to create favorable conditions for Vietnam to become a member merging into and taking part actively and effectively in drug prevention programs regionally and globally, it needs interest and help from international organizations in

- Financial support for strategic social activities program in the following areas:

    - training professional specialists

    - training programs to enhance profession for cadres and social workers working in the communities

    - co-operation with programs deploying experiment in the communities.

DRUG ABUSE, CONSEQUENCES AND RESPONSES
INDIA COUNTRY REPORT – 1995

H.K. Sharma
All India Institute Of Medical Sciences
New Delhi, India

ABSTRACT

In the absence of nationwide survey or monitoring mechanism, comprehensive data is not available on extent and pattern of drug abuse/dependence. The cross-sectional epidemiological studies in this field conducted between 1970 - 1994 at different parts of the country in general population and specific groups provide a broad perspective of drug abuse problem.

1. DRUG ABUSE SITUATION

1.1 Opium (Raw)

Raw opium retains its use in federal states like Rajasthan, Punjab, Haryana, Madhya Pradesh, Gujrat, Orissa and specific groups like transport workers and laborers. (Period prevalence rates: 63 to 189 per 1,000 persons in Northern and Western States).

1.2 Opium (Derivatives)

Heroin (brown sugar) is a recent introduction in the drug scene in India. Seizures of illicit heroin rose from a mere 8kg in 1981 to 2,988kg in 1989. The Drug Abuse Monitoring Study of Indian Council of Medical Research (ICMR) showed that between 50 to 67 percent of the registered patients in selected cities were dependent on heroin (brown sugar). The same study of ICMR showed prevalence rate of 0.5% in a slum population of Delhi. However, no prevalence study has been carried out in general population in other affected metropolitan cities (Bombay, Calcutta, Madras) and other small towns, where heroin emerged as a public health problem. Among university students the prevalence ranged from 0.08 to 1.5%.

Based on crude estimate of 0.3 to 0.5% prevalence rate in metropolitan cities, there are an estimated number of 3,000,000 heroin users in the country. The products of cannabis sativa (*bhang, ganja* and *charas*) have a long history of use in India and cross-sectional studies showed prevalence rate between 1.2 percent 4.0 percent in general population in different parts of the country. Among student populations, the period prevalence rate was 1.6 percent to 10.9 percent.

1.3 Alcohol And Tobacco

Besides, cannabis, opium and its derivatives, tobacco and alcohol remain popular psychoactives. The period prevalence rates use of alcoholic beverages consumption ranged between 23 to 74 percent males in different parts of the country. The women constituted a large proportion of abstainers, over 90 percent, except in groups like tribals, tea plantation workers and nouveau riche. The per capita consumption of absolute alcohol amounts between 4 - 6 liters per head among males in states like Punjab, Maharastra and Karnataka. The prevalence figures of tobacco when projected at the national level showed that 100 million men and 20 million women are dependent users of one or more tobacco products.

1.4 Polydrug

From epidemiological studies and from other indicators, it appears that besides the use of traditional substances in rural areas, the new drugs like heroin, barbiturates, benzodiazipines are being abused especially among the vulnerable groups like non-student youth, industrial workers, transport workers and slum dwellers. These indicators also suggest that drug dependence, once considered as a problem of elite and higher echelon of the society, has become a classless phenomenon. It has also been noticed that polydrug use has become a general trend among users of potent drugs.

2. PATTERN OF DRUG ABUSE

India being a sub-continent, regional variations exist in drug of choice and pattern of drug abuse in the country. In the Northern States, Jammu and Kashmir, Himachal Pradesh, Punjab, Rajasthan, parts of Uttar Pradesh, Madhya Pradesh and Haryana, opium use is largely confined to the rural areas. In Rajasthan, consumption of raw opium (*amal*) appears to be a widespread social phenomenon in selected areas in the absence of adequate health care system in the states. Opium use is being facilitated for therapeutic uses for common ailments as well as to overcome hardships of nature, specially conditions created by arid geomorphology. Cannabis, which enjoys a wide socio-cultural sanction in India has regional variations. Its use is more common in states like Punjab, Bihar, Uttar Pradesh, Orissa, West Bengal, Kerala and Karnataka. Similarly, a wide diversity in drinking and alcoholic preferred beverages across different regions and population has been observed in the country.

A major epidemiological finding of the research work (1970 - 94) is that the use of psycho-active substances is spreading and becoming multi dimensional and multisectoral. The spread is occurring in many directions: gender, age, geographical location, social class and polydrug use pattern.

3. IMPLICATIONS ON HEALTH

Drug/alcohol related adverse health consequences has manifold implications. Tobacco smoking/oral use has reached an unprecedented position in our way life. It is also observed that for every patient receiving treatment for alcohol dependence in the psychiatry department, there are 10 more patients in the same hospital in various other departments receiving treatment for alcohol related problems such as gastritis, hepatic dysfunction, injuries, organic brain syndrome and suicide attempts etc. The many side-effects of drug abuse observed among patients in clinical settings included nausea, loss of interest, constipation, cirrhosis of liver, hepatitis, sedation, coma and AIDS (acquired through infected syringes). In Manipur, a north-eastern state bordering Myanmar, seropositivity among intravenous drug users increased from 0 percent in September 1989 to 50 percent within six months. With a minimum injecting population of 15,000 and seropositivity of over 50 percent, the infection quickly spread to the population at large. In other parts of the country in last few years, the parenteral (injectable) drugs like buprenorphine, proxyvon and avil finds popularity and preference among old heroin users. Likewise a voluntary organization from Bombay reported 5.34% cases of HIV positive on account of injectable behavior among heroin dependent patients. Drug Abuse Monitoring System (DAMS) data showed that in Delhi, the percentage reporting severe dysfunction due to opiate use ranged between 32 to 64% over three years. Among alcohol users in Delhi in these three years 24% to 34% reported severe dysfunction. On the other hand in Jodhpur, raw opium users reported between 5 - 12% severe dysfunction in three years. In Lucknow, a small percentage of heroin users, reported dysfunction upto 42 percent.

It is obvious from the previous description on extent and magnitude of drug problem that the contemporary drug scene presents a mixed picture. It is heartening to know that a large majority of women and fifty percent men are long abstainers. However, in the last two decades, increase in consumption of alcoholic beverages and introduction of heroin and intravenous use of drugs pose a serious public health problem. Thus it become necessary to develop a comprehensive strategy for both supply and demand reduction.

DRUG ABUSE MONITORING SYSTEM IN RAWALPINDI/ISLAMABAD APRIL - SEPTEMBER 1996

Dr. Kamran Niaz
Integrated Drug Demand Reduction project
Islamabad, Pakistan

ABSTRACT

The drug abuse monitoring system for Rawalpindi/Islamabad was initiated on an experimental basis in March 1995. This report covers the six months period from April - September, 1996, and looks at the drug abuse trends and other indicators for this period. During the reporting period there have been a total of 812 drug addicts in for treatment. 82% of the drug addicts were using heroin as their primary drug of abuse, while 54% were polydrug users. 80% were smoking or 'chasing the dragon', and 5.5% were injecting drugs. 99% of the clients were male, 53% were between the ages of 20 - 34 years and 27% between 35 - 44 years. 50% were single or never married, while 40% were married. 80% were living with their families. 36% of the drug addicts were illiterate, 34% had 1 - 6 years, and 24% 7 - 12 years of education. 79% were employed, the major category within the employed drug addicts was of self employed (24%), followed by drivers and transport workers (23%), sales/clerical (9%), agrobased and skilled and unskilled labor 8% each. The law enforcement agencies arrested 452 people on drug related offenses. With 393 seizures the agencies confiscated 2,873kg of opium, 5,846kg of heroin, 6,616kg of cannabis, and 2,883 bottles of alcohol during the six months.

1. RAWALPINDI/ISLAMABAD

Rawalpindi and Islamabad referred to as the twin cities are situated in the north east of the country. Rawalpindi is an old city which emerged from a village founded in around the 14th century, while Islamabad was founded in 1965 when it was decided to move the capital from Karachi in the south.

The total population of Rawalpindi and Islamabad according to the 1981 census is 1,159,916 with 628,565 males and 531,351 females. The majority of population living in Rawalpindi are Punjabi Muslims, while very few people in Islamabad can say that they belong to this area. Most of the people residing in Islamabad are civil servants belonging to different parts of the country. Being the capital there is also a sizable number of foreign diplomats and representatives of international donor agencies in Islamabad.

The major occupation groups in Rawalpindi are production and related workers, transport workers and laborers. Other occupations in which people are engaged are government service, business, agriculture, and overseas employment. A large number of people from the area also serve in the military.

The literacy rate of the cities according to 1981 census is 58.8% while the male literacy was 68.8% as compared to 31.2% female.

Administratively, Rawalpindi comes in the Punjab province, while Islamabad and some areas around it are termed as Federal Territory. Generally better medical, educational facilities and other amenities are available to the population in Rawalpindi and Islamabad, than the rest of the country.

Rawalpindi and its adjoining areas serve as a transit point for drugs originating from the North West Frontier Province to other parts of the country or abroad. An interesting feature of the area is that cannabis grows wildly in the area. Cannabis plants can be seen even around houses and pathways in the twin cities.

2. DATA SOURCES

There are 14 drug treatment facilities in Rawalpindi/Islamabad, as reported in the National Directory of Treatment Services. One program is being run in the Central Jail, two in the Government Hospitals, three self help groups and eight treatment centers run by NGOs or commercial interests.

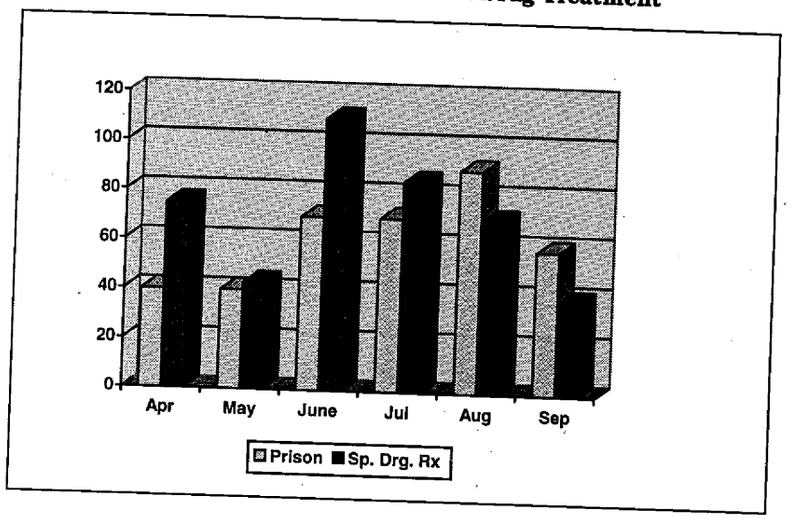
During the reporting period, April 01 to September 30, 1996, the data has been collected on a monthly basis by drug treatment centers and the Central Prison in Rawalpindi. The number of treatment centers providing monthly data has fluctuated from 4 to 3 years over this period. For the months of April, June, and July treatment data was provided by 4 centers while for May, August and September, 3 centers provided this data. The specialized drug treatment centers include, Imran Center, Islamabad Christians Against Narcotics (ICAN), Naya Janam, and Department of Psychiatry, Rawalpindi General Hospital. Prison data is provided by the District Prisoners Aid Society.

The law enforcement data was provided by the Police and Excise Departments through the District Narcotics Control Committee, which is headed by the Deputy Commissioner of Rawalpindi.

3. DRUG ABUSE TRENDS

During the reporting period, 812 clients came for treatment in the participating centers. Out of these, 52% were reported from the treatment centers and the rest from the prison in Rawalpindi. The total number of clients reported for each month is given in the chart below.

Chart 1 : Total Numbers In Drug Treatment



Due to the inconsistency in the number of treatment centers providing data, one cannot establish any trend for admissions into these centers. For the prison, except for August when the highest number of clients (91) came in, there is no significant change in numbers of drug addicts in prison for June, July and September.

Out of 812 clients who came for treatment, 85% (692) were institutional admissions, while 15% (120) were non institutional admissions. From the 692 institutional admissions 56.6% were new admissions while 43.4% were readmissions. Out of 120 non institutional admissions 58% were new admissions while 41% were readmissions. The number of readmissions both in institutional and non institutional admissions is higher in this quarter than the previous one.

4. PRIMARY DRUG OF ABUSE

While heroin has remained the main drug of abuse for which the majority (82%) of clients came for treatment, this percentage has decreased from the previous quarter where it was 85%. Moreover, the number of clients for other drugs has increased during this period. The main increase has been in the number of clients using opium, morphine, sedatives and minor tranquilizers as primary drugs of abuse. The percentage comparison of the primary drugs of abuse for the two quarters is given in **Table 1**.

Table 1 : Primary Drug Of Abuse

Category Of Drug	Oct - Mar (%)	Apr - Sep (%)	↑↓
Heroin	85.9	82.2	↓
Cannabis	3.70	3.80	↑
Opium	2.92	4.68	↑
Buprenorphine	2.47	1.40	↓
Morphine	1.35	2.30	↑
Tranquilizers	1.57	1.90	↑
Alcohol	0.56	1.40	↑
Sedatives	1.01	1.23	↑

5. POLYDRUG USERS

Of the total clients, 54% were polydrug users. This number is lower as compared to the previous quarter where 65% of the clients were reported to be polydrug users. The majority (34%) of this group were using tranquilizers and another 34% cannabis, opium (5%) and buprenorphine (3%) as the secondary drug of abuse. Most of the clients have been reported to use more than one substance as their secondary drug. The breakdown of secondary drugs with their percentage and comparison with the previous quarter is given in **Table 2**.

Table 2 : Secondary Drug Of Abuse

Category Of Drug	Oct - Mar (%)	Apr - Sep (%)	↑↓
Cannabis	36.57	34.00	↓
Opium	10.85	5.00	↓
Tranquilizers	24.83	34.00	↑
Buprenorphine	2.80	3.00	↓
Morphine	0.33	0	↓
Alcohol	22.25	23.00	↑
Heroin	0.44	0.30	↓
Codeine/ Pethidine	1.45	0.40	↓

6. DEMOGRAPHIC CHARACTERISTICS OF DRUG ABUSERS

6.1 Sex Of The Clients

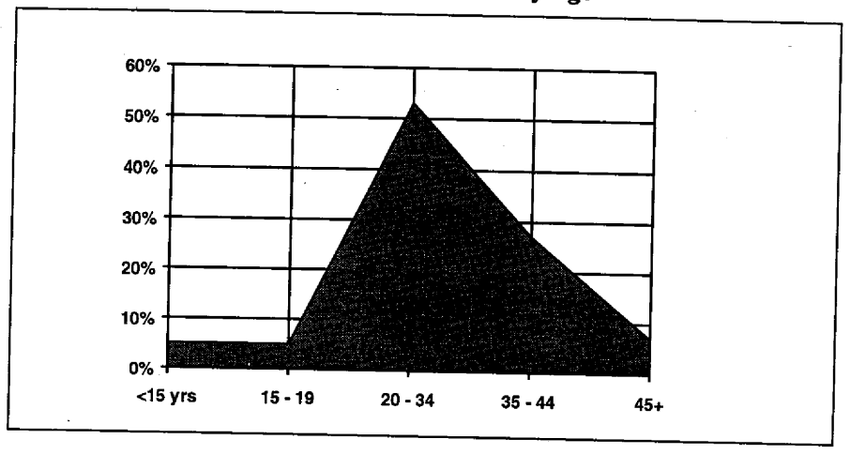
While the majority (99.6%) of drug addicts were male, 3 female clients have been reported during these six months' period.

6.2 Patients' Age

53% of the clients who came for treatment were 20 ~ 34 years old, while 27% were between 35 and 44 years of age. The percentage of 20 ~ 34 years old drug users during this quarter has dropped from 57.6% in the previous quarter to 53% in the

current quarter. The number of clients 45 years and plus has increased to 11% in this quarter. The breakdown of clients by age is given in **Chart 2**.

Chart 2 : Distribution By Age



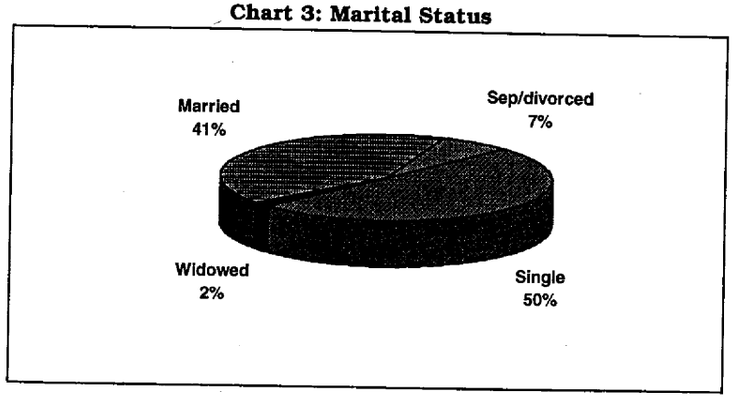
6.3 Patients' Ethnicity

While not all the participating centers have given data on the ethnicity of the clients, of those that have been reported 72% were Punjabis, 10% were Pathans, 2% were reported as Sindi, and 13% were reported as Kashmiris. Ten foreigners (Iranian, Nigerian and Afghans) have also been report from one treatment center.

6.4 Marital Status

The majority (50%) of clients coming for treatment were single/never married, while 40.5% were married. As compared to the previous quarter, the number of married clients has reduced from 47% to 40%. Similarly, the percentage of those who were single has increased from 42% to 50%, and those separated or divorced has decreased from 10% to 7%. The distribution of clients by marital status is given in **Chart 3**.

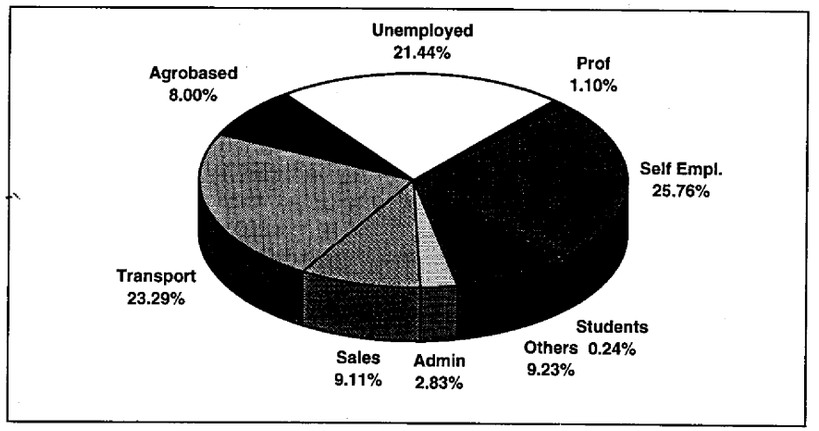
Chart 3: Marital Status



6.5 Occupational Status

Among the clients who came for treatment during the reporting period 79% were employed. Within the employed drug addicts, the major occupational category (24.75%) was of 'self employed', followed by 'drivers and transport workers' (23%). The percentage of self employed clients in this quarter has increased from 13.7% in the previous quarter to 24% in the current quarter. Similarly, the percentage of drivers and transport workers has decreased from 26% to 23% in this quarter. The breakdown of occupational categories of the clients is given in **Chart 4** below.

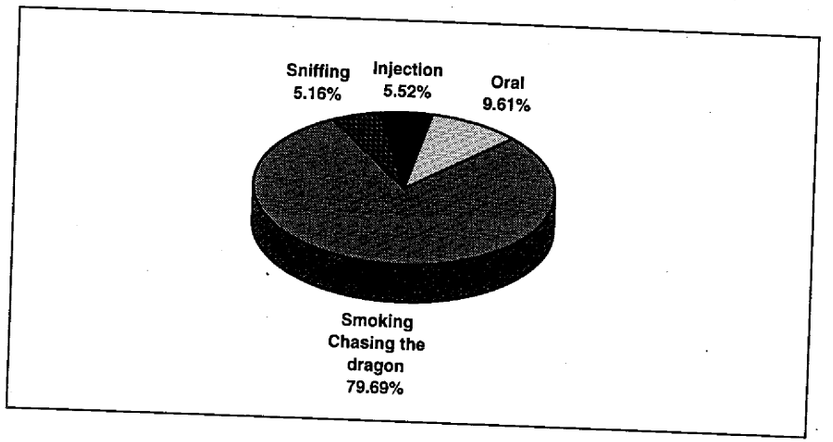
Chart 4 : Occupational Status



6.6 Route Of Administration

The route of administration of drug for the majority (80%) of clients has remained smoking or 'chasing the dragon'. Injection use was reported by 5.5% of the clients. It may be noted that injection use reported here is not primarily of heroin. Oral use of drugs, primarily tranquilizers and sedatives, has increased from 8% in the previous quarter to 9% in the current quarter. The breakdown of clients by route of administration is given in **Chart 5**.

Chart 5: Route Of Administration



6.7 Drug Sources

83.56% of the drug addicts obtained their drugs from street sources, while 9% bought from the tribal areas or local dens. 3.5% of the drug addicts got their drugs from 'over the counter sale', while 1.2% from diversion of legal prescription and 2.5% from legal prescription.

6.8 Living Arrangements

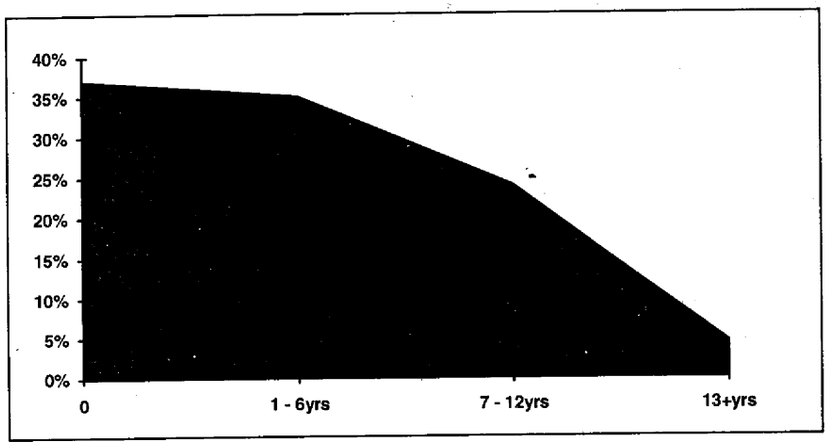
80% of the drug addicts were living with their families, while 14% were living alone and 6% with friends and colleagues. The changes that have occurred from the previous quarter are: as compared to 11% of the clients living alone, this percentage has increased to 14% in this quarter, while the percentage of those who were living with friends and colleagues has increased from 2.6% to 6% in this quarter. The percentage of clients living with family and relatives has decreased from 85% in the previous quarter to 80% for the current quarter.

6.9 Years Of Education

36% of the drug addicts reported were illiterate. Among the illiterate 35% had one to six years and 24% had between seven to twelve years of education. 4.5% had thirteen or more than thirteen years of education.

Comparing the years of education for the clients for the two quarters, the percentage of illiterates and those between 7 ~ 12 years of education has decreased from 37% to 36%, and 28% to 24% respectively, while the percentage of those with 1 ~ 6 years of education has increased from 30.3% to 34.7% in the current quarter. The educational status of drug addicts is given in **Chart 6**.

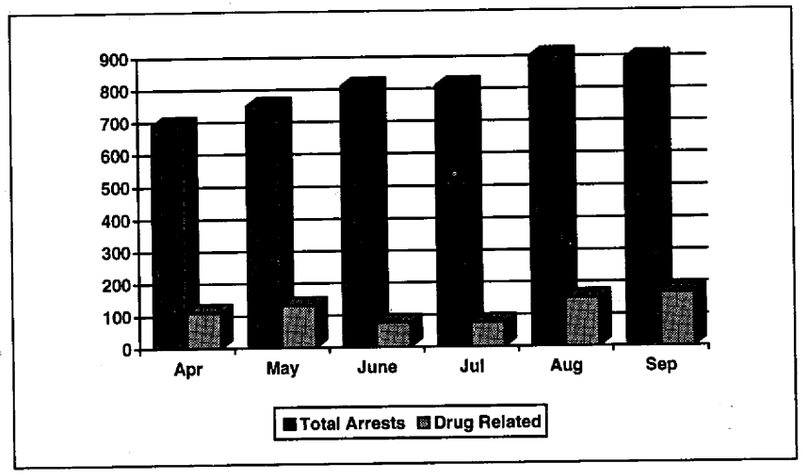
Chart 6: Educational Status



7. LAW ENFORCEMENT INDICATORS

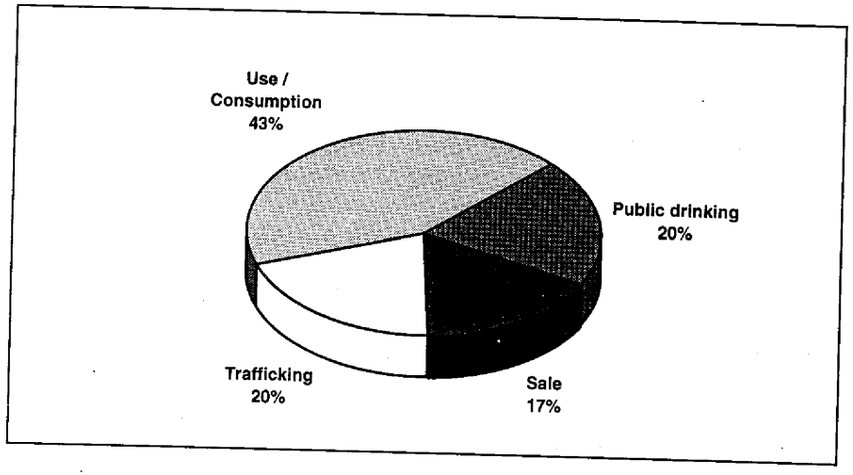
During the six months' reporting period 4,522 arrests were made for criminal offenses. Out of these, 452 arrests were for drug related charges. While the total number of arrests for this 6 months has remained almost the same as of the previous 6 months, arrests for drug related charges has decreased from 724 to 452 in this 6 months. The monthly arrests for criminal and drug related offenses is given in **Chart 7**.

Chart 7: Total And Drug Related Arrests



Out of the 452 drug related offenses, 190 arrests were related to use/consumption of drugs, 77 arrests for sale of drugs, and 92 arrests for trafficking of drugs. Other offenses for which arrests were made included public drinking (of alcohol) ~ 93. The percentage wise breakdown of drug related arrests in given in the **Chart 8** below.

Chart 8: Arrests For Drug Related Offenses



As compared to the previous quarter where 565 seizures were made, in this quarter 393 seizures of different drugs were made. The drugs, and the quantities seized for each month is given in the **Table 3** below.

Table 3: Seizures And Quantity Of Drugs Seized

Drug	Szrs	Drugs Seized Quantity (Kilograms/liters)						
		Apr	May	June	Jul	Aug	Sep	Total
Opium	7	0.00	0.50	0.001	1.410	0.962	0.00	2.873
Heroin	193	3.763	0.094	0.279	0.666	0.379	0.665	5.846
Cannabis	105	14.78	6,586	0.00	0.00	5.368	10.351	6,616.50
Alcohol	88	2,025	136	101	193	213	215	2,883

During the same period a total of 221 traffic accidents were reported. The breakdown of accidents by each month is given in the **Table 4** below.

Table 4: Number Of Accidents

	Apr	May	June	July	Aug	Sep
# of accidents	37	38	33	31	36	46

However, no accidents as a result of drug intake been reported by the police for this period.

8. HEALTH INDICATORS

There is no system of reporting or collecting data of psychological, or emergency room cases in hospitals. However, the number of drug related psychological cases as reported by the treatment centers were 19 out of the total 812 drug addicts. Similarly, 4 drug related emergency room cases and drug related deaths have been reported by the treatment centers. Some treatment centers have reported pulmonary tuberculosis in the clients coming for treatment.

9. HIV/AIDS

The total number of HIV / AIDS cases for the city have not been collected during this period. Also, the treatment centers do not have the facilities for HIV screening of their clients. However, some of the drug treatment centers are now looking into the possibilities of having their clients, especially those who have been injecting drugs, screened for HIV/AIDS.

10. OPERATIONAL ISSUES

The drug abuse monitoring system in Rawalpindi/Islamabad has now been operational for 18 months. All the treatment centers contributing data in the system are participating through voluntary interests. Similarly, the Police and Excise Department through the District Narcotics Control Committee have been very helpful in providing the law enforcement data for the system. However, the number of treatment centers providing data on a regular basis has decreased. Overall, the parties who are participating in the data monitoring system perceive it to be quite useful and informative.

An important operational issue for the monitoring system is that to date Anti Narcotics Force has not indicated its willingness to take a lead in the data collection and monitoring system in Rawalpindi/Islamabad and its replication in other parts of the country.

THE DRUG PROBLEM IN KUALA LUMPUR

Ismail Haji Ahmad
National Narcotics Agency
Ministry Of Home Affairs Malaysia

1. INTRODUCTION

The drug[1] problem in Malaysia is closely linked to the early economic development of this country. In the early 19th century, tin mines, rubber and pepper estates were being developed and the labor required was to a large extent provided by migrants from China and South India. Most of these laborers had brought along with them their opium-smoking habit. Simultaneously, workers in the dock areas were also using marijuana.

Initial Government efforts in facing the drug problem were through legislation. In 1952, the Dangerous Drugs Ordinance was promulgated to replace the separate state enactments to control the drug problem. The Poisons Ordinance 1952 controlled substances which may be used for processing of drugs.

The patterns of drug use in Malaysia changed towards the end of the 1960s. Youths of all races increasingly form most of the drug abusers. Most of them were using heroin and morphine. Marijuana was also fast becoming a popular drug of choice. Psychotropic substances like methaqualone, amphetamines, barbiturates and others were also being abused. The Central Narcotics Bureau was established in 1972 under the Justice Ministry to coordinate such activities. Before 1972, the enforcement of various legislations was left to various government agencies. Since then, a number of agencies were setup to fight the drug problem. Among them were Narcotics Secretariat, Executive Action Unit, Anti Narcotics Task Force and the National Narcotics Agency. The National Narcotics Agency was established in 1996 under the Ministry of Home Affairs.

For the purpose of this meeting, this paper will present the extent of the drug problem in Kuala Lumpur in the first six months of 1996.

2. AREA DESCRIPTION

Malaysia consists of fourteen states and has an estimated land area of 329,757 square kilometers. The main ethnic groups, i.e. Malay, Chinese and Indian, made up its population of 18,180,853 (from the 1991 population census).

The capital city of Kuala Lumpur has an area of 243 square kilometers with an estimated population of 1,257,662 (in 1991) or approximately 6.9 percent of the total population of Malaysia. In 1991, the age group distribution was 416,038 persons (33.1 percent) in the 0 - 14 year age bracket, 800,552 persons (63.6 percent) in the 15 - 64

[1] Drugs in Malaysia refers to all illicit drugs such as marijuana, opiates and psychotropic pills.

year age bracket and 41,072 persons (3.3 percent) in the sixty-five ± year age bracket. There were 106 males for every 100 females in the population in 1991.

3. DATA SOURCES

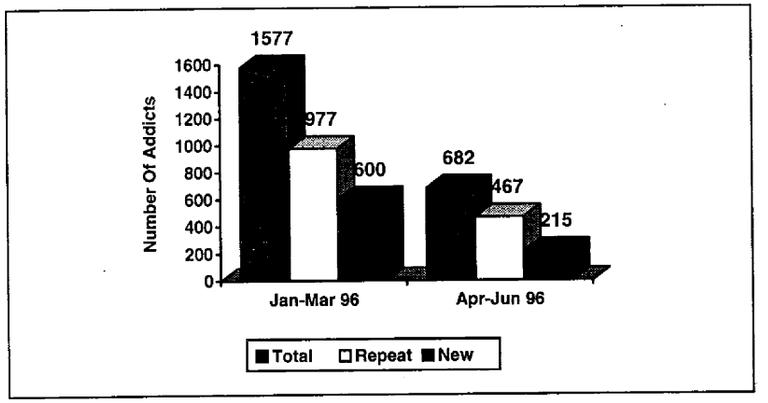
The National Drug Information (NADI) System maintained by the National Narcotics Agency provided data for this report. NADI is the official source for all data pertaining to the drug problem. NADI is responsible to monitor the current development of the drug problem by creating a drug information system, compiling and analyzing information and data on all aspects of the drug problem, as a basis for the formulation and implementation of drug control and prevention programs. The system collates all data submitted by anti drug and health care agencies throughout the country. These include hospitals, police departments, prisons and treatment centers.

4. NUMBER OF ADDICTS IDENTIFIED

The prevalence of drug use between April to June decreased by about 56.7 percent as compared to January to March 1996. This could possibly be due to a backlog of cases not yet reported by agencies. However the proportion of new to repeat cases remained the same for the two periods, i.e. about 38.05 percent for the first quarter and 31.52 percent in the second quarter for new cases. Statistics also showed that 61.95 percent of addicts detected from January to March were relapsed cases against 68.48 percent (April to June 1996). **Figure 1** illustrates the prevalence of drug use in Kuala Lumpur from January to June 1996.

As in the past, majority of cases detected were males but records showed that 12.2 percent of females addicts detected from January to March 1996 was the highest recorded since 1992.

Figure 1: Number Of New And Repeat Cases, And Total Number Of Addicts In Kuala Lumpur Between January To June 1996.

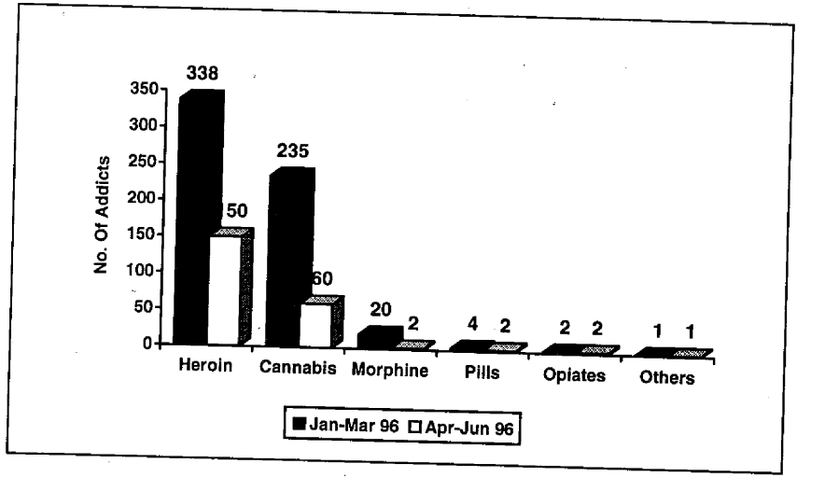


5. TYPE OF DRUGS USED

The main types of drugs used by new addicts were heroin and cannabis **(Figure 2)** . Heroin remained the dominant type of drug used. NADI recorded that 69.8 percent used heroin between April to June against 56.3 percent in the first quarter.

The proportion of cannabis users decreased from 39.2 percent in January-March 1996 to 27.9 percent in April-June 1996. This was accompanied by a parallel increase in the number of psychotropic pills users. It also recorded a small proportion (3.3%) of new cases detected between January-March and only 0.9 percent (April-June 1996) reported using morphine.

Figure 2: Type Of Drugs Used By New Addicts In Kuala Lumpur Between January To June 1996.



6. ROUTE OF ADMINISTRATION

The main route of administration of new cases was smoking (cannabis) and 'chasing the dragon' (heroin). Statistics showed an increase of 3.1 percent in April-June (95.1%) as against January-March (91.9%). A very small percentage (2.8%) of new cases detected between April and June 1996 injected drugs as compared to 7.0 percent between January and March 1996. NADI also recorded 2.1 percent of new cases taking drug orally against 0.9 percent of new cases in January-March sniffing drugs **(Table 1)**.

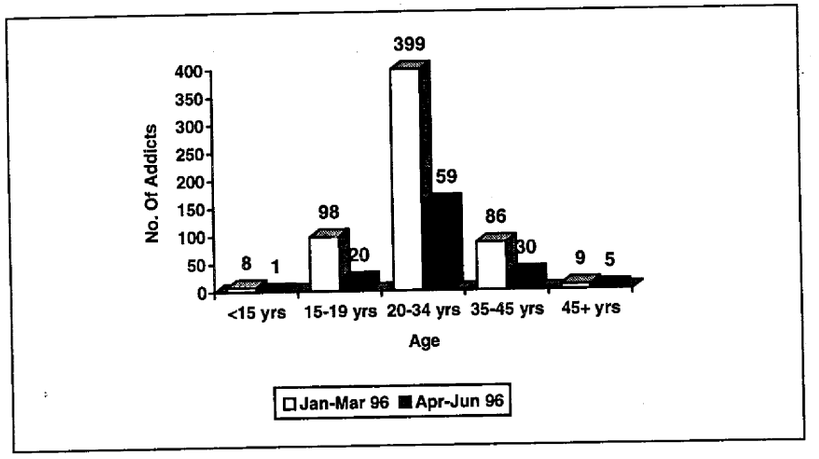
Table 1: Route Of Administration Of New Drug Users (January-June 1996)

Route Of Administration	January-March	April-June
Smoking/Chasing the dragon	91.9	95.1
Oral/Swallow	0.9	2.1
Injecting	7.0	2.8
Sniffing	0.2	0

7. AGE WHEN DETECTED

As shown in **Figure 3,** the majority of cases detected were aged between 20 and 34 years old (66.6% in the 1st quarter and 73.6% in the 2nd quarter). The second largest age group detected was the 35 to 44 year olds. (An average of 14%). While the proportions on the two age groups remained somewhat similar from January to June 1996, there was a slight upward trend in the percentage of addicts aged 45 years and above being detected. (1.6% in January-March as compared to 2.1% in April-June).

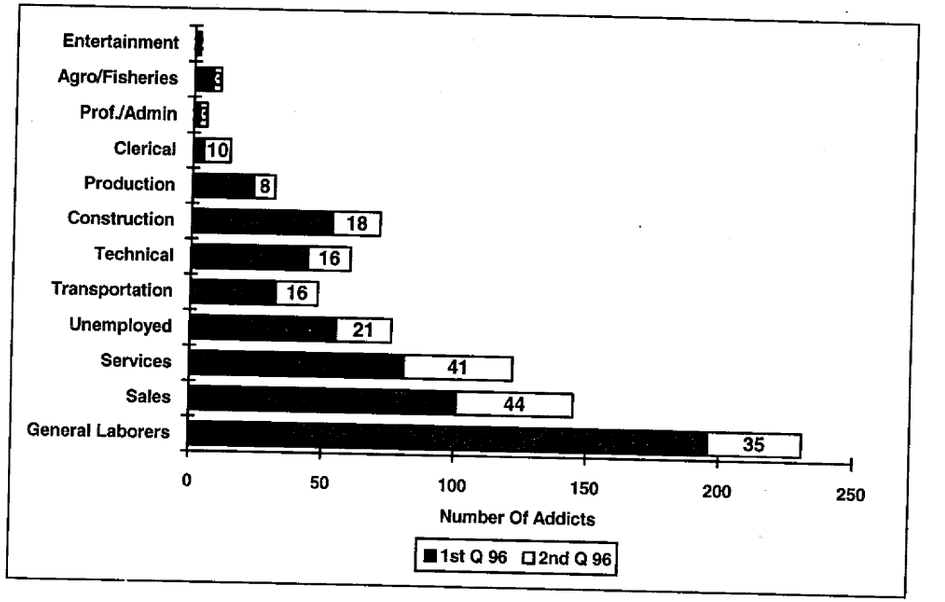
Figure 3: Age Of New Addicts When Detected In Kuala Lumpur Between January To June 1996.



8. OCCUPATION OF NEW DRUG USERS

Sales and clerical workers, laborers and workers in the service industry constituted the majority of cases detected. However, between January-March 1996, the proportion of the laborers detected (32.6%) was prominent when compared to subsequent periods (16.1%). A possible explanation was the extensive job opportunities in the city center especially laborers. Technical workers (average of 7%), production workers (3.8%), agro-based workers (average of 1.2%) and unemployed (9.2%) showed similar statistics between the two periods. Kindly refer to **Figure 4** for the details.

Figure 4: Occupation Of New Addicts Detected In Kuala Lumpur Between January To June 1996.



9. DRUG SEIZURES

Heroin and cannabis seizures in the April-June period and psychotropic pills seizures in January-March 1996 were made significantly as compared to other drugs. In the same period seizures of psychotropic pills remained constant since January but a few significant seizures of ecstasy pills were found near Kuala Lumpur in May 1996. It also showed that seizures of opiates such as raw or prepared opium was lower as compared to previous reports.

Table 2: Drug Seizures In Kuala Lumpur Between January To June 1996

Type Of Drug	Amount Seized	
	1st Q 96	2nd Q 96
Opiates	0.01 kgs.	0.02 kgs.
Heroin	9.04 kgs.	26.79 kgs.
Cannabis	13.78 kgs.	40.35 kgs.
Psychotropic (pills)	3,335 pills	2,562 pills

10. ARREST OF DRUG OFFENDERS

The total number of people arrested for the two quarters was almost similar. More offenders were arrested for use and consumption during January-June 1996. More traffickers were arrested in April-June 1996 (83 offenders) against January-March (63 offenders) under section 39B Dangerous Drugs Act which carries the death sentence.

Table 3: Number Of Drug Arrests In Kuala Lumpur Between January To June 1996

Type Of Offense	Number Of Arrests	
	1st Q 96	2nd Q 96
Use/consumption	111	109
Possession	50	61
Sales	40	43
Trafficking	63	83
Conspiracy	0	0
Others	0	0
Total	264	296

11. CONCLUSION

The statistics showed that the drug problem in Kuala Lumpur, the capital city of Malaysia is still a very serious one. Thus, the National Narcotics Agency which is the lead agency in formulating policies, strategies and programs in the combat against the drug scourge need to step up its efforts especially in the field of primary prevention and law enforcement activities. The rise of the designer drug 'ecstasy' among youths in discos need to be curbed as it could lead to more serious implications. Treatment and rehabilitation modalities in the one-stop centers also need to be reviewed to enhance its efficacy. Lastly, all relevant agencies need to work in concert to make drug prevention/control work in Kuala Lumpur.

Appendix 1: Number Of New And Repeat Cases And Total Number Of Addicts In Kuala Lumpur Between January And June 1996

Addicts Detected	January - March 1996		April - June 1996	
	N	%	N	%
New	600	38.05	215	31.52
Relapse	977	61.95	467	68.48
Total	1,577	100	682	100

REPORTING AGENCIES

1. Detection and Detoxification Centers, Hospital of Kuala Lumpur.
2. Institute of Medical Research, Kuala Lumpur.
3. Prisons Department, Kuala Lumpur.
4. Narcotics Department, Royal Malaysian Police, Kuala Lumpur.
5. Pharmacy Division; Ministry of Health, Kuala Lumpur.
6. Narcotics Unit; Prevention Division, Customs Department.
7. National Narcotics Agency, Ministry of Home Affairs.
8. Private Rehabilitation Centers in Kuala Lumpur.
9. The Armed Forces.

DRUG ABUSE IN MADRAS (CHENNAI) CITY, INDIA

Dr. M. Suresh Kumar
Punarjeevan Drug Treatment Center
Madras, India

1. MADRAS OR CHENNAI

The universe considered for the study is Madras (Chennai), a cosmopolitan city. It is the capital of the Tamil speaking region (Tamil Nadu State) of the country, India and is situated on the north east end of Tamil Nadu on the coast of Bay of Bengal. It stretches nearly 25.6 kms along the Bay coast and runs inland in a rugged semi-circular fashion and covers 172 square kilometers. The total population is about 4 million and about a third of the population is literate.

2. DATA SOURCE

As a follow-up to the Asian Multicity Epidemiology Workgroup Meeting at Colombo in July - August 1996, a drug monitoring system named **M**adras **A**lcohol and **DR**ug **A**buse **S**urveillance **(MADRAS)** has been established and this system is collecting data from the networking partners of an umbrella organization of all the drug prevention/treatment agencies working in the field of drug/alcohol abuse in Madras.

The data has been obtained from some agencies, and few agencies have provided incomplete data and other agencies have not responded as yet. We are organizing a workshop in the month of December 1996 to facilitate the process of data collection from all the networking partners and hope to have a comprehensive drug monitoring system in the year 1997.

The current paper focuses on the data obtained form the major treatment center at Madras namely the Institute of Mental Health, a Government sponsored deaddiction center providing inpatient care for a minimum period of 21 days. The treatment program consists of detoxification, psycho-educational approaches, individual and group psychotherapy and family therapy. Also, the paper provides some data from the Narcotics Intelligence Bureau, Madras for drug seizure and drug related arrests. The reporting period is from January 1996 and June 1996.

3. DATA FROM THE INSTITUTE OF MENTAL HEALTH

3.1 Drug Abusers In Treatment

During the period between January 1996 and June 1996, 853 persons were admitted for alcohol/drug dependence and related problems at the Institute of Mental Health, Madras. Of these, 174 persons (20.4%) had a significant psychiatric morbidity.

Table 1: Drug Abusers In Treatment

	Jan 1996 - June 1996	Jan 1995 - Dec 1995
Total Number Of Persons Admitted	853	1,749
With Psychiatric Morbidity	174 (20.4 %)	308 (17.6 %)

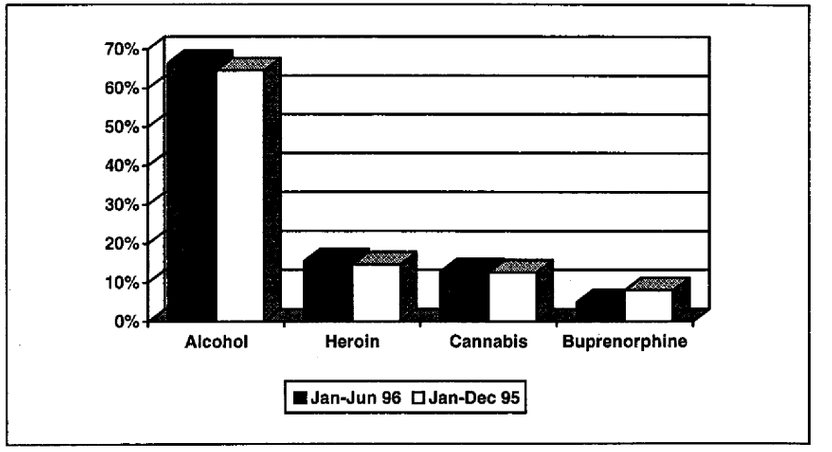
3.2 Primary Drug Of Abuse

Alcohol ranks high as the primary drug of abuse (66.5%) among the persons seeking treatment at the Institute of Mental Health. Heroin is the next primary drug of abuse (15.5%), Cannabis (12.8%) and Buprenorphine (4.9%) are placed third and fourth respectively.

Table 2: Primary Drug Of Abuse

Primary Drug	Jan - Jun 96		Jan - Dec 95
	N	(%)	(%)
Alcohol	567	66.5	64.6
Heroin	132	15.5	14.6
Cannabis	109	12.8	12.6
Buprenorphine	42	4.9	8.0
Others	3	0.35	0.2

Figure 1: Primary Drug Of Abuse



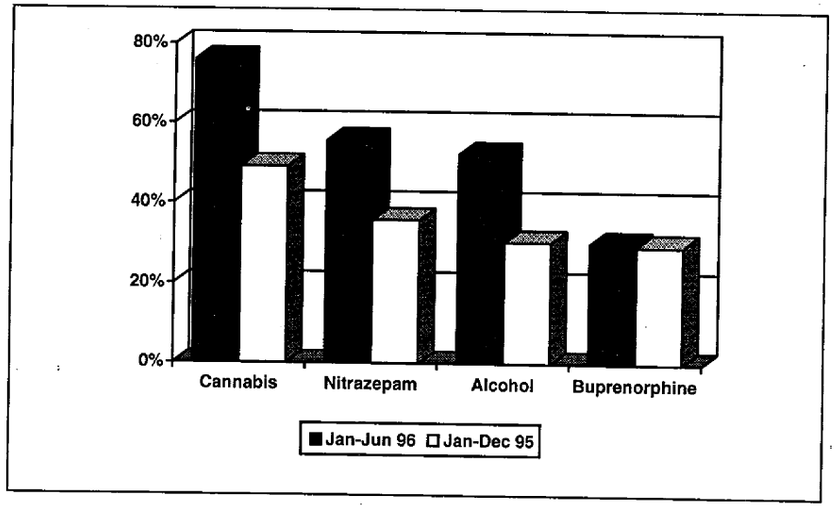
3.3 Polydrug Users

A total of 271 persons (31.8%) admitted to the Institute were polydrug users. Almost all of the opiate users are polydrug users. Cannabis was the most frequently abused secondary drug.

Table 3: Rank Order Frequency Of Secondary Drug Of Abuse

Secondary Drug	Jan - Jun 1996		Jan - Dec 95
	N	(%)	(%)
Cannabis	206	76.0	49.1
Nitrazepam	151	55.7	35.8
Alcohol	142	52.4	30.3
Buprenorphine	84	30.1	29.4
Diazepam (inj)	38	14.0	26.2
Chloropheneramine maleate (Avil - inj)	37	13.7	22.5
Heroin	17	6.3	11.9
Painkillers	11	4.1	5.3

Figure 2: Secondary Drug Of Abuse

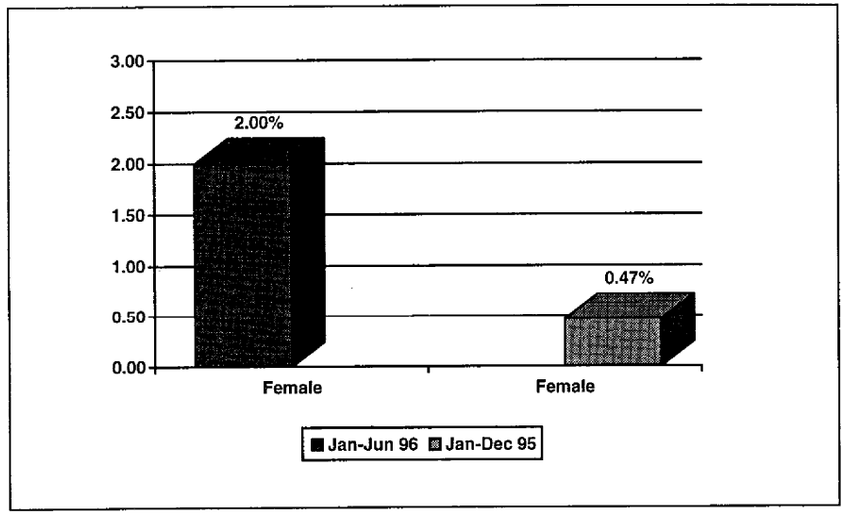


3.4 Socio-demographic Characteristics

3.4.1 Gender

The number of women abusers in treatment is low and 18 women (2.11%) entered treatment during the above period (Jan, 96 - Jun, 96). But comparing the figures for the period between Jan, 95 - Dec, 95, there is certain escalation in the number of women abusers seeking help.

Figure 3: Female Drug Abusers



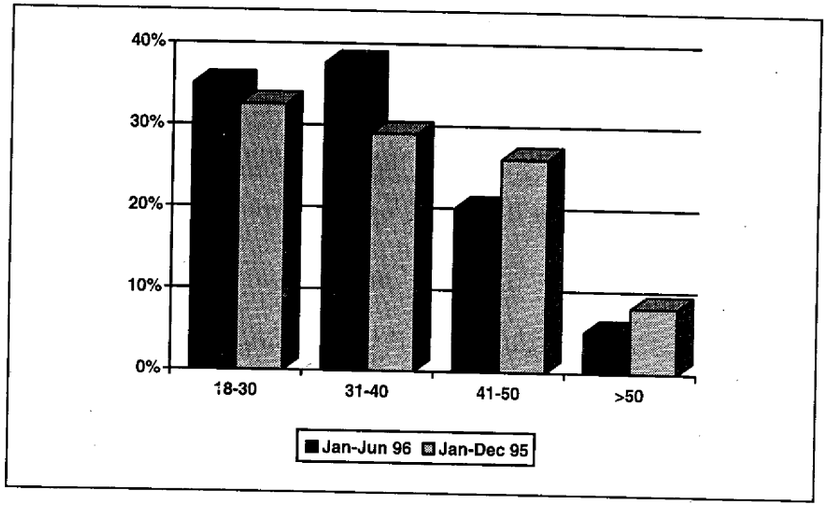
3.4.2 Age

Majority of the other than alcohol users were in the age group of 18 to 30 years and majority of alcohol users in the age of 31 - 50 years.

Table 4: Age Distribution Of The Alcohol/Drug Users

Age range	Jan - Jun 1996		Jan - Dec 95
	N	(%)	(%)
18 - 30	297	34.8	33.1
31 - 40	331	38.3	29.8
41 - 50	177	20.8	27.0
> 50	48	5.6	8.8

Figure 4: Age Distribution Of Treatment Seekers



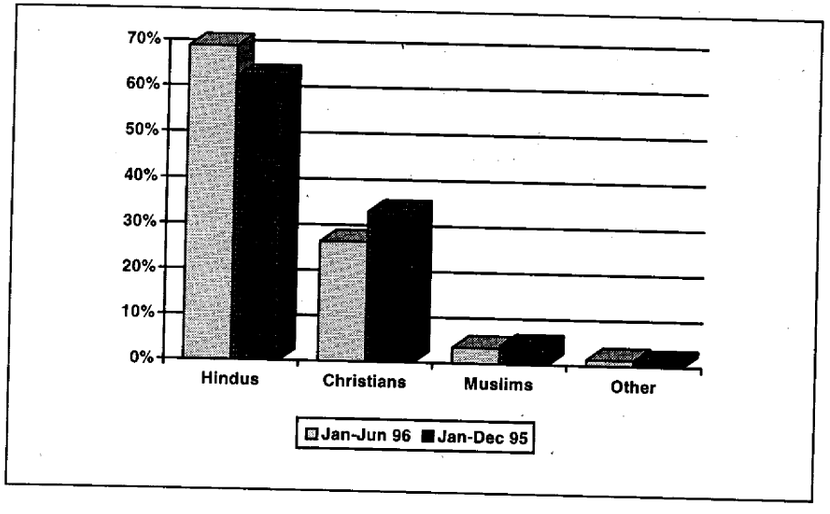
3.4.3 Religion

Majority of the drug users in treatment are Hindus (68.8%) followed by Christians (26.3%), Muslims (3.5%) and others (1.4%).

Table 5: Religion Of Treatment Seekers

Religion	Jan - June (96)		Jan - Dec (95)
	N	(%)	(%)
Hindus	587	68.8	62.0
Christians	224	26.3	33.0
Muslims	30	3.5	4.0
Others	12	1.4	1.0

Figure 5: Religion Of Treatment Seekers



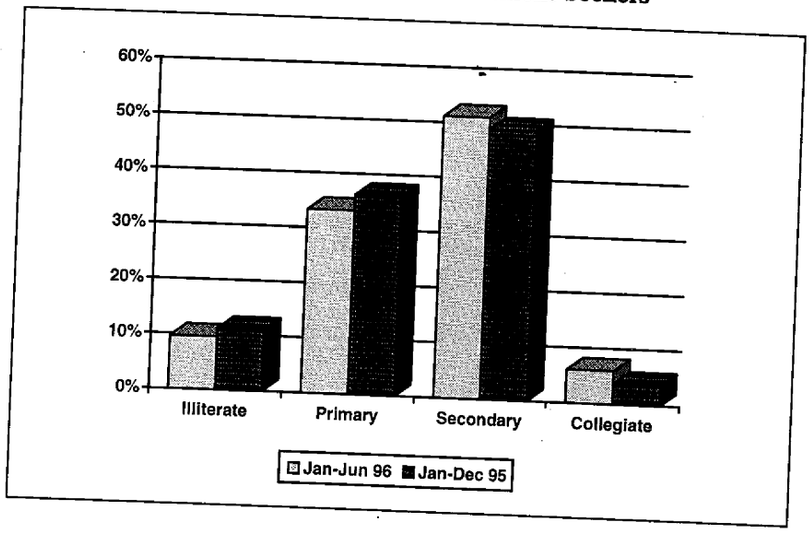
3.4.4 Education

The number of illiterates were 9.6% and 33.3% have primary schooling and 51.1% had completed secondary school level. The percentage of persons with collegiate level education was 6%.

Table 6: Educational Level Of Treatment Seekers

Educational Level	Jan - June (96)		Jan - Dec (95)
	N	(%)	(%)
Illiterate	82	9.6	11.1
Primary school	284	33.3	36.2
Secondary school	436	51.1	49.0
Collegiate education	51	6.0	3.7

Figure 6: Education Of Treatment Seekers



3.4.5 *Occupational Status*

Majority of the individuals seeking treatment at the Institute of Mental Health were employed full time or part time and hence were gainfully occupied. Only 89 individuals (10.4%) were currently unemployed.

Table 7: Occupation - Wise Distribution Of Treatment Seekers

Occupation	Jan 96 - Jun (96)		Jan - Dec (95)
	N	(%)	(%)
Unemployed	89	10.4	21.0
Casual laborers	184	21.6	20.0
Fishermen	108	12.7	14.0
Auto drivers	113	13.2	8.0
Rickshaw pullers	56	6.6	7.0
Small business	79	9.3	7.0
Artists	8	0.9	4.0
Mechanics	69	8.1	4.0
Agriculture workers	27	3.2	3.0
Electricians	74	8.7	2.0
Others	46	5.4	10.0

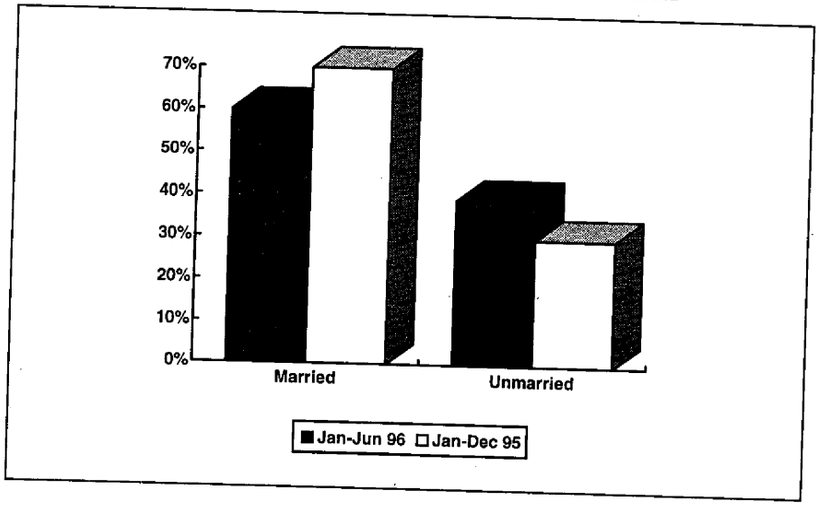
3.4.6 *Marital Status*

524 of the persons in treatment at the Institute of Mental Health (61.4%) are married.

Table 8: Marital Status Of Treatment Seekers

Marital Status	Jan 96 - Jun (96)		Jan - Dec (95)
	N	(%)	(%)
Married	524	61.4	70.7
Unmarried	329	38.6	29.3

Figure 7: Marital Status Of Treatment Seekers



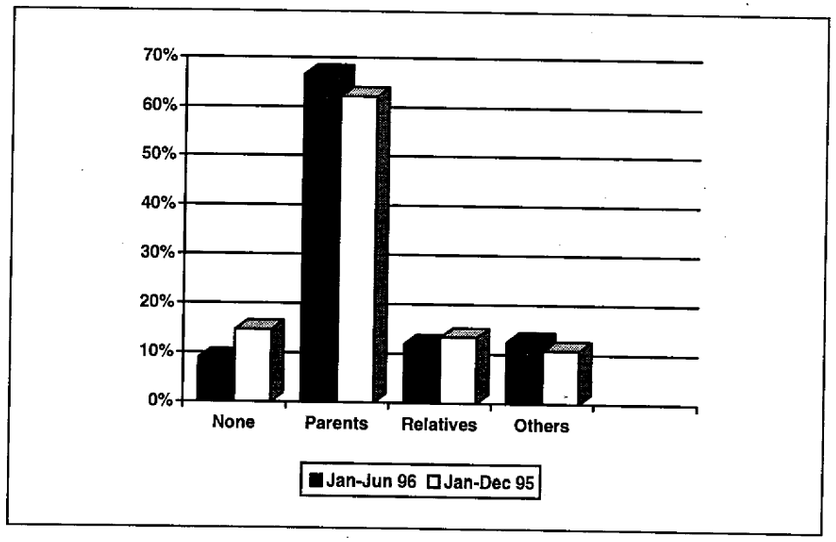
3.4.7 *Living Arrangements*

Only a minority of drug/alcohol users in treatment have no accommodation (8.9%) and majority of them live with a close family member-parents or spouse or a close relative (78.6%).

Table 9: Living Arrangements Of Drug Abusers

Living Arrangements	Jan 96 - Jun (96)		Jan - Dec (95)
	N	(%)	(%)
Living with parents/spouse	568	66.6	62.1
Living with close relatives	102	12.0	12.4
Living alone	79	9.3	6.0
Living with friends	21	2.5	3.0
Living in hostels/hotels	7	0.8	1.8
No accommodation	76	8.9	14.7

Figure 8: Living Arrangements Of Drug Abuser



3.4.8 Route of administration

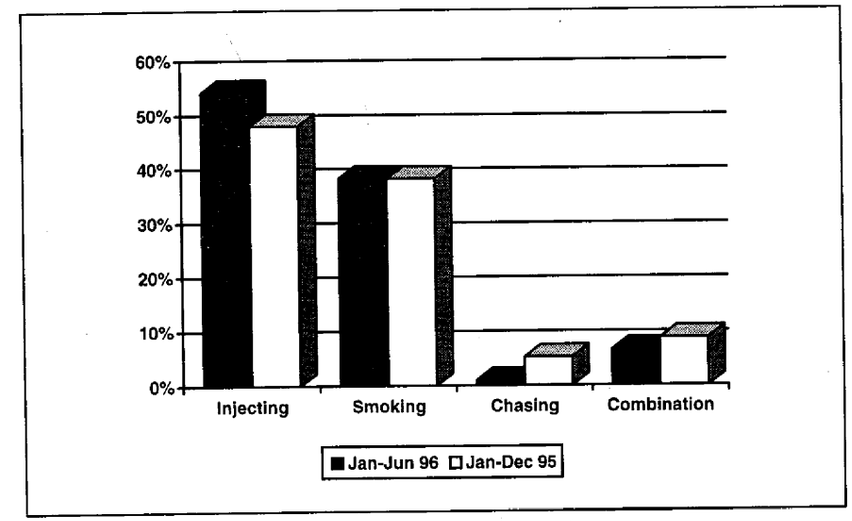
The routes of administration for drugs other than alcohol were: Injecting (54.2%); Chasing (1%); Smoking (38.2%); and combination (6.6%). Majority of opiate users prefer injecting mode of administration.

Table 10: Route Of Administration

Route Of Administration	Jan 96 - Jun (96)		Jan - Dec (95)
	N	(%)	(%)
Injecting	155	54.2	48.0
Smoking	109	38.2	38.1
Chasing	3	1.0	5.2
Combination*	19	6.6	8.7

** State more than one route as their primary routes of administration*

Figure 9: Primary Route Of Administration



3.5 HIV And AIDS

HIV antibody testing was done for 100 persons (the first 100 consenting injecting drug users admitted at the Institute of Mental Health, Madras since 1st. Jan. 1996). Two consecutive positive tests with ELISA and a confirmatory positive result with Western blot technique was called HIV seropositive. Sixteen of the 100 consenting injecting drug users were HIV seropositive.

4. LAW ENFORCEMENT INDICATORS

The data was obtained from the Narcotics Intelligence Bureau, Madras.

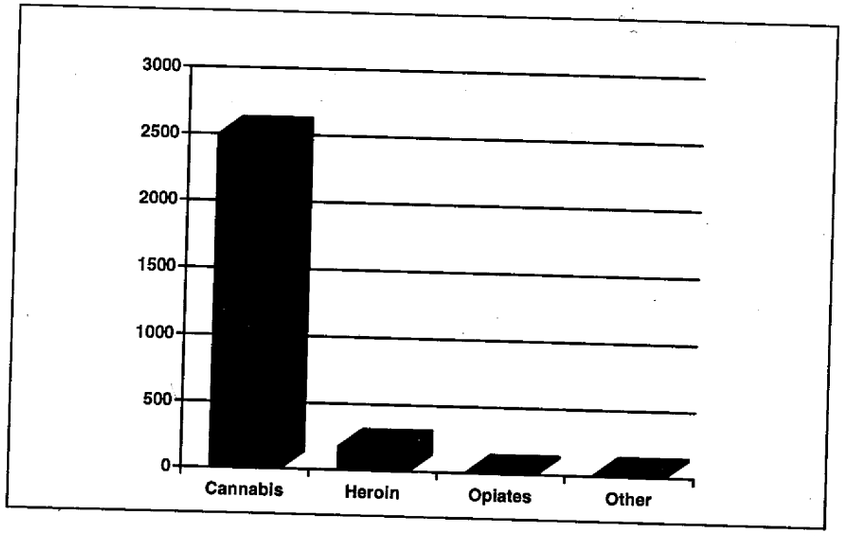
4.1 Number Of Drug Related Arrests

The data is for the year 1995 only. There were 2,774 arrests made during the year and 2,762 of them were Indians and 12 were foreigners (9 Srilankans; 2 Nigerians; 1 Australian). Of the 2,762 arrests of Indians, 543 were females. All the arrested foreigners were males.

Table 11: Drug Related Arrests

Drug Seized	No. Of Cases	Arrests: Indians	Arrests: Foreigners	Arrests : Males	Arrests: Females
Ganja	2,495	2,533	1	2,040	494
Opium	7	11	–	10	1
Heroin	178	206	10	169	47
Cocaine	1	3	–	3	–
Injectable Buprenorphine	5	4	1	4	1
Diazepam	2	2	–	2	–
Poppy cap.	1	1	–	1	–
Nitrazepam	2	2	–	2	–

Figure 10: Drug Related Arrests



Drug seizures effected during the year 1995 is shown below:

Table 12: Quantity Of Drugs Seized

Drug Seized	Quantity In Kgs.
Ganja	Dry: 4,239.873 Wet: 74,092.00
Opium	4.835
Heroin	12.54
Cocaine	21.5
Burprenorphine Inj.	50 vials
Diazepam	5,030
Poppy capsules	10.000
Nitrazepam tabs.	128 tablets
Hashish Oil	1 drop

DRUG SITUATION IN THE PHILIPPINES

Diony V. Varela
Dangerous Drugs Board
Philippines

1. INTRODUCTION

1.1 Area Description

Manila is the capital of the Philippines. It has a total land area of 38.8 square kilometers or roughly 3,830 hectares and is divided into 16 geographical districts. It does not fall within the geographical or political jurisdiction of any other local political unit although for certain administrative purposes, it is considered a component of Metropolitan Manila which is governed by the Metro Manila Commission. The population is estimated to be about 3.1 million. Population density is around 7,800 per square kilometer.

Manila is the center of trade, commerce and industry and has the most number of schools in the country. In addition to the resident students of the city, thousands from the provinces flock to Manila every year to pursue college education. This has contributed to the enlargement of the city's youth population.

Consequently, authorities have felt a greater need to implement effective drug abuse prevention and control programs. A reliable monitoring and assessment of the trends and patterns of drug abuse such as the one we are doing will surely contribute to the successful implementation of these programs.

2. DATA SOURCES AND TIME PERIOD

The treatment data which will be presented are based on the statistical reports submitted by nine (9) treatment and rehabilitation facilities and one (1) general hospital which is the country's biggest, all of these are based in the city of Manila proper. Law enforcement data are based on reports by various law enforcement agencies nationwide.

The treatment report covers the period January to September 1996 while the law enforcement report covers the period January to June, the same year.

3. DRUG ABUSE TRENDS

3.1 Consumption

There were a total of two hundred eighty-six (286) cases of center admissions reported. Of this figure, ninety-two percent (92.0%) were new cases while eight percent (8%) were re-admissions. Male and female patients comprised around ninety percent (89.7%) and

ten percent (10.3%) respectively. This represents a ratio of nine (9) males for every one (1) female.

3.2 Drug Of Abuse

Amphetamines particularly Shabu and cannabis continue to be the leading drugs of abuse in the Philippines. The former was abused by eighty-six percent (86.3%), seconded by cannabis used by thirty-five percent (35.4%). Please note that the sum of the figures are more than one hundred percent (100%) because of multiple drug intake practiced by the clients. Various kinds of cough preparations were abused by thirty-three percent of the patients (33.1%).

Twenty-four percent (24.0%) chose Benzodiazepam while around five percent (4.6%) preferred solvents/inhalants. Tranquilizers were abused by three percent (3.4%). Ninety-nine percent (99.2%) were polydrug users.

3.3 Age

Majority of the patients (52.1%) belong to the 20 - 34 age bracket while twenty-three percent (22.8%) were from 15 to 19 years of age. Around five percent (4.9%) were fifteen year-old or below. About nineteen percent (19.4%) were already over 35 years old. The mean age was twenty-six (26).

3.4 Marital Status

With regard to marital status, unmarried clients constituted a little over one-half (52.5%) while thirty percent (30.4%) were married. Those separated from their spouses accounted for four and a half percent (4.5%). Those who had live-in relationship - twelve and a half percent (12.5%).

3.5 Occupation

A plurality (27.4%) were unemployed. Around twelve percent (11.8%) were unskilled workers. Employees mostly based in private offices comprised a little less than eleven percent (10.6%). Self-employed workers constituted nine percent (9.1%). Those who owned small business accounted for almost eight percent (7.6%) while their counterparts in large scale business - two percent (2.3%). Four percent (4.2%) were skilled workers. About three percent (2.7%) of the policeman who were supposed to enforce the laws against drug abuse had become abusers themselves. This is now a serious cause of concern among drug authorities. Their own people were falling into the trap of drug abuse. Professionals who may include practicing accountants, doctors, teachers represented a small two percent (2.3%).

Students and out-of-school youth comprised seven percent (7.2%) and three percent (3.4%), respectively. Those whose occupation were not specified accounted for eleven percent (11.4%).

3.6 Route Of Administration

Shabu is inhaled through the mouth. Marijuana is by smoking, tranquilizers and cough syrups are by oral ingestion while solvents and other inhalants are by nasal sniffing. The lone case of heroin abuse was by injection.

3.7 Drug sources

Sources of drug indicated were the following:

Street sales	-	83%
Legal prescription	-	2%
Diversion of prescription drugs	-	1%
Others:		
Friends	-	5%
Home	-	3%
Hardware/shops	-	2%
Not specified	-	4%

3.8 Health Indicators

For the period January to September 1996, a total of thirty-one (31) new HIV positive cases were detected none of which was related to drug use. For the same period, fifty-nine (59) drug-associated psychological cases were admitted at the Philippine General Hospital - the country's biggest hospital and a very cooperative participant of the epidemiology project.

3.9 Enforcement Data

For the period January to June 1996, a total of 572 raids were conducted by various law enforcement agencies nationwide. As a result, 764 persons were arrested. Of those persons, 336 or forty-four percent (43.97%) were arrested for possession of prohibited or regulated drugs while 428 were held for sales or trafficking.

The following types of prohibited and regulated drugs were seized:

Drug Type	Quantity Seized	No. Of Raids Conducted	No. Of Persons Arrested
Dangerous Drugs:			
a. Prohibited Drugs:			
Heroin (bricks/gms.)	4/66	3	3
Cocaine, powder (gm.)	1,593	6	3
Coca Plant (no.)	2	1	0
Cannabis:			
Plants (no.)	2,054,828	19	10
Seedlings (no.)	324,950	1	0
Leaves (gm.)	266,308	76	92
Cigarettes (no.)	1,270	28	46
Hashish (gm.)	31	3	3
Seeds (gm.)	76,800	-	-
b. Regulated Drugs:			
Methamphetamine Hcl, powder (Shabu) (gm.)	915,904	433	605
Ephedrine Hcl (gm.)	1,615,000	2	2
Valium, tabs (no.)	51	-	-
Dormicum, tabs (no.)	11	-	-

At present, the Philippine government is putting more emphasis on supply reduction programs of the anti-drug campaign. Special courts were created to try solely drug cases and there is a strong move to put under one command all law enforcement agencies involved in drug control activities. This, if realized, will facilitate more efficient data collection of law enforcement data.

PATTERNS AND TRENDS OF DRUG ABUSE IN SINGAPORE

Dr. Brian Yeo
Department of Psychological Medicine
National University of Singapore

ABSTRACT

Singapore is a small island city-state with close proximity to the Golden Triangle. It is noted for its good communication links. During the 19th century, when it was a British colony, opium dens were legal and were flourishing.

Currently with strict law enforcement and one of the strictest anti-drug laws in the world, the situation is much more under control.

Heroin addicts form more than 90% of all addicts arrested. There is a stabilization in the number of heroin addicts arrested with a slight decrease in the number of new addicts arrested. The relapse rate over the two year compulsory follow-up period remains consistently high at close to 80% relapse. In terms of demographic profile, the Malays and Indians are over-represented but there seems to be a small but rising trend of increased number of arrested female addicts.

Marijuana is the second most popular drug of abuse, constituting 3% of all addicts arrested in 1994 and 5% in 1995.

The other worrying trend is the large increase in psychotropic tablets being confiscated signaling a new problem on the horizon.

At the moment, there is only limited intravenous opiate abuse detected as most addicts used the inhalation route. No cases of HIV/AIDS were detected in 1994 and 1995.

All information however is slanted as they were taken from law enforcement agencies derived from arrestees data. No anonymous drug use data is available.

1. INTRODUCTION

Singapore is a small island, of only 582.8 square kilometers, situated at the southern tip of the Malay peninsula. It has a population of 2.8 million people, comprising three main ethnic groups - Chinese (77.5%), Malays (14.2%) and Indians (7.1%). During the 19th century, when it was a British colony, Singapore served as a conduit of the opium trade between India and China. At that time, opium dens were legally established and many became addicted to smoking opium. Singapore lies close to the Golden Triangle, the main source of opiates in the region. With its known good communication links, Singapore is noted to be on the export route of the illegal opiate trade.

1.1 Data Source

All data is taken from official law enforcement agencies. The data is compiled by the Singapore Anti-Narcotics Association, an independent and voluntary organization providing after-care services to ex-drug addicts.

The data presented is collected from 1991 to 1995. However, these figures only represent addicts apprehended by the authorities. No anonymous community or national survey has been administered to date. In fact, anonymous surveys have yet to be collected from high risk groups.

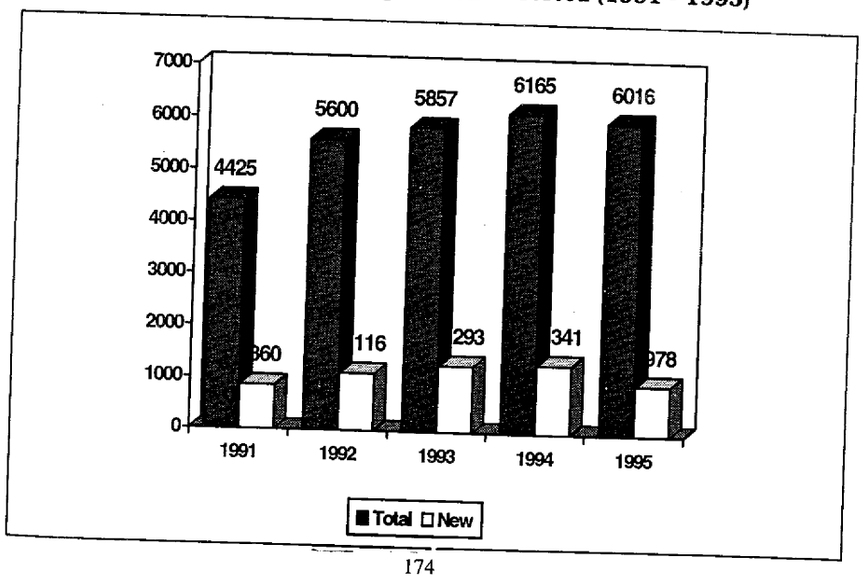
1.2 Drug Abuse Trends

Since the abolition of opium dens, opium use has declined significantly in the country. The major drug of abuse in Singapore has always been heroin since the 1970s when the problem of drug abuse was given prominence. Since then, heroin abusers has always constituted around 90% of all cases arrested for illegal drug use.

Prior to 1977, it was estimated that the number of heroin addicts in Singapore was around 13,000 with an average of 860 local addicts arrested each month. Even more significant, 67% of those arrested were new addicts, signaling an alarming rate of increase.

The government stepped in with a series of harsh penalties for drug abuse as well as vigorous drug enforcement. Since then the number of addicts arrested annually has stabilized at around 6,000 per year with the number arrested in 1995 at 6,016 individuals. This represents a slight decrease from the 1994 arrested number of 6,165. However, the heartening new is that there is a small but perceptible trend in the smaller number of new addicts apprehended since 1993 (1993-1,293, 1994-1,341, 1995-978).

Chart 1 : Singapore Drug Addicts Arrested (1991 - 1995)



In terms of drug choice, heroin abusers constituted 96% of all addicts arrested in 1994 and 94% of all addicts arrested in 1995. The other drug of abuse noted is cannabis constituting 3% of local arrested addicts in 1994 and 5% in 1995.

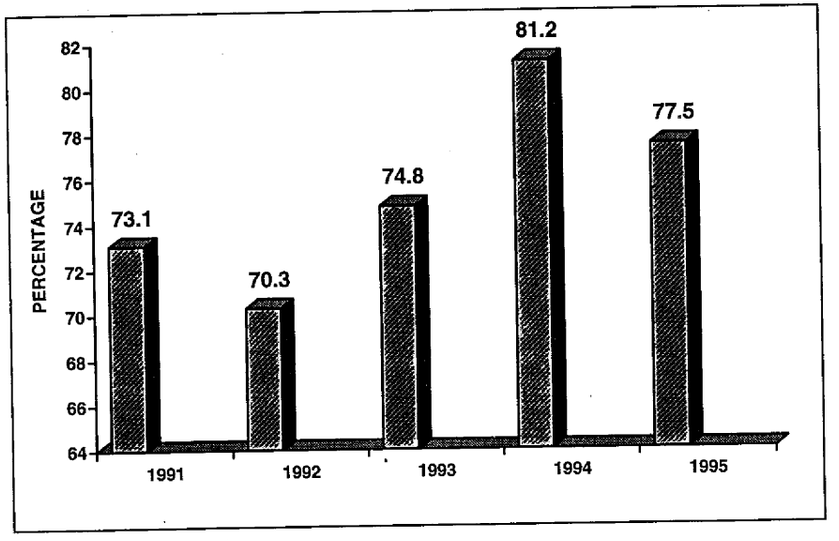
Almost all data collected on drug addicts focuses on heroin abuse as it is the most preferred drug of abuse in the country. The drug rehabilitation centers are solely concerned with heroin abuse and dependency.

Heroin

The data is taken from arrest records and treatment results at the local drug rehabilitation centers. Almost all individuals arrested for heroin abuse undergo compulsory cold turkey treatment before being sent to various drug rehabilitation centers for periods ranging from several months to several years depending on their previous records. After discharge from these centers they are monitored for a two year period with compulsory urine testing.

The relapse rate is still high, more than 70% revert back to heroin within two years despite the vigorous rehabilitation program. In 1994, the relapse rate hit a high of 81.2% but dropped slightly to 77.5% in 1995.

Chart 2 : Drug Relapse Rate (1991 - 1995)



In terms of demographic profile, the Malays are grossly over-represented constituting more than half of all addicts arrested as well as new addicts arrested; despite forming only 14.2% of the local population. The Indian population is also modestly over-represented but the Chinese population is grossly under-repsented, forming about 30% of addicts arrested although the community forms 77.5% of the total population.

It is noted that there is a trend indicating smaller numbers of Malay addicts being arrested over the last few years, both in terms of total number as well as in new

addicts arrested. This trend is also being seen in the Indian addicts but the situation does not seem to be improving amongst the Chinese addicts.

Chart 3 : Singapore Addicts (Total) Arrested (1991 - 1995)

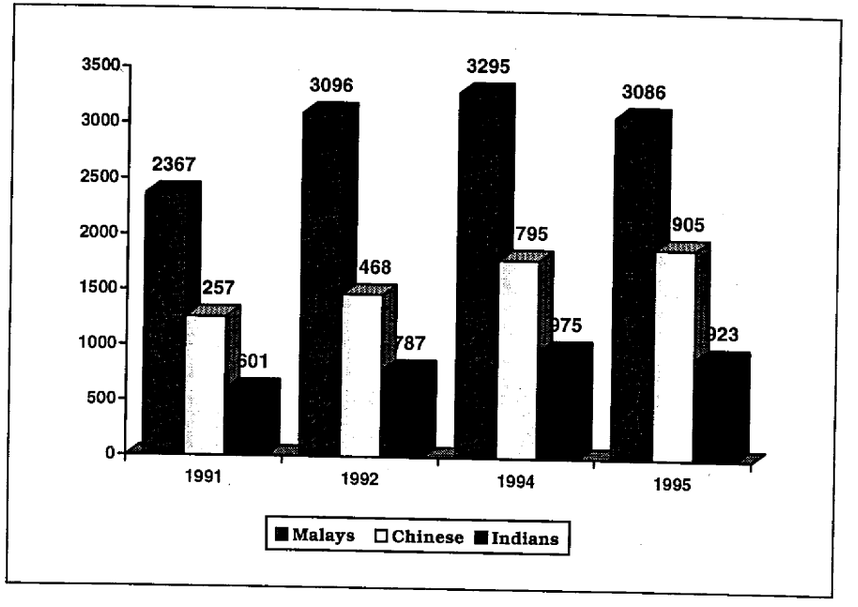
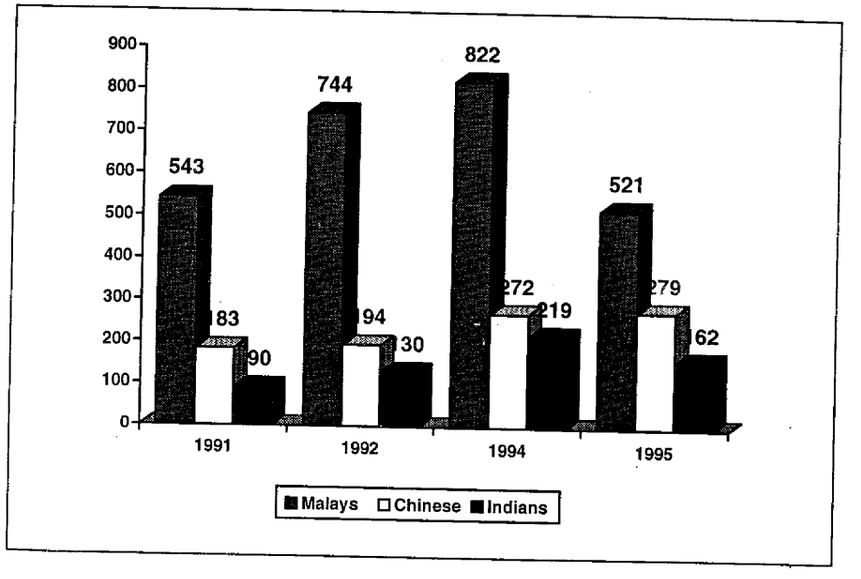


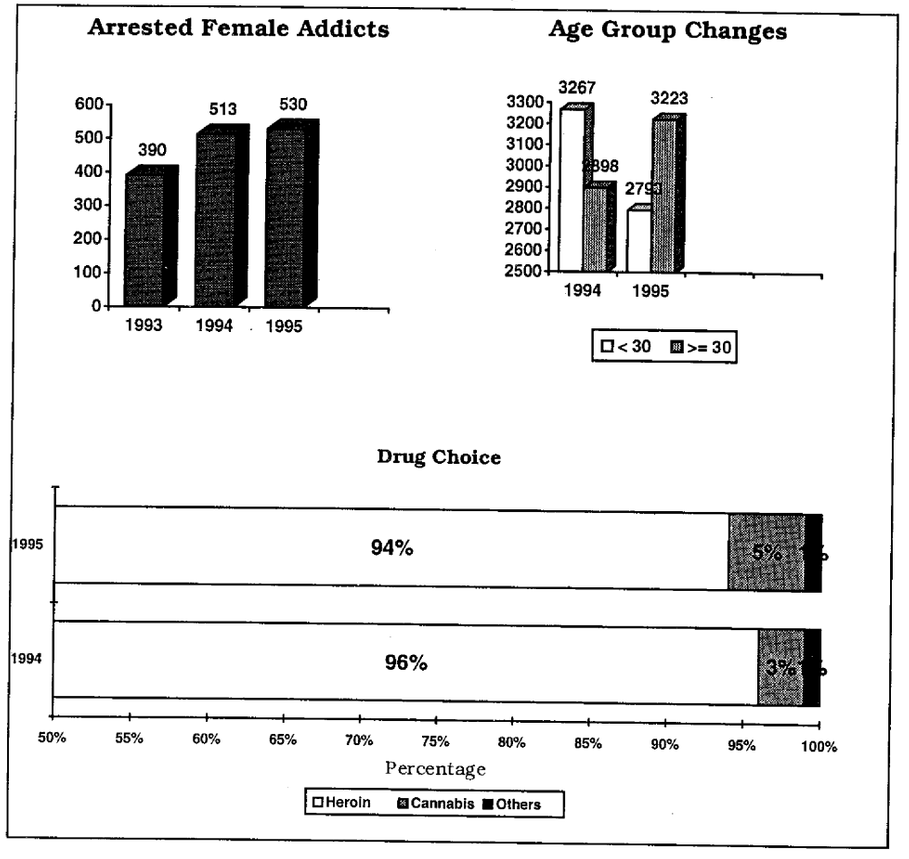
Chart 4 : Singapore Addicts (New) Arrested (1991 - 1995)



In terms of sex ratio, male addicts still grossly outnumber female addicts forming over 90% of all addicts arrested. However there is a trend towards higher numbers of female addicts being arrested.

The addicts arrested are also getting older. The number of addicts below 30 years old fell from 3,267 in 1994 to 2,793 in 1995. The number of addicts below 30 years old also fell from 1,078 in 1994 to 729 in 1995. The number of addicts 30 years and above rose from 2,898 in 1994 to 3,223 in 1995.

Chart 5: Drug Abuse Trends In Singapore



However, certain demographic parameters seem consistent. The percentage of local addicts who only received primary education hovered at around 70% over the last five years, of which more than half were primary school dropouts. The age group 20-29 years form the largest segment of arrested addicts followed by those in the 30-39 year age group.

Chart 6: Singapore Addicts Arrested By Age Group (1995)

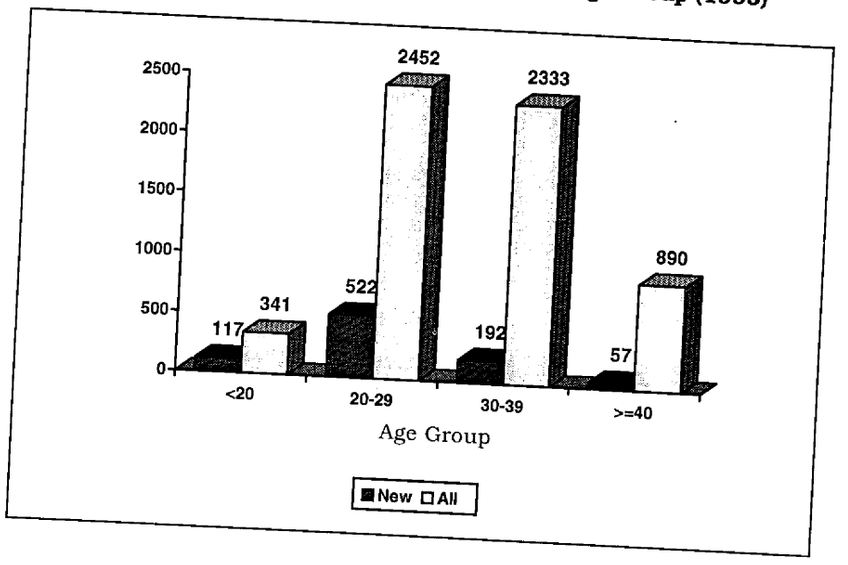
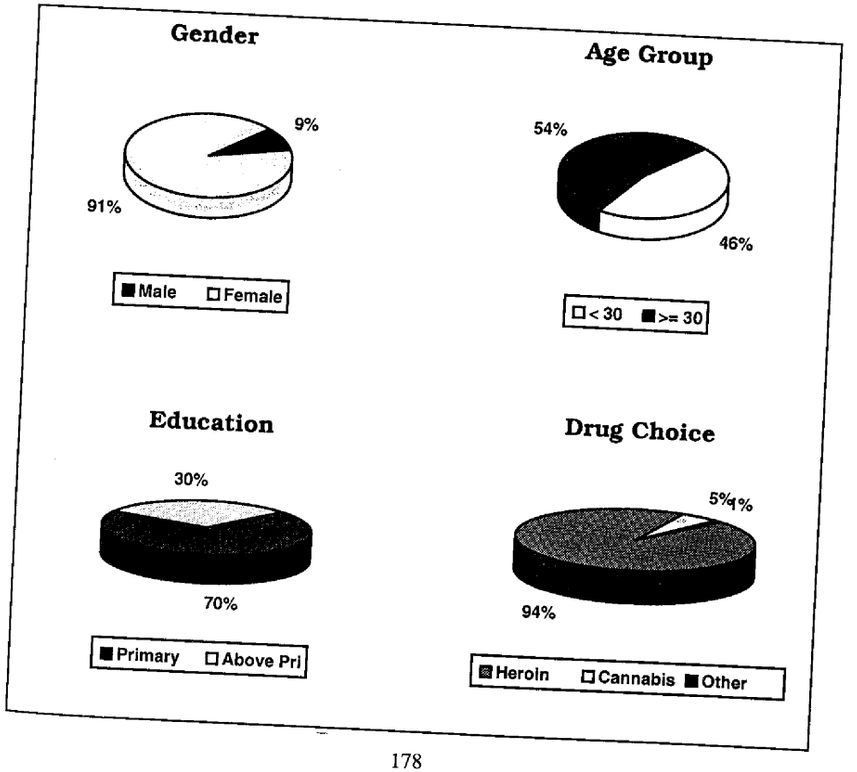
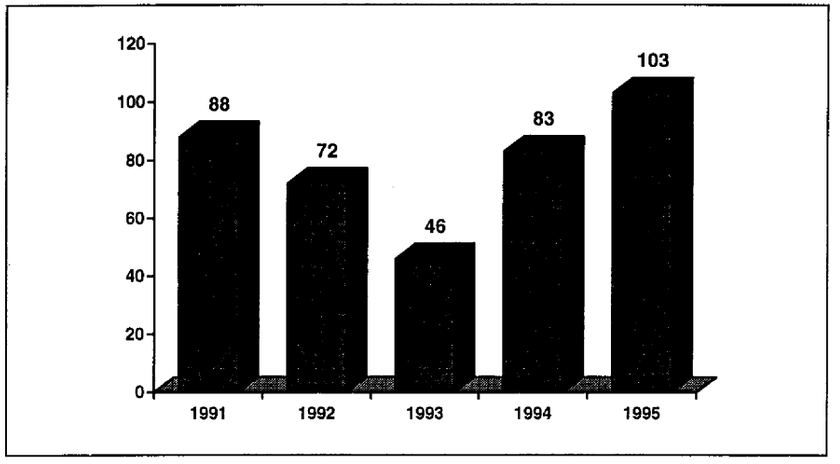


Chart 7: Profile Of Addicts Arrested - 1995



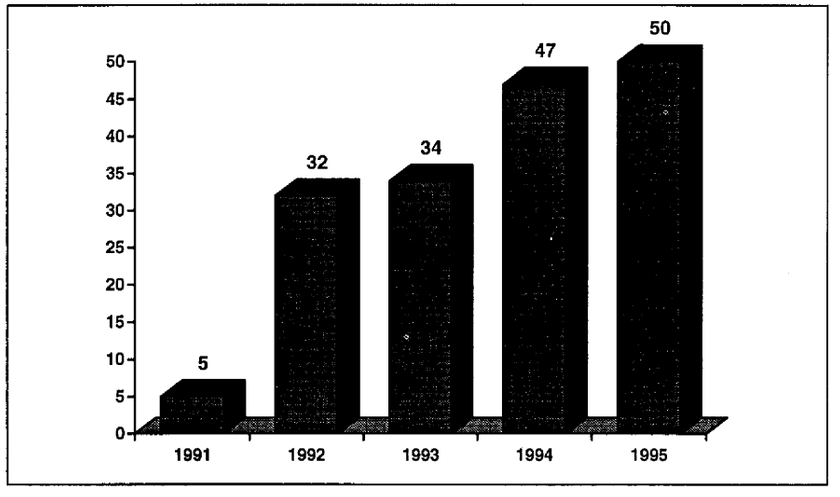
In the background of these changes, the law enforcement agencies have been increasing their enforcement against drug abuse. There is a trend towards higher number of persecutions for drug possession and trafficking. The number of persons prosecuted under capital charges increased from 83 in 1994 to a record high of 103 in 1995. Since the enactment of the death penalty in 1975, 197 persons have been sentenced to death, of which 148 have been executed.

Chart 8 : Singapore Death Penalty Cases (1991 - 1995)



A worrying trend over the last five years have been the rising number of Singaporeans arrested overseas for being drug couriers. Most of the arrests were in Australia, Thailand and Taiwan.

Chart 9 : Singaporeans Arrested Overseas (1991 - 1995)



The purity of heroin number 3, the main drug abused in Singapore has been decreasing since 1993. The average purity of heroin available on the streets have been reported to drop from 16% in 1994 to 10% in 1995.

Marijuana

Not much data is available as there is no rehabilitation program in the drug rehabilitation center for marijuana abuse. However there is small rise in the percentage of addicts arrested for cannabis abuse from 3% in 1994 to 5% in 1995.

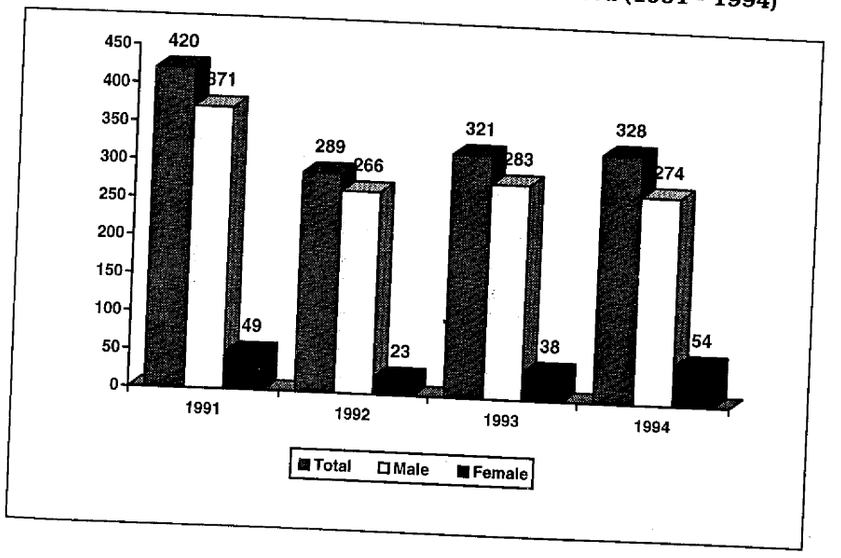
Psychotropics

This is a new phenomenon noted only recently by the authorities. However based on the amount of tablets confiscated, there is a very worrying trend of marked consumption increase. The amount of psychotropic substances confiscated almost quadrupled from 12,518 tablets in 1994 to 48,513 tablets in 1995.

Inhalant Abuse

Inhalant abuse cases detected has been steady at around 300 cases arrested annually. Although predominantly male, constituting close to 90% of all cases arrested, there is a small but steady increase in the number of female inhalant abusers arrested from 1992. However the number of female addicts still remain small, only 54 addicts were arrested in 1994. Inhalant abuse is more predominant in the younger age group, i.e. age 15-19 years, usually from the less affluent socio-economic group.

Chart 10: Singapore Inhalant Abusers Arrested (1991 - 1994)



1.3 HIV/AIDS Infection via Intravenous Drug Use

(data courtesy of Communicable Disease Center, Singapore)

No records of HIV infection via intravenous drug use was recorded in 1994 and 1995. Most cases of opiate abuse is via inhalation and intravenous drug use is limited. Of the 419 cases of HIV/AIDS recorded since 1985 till 1995, only a total of 7 cases were noted to have contacted HIV/AIDS through intravenous drug use.

Chart 11: Distribution Of Residents With HIV/AIDS Infection By Mode Of Transmission, 1985 - 1995

	Year Notified With HIV											
Mode Of Transmission	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**	**94**	**95**	**Total**
Heterosexual	1	1	1	1	6	5	22	37	46	61	80	261
Homosexual	1	2	6	10	1	11	11	12	6	15	17	92
Bisexual	-	2	3	4	3	-	3	3	9	9	10	46
Blood transfusion (overseas)	-	1	-	-	-	-	-	-	-	-	-	1
Intravenous drug use	-	-	-	-	-	1	3	1	2	-	-	7
Transplant operation (overseas)	-	-	-	-	-	-	2	2	-	-	1	5
Perinatal	-	-	-	-	-	-	1	-	-	-	-	1
Unknown	-	1	-	-	-	-	-	-	1	1	3	6
Total	2	7	10	15	10	17	42	55	64	86	111	419

Source: Communicable Disease Center, Singapore

2. CURRENT TRENDS IN DRUG ABUSE REHABILITATION

In the past, all heroin addicts had to undergo compulsory cold turkey detoxification in the drug rehabilitation center. There was no provision for volunteer treatment of drug abuse.

In early 1996, the government has initiated a volunteer drug treatment program solely for first time drug addicts in a designated hospital. Subsequent rehabilitation after detoxification in a half way house was not compulsory but would be funded by the Singapore Prison Service. In late 1996, the authorities have given implicit permission for the university hospital to treat drug addicts with past records. After detoxification, they would also be eligible for admission to the half way house but they would have to bear the charges.

The government is likely to initiate harsher treatment for apprehended repeat drug offenders. Measures considered would include:

- longer detention periods
- prison sentences for recalcitrant addicts
- *rotan* strokes for hard core addicts

The aim is to be more lenient towards addicts who volunteer themselves for treatment and to implement more stringent measures for apprehended repeat offenders. It is too early to evaluate this new two-pronged approach in terms of changes in the relapse rates.

DRUG ABUSE SITUATION IN SRI LANKA
JANUARY - JUNE 1996

Y.Ratnayake,
National Dangerous Drugs Control Board
Colombo, Sri Lanka

ABSTRACT

Until 1880s, opiate abuse or similar drug abuse was not considered a problem in Sri Lanka, where only some older males continued their traditional opium use. The use of ganja (cannabis) had a limited clientele and was confined mainly to the working class of those engaged in hard work in rural and in urban areas. This class bias or the low 'value' given to the drug has been a major control over its spread to other segments of the society. With the arrival of heroin in early 1980s, the country began to face a serious opiate problem which was indicated by increase in heroin related arrests, heroin seizures, related crime, and imprisonment for drug related offenses. In Sri Lanka there is no compulsory reporting system in respect of drug abuse. An event reporting system called Drug Abuse Monitoring System (DAMS) was established in early 1990s by the National Dangerous Drug Control Board (NDDCB) with UN assistance. Although in its infancy, it is the 'official' source of epidemiological information on drug abuse in the country. This report covers the first two quarters of 1996, and looks at the treatment data and drug related arrests. Majority of treatment seekers as well as drug related arrests were reported from the Colombo district. Of the treatment admissions and report arrests about 75% were youths in the age group of 20 - 35 years.

1. AREA DESCRIPTION

Sri Lanka is comparatively a small (62,337 sq.km) tropical island close to the southern end of India. The mid-year population estimate for 1996 was 18.2 millions with a marginal male preponderance. The population is multi ethnic and multi religious. Most of the people (78%) live in rural areas. The Sri Lankan family is traditionally of the extended type. However, urbanization, population pressure, life style trends, employment of women, rising cost of living, difficulties in housing etc., have been contributing to rapid shift towards the nuclear type.

Traditionally an agricultural country, Sri Lanka has recently begun to expand into other areas of production and export. Tourism is another economic area into which the country is moving rapidly. Recent years have seen many people seeking long term employment abroad. Many of them go abroad for low-income jobs. Due to this reason, many families have temporarily become single parent units. The health status of the country is better compared to that of other countries in the southern hemisphere. Education is provided free and schooling is compulsory in Sri Lanka. The country has a literacy rate of 91% for males and 83% for females.

2. DATA SOURCES

The main sources of the data presented in this paper is from the Drug Abuse Monitoring System (DAMS), which is the official source of epidemiological information on drug abuse in Sri Lanka. The DAMS is an event reporting system.

Even though, it is not compulsory to report treatment events, Police Narcotics Bureau, all local police stations, and main treatment centers (GOs/NGOs) in the country send their information to system, in specific forms, on a monthly basis. Other sources of information include Department of Prisons, Outreach Workers of the NDDCB stationed in several of the major cities, National Narcotics Laboratory of the NDDCB, key informants and newspaper reports.

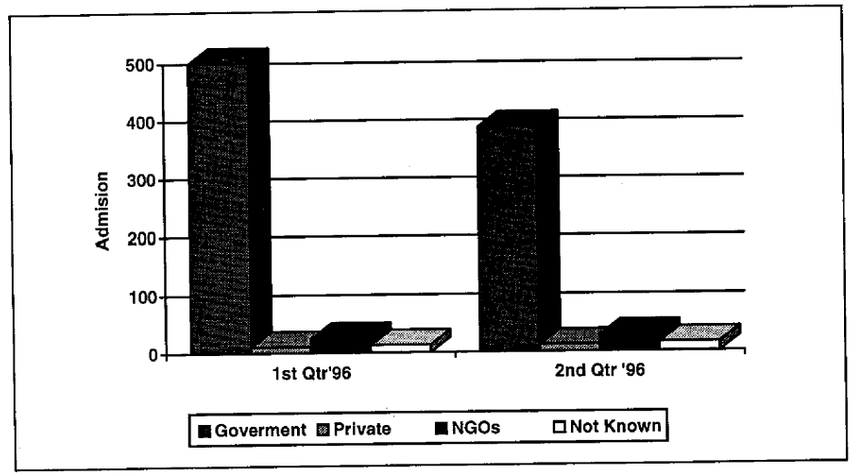
3. TREATMENT INDICATORS

This is an analysis of report from the treatment facilities received by the Drug Abuse Monitoring System (DAMS) for the 2nd quarter of 1996. The number of reports received for the 2nd quarter of 1996 was 380 compared to the 443 reports received for the 2nd quarter of 1995.

3.1 Reporting Agency

For the month of April, May and June 1996, 367 reports were received and 96.5 percent of these reports were received from the Government treatment facilities, 3.5 percent from the non-government treatment facilities and no reports from the private medical practitioners. During the 2nd quarter of 1995, 88.9 percent of the 394 reports received were from Government treatment facilities, 2.3 percent from the non-government treatment facilities and 0.1 percent from the private medical practitioners.

Exhibit 1: Distribution Of Reported Drug Users By Treatment Facility



Source: Drug Abuse Monitoring System (DAMS)

3.2 Type Of Treatment

Out of the drug dependents reported to the DAMS for the 2nd quarter 1996, 238 had received Allopathic treatment, 303 non medical treatment, 13 Homeopathic treatment and 37 Ayurvedic treatment. During this quarter, 332 dependents had

been treated in the treatment and rehabilitation centers of the National Dangerous Drug Control Board. During the 2nd quarter 1995, 238 had received Allopathic treatment whilst 5 had Ayurvedic treatment and the number that received Homeopathic treatment was 46.

3.3 Administrative District

Of the 380 reports received for the 2nd quarter of 1996, 64.5 percent were from the Colombo district, 8.2 percent from Galle district and 10.0 percent from the Gampaha district. From the Kandy and Kalutara districts, the reports received were 8.9 and 1.4 percents, respectively. These five districts put together reported the highest number of drug users for the 2nd quarter of 1996. During the 2nd quarter 1995, the majority (70.2%) of drug dependents were reported from the Colombo district, 7.0 percent was from the Gampaha district, 2.9 percent from the Kandy district and 7.9 percent from the Galle district.

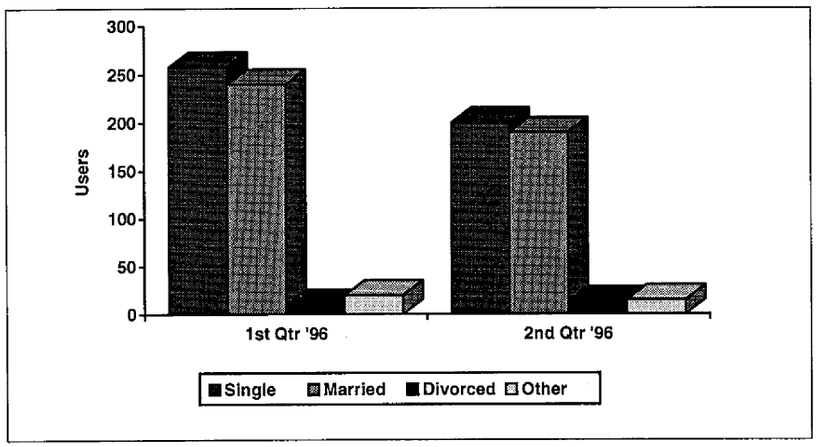
3.4 Sex

During the 2nd quarter of 1996, all 380 reported drug users were males. There was no reports of females. During the 2nd quarter of 1995 too, all the 443 reported cases were males.

3.5 Marital Status

There were 190 (50.0%) single drug users and 183 (48.1%) married drug users reported to the DAMS during the 2nd quarter of 1996. The number of single and married drug users reported during the 2nd quarter of 1995 were 227 (51.3 %) and 203 (45.8 %) respectively.

Exhibit 2 : Distribution Of Reported Drug Users By Marital Status



Source: Drug Abuse Monitoring System (DAMS)

3.6 Ethnicity

During the 2nd quarter of 1996, there were 330 (86.8%) Sinhala drug users reported to the DAMS, the percentage of Moors reported was 6.8 whilst 3.3 percent were Tamils. The percentage of Malay drug users reported was 0.7. According to the census of 1981, 74 percent of the population of Sri Lanka were Sinhalese, 18.1 percent Tamil and 7.1 percent Moor. The percentage of the Malay and Burgher population together were 0.3. The rate of drug use during the 2nd quarter 1996 was 30.1 per one million among Sinhalese, 24.8 among Moors, 4.4 among Tamils and 76.9 among Burghers. During the 2nd quarter of 1995 the ethnic distribution was 31.2 percent Sinhala, 12.9 percent Tamil, 24.8 percent Moor and 76.9 percent Burgher.

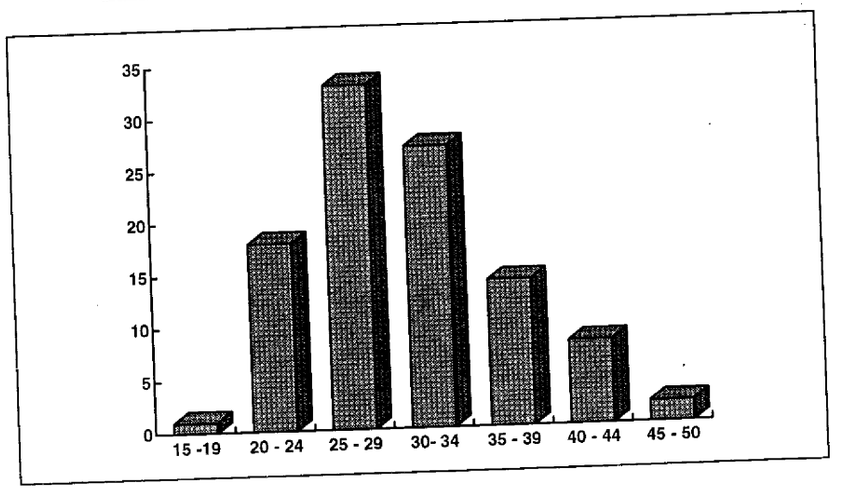
3.7 Religion

Of the 380 reports, 72.8 percent were Buddhist whilst 2.3 percent were Hindus, 8.6 percent Muslims and 13.4 percent Christians. The percentage proportion of Buddhists, Hindus, Muslims and Christians in Sri Lanka were 69.3, 15.5, 7.6 and 7.5, respectively according to the census of 1981. The rate of drug use among them during the 2nd quarter of 1996 were 26.9, 3.5, 29.4, 45.1 per one million persons, respectively. During the 2nd quarter of 1995, 66.4 percent of the reported drug users were Buddhists, 3.8 percent Hindus, 12.2 percent Muslims and 15.1 percent Christians.

3.8 Age

The majority of the drug users (74.4%) were between the ages of 20 - 34 during the 2nd quarter of 1996 compared to 75.2 percent of that in 1995.

Exhibit 3 : Distribution Of Reported Drug Users By Age



Source: Drug Abuse Monitoring System (DAMS)

3.9 Education Level

Of the 380 drug users reported during the 2nd quarter of 1996 to the Drug Abuse Monitoring System, 92 (24.3%) had attended school up to year 8 and 108 (28.5%) up to year 10. The number of drug users who had completed the GCE O/Level was 120 (31.5%) and 19 (5.0%) had completed the GCE A/Level examination. Of the reported drug users, 9 (2.4%) had not attended school. There was one professionally qualified drug user reported during the quarter. During the 2nd quarter of the 1995, of the users reported, 115 (25.9%) had attended school up to year 10 whilst 120 (27.1%) and 18 (4.1%) had completed their GCE O/Level and GCE A/Level examinations respectively.

3.10 Drug Use

The majority of the reported drug dependents were heroin dependents (97.6 %). There were no drug dependents reported for cannabis use and 5 (1.4 %) were reported for alcohol use. Two persons (0.5%) were reported for Hashish, compared to that of 95.7 percent for heroin use and 0.9 percent for cannabis use reported during the 2nd quarter of 1995.

3.11 Route Of Drug Administration

Of the 380 reported drug users, 375 (98%) had chased (chasing the dragon) the drug. There were 3 drug users reported to the DAMS who had injected the drug during the 2nd quarter of 1996. The number of drug users reported who had 'chased' the drug during the 2nd quarter 1995 was 429 (96.8%). There were 4 intravenous users reported during the quarter.

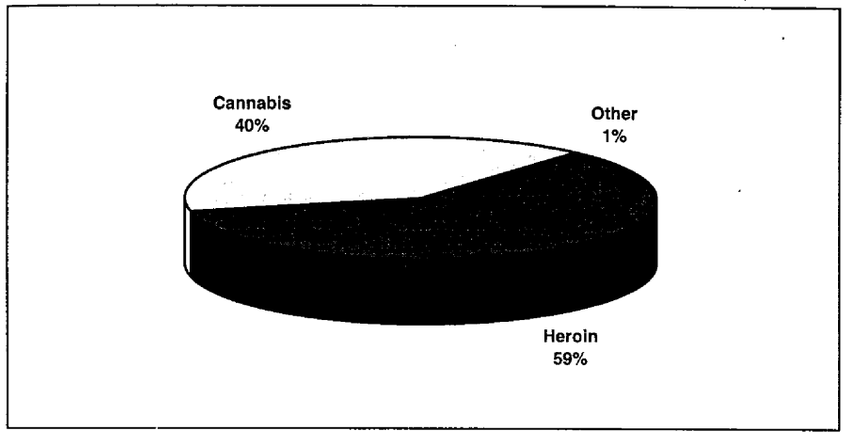
4. LAW ENFORCEMENT INDICATORS

This is an analysis of 2,169 reports received by Drug Abuse Monitoring System (DAMS) from 165 police stations and from the Police Narcotics Bureau (PNB) for the months of January - June 1996. The majority of drug related arrests were made by the Colombo North & South Police Division (5.3%), the Galle Police Division came next with 12.2% arrests. The Police Narcotics Bureau had made 200 (9.2%) arrests island wide from January to June, 1996.

4.1 Type Of Drug

The majority of the drug arrests reported were due to heroin related offenses (59.3%), while 39.8 percent were due to cannabis related offenses. During the first six months of 1996, 59.3 percent of the arrests were heroin related and 41.2% percent were cannabis related arrests.

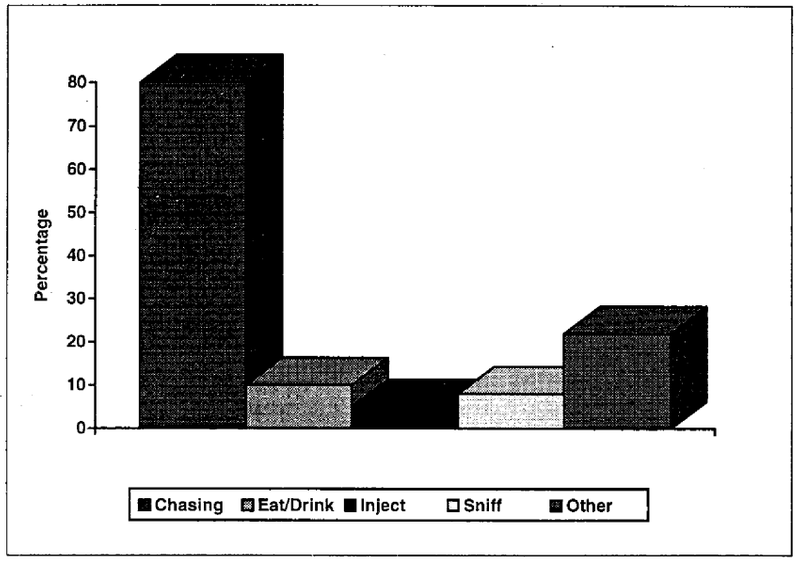
Exhibit 4 : Reported Drug Related Arrested By Drug



4.2 Method Of Drug Administration

The majority of the arrested persons (76.3%) had 'chased' the drug, while 3.1 percent had 'sniffed' the drug. There were 15 cases of intravenous drug use reported during the first six months of 1996. In 1995, for the same period of reporting there were 79.8 percent had 'smoked' the drug and 1.3 percent had sniffed. There were 7 cases reported to the DAMS with intravenous drug use during this period.

Exhibit 5 : Reported Drug Related Arrests By Route Of Use



Source: Drug Abuse Monitoring System (DAMS)

4.3 Sex

From January to June 1996, of the 2,169 arrested 2,046 (94.3%) were males whilst 107 (4.9%) were females. The number of males arrested during January to June 1995 was 2,239 (93.3%) and the number of females was 130 (5.4%).

4.4 Age

Of the 2,169 reported arrested, 77.5 percent were in the age group of 20 - 39 years compared to 76.5 percent of reported during the first half of 1995.

4.5 Ethnicity

The number of Sinhalese arrested was 1,738 (80.1%) and the number of Moors were 184 (8.5%), Malays were 18 (0.8%) and Burgher were 4 (0.2%). According to the census of 1981, 74 percent of the Sri Lankan population were Sinhalese with 18.1 percent Tamil and 7.1 percent Moor. The rate of drug related arrests among Sinhalese in 1996 was 158.1 per million and the rate of arrests among Tamils was 46.9 per million compared to 175.7 per million among Moors and 382.9 per million among Malays. The rate of drug use among Burghers was 102.6 per million. During the first six months of 1995, the rates of drug use among Sinhala, Tamil, Moor, Malay and Burgher communities were 170.2, 59.8, 207.2, 340.4 and 205.1 per million respectively.

4.6 Religion

Of the 2,169 arrests reported to the DAMS, 1,618 (74.6%) were Buddhists whilst 224 (10.3%) were Muslims. The number of Hindus was 114 (5.3%) and 91 (4.2%) was Christians. According to the 1981 Census report the proportion of Buddhists, Hindus, Muslims and Christians in the population was 69.3, 15.5, 7.6 and 7.5 percents respectively. The rates of drug related arrests among Buddhists, Hindus, Muslims and Christians were 157.3, 49.6 199.7 and 80.5 per million respectively. From January to June of 1995 the rate of drug related arrests were 174.3, 60.9, and 72.5 among Buddhists, Hindus, Muslims and Christians respectively.

4.7 Education

Out of the reported arrests of 2,169, 28.8 percent had attended school up to year 8 and 21.6 percent up to year 5. The percentage that had attended up to year 10 was 20.6, whilst 7.9 percent had completed the GCE O/Levels and 0.9 percent had completed the GCE A/Levels. There were 1.2 percent professionally qualified persons. Out of the persons arrested, 14.5 percent hat not attended school. During January to June 1995, 27.5 percent had attended school up to year 8 and 27.8 percent up to year 5. The percentage that had attended up to year 10 was 17.6, whilst the percentage the had completed the GCE O/Levels and GCE A/Levels were 7.7 and 1.0 respectively.

4.8 Marital Status

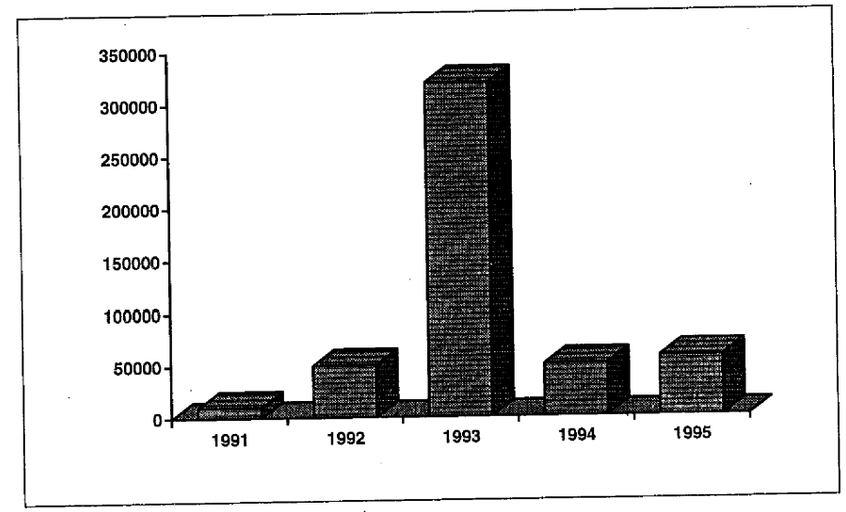
Of the 2,169 persons arrested during the first six months of 1996, 61.5 percent were married whilst 36.2 percent were single. During the same period of 1995, 57.9 percent were married whilst 36.2 percent were single.

5. DRUG OF ABUSE, TRENDS AND PATTERNS

5.1 Cannabis

Cannabis is believed to be the most prevalently used illicit drug in 1995. Illegal cultivation of cannabis continued as in previous years in the jungle areas of Sri Lanka. Traditionally, it is mostly grown in the South Eastern region in the country. Although no survey has been done in 1995 (or in the recent past) on the extent of illicit cultivation of the cannabis plant; some useful information is available with the Annual Report 1995 of the Police Narcotics Bureau (PNB). According to the report, the cannabis plantations are mostly confined to an average of 1/4 acre plots in the jungles and is also grown as a 'side crop' by the cultivators of vegetables. Cannabis cultivators are mostly controlled by the local businessmen in their receptive areas.

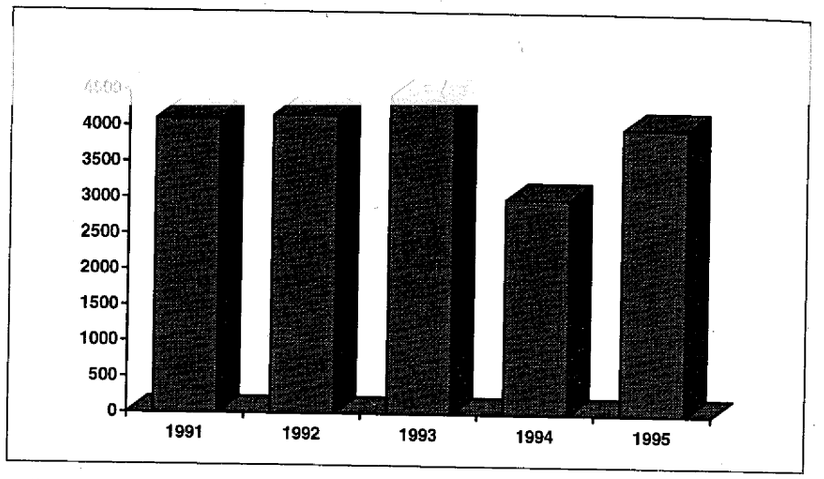
Exhibit 6 : Quantity Of Cannabis Seized(In Kg.) During The Past Five Years



Source: Drug Abuse Monitoring System (DAMS)

The trafficking of locally produced cannabis is from outstations to Colombo. From the jungles, it is first brought to villages, then to towns via provincial capitals to Colombo, mostly along with vegetable and other consumer goods. During the period January to December 1995, cannabis seized was 59,448.900 kg. Cannabis is inexpensive, compared to heroin or opium. Street value of cannabis was around Rs 2.20 per gram. Most of the cannabis offenders in 1995 were young male adults.

Exhibit 7 : Cannabis Related Arrested From 1991 To 1995



Source: Drug Abuse Monitoring System (DAMS)

Whilst smoking of cannabis is mostly confined to low income groups of the city and village; some reports suggest that even affluent youths in the city engage in it regularly at 'parties'. Annual Report 1994 of the PNB reported that the cannabis smoked at the 'parties' is of higher quality than that of the street level, prepared mostly from the inflorescence of the cannabis plant.

5.2 Heroin

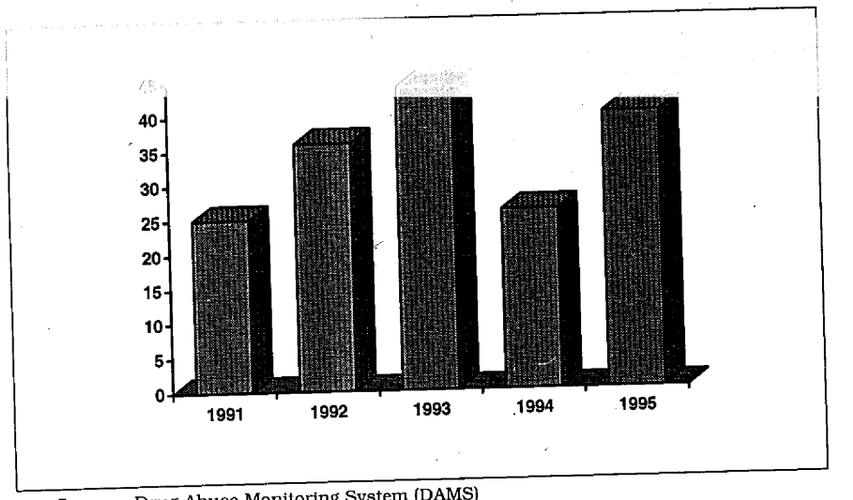
Heroin was the most frequently abused illicit opiate. 'Brown Sugar' (number 3 heroin) was available in most parts of the island as in the previous year. In 1995 the quantity of heroin seized was 40.332 kg by the drug law enforcement officers. The bulk of it came from India and lesser quantities of it from Pakistan. The average purity of heroin seized in bulk was about 50% to 55% morphine and that of street level heroin was around 40%. The average street price of no. 3 heroin ranged between Rs. 1,000 to Rs. 1,200 per gram.

Charas, also known as 'halape' (black tar heroin), which is lower quality heroin, was sold in Colombo for Rs. 20 - 30 a packet (10-15mg). According to the users, unlike good quality heroin it does not 'run' on the tin foil when heated; instead it would 'burn' in one spot on the foil. Its availability was limited to Colombo.

5.2.1 Method Of Heroin Administration

Inhaling of heroin vapor 'chasing the dragon' (locally known as 'Chinese method') was the much preferred method of use as in the previous years. Very few injecting drug dependents were reported.

Exhibit 8 : Quantity Of Heroin Seized (In Kg.) From 1991 To 1995



Source: Drug Abuse Monitoring System (DAMS)

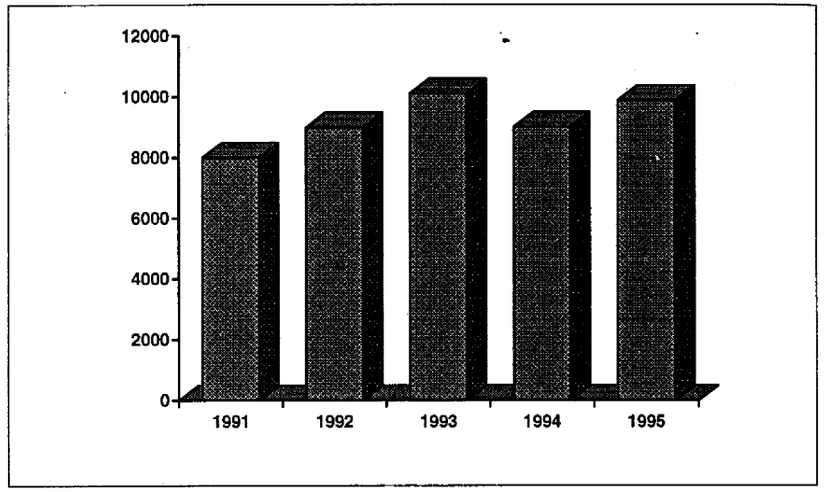
5.2.2 IV Drug Use

Details are not available on specific characteristics of injectors but a case reported by an Outreach Assistant on a regular injector gives a 'snap shot' of them; it is as follows. The drug injector had needle marks in his body which confirmed his drug injecting career. According to him, he could cut down on his heroin costs from Rs. 600 to 200 per day (i.e. by about 75%) by resorting to injecting heroin. He had revealed that he used to go to a heroin injecting "doctor" in his area for his shots. However, after some time he had stopped going to the "doctor" because he was cheated - the "doctor" had given only half the dose for the price of one. Presently he injects the drug on his own. "....a packet of heroin would be emptied into a spoon, dissolved by adding some water and a bit of lime juice. Then, it would be boiled in the spoon with a flame. The contents of the spoon will be sucked into a syringe through a unused cigarette filter. Using a staple around his arm, having located a vein (it would be confirmed by dragging some blood from the vein to the syringe) the drug is injected into the vein...".

5.2.3 Heroin Market

Heroin dealing in towns outside Colombo was apparently done by small scale traffickers who travel between Colombo and outstations. They supply heroin mostly to local street level pushers-cum-users who would generally resell the stock for a commission of 1-2 packets of heroin for every 25-30 packets sold. The traffickers use buses, night train or sometimes 'three wheelers' from Colombo to transport heroin with them.

Exhibit 9 : Number Of Persons Arrested For Heroin Related Offenses From 1991 To 1995



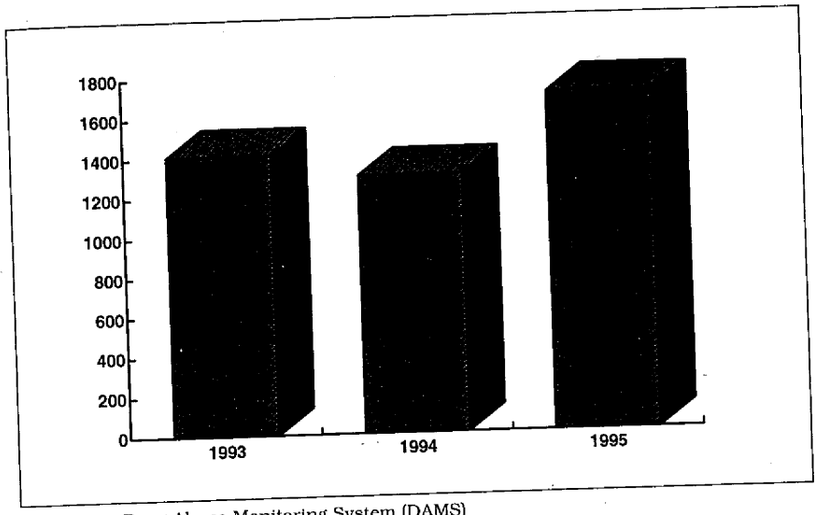
5.2.4 Heroin Use In Colombo

Colombo city and its suburbs reported the highest number of heroin users. Many heroin users from Colombo come from "garden"s (shanty/slum areas) and densely populated lanes who are generally considered as "poor" by the main-stream of the society. However, many of the users earned between Rs. 200-400 a day as wages during the period under review. Many worked in the informal sector of the city's work force and their employments were generally seasonal. The profile of the heroin users in Colombo more or less fit their counterparts in other towns as well.

5.2.5 Treatment

Heroin dependents in the country sought a variety of treatments. These treatments ranged from popular inpatient detoxification and rehabilitation at NDDCB treatment centers, out patient treatment from Allopathic medical practitioners, Homeopathic treatment, Ayurvedic treatment, self medication by drugs obtained from pharmacies and other outlets, seeking spiritual help from religion, deities based treatment, making vows at various places of worship, and changing their place of residence. Some heroin dependents had taken treatment at psychiatric wards without identifying themselves as heroin users. It was reported that in Anuradhapura three heroin users had attempted to commit suicide.

Exhibit 10 : Admission For Treatment By Heroin Dependents From 1993 To 1995



Source: Drug Abuse Monitoring System (DAMS)

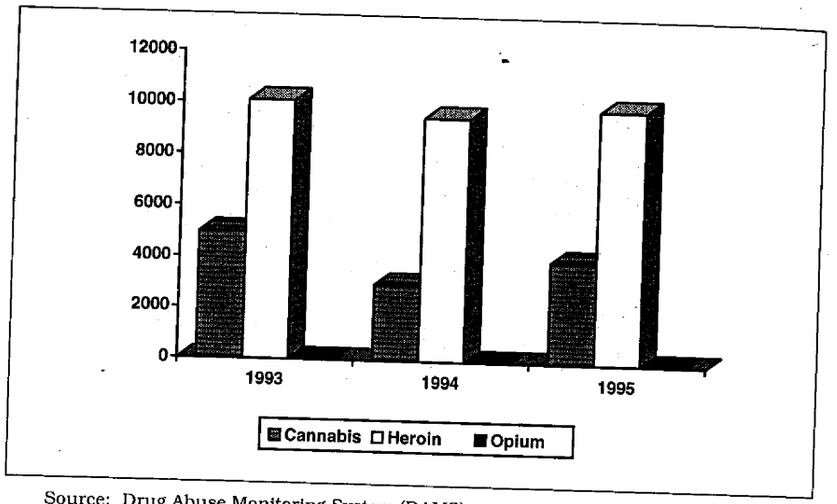
5.2.6 Attitudes/Practices

Most of the drug dependents and their families were in the belief that alcohol is "safer" than heroin. It was not uncommon for a mother, wife or a family member of a heroin dependent to yell at him "why don't you stop that 'kudu gehima' (meaning stop taking heroin) and take some arrack instead".

5.3 Opium

Opium abuse has taken a downward trend with the dawn of the 1980s. However, opium continues to be available and abused in Sri Lanka over a long period of time. The abuser obtains his requirement from the stocks of opium which are imported for medicinal purposes, or from the stocks which are illegally brought into the country.

Exhibit 11 : Number Of Persons Arrested For Drug Related Offenses From 1993 To 1995



Source: Drug Abuse Monitoring System (DAMS)

5.4 Psychotropic Substances

Flunitrazepam, Mandrax, Diazepam, Codeine, Methadone, Amphetamine, Valium, and Rohypnol were the widely abused psychotropic substances during the year. According to the reports, some pharmacies in Colombo and outstations sold most of these substances over the counter for drug dependents charging high prices. There were occasions reported that some tablets were given free with heroin to enhance the effect of heroin. Further more, unofficial reports confirmed the occasional use of Ecstasy by a certain group of youths as in the previous year.

DRUG ABUSE SITUATION IN VIENTIANE MUNICIPALITY

Narcotics And Poisons Division
Food And Drug Department, Ministry Of Health
Lao People Democratic Republic

1. AREA DESCRIPTION

Lao People Democratic Republic (PDR) consists of 17 provinces and 1 special region, 133 districts, 11,795 villages and has a land area of 236,800 square kilometers. The 1995 census estimated a population of 4,605 millions. The main ethnic groups, are Laoloum (Lowland Lao), Laosoung (Highland Lao) and Laoteung (Upland Lao).

The capital city of Vientiane has an area of 3,920 square kilometers with estimated population of 531,800 (in 1995 census) or approximately 11.5 percent of the total population of Lao PDR. In 1995, the age group distribution were 197,605 persons (37.15 %) in the 0 - 14 year age bracket, 298,157 persons (56.06%) in the 15 - 60 year age bracket and 36,038 persons (6.77%) in 61 and over year age bracket.

2. SOURCES OF DATA

Data collection is centralized at the Lao National Commission for Drug Control (LCDC) and Supervision which is a task force composed of representatives from various ministries and institutions. This organization has very limited operational resources, to carry out data collection and analysis, it has to deal with the National Statistics Center, Hygiene and Epidemiology Institute, health care agencies, and Narcotics Control Unit, Ministry of Interior. Besides this some line ministries carried out their own sampling survey related to glue sniffing, cannabis consumption, for demand reduction purposes. These data are collected, analyzed, and filed at LCDC.

3. CURRENT DRUG ABUSE SITUATION IN VIENTIANE MUNICIPALITY

3.1 Number Of Addicts Identified

According to a study of drug use in June and July 1996 in 4 metropolitan districts of Vientiane Municipality, the major drugs of abuse among young people (age under 20) are glue sniffing and alcohol. It is estimated that there are approximately 1,100 glue sniffers and many are school drop-outs, 13 opium addicts, almost all are elderly and 27 cannabis smokers. The majority are unskilled and unemployed and come from poor families. There was reported 1 heroin user and other drug use was unknown **(Table 1).**

Table 1: The Number Of Drug Addicts In Vientiane Classified By Type Of Drugs

Type Of Drugs	Total
Opium	13
Cannabis	27
Volatile Substances	1,100

3.2 Drug Seizures And Arrests

According to Narcotics Control Unit's data, cannabis seizures showed a decline of 4,732.08 kg in 1995 throughout the country compared with the last 2 years, heroin seizures gradually increased to 49.65 kg in 1995, however opium seizures were the largest amount in 1995. Drug seizures in Vientiane in 1996 (April-June) were 5 cases, there were 3 cases of 40.8 kg of heroin seizures opium seizures were not reported in 1996 in Vientiane, cannabis seizure was 1 case and 1 case of morphine seizure **(Table 2).** A total of 17 arrests were made in Vientiane during April-June 1996, most were arrests for possession **(Table 3)**

Table 2: Seizures Of Drugs Throughout The Country In 1995 And In Vientiane Second Quarter 1996

	Lao 1995	Vientiane 2nd Q 1995	
Type of Drug	Amount Seized (kg)		No of cases
Morphine	0	8	1
Heroin	49.65	40.8	3
Opium	695.05	0	0
Cannabis	4,732.08	435	1

Table 3: Number Of Drug Arrests In Vientiane

Type Of Offense	Number Of Arrests
	2nd Q 1996
Use/consumption	0
Possession	11
Sales	0
Trafficking	6
Conspiracy	0
Others	0
Total	17

4. ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) AND HIV

According to the report of the National Institute of Hygiene and Epidemiology (NIHE) and National Committee for AIDS Control, the situation of AIDS and the number of AIDS patients and symptomatic HIV infected patients since 1 April to 30 June 1996 **(Table 4)** are as follows:

- There are 8 cases of symptomatic HIV infected patients, all are still alive.
- Only 3 are full blown AIDS patients, all are still alive.

According to the risk factors causing people to get AIDS or become the symptomatic HIV infected patients, sexual activity is the most important factor, there are no drug related HIV positive and AIDS cases.

Table 4: The Number Of Full Blown AIDS And HIV Positive Since 1995 And 1 April To 30 June 1996

	AIDS Patients			HIV Patients		
Survey Area	Total	Dying	Living	Total	Dying	Living
Vientiane 1995	4	4	0	31	0	31
Vientiane Mun.	3	0	3	8	0	8
Apr - Jun 1996 Total	7	4	3	39	0	39

DRUG ABUSE PATTERN AND PROBLEMS IN YANGON CITY UNION OF MYANMAR

Dr. Aung Thaw
Drug Dependency Treatment And Research Unit
Yangon, Myanmar

1. INTRODUCTION

Drug abuse is a chronic relapsing medical disorder which is measurable; it can be treated and more importantly be prevented. It is one of the major health problems in Myanmar. From 1974, till September 1996 there were 57,463 registered number of drug addicts in the Union of Myanmar, but the actual figures could be much higher.

Of this statistic, Yangon city the capital of Myanmar accounted for 9,198 drug addicts, all of them were registered in the Yangon Drug Dependency Treatment and Research Center which is the one and only specialized drug treatment as well as a research unit in Yangon.

2. DEMOGRAPHIC PROFILE

The Union of Myanmar is located in South East Asia. It is divided into 7 states and 7 divisions and is inhabited by 135 ethnic nationalities. The total area of the country is 676,577 square kilometers.

The total estimated population of Myanmar in 1995 - 1996 is 44.74 millions with 22.22 million males and 22.52 million females who outnumbered the males by a small margin. The total population of young people under 15 years is 15.03 millions, the working age group between 15 - 59 years is 26.34 millions. The population above 60 years of age is 3.37 millions.

Yangon is located in Yangon Division which has an area of 10,132 square kilometers. Yangon division has 42 townships with a total population of 4,410,727. There are approximately 48% males and 52% females. Yangon city is the most densely populated area in the division. The city area is 350 sq km with 31 townships and has a population of approximately 2.83 millions.

This report presents data on epidemiological studies covering patterns and drug abuse, problems in Yangon city from January to September 1996.

3. SOCIO-DEMOGRAPHIC CHARACTERISTICS

During the period January to September 1996, a total of 406 drug addict patients were admitted to Yangon Drug Dependency Treatment and Research Center. Out of them 185 patients were newly admitted and 221 were readmitted patients. This report focuses on newly admitted cases.

3.1 Age

Most of the addicts fell into the age group of 20 - 34 years (82%). There were 14 drug addicts between the age groups of 15 - 19 years (7.6%) and 18 persons in the age group of 35 - 44 years (9.8%). This shows that the most valuable and productive age group between 20 and 34 years were severely affected by abuse of illicit drugs and is a cause of concern for the government and the country. The remaining one addict was 46 years old (0.6%).

3.2 Sex

Out of 185 new patients there were only 3 females which constituted only 1.7% **(Table 1).**

3.3 Education

In Myanmar there are five categories of education; namely primary, middle, high school, higher education level which includes colleges, institutes, universities; and vocational training. It takes five years in primary education, four years in middle and two years in high school education after which the students enter the colleges, institutes and universities. Illiteracy rate was very low.

Among the drug addicts it was seen that majority were educated where they had 7 to 12 years of high school and higher education. They were 136 in number or 73.5%. Thirty (16.2%) drug addicts had university education or were graduates. By the time they became addicts most had left school. If they had not become drug dependents, they would have achieved higher education levels.

In this study, only two persons were found to be illiterate (1.1%). Seventeen addicts had 1 to 6 years of education and accounted for (9.2%). **(Table 1).**

3.4 Occupation

About nearly half the addicts who entered for detoxification were unemployed, and depended on their parents mostly. They had never worked. They were 43.2% or 80 in number. Most of their parents were well-to-do and the patients had obtained money for drugs easily. Another nearly half 46.5% or 86 addicts were employed. Mostly they were self employed in their parents'/family's business or had business of their own. Only a small percentage out of them were government employees.

Table 1: Sosio Demographic Characteristics Of Drug Addicts In Yangon City

Characteristics	No.	Percentage
Sex Of The Patients		
Male	182	98.3
Female	3	1.7
Age		
Under 15 years	Nil	-
15 - 19	14	7.6
20 - 34	152	82
35 - 44 years	18	9.8
45+ years	1	0.6
Marital Status		
Single	120	64.9
Married	59	31.9
Separated/Divorced	6	3.2
Occupation		
Employed	86	46.5
Unemployed	80	43.2
Students	19	10.3
Number Of Years Of Education		
Zero	2	1.1
1 - 6	17	9.2
7 - 12	136	73.5
13+	30	16.2
Number Of People In Household		
2 - 5	73	39.5
6 - 10	102	55.1
11+	10	5.4

Source: Drug Dependency Treatment and Research Unit (DDTRU)

Some lost their jobs through addiction or on discharge. But most remained in their previous occupations (where actual percentage figures could not be traced exactly) **(Table 1)**.

A small percentage of the addicts were students. They were 19 in number or 10.3%. Mostly their education had been interrupted when they became addicts. Most had to try hard with a keen interest and had to be supported by the parents or guardians strongly to continue their education when they were discharged from the hospital. A regular follow up OPD treatment was also necessary like others to support their continuation of their education **(Table 1).**

3.5 Marital Status

It is very important to observe the marital status of the addicts on admission. Majority of them were still single or unmarried which was 120 in number (64.9%). Fifty nine addicts (31.9%) were married and it was found that almost all of their wives supported the addicts to get detoxicated and managed to stop the habit of dependency. They used to come along with the patients to the hospital for regular visits supporting and encouraging them to work through treatment and on follow-up visits. Most of the spouses never abandoned their husband although addiction posed a problem to their marriage. Only a small number of the patients had separated or divorced (3.2%) **(Table 1)**.

3.6 Number Of People In Household

Myanmar families are extended ones. Most of the families of the addicts had 6 to 10 household members which accounted for 55.1% or 102 numbers. Ten addicts (5.4%) had 11 members in the family. Seventy three addicts (39.5%) had 2 to 5 members. As Myanmar families are closed units they used to help the addicts to get off the dependency habits even when they found out. Mostly they never abandoned the family member addicts **(Table 1)**.

4. TYPES OF DRUGS USED

Heroin was the drug mostly abused by the addicts who entered the Drug Dependency Treatment Unit. Heroin abusers were 93.5% or 173 out of the total 185 addicts. Marijuana was used by 8 persons (4.3%). Opium dependency was seen only in 3 persons (1.6%). And only one took codeine containing cough syrup (0.6%) **(Table 2)**.

These were the primary drug of abuse on admission.

The was no report of cocaine, hallucinogens or amphetamines abuse till the period of study although amphetamine seizures were mentioned in the newspapers.

Table 2: Number Of Patients By Primary Drug Of Abuse

Type Of Drug Of Primary Abuse	N	Percent
Heroin	173	93.5
Marijuana	8	4.3
Opium	3	1.6
Codeine	1	0.6

Source: Drug Dependency Treatment and Research Unit

5. ROUTE OF ADMINISTRATION

Among the heroin users the common route was intravenous injection which gave way to high incidence of HIV infection and other complications through needle sharing habits. Intravenous injection represented 75.1% or 139 in number. Smoking of heroin was 18.4% or 34 in number. In Yangon sniffing and snorting were other methods practiced by the smokers.

Opium (or) tincture opium was taken orally and accounted for only 1.6%. Marijuana was usually mixed in cheroots with tobacco powder and smoked by the addicts; it accounted for 4.3% or 8 patients.

Codeine containing cough syrup was taken orally (0.6%) only **(Table 3)**.

Table 3: Route Of Administration

Drug	Injection		Smoking		Oral	
	N	Percent	N	Percent	N	Percent
Heroin	139	75.1	34	18.4		
Opium					3	1.6
Marijuana			8	4.3		
Codeine					1	0.6

Source: Drug Dependency Treatment and Research Unit

6. DRUG RELATED PROBLEMS

6.1 HIV Infection

For the whole country of Myanmar the HIV positive rate among intravenous users has steadily increased from 65.1% in March 1995, 62.7% in Sept. 1995 to 66.5% in March 1996.

But in the Yangon city it was 54% in March 1996, 56% in March 1995 and 47% in September 1995. This showed that the percentage hasn't changed markedly if averages were taken for each year **(Table 4)**.

Table 4: Comparison Of Average Biannual HIV Positive Percentage Among IDUs In Yangon City

Year	No. Of Cases Examined	No. Positive	Average Biannual HIV (+) Ve %
1992	186	123	66.1
1993	222	156	70.3
1994	200	115	57.5
1995	200	103	51.5
1996 (March)	100	100	54

Source: AIDS Prevention And Control Project, Department Of Health

Data on seropositivity percentages obtained from the sentinel surveillance data for the period Sept. 1995 to March 1996 show an increasing rate in HIV infection among commercial sex workers (CSWs) but it was rather stagnant among injecting drug users (IDUs) **(Table 5)**.

Table 5: Comparison Between HIV Positive, Percentage And Number Of Cases Examined Between September 1995 And March 1996 For Sentinel Surveillance

Population Group Examined	September 1995				March 1996			
	Sites	No. Examined	No. Positive	Sero-Positive Percent	Sites	No. Examined	No. Positive	Sero-Positive Percent
IDUs	6	475	298	62.7	6	388	258	66.5
CSWs	2	202	37	18.3	2	200	43	21.5
Male STD	19	1,812	119	6.6	18	1,634	126	7.7
Female STD	7	649	37	5.7	7	627	27	4.0

Source: AIDS Prevention And Control Project, Department Of Health.

6.2 Overdose Cases

Overdose cases were hard to trace exactly. The information obtained during this 9 months period showed there were 8 cases of reported overdose. Out of them 3 had died before reaching hospital. The other 5 cases had survived through intensive and immediate treatment in hospitals.

6.3 Other Complications

6.3.1 Psychosis

This was seen mostly in marijuana addicts who had used the drugs for a number of years. There were four cases of marijuana psychosis. Psychosis was also found among three of the heroin addicts.

6.3.2 Septicemia, Endocarditis, Pulmonary Tuberculosis And Viral Hepatitis

There were some cases of these complications but the exact number could not be traced.

7. TREATMENT AND REHABILITATION

Newly admitted drug addicts are entitled to stay in the hospital for 2 months while they are undergoing detoxification and rehabilitation. Readmitted patients (relapse) have to stay for 3 months. The detoxification method mostly used by the Drug Dependency Treatment Center was routine systematic treatment which includes substituting opiates with tincture opium in tailing dose within 10 to 14 days. Other symptoms and complaints are dealt with accordingly.

Rehabilitation methods include vocational training, gymnastics, gardening, agriculture, live stock breeding, which may take more than 2 months. Peer education, counseling and meditation are also practiced. Regular follow-up treatments are compulsory after discharge.

8. LAW ENFORCEMENT

The State Law and Order Restoration Council of Myanmar has enacted the 1993 Narcotic Drugs and Psychotropic Substances law, amending the 1974 Narcotics and Dangerous Drugs Act law.

Two strategies were laid down by the law for control and prevention of narcotics and psychotropic substances, abuse and their problems. The first is to combat the problem with national and international outlook and the second is to eradicate poppy plantation with development programs for national races.

According to the new law, the Central Committee for Drug Abuse Control (CCDAC), Ministry of Home Affairs is responsible for various tasks, plans, strategies, programmes, with regional and local cooperation concerning the prevention and control of drug problems. Supply reduction and demand reduction are the two main objectives which the CCDAC is now addressing in cooperation with regional and international working sectors.

8.1 Measures Taken by Law Enforcement

All the measures are jointly taken by the Military, Myanmar Police Force and Customs Department.

8.1.1 Drugs Seized

The following is a list of narcotic drugs and psychotropic substances seized by military, police forces and Customs Department from 18 September 1988 to 31 May 1996.

Opium	14,185.743	kgs
Morphine	126.200	kgs
Heroin	1,900.3572	kgs
Opium Oil	59.8777	kgs
Liquid Opium	91.735 kgs	& 215.00 gallons
Marijuana	5806.4009	kgs
Phensedyl	30,940.477	litters
Opium Powder	220.600	kgs
Cough Syrup with drug characteristics	456.15	litters
Acetic Anhydride	9,881.68	kgs
Other Chemicals	1,135.00	gallons

8.1.2 Destruction Of Drugs By National Races

The following drugs were destroyed by duty-conscious national races on 15 occasions.

Opium	328.913	kgs
Morphine	379.5529	kgs
Heroin	181.00	kgs
Phensedyl	689.750	litters
Acetic Anhydride	2,005.00	gallons
Poppy Plantation	7,736.000	acres
Refinery	21	units
Hydrochloric Acid	218.87	gals
Sulphuric Acid	135.5	gals
Used Chemical compound	15.80	gals
Lysol	62.99	gals
Chloroform	280.00	gals
Ammonium Chloride	1,286.32	kgs
Sodium Carbonate	2,600.00	kgs
Animal Charcoal	500.00	kgs

Source: Central Committee for Drug Abuse Control

8.1.3 *Seizures Of Amphetamine Tablets And Precursor Chemicals*

Date Seized	Amount
19.02.1996	2,700 tablets
04.04.1996	1 barrel of precursor
18.04.1996	15 barrels of precursor
26.04.1996	3 bags of chemical

Source: Central Committee for Drug Abuse Control

8.1.4 *Drug Offenders Arrested By The Police From January To September 1996*

January to September 1996	Monthly	Quarterly	Total
1st quarter			
January	95		
February	113		
March	146	354	
2nd quarter			
April	136		
May	176		
June	185	497	
3rd quarter			
July	176		
August	181		
September	154	511	1,362

Source: Drug Dependency Treatment and Research Unit

Table 6: Age Specific Seropositivity Rates (%) Among "High Risk Behaviour" Sentinel Population (All Sentinel Sites), March 1996

	Sentinel					Population		
Age (years)	IDUs Exam.	+ ve (%)	Male STD Exam.	+ ve (%)	Female STD Exam.	+ ve (%)	CSWs Exam.	+ ve (%)
0 - 4	-	-	-	-	-	-	-	-
5 - 9	-	-	-	-	-	-	-	-
10 - 14	-	-	-	-	-	-	-	-
15 - 19	17	11 (64.7)	166	4 (2.4)	74	4 (5.4)	55	18 (32.7)
20 - 24	89	49 (55.1)	377	33 (8.8)	146	4 (2.7)	58	13 (22.4)
25 - 29	131	79 (60.3)	404	43 (10.6)	151	7 (4.6)	42	7 (16.7)
30 - 34	65	50 (76.9)	293	24 (8.2)	107	5 (4.7)	23	3 (13.0)
35 - 39	55	41 (74.5)	182	17 (9.3)	95	4 (4.2)	15	2 (13.3)
40 - 44	26	25 (96.2)	114	3 (2.6)	38	3 (7.9)	5	0 (0.0)
45 - 49	4	2 (50.0)	41	2 (4.9)	34	0 (0.0)	-	-
50 &	1	1 (100)	43	0 (0.0)	16	0 (0.0)	2	0 (0.0)
Unknown	-	-	14	0 (0.0)	11	0 (0.0)	-	-
Total	388	258 (66.5)	1,634	126 (7.7)	672	27 (4.0)	200	43 (21.5)

Source: AIDS Prevention And Control Project, Department Of Health.

DATA SOURCES AND TIME PERIOD

- Data with regard to amount of seized drugs was collected from Central Committee for Drug Abuse Control (CCDAC) Ministry of Home Affairs.
- Sentinel surveillance results (1995, 1996) by AIDS Prevention and Control Project, Department of Health.
- Hospital data from Drug Dependency Treatment and Research Unit (DDTRU).
- Time period: January 1996 to September 1996.

Table 7: Quarterly Figures Of New And Readmitted Patients In Yangon Drug Treatment Center In 1995 And 1996

Month	1995			1996		
(Quarterly)	New Admission	Re-admission	Total	New Admission	Re-admission	Total
Jan - Mac	66	86	152	59	61	120
Apr - Jun	83	125	208	58	88	146
Jul -Sep	81	78	159	68	72	140
Oct - Dec	87	80	167			
TOTAL		686			406	

Source: Drug Dependency Treatment and Research Unit

Table 8: Drug Offenders Arrested By Police From January To September 1996 In Yangon City (Quarterly Figures)

1996	Male	Female	Total
1st Quarter	83	12	95
January	103	10	113
February	129	17	146
March			
2nd Quarter	123	13	136
April	148	28	176
May	162	23	185
June			
3rd Quarter	161	15	176
July	157	24	181
August	143	11	154
September			
TOTAL			1,362

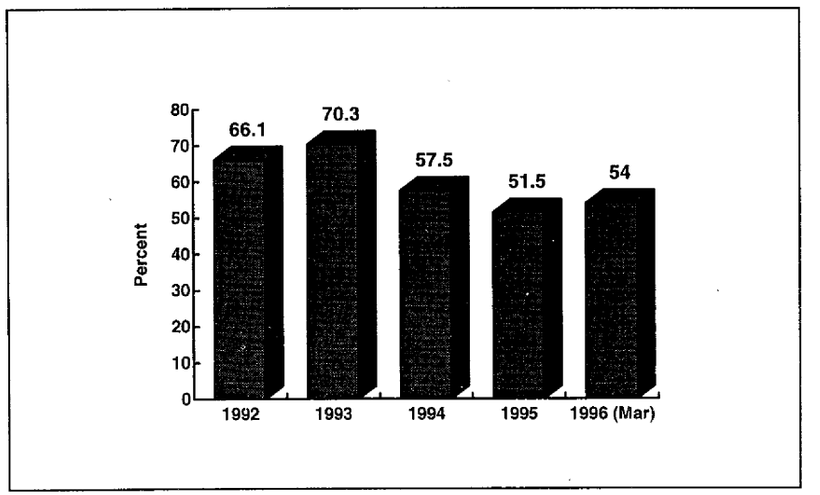
Source: Drug Dependency Treatment and Research Unit

Table 9: Comparison Of Patients Admitted To Yangon Drug Treatment Center And Drug Offenders Arrested From 1991 To 1996

	1991	1992	1993	1994	1995	1996 (Jan-Sept)
New Patient	362	416	291	424	317	185
Readmitted Patients	425	602	436	421	369	221
Total	787	1018	727	845	686	406
Offenders Arrested	2,742	2,331	2,051	1,927	1,751	1,362

Source: Drug Dependency Treatment and Research Unit

Chart 1: Average Biannual (%) HIV Infection Among IDUs In Yangon City From 1992 To 1996 (March)



Source: AIDS Prevention And Control, Health Department

PART 2: SECTION TWO

REGIONAL REPORTS
(January 1994 - September 1996)

A COMPARISON OF DRUG ABUSE PATTERNS OF SELECTED EAST ASIAN CITIES JANUARY 1995 - JUNE 1996

Center for Drug Research
Universiti Sains Malaysia

ABSTRACT

Drug treatment and law enforcement data are collected using a standardized instrument in six East Asian cities: Bangkok, Kuala Lumpur, Manila, Hanoi, Yangon and Phnom Penh. Information from treatment sources indicated significant variations in drug abuse patterns between these cities. Heroin was the most widely used illicit substance among clients admitted for treatment and rehabilitation in Bangkok, Kuala Lumpur and Yangon. In Hanoi, opium use was the predominant problem. Polydrug abuse of amphetamines, alcohol, cannabis and cough syrups was widespread in Manila. Injecting drug use was common in Bangkok, Yangon and Hanoi. In Kuala Lumpur smoking or 'chasing the dragon' was the main route of drug administration. There are some variations in the socio-demographic profile of drug dependents contacted by treatment agencies between the cities. The number and rate of drug-related arrests varied between the six cities. Differences in the types and quantity of drugs that were seized were also observed.

1. METHOD

Using a standardized instrument, members of the Asian Multicity Epidemiology Work Group collected information on a number of epidemiological indicators. These include drug treatment and law enforcement data, drug-related health and social indicators. These data are monitored on a quarterly basis.

2. DATA SOURCES AND TIME PERIODS

The number of quarterly reports received from participating cities varied. Manila and Kuala Lumpur had provided the most up to date reporting (July 1992 - June 1996). Bangkok had reported data from 1992 to December 1995. Hanoi had submitted annual figures from January 1994 to June 1996. In the case of Yangon information was available for 1994 and 1995. Phnom Penh had reported only some law enforcement data for the months of June and December 1995.

Data sources varied between these six cities. Kuala Lumpur reported aggregated data on all drug dependents who were contacted by governmental agencies (i.e. police, prison, treatment centers, etc.) for the first time over the reporting period. These data are obtained from the National Drug Information System. The sources of information on treatment indicators of the other cities include both specialized drug treatment facilities and primary or general health facilities (in the case of Bangkok and Hanoi). In Bangkok, treatment data are collected from four specialized drug treatment centers and 34 primary/general health care facilities. Treatment data from Manila are available from 9 of the 13 drug treatment centers operating in the city. There is one drug treatment and rehabilitation center and four primary/general health care facilities in

Hanoi. Treatment data are reported by all of these sources. Yangon has only one specialized drug treatment center.

Data on law enforcement indicators were obtained from law enforcement agencies such as the police and prisons. Comparability of the nature of drug abuse between the cities was limited due to variation in sources of information and the types of cases from which data on treatment indicators were collected (i.e. new or first admissions, or total, which included both new and readmissions). Nonetheless the use of a standardized data collection instrument had facilitated the collection of data of selected core drug abuse indicators. Inspite of these differences some common features, as well as city variations could be inferred from the available information.

This paper presents a comparison of the socio-demographic profile and drug abuse patterns of drug dependents admitted for drug treatment in the six cities. The reporting period from which data were analyzed varied between the cities: Bangkok (January - December 1995), Kuala Lumpur (July 1995 - June 1996), Manila (July 1995 - June 1996), Hanoi (January - December 1995)and Yangon (January - December 1995). Law enforcement data that were reported by the cities for the same period are also described.

3. DEMOGRAPHIC CHARACTERISTICS OF CITIES

A comparison of selected demographic features of the cities is presented in **Exhibit 1**. Census data that are available are outdated for most of the cities. Bangkok has the largest population size of about six million followed by Yangon (2.5 million) and Hanoi (2.2 million). Both Manila and Kuala Lumpur have less than two million people. The proportion of male and female is almost similar within each city. There are variations in the distribution of age groups between the cities. For example, Hanoi and Bangkok have a larger proportion of the population who are above thirty four years of age. Both Kuala Lumpur and Manila have a relatively younger population. This is indicated by the larger proportion of people who are below twenty years of age. There are vast differences in the distribution of marital status of the city populations. Hanoi has a larger percentage who are married. The cities of Manila, Kuala Lumpur and Yangon have a larger proportion of people who are single. The number of people in the household varies between the cities where data are available. Bangkok and Hanoi have comparatively smaller household sizes. Comparison of the levels of education of the city populations is limited by the variation in categories that are used by the cities.

4. CROSS-CITY COMPARISON

4.1 Total Number Of Drug Treatment Admissions

The sources of data varied between the cities. Kuala Lumpur had reports of all drug dependents identified by both treatment and law enforcement agencies. No distinction was made between the two categories. Since most of the newly identified drug dependents are channeled into some form of treatment facilities in Malaysia because of mandatory treatment, reports are thus basically reflective of the treatment population. In the case of the other cities, information was obtained from treatment admissions. The number and capacity of treatment facilities available within each city differs. This is indicated by the substantial variation in total number of treatment admissions between the cities.

In 1995 a total of 24,519 persons were admitted into treatment, (17,790 or 72.6% in specialized drug treatment facilities and 6,129 or 27.4% in primary or general health care) in Bangkok. Of the total treatment admissions, 32.6% were new and the rest were readmissions. In 1992 and 1993, a total of 12,455 and 15,423 individuals were admitted for drug treatment, respectively. There was a marked increase in total admissions in 1994 (n = 25,551) and 1995 compared to the two previous years.

From January to December 1995, a total of 1,955 new drug dependents were detected for the first time in Kuala Lumpur. Another 815 new cases were detected for the first half of 1996.

In Manila, a total of 288 new treatment admissions were recorded for period January to December 1995. A further 89 new cases were admitted in the first half of 1996.

A total of 149 drug dependents were admitted into drug treatment facilities in Hanoi for the first half of 1995. In the second half of 1995, 584 drug dependents were treated, significantly higher than the first six months. A three fold increase in treatment admissions was recorded for the first half of 1996 (i.e. 1951 cases), out of which 90% were readmitted cases. A majority of the cases were reports from the community based treatment facilities. Since a gross figure was reported, there was no breakdown by quarters.

In Yangon an aggregated total of 843 drug dependents were treated in 1994 of which 422 (or 50%) were new admissions. A slight decline in total admissions were reported in 1,995, i.e. 686 cases.

4.2 Patient Socio-Demographic Characteristics

More than 95% of the clients admitted for treatment, with the exception of Manila (90.8%), were male (**Exhibit 2**). This is suggestive of the severity of the drug abuse problem among the male population in all the cities. It must also be noted that the extent of the problem among females may not be reflected here because the existing treatment facilities in most of the cities are mainly for male drug dependents.

A comparison of the other characteristics of drug abusers among the cities indicated a rather wide variation, particularly with regard to employment status, the level of education and marital status. Most of the clients from all cities (except Hanoi) who were admitted for treatment were between the ages of 20 and 34. Hanoi and Manila have a larger percentage of teenagers who were admitted into treatment (26% and 41.6%, respectively) when compared to the other cities. Hanoi also recorded the highest percentage of patients who were thirty five and above years of age (48.5%). Overall the age distribution of the drug abusers contacted within each city differed from that of the general population of the city. Comparing these two age group categories it is evident that the reported age-specific incidence rates of drug abuse cases is significantly higher among those between twenty and thirty four years of age when compared to the other age categories.

The distribution of employment status differed significantly between the five cities. Kuala Lumpur and Manila have the largest percentage of patients who were employed (91.3% and 67.0%, respectively) prior to entry into treatment. Hanoi (58.0%) and Yangon (48.6%) reported a larger percentage of unemployed. A small percentage of clients that were reported from all cities (except Kuala Lumpur) were students.

Information on years of educational attainment revealed that a majority of drug abusers who were treated in most of the cities had between six and twelve years of education. Hanoi has a larger proportion (40.4%) of those who had less than six years of education. Manila has the highest percentage (38.0%) of patients who had more than twelve years of education. A majority of the drug abusers from each city were unmarried.

The differences in the background characteristics of drug abusers is an indication of the types of drug abusers that were contacted by treatment facilities or other governmental agencies in each city. They may or may not represent the general drug abuser population within each city.

4.3 Pattern Of Drug Use

Opiate type drugs were widely abused in all cities with the exception of Manila (**Exhibit 3**). Heroin was the primary opiate and drug of abuse among drug dependents who were contacted by treatment facilities in Bangkok (97.2%), Kuala Lumpur (64.5%) and Yangon (90.2%). A variety of opiates were abused among treatment admissions in Hanoi. Opium use was predominant with 61.6% who have reported its use. Opium addiction, however, is rare in the other cities. Only Yangon reported a larger percentage (5.4%). Reports on morphine abuse was mainly from Hanoi (6.7%).

Cannabis abuse among treatment admissions is widespread in Manila (33.2%). The abuse of cannabis was also observed in Kuala Lumpur (33.3%), Bangkok (0.6%) and Yangon (3.5%).

Manila is the only city which recorded a highly varied pattern of drug abuse. A variety of other non-opiate drugs were abused. Amphetamines was top on the list with 87.5%, of patients reporting its use, followed by alcohol (48.9%) and cough syrups (25.1%). Solvents (3.7%) were also abused, but to a much lesser extent. Other (12.5%) types of drugs such as benzodiazepines and analgesics were also abused. Polydrug use was widespread with 76.8% of patients who had reported such a feature of use.

The mode of drug administration varied substantially among the cities where heroin was the primary drug of abuse. Smoking or 'chasing the dragon' was the most common route of administration in Kuala Lumpur (83.2% of patients) with a lesser extent in Bangkok (35.3%), Hanoi (47.6%) and Yangon (21.0%). Injecting drug use was the main feature in Bangkok (62.1%), Hanoi (52.0%) and Yangon (73.0%). Only 14.1% of patients in Kuala Lumpur reported injecting use. Data on route of administration was not collected in Manila.

Street sales was the primary source of drugs in all the cities where information was available.

4.4 Drug-Related Offenses

Law enforcement indicators such as drug seizures and drug-related arrests are influenced by enforcement priorities, availability of resources as well as policy. Thus changes in these indicators may be a result of changes in the above factors rather than real changes in the extent of the problem. The total number and rate per 100,000 of persons arrested for drug-related offenses varied substantially between the cities. These

differences may be a reflection of the extent of police activity or law enforcement in each city. The wider policy and legal aspects associated with drug abuse may also be influencing factors.

Bangkok has the highest number (46,117) and rate (783.98 per 100,000 population) of arrests for drug-related offenses when compared to the other cities (**Exhibit 4**). Among the rest of the cities, Yangon and Kuala Lumpur recorded much higher rates (69.68 and 87.9 per 100,000 population respectively). Manila, Hanoi and Phnom Penh reported the lowest figures, i.e. 33.85, 38.09 and 16.16 respectively. Variation in duration of reporting should be considered when comparing the rates.

The types of drug-related offenses also differed greatly between the cities. Arrests for use/consumption is the most predominant form of offense in the cities of Bangkok (59.2%); Manila (61.1%), Yangon (100%) and Kuala Lumpur (40.1%). Arrests for possession is more common in Hanoi (58.3%) and Bangkok (35.6%), Kuala Lumpur (18.7%) and Manila (10.5%). In the other two cities (Yangon and Phnom Penh) no arrests were made for drug possession and sales. In Phnom Penh all drug-related offenses were for drug trafficking. Kuala Lumpur had reported a sizeable percentage (17.7%) of arrests for sale of drugs.

4.5 Drug Seizures

The types and quantity of drugs that were seized varied between the cities. A wider range of drugs were seized in Bangkok between January 1994 to December 1995. They include 7.99 kilograms of opium, 399.61 kilograms of morphine and 1,115.24 kilograms of cannabis, 215.89 kilograms of amphetamines, 221.91 kilograms of solvents, 0.37 kilogram of psychotropic drugs and 18.99 kilograms of kratom plants. In Kuala Lumpur 51.79 kilograms of opiates, 172.92 kilograms of cannabis and 7,412 psychotropic pills were seized between July 1995 and June 1996. Cannabis (254.40 kilograms) and amphetamines (14.36 kilograms) were seized in Manila over the same period (**Exhibit 4**).

In Hanoi 48.77 kilograms of opium, 2.25 kilograms of heroin and 69,000 pills of psychotropic substances were seized between July 1995 and June 1996. Yangon and Phnom Penh had reported cannabis seizures of 61.63 and 1,585 kilograms, respectively. Phnom Penh also reported sizeable amounts of opium and heroin seizures.

4.6 Health And Social Indicators

Information on these indicators was incomplete in most of the cities. Drug-related HIV cases were reported by Bangkok, Yangon and Manila. In Bangkok, a total of 1,693 HIV cases and 3,023 AIDS cases were detected over the period September 1984 to December 1995. About 20% of these HIV/AIDS cases were drug-related. In Yangon, 115 drug-related HIV cases were detected in 1994. There were also reports of 79 drug-related psychological cases and 4 drug-related deaths. By December 1995, Hanoi recorded a total of 29 HIV/AIDS cases, out of which 14 were drug injectors. So far there were only two AIDS deaths. Manila had reported 211 drug-related psychological cases for the period July 1995 to June 1996 and 70 emergency room cases. No new HIV/AIDS cases were reported over the same period. In Phnom Penh, 1,225 HIV positive and AIDS cases were detected by June 1995. Two of these cases were drug-related. Another 3 cases of deaths were also reported.

Exhibit 1

A Comparison Of Selected City Demographic Indicators

INDICATORS	BANGKOK 1990	KUALA LUMPUR 1991	MANILA 1991	HANOI 1989	YANGON 1994	PHNOM PENH 1995
TOTAL POPULATION OF CITY/METROPOLITAN	5,882,411	1,145,075	1,876,195	2,255,000	2,513,023	823,103
	%	%	%	%	%	%
SEX						
MALE	48.1	51.0	47.8	49.0	50.2	49.3
FEMALE	51.9	49.0	52.2	51.0	49.8	50.7
AGE						
< 15	21.5	36.8	43.4	31.0	33.6	
15 - 19	11.3	13.2	10.1	10.1	12.1	(<18) 44.4
20 - 34	36.2	37.5	22.9	25.3	26.9	
> 34	31.0	12.5	23.6	33.6	27.4	(>18) 55.6
NO. OF PEOPLE IN HOUSEHOLD						
1	7.9		3.0	6.2		
2-5	68.0	NA	41.7	71.5	NA	NA
6-10	22.2		48.2	(6-9) 21.5		
11+	1.8		7.1	(9+) 0.8		
NUMBER OF YEARS OF EDUCATION						
0	6.7	24.7		(0) 9.5	(0) 19.2	
1-6	46.2	34.2	(0-6) 65.9	(1-5) 39.0	(1-4) 34.7	
7 -12	29.4	37.5	21.9	(6-9) 31.5	(5-8) 28.8	
>12	17.6	3.6	11.9	(10-12) 10.5	(9-10) 11.3	
				(12+) 9.5	(10+) 5.9	
MARITAL STATUS						
SINGLE	45.8	50.6	44.8	32.0	46.8	
SEPARATED	2.6	0.8	0.5	1.3	1.6	
MARRIED	47.4	44.8	50.6	61.0	45.6	NA
WIDOWED	3.9	3.8	4.0	5.1	5.1	
OTHERS	0.3	0.0	0.1	0.4	0.9	

NA - Not Available

Exhibit 2

Demographic Characteristics of Drug Abusers Admitted For Treatment By Cities

CHARACTERISTIC	BANGKOK Jan - Dec 95	KUALA LUMPUR Jul 95 - Jun 96	MANILA Jul 95 - Jun 96	HANOI Jul 95 - Jun 96	YANGON Jan - Dec 95
	N = 24,519 Total	N = 5,502 New	N = 308 New	N= 2,535 Total	N = 317 New
	%	%	%	%	%
SEX OF PATIENT					
MALE	95.9	96.2	90.8	99.0	98.7
FEMALE	4.1	3.8	9.2	1.0	1.3
PATIENT AGE					
< 15	0.3	1.1	3.1	1.8	-
15 - 19	20.8	15.9	25.9	41.6	12.0
20 - 34	50.3	66.5	57.5	8.1	81.4
> 34	28.5	16.4	13.5	48.5	6.6
PATIENT EMPLOYMENT STATUS					
EMPLOYED	56.9	91.3	67.0	32.6	41.9
UNEMPLOYED	31.7	8.7	26.9	58.0	48.6
STUDENTS	11.4	-	6.1	9.4	9.5
NUMBER OF YEARS OF EDUCATION					
< 6	34.2	26.4	9.6	40.4	9.5
6-12	60.9	70.5	52.1	52.9	76.0
> 12	3.8	0.6	38.0	2.2	13.9
0	1.1	2.6	0.3	4.5	0.6
PATIENT MARITAL STATUS					
SINGLE	65.6	NA	57.9	75.3	64.4
SEPARATED	5.3	NA	3.9	0.7	0.6
MARRIED	25.7	NA	27.0	24.0	35.0
WIDOWED	3.4	NA	3.5	0.0	-
LIVE-IN	-	NA	7.7	0.0	-

NA - Not Available

Exhibit 3

Types of Drugs Abused, Route Of Drug Administration And Drug Sources By Cities

CHARACTERISTIC	BANGKOK Jan - Dec 95	KUALA LUMPUR Jul 95 - Jun 96	MANILA Jul 95 - Jun 96	HANOI Jul 95 - Jun 96	YANGON Jan - Dec 95
	N = 24,519 %	N = 1,989 %	N = 308 %	N = 2,535 %	N = 317 %
PRIMARY DRUG OF ABUSE					
OPIATE TYPE					
OPIUM	0.19	0.11	2.26	61.64	5.40
MORPHINE	-	1.45	-	6.68	-
HEROIN	97.16	64.49	-	28.85	90.20
OTHERS	-	-	-	0.77	-
CANNABIS TYPE	0.56	33.26	33.17	-	3.50
COCAINE TYPE	0.01	-	0.29	-	-
HALLUCINOGENS	-	0.51	-	-	-
AMPHETAMINES	0.76	-	87.51	-	-
SOLVENTS	1.04	-	3.68	-	-
ALCOHOL	0.02	-	48.89	-	-
COUGH SYRUPICS	-	-	25.06	-	-
MINOR TRANQUILISERS	1.04	-	-	-	-
OTHER PSYCHOTROPICS	0.08	0.18	12.53	2.05	0.90
POLY-DRUG USERS	7.43	-	76.75	-	-
ROUTE OF ADMINISTRATION					
INHALATION	-	-		4.10	-
INJECTION	62.09	0.04		52.05	73.00
ORAL	0.45	14.09	NA	0.15	6.00
SMOKING/CHASING	35.28	2.58		47.62	21.00
SNIFFING	1.35	83.13		-	-
OTHER	0.81	0.09		0.18	-
DRUG SOURCES					
STREET SALES	NA	NA	72-81%	100.00	100.00
LEGAL PRESCRIPTION			2-6%%	-	-
DIVERSION OF PRESCRIPTION			3-12%	-	-
OTHERS			7-9%	-	-

Exhibit 4

Law Enforcement Indicators By Cities

INDICATORS	BANGKOK Jan - Dec 1995	KUALA LUMPUR Jul 95 - Jun 96	MANILA Jul 95 - Jun 96	HANOI Jul 95 - Jun 96	YANGON Jan - Dec 1995	PHNOM PENH Jan - Dec 1995
NO. OF PERSONS ARRESTED FOR DRUG-RELATED OFFENCES	46,117	1007	635	859	1751	133
RATE PER 100,000 POPULATION	783.98	87.94	33.85	38.09	69.68	16.16
ARRESTS FOR USE/CONSUMPTION	59.17	40.12	61.10	34.40	100.00	-
ARRESTS FOR POSSESSION	35.56	18.67	10.55	58.20	-	-
ARRESTS FOR SALES	5.05	17.68	-	-	-	-
ARRESTS FOR TRAFFICKING	0.14	23.54	28.35	7.40	-	100.00
OTHER DRUG-RELATED OFFENCES	0.08	-	-	-	-	-
QUANTITY OF DRUG SEIZED (KG)						
OPIATE-TYPE		71.66	-	-	-	-
OPIUM	7.99	-	-	-	0.80	40.90
HEROIN	-	-	-	48.77	4.42	75.00
MORHPINE	399.61	172.92	-	2.25	61.63	1,585.00
CANNABIS-TYPE	1,115.24	-	254.40	-	79.22	-
COCAINE-TYPE	-	-	0.50	-	-	2.15
AMPHETAMINE-TYPE	215.89	-	14.36	-	-	-
SOLVENTS/INHALANTS	221.91	-	-	-	-	(Lydocaine) 2.7
OTHER (Psychotropic Subs.)	0.37	7,412.00	-	69,000.00	-	-
KRATOM PLANT	18.99	-	-	-	-	-
PHENSEDYL (Litre)	-	-	-	-	0.25	-
COMETHAZINE	-	-	-	-	0.04	-
OTHERS	1.45	-	-	-	-	-

A COMPARISON OF DRUG ABUSE PATTERNS OF SELECTED SOUTH ASIAN CITIES JANUARY 1994 - JUNE 1996

Center For Drug Research
Universiti Sains Malaysia

1. DEMOGRAPHIC CHARACTERISTICS OF CITIES (EXHIBIT 1)

1.1 Population

The population data from each city varies by year. New Delhi has the largest population size of 9.4 million (in 1991) followed by Madras (3.8 million in 1991), and Dhaka (3.4 million in 1991). Population data for Colombo and Islamabad were available as at 1981 only, 1.7 million and 1.2 million for the two cities respectively.

1.2 Gender

The proportion of males and females is almost similar among the five cities with slightly more males.

1.3 Age Groups

The age group distribution is not available for Madras and New Delhi. The distribution of age groups is rather similar for Colombo, Dhaka and Islamabad except for the under 15 (29.7%, 39.3% and 40.6% respectively) and the above 35 years age group (30%, 21.2% and 25.7% respectively). Dhaka and Islamabad have more people in the under 15 years age group and Colombo has more people in the 35 and above years age group.

1.4 Marital Status

Information on the marital status of the population is not available for Madras and New Delhi. A larger proportion of the population (59%) in Colombo are single compared to Dhaka (41%) and Islamabad (29.4%). A higher percentage (55%) of the population in Dhaka and Islamabad (65%) are married compared to Colombo (36%).

2. COMPARISON CHARACTERISTICS OF DRUG ABUSERS BY CITIES (EXHIBIT 2)

2.1 Reporting Period

The aggregated data of each city which are used for this cross-city comparison differ. The reporting period for each city is as follows:

Colombo	-	July 1995 - Jun 1996 (12 months)
Dhaka	-	July 1995 - May 1996 (11 months)
Islamabad	-	July 1995 - Jun 1996 (12 months)
Madras	-	January - December 1995 (12 months)
New Delhi	-	January - December 1994 (12 months)

During the current reporting period, data for New Delhi and Madras was only available for the year 1994 and 1995 respectively.

2.2 Total Number Of Drug Dependents Reported

Except in the case of Islamabad where data were reported from both specialized drug treatment facilities and prison, the rest of the other cities have data from only specialized drug treatment facilities. The total number of drug treatment admissions are as follows:

Colombo	-	1,753 (no breakdown by new and readmissions)
Dhaka	-	1,247 (78.3% are new admissions)
Islamabad	-	1,341 (63.8% are new admissions)
Madras	-	1,749 (no breakdown by new and readmission)
New Delhi	-	258 (89.9% are new admissions)

2.3 Reporting Agency

Colombo	-	The Drug Abuse Monitoring System / Research and Publication Division, Dangerous Drugs Control Board
Dhaka	-	Central Treatment Center (Drug Addiction Cure Hospital)
Islamabad	-	Narcotics Control Bureau
Madras	-	Institute of Mental Health
Islamabad	-	Integrated Drug Demand Reduction Project

2.4 Sex Of Patients

Almost all of the patients from each city were males (99 - 100%).

2.5 Patient Age

The age groups of the patients were almost similar for all the cities except Madras which had different age group categories. The majority (between 55% and 89%) of the patients were in the 20 - 34 years age group. In Islamabad, however about one third of the total number of drug abusers (34.0%) were over 35 years old, while New Delhi had the lowest number of abusers (8.5%) in this age category. During a reporting period of the last 12 months, the second largest age category of drug abusers was 35+ years. In Islamabad, about one third of the total number of abusers (34.0%), in Colombo (18.4%) and in Dhaka (14.4%) were in this age category. In Madras about one third (33%) of abusers were in the 18-30 years age group, while more than half (56.8%) were aged between 31 - 50 years. About 10% of the patients were in the above 50 years age group, this is high compared to the other cities (except) Islamabad where even the 35+ age group had only between 8.5% to 18.4%.

2.6 Patient Marital Status

The proportion between the marital status of single and married among the drug abusers were almost similar with the exception of Madras and New Delhi where more were married (71% and 55% respectively). Notably, Islamabad and New Delhi had about 12% of patients who were separated/divorced.

2.7 Employment Status

The unemployed featured quite prominently in the occupational status in all five cities (between 17% and 47%). In all the cities except New Delhi, a sizeable proportion (26% to 61%) fell under the 'others' category which were mostly laborers. In Islamabad, drivers made up 26% of the total occupation profile of drug abusers. Sales and clerical workers accounted for a sizeable proportion of employment among abusers in all the cities (9 - 18%) except Madras. Students and professionals accounted for a significant proportion of the occupation profile of drug abusers (12% each) in Dhaka and New Delhi respectively.

2.8 Educational Attainment

Information on years of education attainment revealed a similar proportion among all the cities (with the exception of Islamabad) where over 50% of the patients had between 6 - 12 years of education. Colombo had the largest (90%) proportion of patients who had between 6 - 12 years of education. In Islamabad, a slightly higher proportion (35%) of the patients had no formal education while almost one third proportion each had less than 6 years and between 6 - 12 years of formal education. In Madras, a significant one third of abusers had less than 6 years of education.

3. PATTERNS OF DRUG USE (EXHIBIT 3)

3.1 Primary Drug Of Abuse

Heroin was the primary drug of abuse among drug dependents in the treatment facilities of all the five cities. Almost all (97%) of the patients in Colombo and most of the patients in Islamabad (79%) abused heroin. On the other hand, about half of the patients in New Delhi (54%) and less than half of the patients in Dhaka (40%) abused heroin. In Dhaka, a significant proportion of abuse of other opiate drugs such as pethedine and phensedyl (34%) were detected. Madras reported a small proportion (8.0%) of abuse of buprenorphine.

Cannabis was abused by a small percentage of patients in all cities. Alcohol consumption was high in Madras (65%) followed by New Delhi (23%). In this city too, consumption of opium (8%) was highest among the five cities. In Dhaka other types of drugs made up one tenth of the primary drugs of abuse.

More than half of the patients (59%) in Islamabad were polydrug users, followed by 25% in Madras while only a small percentage in New Delhi and Dhaka were polydrug users. Data were not available from Colombo.

3.2 Route Of Drug Administration

The route of drug administration varied among the cities. (Data were not available from New Delhi). Smoking or 'chasing the dragon' was the most popular route of drug administration in Colombo (98%), Islamabad (73%), Dhaka (45%) and Madras (43%). In Madras slightly more patients (48%) were injecting while in Dhaka 32% were taking drugs orally. In Dhaka and Madras a growing number (8 - 9%) were using other routes of drug administration. This diverse pattern is attributed to the varied types of drugs that were abused.

4. LAW ENFORCEMENT INDICATORS (EXHIBIT 4)

4.1 Drug-Related Arrests

The number of drug-related arrests of each city for the reporting period was Colombo 3,827, Dhaka 2,415, Islamabad 1,254, and New Delhi 114. Data on number and type of arrests was not available for Madras while Dhaka showed the total of all offenses. The types of drug-related arrests varied among the cities. All of the arrests in New Delhi were arrests for drug possession. In Colombo, the majority were arrests for drug use/consumption (71%) and sales (28%). In Islamabad, about half (46%) were arrests for sales followed by arrests for use/consumption (17%) and arrests for trafficking (14%), while arrests for other drug related offenses constituted a significant 23%.

4.2 Rate Of Drug-Related Arrests

The rate of drug-related arrests per 100,000 population was highest for Colombo (225.2 per 100,000) followed by Islamabad (108.1 per 100,000), Dhaka (70.2 per 100,000), and New Delhi (1.2 per 100,000). The differences may be a reflection of the variation in extent of police activity or law enforcement in each city.

4.3 Drug Seizures

Opiates and cannabis were seized in all cities with cannabis being the main drug seized. (Data were not available from Colombo). The quantity of these two drugs that were seized varied among the cities. Islamabad recorded the largest amount of cannabis seizures (7,516.6kg) followed by Dhaka (2,008 kg) and New Delhi (597.2 kg). New Delhi recorded the largest amount of heroin seized (85.2 kg) while smaller amounts were recorded by Islamabad (18.40 kg), Madras (12.5 kg) and Dhaka (2.7 kg). Under the opiate types, Dhaka reported a sizeable amount of codeine (2,399 litters) and pethedine (63 amp) seizures.

In addition to opiate and cannabis seizures, Dhaka and Islamabad reported sizeable seizures of other types of drugs such as alcohol, phensedyl, buprenorphine and solvents/inhalants. In Madras a significant amount of ganja (4,267 kg) was seized during the reporting period.

Exhibit 1

General Population Demographic Indicators

CHARACTERISTICS	COLOMBO 1981	DHAKA 1991	ISLAMABAD 1981	MADRAS 1991	NEW DELHI 1991
Total Population	1,699,241	3,440,147	1,159,916	3,841,396	9,420,644
	%	%	%	%	%
Sex					
Male	52.6	58.0	54.0	51.7	54.6
Female	47.4	42.0	46.0	48.3	45.4
Age					
< 15	29.7	39.3	40.6	NA	NA
15 - 19	10.8	10.4	10.4		
20 - 34	29.5	29.1	23.3		
35+	30.0	21.2	25.7		
Marital Status					
Single	59.0	41.0	29.4	NA	NA
Separated/Divorced	0.3	0.3	5.6		
Married	36.0	54.8	65.0		
Widowed	2.7	3.9			
Others	1.9				
Years of Education					
Zero	(0) 18.0	NA	(0) 41.2	NA	NA
1 - 6	(1- 5) 14.6		(1 - 5) 15.8		
7 - 12	(6-12) 63.8		(6 - 10) 26.0		
13+	(13+) 3.6		(11+) 17.0		

Exhibit 2

Demographic Characteristics Of Drug Abusers By Cities

CHARACTERISTICS	COLOMBO Jul 95 - Jun 96	DHAKA Jul 95 - May 96	ISLAMABAD Jul 95 - Jun 96	MADRAS Jan - Dec 95	NEW DELHI Jan - Dec 94
	N = 1753	N = 1247	N = 1341	N = 1749	N = 258
	%	%	%	%	%
Sex of Patients					
Male	99.8	99.8	99.3	99.6	100.0
Female	0.2	0.2	0.7	0.4	-
Patient Age					
< 15 years	1.7	0.1	2.5	(18 - 30) 33.1	-
15 - 19 years	2.3	6.1	8.1	(31 -40) 29.8	2.7
20 - 34 years	77.6	79.4	55.4	(41 - 50) 27.0	88.8
35+ years	18.4	14.4	34.0	(51 - 60) 8.8	8.5
				(> 60) 1.3	
Patient Marital Status					
Single	52.9	56.4	41.2	29.3	31.4
Separated/Divorced	1.1	2.2	12.2	-	12.8
Married	45.6	41.3	43.8	70.7	55.0
Widowed	0.4	0.1	2.8	-	0.8
Other	-	-	-	-	-
Patient Occupation					
Professionals	1.6	1.3	1.9	-	12.4
Administrators	3.5	-	2.4	-	-
Sales & Clerical	9.5	10.1	11.5	-	18.2
Drivers	12.6	5.7	26.3	8.0	5.0
Cultivators	9.8	-	4.8	2.9	-
Unemployed	24.4	37.8	17.0	21.0	46.9
Small Business	8.3	6.0	3.1	7.0	10.5
Students	1.8	12.5	1.1	-	-
Others	28.4	26.6	31.9	61.1	7.0
Years of Education					
Zero	1.2	19.6	34.6	11.1	5.4
< 6 years	8.7	24.5	31.3	36.2	24.4
6 - 12 years	89.8	43.7	28.3	49.0	50.8
> 12 years	0.3	12.2	5.8	3.7	19.4

Exhibit 3

Types Of Drugs Abused And Route Of Administration By Cities

CHARACTERISTICS	COLOMBO Jul 95 - Jun 96	DHAKA Jul 95 - May 96	ISLAMABAD Jul 95 - Jun 96	MADRAS Jan - Dec 95	NEW DELHI Jan - Dec 94
	N = 1753	N = 1247	N = 1341	N = 1749	N = 258
	%	%	%	%	%
Primary Drug of Abuse					
Opiate Type					
Opium	0.3	-	3.9	-	8.3
Morphine	-	-	2.7	-	-
Heroin	97.3	40.1	78.5	14.6	54.2
Other Opiates	-	33.6	3.4	-	-
Cannabis Type	0.1	5.0	6.6	12.6	8.0
Amphetamines	-	-	0.1	-	-
Sedatives	-	-	1.5	-	-
Minor Tranquilizers	-	1.9	2.3	-	-
Solvents/Inhalants	-	-	0.1	-	-
Alcohol	0.3	1.6	0.9	64.6	23.1
Buphrenorphine	-	-	-	8.0	-
Other	2.1	9.0	-	0.2	6.4
Polydrug Users	NA	8.8	58.8	24.9	11.6
Route of Admin/Use					
Inhalation	-	-	1.0	-	NA
Injection	0.5	15.2	8.1	48.0	
Oral	0.9	32.1	9.3	-	
Smoking/Chasing	98.2	45.1	73.1	43.3	
Sniffing/Snorting	0.4	-	8.5	-	
Other	-	7.6	-	8.7	

Exhibit 4

Law Enforcement Indicators By Cities

OFFENCES	COLOMBO Jul 95 - Jun 96	DHAKA - Jul 95 - May 96	ISLAMABAD Jul 95 - Jun 96	MADRAS Jan - Dec 95	NEW DELHI Jan - Dec 94
Number of Arrests	N = 3827	N = 2415	N = 1254	N = NA	N = 114
	%	%	%		%
Arrests for Use/Consumption	70.5		16.7		-
Arrests for Possession	-		-		100.0
Arrests for Sales	27.9	100*	45.5		-
Arrests for Trafficking	1.6		14.4		-
Arrests for Conspiracy	-		-		-
Other	-		23.4		-
Rate of Drug-Related Arrests Per 100,000 Population	225.2	70.2	108.1	-	1.2
Quantity of Drug Seized	NA				
Opiate Type					
Heroin (kg)		2.73	18.40	12.5	85.2
Codein (litre)		2399			
Pethedine (amp)		63			
Cannabis (kg)		2008.0	7516.6		597.2
Solvents/Inhalants (litre)			12365		
Alcohol (litre)		76469	3860		
Phensedyl (litre)		921			
Buphrenorphine (amp)		7551			
Ganja (kg)				4267	

* Dhaka Showed The Total Of All Offences

PART 3

Drug Abuse Indicator Reporting Instrument

Publications Of The Center For Drug Research

ASIAN COUNTRIES

MULTICITY EPIDEMIOLOGY STUDY

City / Metropolitan Name : _____

Period of Reporting : _____

Compiled by : _____

Name of Agency : _____

Please return the completed questionnaire to :

The Director
Center for Drug Research
Universiti Sains Malaysia
11800 Penang, Malaysia

Tel. No. : 604-6577888
Telefax : 604-6577957
Telex : MA-40254
Cable : UNISAINS

A. GENERAL POPULATION DEMOGRAPHIC INDICATORS*

* (data from most recent Census. State year _____
(To be completed once / year)

1. Total population of City / Metropolitan _____

		N	%
2.	Sex: Male		
	Female		
3.	Age** Under 15 years old		
	15 - 19 years		
	20 - 34 years		
	35 - 44 years		
	45 + years		

(** or specify other similar age brackets)

4. Ethnic Groups
(specific for major groups)

Ethnic "A"	_____	_____	_____
Ethnic "B"	_____	_____	_____
Ethnic "C"	_____	_____	_____
Other (specify:	_____)	_____	_____

5. Religious Groups
(specific for major groups)

Religious "A"	_____	_____	_____
Religious "B"	_____	_____	_____
Religious "C"	_____	_____	_____
Other (specify:	_____)	_____	_____

		N	%
6.	Marital Status		
	Single, never married	_____	_____
	Separated / divorced	_____	_____
	Married	_____	_____
	Widowed	_____	_____
	Other	_____	_____
7.	Occupational Categories [List according to Census]		
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
8.	Number of Years of Education		
	Zero	_____	_____
	1 - 6	_____	_____
	7 - 12	_____	_____
	13 +	_____	_____

9. Annual Per Capita Income
(local currency) (please define it as in the Census Report) _____

10. Other Comments: _____

_____

_____

B. DRUG TREATMENT INDICATORS

		TYPE OF TREATMENT FACILITY			
		Prison	Specialised Drug Treatment	Primary / General Health Care	Other
1a.	Total Number of Available Treatment Facilities in the City				
1b.	Total Number of Treatment Facilities from which Information is Collected				
2.	Total Number in Drug Treatment Facilities in the City				
3a.i	Number of Institutional Admissions (in-patient)				
	- New admissions				
	- Readmissions				
	- Total Admissions				
ii	Number of Non-Institutional Admissions (out-patient)				
	- New admissions				
	- Readmissions				
	- Total Admissions				
3b.	Number of Patients by Primary Drug of Abuse				
	Opium type				
	Opium				
	Morphine				
	Heroin				

B. DRUG TREATMENT INDICATORS

	TYPE OF TREATMENT FACILITY			
	Prison	Specialised Drug Treatment	Primary / General Health Care	Other
Codeine				
Pethedine				
Pentadzocine				
Buprenorphine				
Others (specify)				
Cannabis type				
Cocaine type				
Hallucinogens (e.g. LSD)				
Amphetamine				
Sedative hyponotics (e.g. barbiturates, methaqualone, etc.)				
Tranquilisers (e.g. benzodiazepines, etc.)				
Solvent / Inhalant				
Alcohol				
Other (specify)				
3b.i Number of Poly-drug users				
3b.ii Number of patients by secondary drug of abuse (specify type:)				
3c. Sex of Patients				
Numbers of Males				
Number of Females				

B. DRUG TREATMENT INDICATORS

	TYPE OF TREATMENT FACILITY			
	Prison	Specialised Drug Treatment	Primary / General Health Care	Other
3d. Patient Age				
Under 15 years				
15 - 19 years				
20 - 34 years				
35 - 44 years				
45+ years				
3e. Patient Ethnicity (specify)				
a _____				
b _____				
c _____				
d _____				
3f. Patient Religious (specify)				
a _____				
b _____				
c _____				
d _____				
3g. Patient Marital Status				
Single, never married				
Separated / divorced				
Married				
Widowed				
Other				

B. DRUG TREATMENT INDICATORS

	TYPE OF TREATMENT FACILITY			
	Prison	Specialised Drug Treatment	Primary / General Health Care	Other
3h. Patient Occupation				
Professionals				
Managers / Administratiors				
Sales & clerical workers				
Drivers / Transport workers				
Agrobased workers				
Unemployed				
Self-employed				
Student				
Others (specify)				
3I.1 Route of Admin./Use				
Inhalant (gases, volatile substances)				
Injection				
Oral (through the mouth)				
Smoking / 'chasing'				
Sniffing / snorting (nasal)				
Other (specify)				
3I. 2 Number of patients _____ by multiple Route				
3j. Drug Sources				
Street sale				
Over-the-counter				
Prescription				
Diversion of prescription drugs				
Other (specify)				

B. DRUG TREATMENT INDICATORS

	TYPE OF TREATMENT FACILITY			
	Prison	Specialised Drug Treatment	Primary / General Health Care	Other
3k. Living Arrangements				
Alone	____	____	____	____
Living with family / other relative	____	____	____	____
Living with friends / colleagues	____	____	____	____
Other (specify)	____	____	____	____
3l. Number of years of Education				
Zero	____	____	____	____
1 - 6 years	____	____	____	____
7 - 12 years	____	____	____	____
13 + years	____	____	____	____

4. Other Comments / Observations: _____

_____

_____

_____

C. LAW ENFORCEMENT INDICATORS

1. Total Number of Persons Arrested for Criminal Offences _____

2. Number of Persons Arrested for Drug-Related Offences
   - a. Arrests for use / consumption _____
   - b. Arrests for possession _____
   - c. Arrests for sales _____
   - d. Arrests for trafficking _____
   - e. Arrests for conspiracy _____
   - f. Other drug-related offences _____
     (Please specify: _____)

3. Number and Quantity of Drug Seized by Drug type

	No. of seizures	Quantity (kg/# of pills / vol.)
Opiate type		
Opium	____	____
Morphine	____	____
Heroin	____	____
Codeine	____	____
Pethedine	____	____
Pentazocine	____	____
Buprenorphine	____	____
Cannabis type	____	____
Cocaine type	____	____
Hallucinogens (e.g. LSD)	____	____
Amphetamines	____	____
Sedative / hynotics (e.g. barbiturates, methaquaolone, etc.)	____	____
Tranquilisers (e.g. benzodiazepines, etc.)	____	____
Solvents / Inhalants	____	____
Alcohol	____	____
Other (Specify)	____	____

4. Drug Production Crimes

	a	b	c	d	e	
Amount of drug seized in a manufacturing facility (kg / # pills / volume)	___	___	___	___	___	___
Number of labs. destroyed	___	___	___	___	___	___
Amount Destroyed (kg / # / vol. acreage)	___	___	___	___	___	___
Arrest for cultivation (person)	___	___	___	___	___	___
Arrest for manufacture (person)	___	___	___	___	___	___

Note:
- a - Opium
- b - Heroin
- c - Marijuana
- d - Amphetamines
- e - Other drug, (specify as many as applicable) _____

5. Traffic Accidents

		Source(s) of Information
a. Total Number of Traffic Accidents	_____	_____
b. Number of Crashes Caused by Drivers under the Influence of:		
Alcohol	_____	_____
Narcotic drugs	_____	_____
Psychotropic substances	_____	_____

6. Other Comments: _____

_____

D. HEALTH INDICATORS

		Source(s) of Information
1a. Number of HIV - Pisitive cases AIDS cases	_____	_____
1b. Number of Drug-Related HIV-Positive Cases AIDS Cases	_____	_____
2a. Number of psychological Cases	_____	_____
2b. Number of Drug-Associated Psychological Cases	_____	_____
3a. Number of Emergency Room Cases	_____	_____
3b. Number of Drug-Related Emergency Room Cases	_____	_____
4a. Number of Deaths	_____	_____
4b. Number of Drug-Related Death	_____	_____

		Source(s) of Information
5. Other Health Indicators (specify)	_____	_____

6. Other Comments: _____

_____

E. SOCIAL INDICATORS E.G. DATA FROM FAMILY, WORKPLACE, SCHOOL, ETC.

[(Optional] (Attach as Annex, data from qualitative research studies / exploratory studies or surveys)

F. OTHER COMMENTS:

_____

_____

_____

_____

ASIAN MULTI-CITY EPIDEMIOLOGY STUDY

INSTRUCTIONS FOR COMPLETING THE REPORTING FORMS

General

1. City/Metropolitan Name:- Each reporting City is identified by this item. If data available to you covers a larger area than the city limits then, please report data for the metropolitan area. Specify whether report is on city or metropolitan area.

2. Period of Reporting. This refers to the period when information is collected.

3. Where no information is available, use NA

4. Where information is available but not accessible or not collected use NC

5. When reporting numbers, do not use - for missing, zero (0). If missing indicate NA and if no cases reported, 0 (zero).

6. Please ensure all items in the reporting forms are completed to the best of your ability. Where gaps occur please send other sources of information which may include a small area survey or survey among students, etc.

7. Please provide all sources of information.

REPORT FORM INDICATORS

	Item	Explanation
A.	GENERAL POPULATION DEMOGRAPHICS	All the data referred to under this section (A1-A10) is City/Metropolitan data and not national data and needs to be provided only once a year. Bear in mind this is a city epidemiology study and all the relevant demographic variables reported should be for the city. This data should be available from the census, and where information is outdated, please provide latest estimates if available. Please give the numbers and percentage for all items.
1.	Total Population of City/Metropolitan	This refers to the residential population population. Please give latest year of census or estimate.
2.	Sex	Please indicate as required.
3.	Age	Please use categories provided as far as possible. If it is not similar to your city's census, please specify age brackets according to your census data.
4.	Ethnic Groups	This refers to race and not religion.
5.	Marital Status	Provide data according to given categories.
6.	Occupational Categories	List categories as used in your census.
7.	Number of Years of Education	Please indicate accordingly
8.	Annual Per Capita Income	Please provide per capita Income data. If this is not available please provide alternately household income or personal income figures and this has to be clearly stated.
9.	Other Comments / Problems	Please specify source of and give details of problems encountered in data collection. If you need to provide clarification on any of the items in this section, please indicate.

B.	DRUG TREATMENT INDICATORS	Should try to include all forms of drug treatment facilities; private or government. Specialised drug treatment centres are facilities solely for drug treatment. Primary health/General health care refers to medical facilities which provide some treatment for drug related cases.
1a.	Total Number of available facilities in the city	Please indicate according, to prison, specialised drug treatment primary / general health care, or other.
1b.	Total number of treatment facilities from which information is collected.	Specify as in 1a above
2.	Total Number in Treatment	Please indicate total number of clients treated in treatment facilities, etc. over the whole period reporting.
3ai.	Number of Institutional Admissions(in-patient)	This is the total for the whole period. If possible, indicate if they are new or readmissions. New admissions are persons admitted for the first time to that facility and not to other (not ever).
3aii.	Number of Non-Institutional Admissions (out-patients)	This is the total for the whole reporting period. If possible, indicate if they are new or readmissions. New admissions are persons admitted for the first time to that facility.
3b.	Number of Patients by Primary Drug of Abuse	To indicate only primary drug of abuse. If patients are poly-users to indicate under 3b(i).

3bi.	Poly-drug users	Indicate number of patients who used more than one drug during the 30 days prior to admission.
3bii.	Number of patients by secondary drug of abuse	This is an optional item. If information is information is available indicate types of secondary drugs that are abused by patients.

ALL INFORMATION FOR ITEMS 3c TO 3k TO BE COLLECTED FOR ALL ADMISSIONS (NEW AND OLD)

3c.	Sex of Patients	Please indicate as required.
3d.	Patient Age	Please use categories provided.
3e.	Patient Ethnicity	This refers to race and not religion.
3f.	Patient Marital Status	Please indicate according to categories provided.
3g.	Patient Occupation	Please indicate according to categories provided. Agrobased workers refers to people involved in either cultivation / farming or fishing. Self-employed refers to those who run their own business.
3h.	Route of Administration	Please indicate according to categories provided.
	Inhalation	Refers to inhalation of gases / volatile substance, e.g. glue.
	Injection	Refers to all types of injections, i.e. I.V., intramuscular, under the skin, etc.

	Oral	Refers to chewing or swallowing.
	Smoking	Includes `chasing the dragon' method.
3i.	Drug sources	To specify primary source of drugs for patients
3j.	Living arrangement	Refers to whom patient is living with at time of treatment admission.
3k.	Number of years of education	Please indicate accordingly.
C.	LAW ENFORCEMENT INDICATORS	This set of indicators refer to drug-related police activities and other information on sales, production and trafficking of drugs.
1.	Total persons arrested criminal offences	Please provide information if available. Data Data can be reported for the reporting period. If this is not available, total cumulative figure for the year could be reported.
2.	Number of Drug-Related arrested	Please provide information according to types of arrest.
3.	Number and Quantity of Drug Seized by Drug Type	Please provide data according to drug type and indicate the measure for quantity, i.e. kg or number (#) or litres. For `other drug', please specify each type in columns provided.

4.	Drug Production Crimes	
	Amount of Drug Seized in a Manufacturing Facility	Please provide data according to drug type and indicate the measure for quantity, i.e. kg. or number (#) or litres.
	Number of Lab. Destroyed	Please indicate the number of labs. destroyed for the reporting period.
	Amount Destroyed	Please state the amount destroyed and indicate the measure per quantity.
	Arrest for Cultivation	Please state the number of persons arrested for cultivation for the reporting period.
	Arrest for Manufacture	Please state the number of persons arrested for manufacture for the reporting period.
5.	Traffic Accidents	a. If available, please provide data on total number of traffic accidents. b. Please provide data for the number of accidents caused by drivers under the influence of drugs according to the categories provided.
D.	HEALTH INDICATORS	If information on these items is not systematically collected, please report on any information available and source of information.
1a.	Number of HIV Positive/AIDS cases	Number of cases who have been found to be HIV - positive or having AIDS.

1b.	Drug-Related HIV-Positive / AIDS cases	Number of drug-related cases who have have cases been found to be HIV-Positive or having AIDS.
2a.	Number of Psychological Cases	This refers to total psychological cases / mental disorders.
2b.	Drug Associated Psychological Cases	Drug associated mental disorders such as Psychological Cases such as drug psychoses, depressions, etc. (Please exclude drug withdrawal or intoxication cases).
3.	Drug-Related Emergency Room Cases	Cases related to drug over-dose and as well as other drug related medical complications.
4.	Number of Drug-Related Deaths	Deaths related to the above.
5.	Other Health Indicators	If information on other indicators is available (e.g. hepatitis, TB.) please indicate here.
E.	Social Indicators	These are optional items. If information from family, workplace, schools, etc. is available please indicate.
F.	Other Comments	Please provide any other comments concerning data collection data sources and data items.

PUBLICATIONS OF THE CENTRE FOR DRUG RESEARCH UNIVERSITI SAINS MALAYSIA PENANG

INTERNATIONAL MONOGRAPH SERIES

1. Abuse of Volatile Solvents and Inhalants: Papers Presented at W.H.O. Advisory Meeting.
   International Monograph Series No. 1, 1988.
   ISBN No. 967 - 9979 - 23 - 7

2. Clinical Pharmacology of Anti Malarial Drugs.
   International Monograph Series No. 2, 1993.
   ISBN No. 967 - 9979 - 33 - 4

3. The Validation of Chemical and Immunological Tests for Antimalarials in Body Fluids: Papers Presented at W.H.O./ Universiti Sains Malaysia Workshop.
   International Monograph Series No. 3, 1990.
   ISBN No. 967 - 9979 - 28 - 8

4. The Comparative Evaluation Of Chemical, Chromatographic And Immunological Tests For The Detection Of Mefloquine And Other Antimalarial Drugs In Body Fluids.
   International Monograph Series No. 4, 1990.
   ISBN No. 983 - 9700 - 12 - X

5. Proceedings Asian Multi-City Epidemiology Work Group.
   International Monograph Series No. 5, 1993.
   ISBN No. 967 - 9979 - 32 - 6

6. Report of The Asian Multi-City Epidemiology Work Group 1994.
   International Monograph Series No. 6, 1994.
   ISBN No. 967 - 9979 - 34 - 2

7. Report of The Asian Multi-City Epidemiology Work Group 1995.
   International Monograph Series No. 7, 1996.
   ISBN No. 967 - 9979 - 38 - 5

8. Exploratory Studies on Drug Abuse in The Asian Region 1995
International Monograph Series No. 8, 1996.
ISBN No. 967 - 9979 - 42 - 3

MONOGRAPH SERIES

1. The Misuse of Drugs Among Secondary School Children in the State of Penang and Selangor.
Monograph Series No. 1, 1976.

2. Drug Abuse Among Malaysian Youths - Originally Published as "A Study of the Misuse of Drugs Among Secondary School Children in the States of Penang and Selangor".
Monograph Series No. 2.

3. Opiate Consumption Pattern in Asia.
Monograph Series No. 3, 1983.

4. A Survey of Drug Abuse Prevention Strategies.
Monograph Series No. 4, 1985.
ISBN No. 967 - 9979 - 12 - 1

5. Assessment of Drug Dependence in Malaysia - A Trend Analysis.
Monograph Series No. 5, 1987.
ISBN No. 967 - 9979 - 14 - 8

6. Assessment of Drug Dependence in Malaysia - An Update Analysis 1985 and 1986.
Monograph Series No. 6, 1987.
ISBN No. 967 - 9979 - 15 - 6

7. An Evaluation Study of the Drug Treatment and Rehabilitation Programme at a Drug Treatment Centre.
Monograph Series No. 7, 1992.
ISBN No. 967 - 9979 - 31 - 8

RESEARCH REPORT SERIES

1. A Study on the Misuse of Drugs Among Secondary School Children in the State of Kelantan.
Research Report No. 1

2. A General Overview on the Practices Relating to the Traditional Treatment of Drug Dependence in Malaysia.
Research Report No. 2

3. A Comparative Analysis of the Psychological Profile of Drug Using and Non-Drug Using Population.
Research Report No. 3, 1984.

4. An Overview of Dadah Use in a High Risk Area - Rifle Range Flats.
Research Report No. 4

5. Impact of Scheduling Drugs Under the 1971 Convention on Psychotropic Substances - The Benzodiazepines Reappraised.
Research Report No. 5

6. A Study on Comparative Study of EMIT vs GC-MS In the Determination of Cannabis in Urine.
Research Report No. 6

7. An Evaluation Study of the Waters QA-1 Quality Analyser Liquid Chromatograph.
Research Report No. 7, 1983.
ISBN No. 967 - 9979 - 08 - 3

8. Impact of Scheduling Drugs under the 1971 Convention on Psychotropic Substances - A Follow-up Study.
Research Report No. 8, 1984.
ISBN No. 967 - 9979 - 01 - 6

9. A Study Into Certain Aspects of Drug Education Programmes in Malaysian Schools.
Research Report No. 9, 1983.
ISBN No. 967 - 9979 - 07 - 5

10. A Study of Opinions Regarding Selected Posters on Drug Education.
Research Report No. 10, 1983.
ISBN No. 967 - 9979 - 10 - 5

11. A Comparative Analysis of the Psychological Profile of Institutionalised Drug Using Population.
Research Report No. 11, 1984.
ISBN No. 967 - 9979 - 09 - 1

12. Analytical Methods for the Identification And Confirmation of the Principal Cannabinoid Metabolite In Urine.
Research Report No. 12.
ISBN No. 967 - 997 - 11 - 3

13. A Comparative Study of the Psychological Profile of Drug Using and Non-Drug Using School Children.
Research Report No. 13, 1986.
ISBN No. 967 - 9979 - 13 - X

14. Women Involved in Drug Dependence in Malaysia - A Preliminary Study.
Monograph Series No. 14, 1986.
ISBN No. 967 - 9979 - 18 - 0

15. An Evaluation Study of the Efficacy of PEMADAM Supervision Programmes - A Preliminary Report (In Bahasa Malaysia).
Research Report No. 15, 1987.
ISBN No. 967 - 9979 - 21 - 0

16. Natural History of Heroin Addiction and Adjunctive Drug Use.
Research Report No. 16, 1988.
ISBN No. 967 - 9979 - 13 - X

17. Determination of Naltrexone Dosage for Narcotic Agonist Blockade in Detoxified Asian Addicts.
Research Report No. 17, 1988.
ISBN No. 967 - 9979 - 17 - 2

18. The Health Knowledge Survey on the Primary School Children (In Bahasa Malaysia).
Research Report No. 18, 1988.
ISBN No. 967 - 9979 - 19 - 9

19. The Survey on the Health Knowledge and the Attitude towards drug use of the Secondary School Children (In Bahasa Malaysia).
Research Report No. 19, 1988.
ISBN No. 967 - 9979 - 20 - 2

20. The Survey on the Health Knowledge and the Attitude towards drug use of the Trainee Teachers (In Bahasa Malaysia).
Research Report No. 20, 1988.
ISBN No. 967 - 9979 - 22 - 9

21. Women Involved in Drug Dependence in Malaysia An In-Depth Study.
Monograph Series No. 21, 1989.
ISBN No. 967 - 9911 - 73 - X

22. An Evaluation and Development of Chromatographic Methods for The Study of Chemical Profiles of Illicit Heroin Samples.
Research Report No. 22, 1989.
ISBN No. 967 - 9979 - 24 - 5

23. Chromatographic Methods for The Detection of The Principal Cannabinoid Metabolite In Urine.
Research Report No. 23, 1990.
ISBN No. 967 - 9979 - 25 - 3

24. Drug Abuse and Dependence Among Adolescent In Malaysia.
Research Report No. 24, 1990.
ISBN No. 967 - 9979 - 26 - 1

25. A Ten Year Retrospective Follow-Up of Drug Dependence Career.
Research Report No. 25, 1990.
ISBN No. 967 - 9979 - 27 - X

26. A Study On S.R.P. and S.P.M. Dropout In Penang.
Research Report No. 26, 1991.
ISBN No. 983 - 9700 - 13 - 8

27. An Evaluation Study of The Drug Treatment and Rehabilitation Programme at A Drug Treatment Centre.
Monograph Series No. 7, 1992.
ISBN No. 967 - 9979 - 31 - 8

28. A Study of the National Aftercare Programme.
Monograph Series No. 28, 1992.
ISBN No. 967 - 9979 - 29 - 6

29. A Study on Women Drug Dependents and Carers of Drug Dependents in Malaysia.
Research Report No. 29, 1992.
ISBN No. 967 - 9979 - 30 - X

30. A Study on Intravenous Drug Use and AIDs Knowledge Among Heroin Addicts
Research Report No. 30, 1996.
ISBN No. 967 - 9979 - 37 - 7

31. A Follow-up Study On Drug Addicts After Treatment And Rehabilitation
Research Report No. 31, 1997.
ISBN No. 967 - 9979 - 41 - 5

REVIEW PAPERS SERIES

1. Stimulant Abuse And Dependence
Review Papers No. 1, 1997.
ISBN No. 967 - 9979 - 43 - 1