4. RESULTS

The findings from the various component studies of this project are described in this chapter. Initially the highlights of each one of the component studies are discussed. Later in the chapter data on certain specified population sub-groups and themes or contents as obtained from more than one component will be presented. Triangulation of the data will depict the parallels or discrepancies. Convergence of data on certain themes would point towards reliability of information obtained. Divergence would however not necessarily mean incongruity as information may vary depending upon the source.

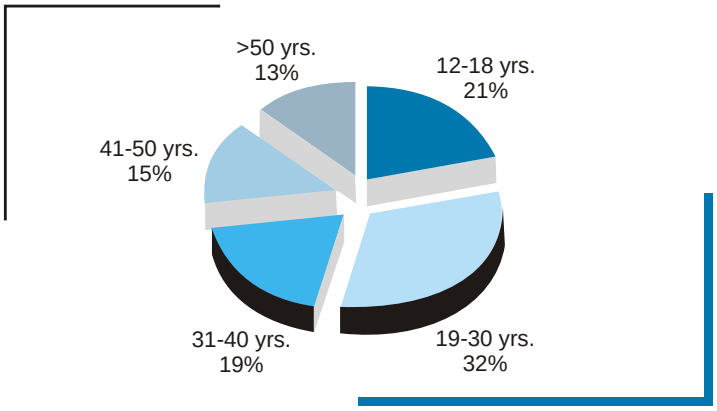
4.1 National Household Survey (NHS)

4.1.1 Sample

Altogether, 40,697 males within the age group of 12-60 years were interviewed and information on various aspects of drug use was obtained. The age distribution of the study can be seen in Figure 4.1. About 20 percent were illiterate, about 18 percent had studied up to primary level and an additional 25 percent up to middle level. Very few (about 8%) were graduates and above. Largely they were either farmers / fishermen (26.8%) or labourers (20.4%). Only about 5 percent were unemployed and about 19 percent were students. Most (59.3%) were married and 73 percent of married population reported satisfaction with their current marriage. Thirteen current users (0.03%) reported that they were separated due to drug abuse. About 74 percent reported a single sexual partner and about 0.5 percent reported sex with commercial sex workers (CSWs). About 38 percent did not report the use of a condom during sex and only about 5 percent reported the use of a condom 'always'. An additional 8 percent reported the use of a condom 'sometimes'. However, about 30-50 percent did not provide any answer with regard to sexual practices and safe sex.

Figure 4.1

Age Distribution in Years (%), N=40,697



Source: NHS

4.1.2 Drugs Used

The percentage (weighted) prevalence of use for various drugs among males within the age group of 12-60 years can be seen in Table 4.1. The data has been expressed as 'ever use' (used at any point during lifetime) and as 'current use' (used during the last one month). Tobacco is the most frequently used substance followed by alcohol. About 4 percent reported lifetime use of cannabis products and about 1 percent reported lifetime use of opiates. Fifty-nine individuals reported lifetime use of sedatives and 43 individuals reported current use, and these were without valid medical reason or prescription and would thus amount to non-medical use of sedatives. Lifetime use of any illicit drug use (use of any substance other than alcohol and tobacco) was reported by 4.7 percent and 3.6 percent reported current use (used within the last one month). A small number of subjects (around 10) reported the use of volatile substance, hallucinogens and stimulants. Fifty-two (0.1%) individuals reported 'ever' injecting drug use (IDU).

Table 4.1

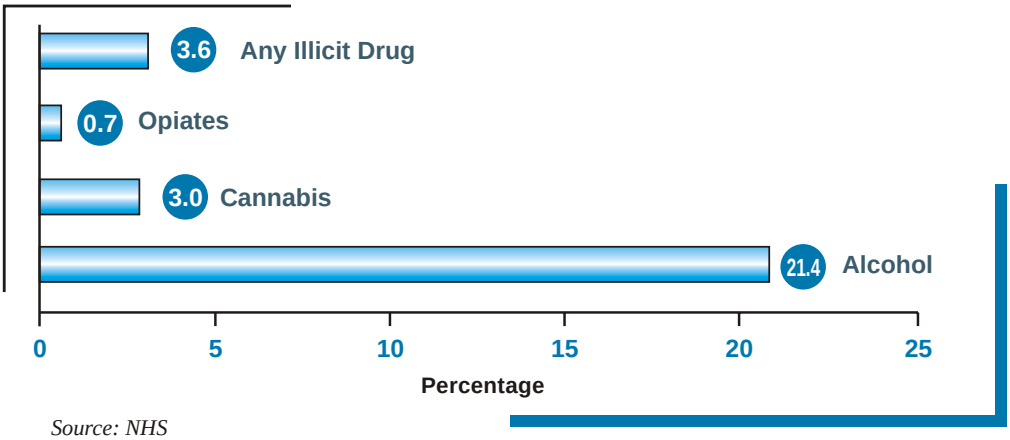
Prevalence of Drug Use among Males (N=40,697)

Drug Type	*Ever Use*		*Current Use*	
	N	*%*	*N*	*%*
Tobacco	22,810	57.9	21,903	55.8
Alcohol	9,936	25.9	8,002	21.4
Cannabis	1,546	4.1	1,089	3.0
Opiates	384	1.0	251	0.7
Sedatives/Hypnotics	59	0.1	43	0.1
Volatile substance	13	-	8	-
Hallucinogens	10	-	8	-
Stimulants	10	-	8	-
*Any illicit drug	1,747	4.7	1,465	3.6

Source: NHS
**Drugs excluding alcohol and tobacco*

Figure 4.2

Percentage Reporting Current Drug Use (Drug Type)



Source: NHS

4.1.3 Types of Opiates and Alcohol Used

Among current opiate users (N=251), the largest proportion were opium users followed by heroin, cough syrup and other opiates. The current prevalence of these substances is seen in Box 4.1. Most alcohol users were consuming distilled liquor (spirits). Some reported use of wine and beer.

4.1.4 Estimated Number of Users of Various Drugs (National)

An attempt has been made to project the total number of males abusing various drugs for the nation as a whole, based on the prevalence figures depicted in the Box 4.1. The sample of this study was chosen as per the 1991 census and the estimates presented are adjusted for growth in males (20.9%) over the decade (1991-2001). The results are depicted in Table 4.2.

The survey used ICD-10 (WHO 1992) criteria for dependence. It was seen that out of 8,002 current alcohol users, around 17 percent (N=1,344) qualified to be diagnosed as dependent users. Correspondingly, out of the current cannabis users (N=1,089) and opiate users (N=251), about 26 and 22 percent were dependent users respectively (see Box 4.2).

It should also be interpreted that a large number of current users would require help so that they do not progress to regular or dependent use. Thus, intervention would have to be planned for these subjects. However, the dependent users (addicts), varying between 17 and 26 percent of current users (Table 4.2) would need treatment most urgently. This number (0.5-10.6 million, of alcohol, cannabis, opiate and sedative/hypnotic users) might constitute the estimated caseload burden for India at present.

4.1.5 Ever Use versus Current Use

It can be seen in Figure 4.3 that many 'ever users' were 'current users' (used within last month). The proportion of 'current users' as part of 'ever users' was around 80 percent for alcohol, 70 percent of cannabis and 65 percent for opiates respectively. Thus, drug use once initiated, appears to continue in a majority of cases.

Box 4.1

Prevalence of Opiate Abuse

- Opium-0.5%
- Heroin-0.2%
- Cough syrup-0.1%
- Other opiates-0.1%

Box 4.2

Dependent Users*

- 16.8% of current abusers of **alcohol** were dependent
- 25.7% of current abusers of **cannabis** were dependent
- 22.3% of current abusers of **opiates** were dependent

**As per ICD-10 criteria (WHO 1992)*

Table 4.2

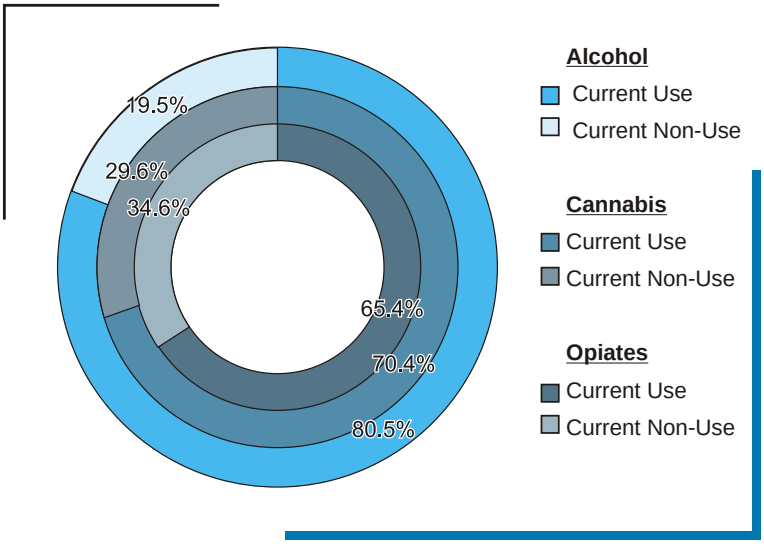
Estimates of Number of Users of Select Drug Types (approximate, in millions)

Drug Type	*Ever Use*	*Current Use*
Tobacco	168.99	162.86
Alcohol	75.59	62.46
Cannabis	11.96	8.75
Opiates	2.92	2.04
Sedative/Hypnotics	0.58	0.29

Source: NHS
Based on 1991 census male population stratified for age (15-60 years) adjusted for ten-year growth in males

Figure 4.3

Current Users as Proportion of Ever Users (Drug Types)



Source: NHS

The information discussed in subsequent pages will focus on current users (those who had used these substances within the past thirty days). Wherever appropriate, data on lifetime users will be briefly discussed.

4.1.6 Poly-Substance Use

Nine thousand and ninety-four subjects (9,094 out of 40,697), constituting 22.3 percent of the sample, reported concurrent use of alcohol and tobacco. Of these, 27.1 percent had used opiates in their lifetime and about 2 percent reported current use. This constituted about 59 percent of the individuals who reported opiate use ever in their lifetime and about 14.6 percent of those who were using opiates currently. About 0.3 percent of the subjects who had used alcohol and tobacco in their lifetime were also injecting drug users. About 60 percent of 'ever' IDUs were poly-drug injecting users.

Some of the dependent users were dependent on more than one substance. Between 0.3 and 11.3 percent of the current users were dependent on substances other than the primary drugs of use.

4.1.7 Prevalence of Drug Use and Age Distribution

Table 4.3 depicts the percentage prevalence of current use of various drugs by various age groups. It is seen that the prevalence of alcohol use was highest among the age group 41-50 years (prevalence 32.2%). For cannabis users this was highest (5.2%) among the

Table 4.3

Prevalence of Drug Use and Age Distribution for Select Drug Types

Drug Type	*12-18 years N=8,587 (%)*	*19-30 years N=13,216 (%)*	*31-40 years N=7,805 (%)*	*41-50 years N=5,920 (%)*	*51-60 years N=5,168 (%)*
Alcohol	294 (21.4)	2,334 (19.3)	2,279 (30.8)	1,770 (32.2)	1,325 (26.7)
Cannabis	50 (3.0)	311 (2.6)	269 (3.8)	216 (3.9)	243 (5.2)
Opiates	13 (0.1)	88 (0.7)	69 (1.0)	44 (0.8)	37 (0.9)

Source: NHS

population in the age group 51-60 years and for opiate users it was for the age group 31-40 years. Thus, prevalence for three different drugs was different for various age groups.

4.1.8 Rural / Urban distribution of Drug Use

Among the subjects interviewed, 31,159 (76.6%) were from a rural background and the remaining 9,538 (23.4%) were from an urban background. Table4.4 describes the rural/urban background of current users of various drug types. It can be seen that among the rural population 20.1, 3.1 and 0.7 percent were current users of alcohol, cannabis and opiates respectively. The corresponding figure among the urban population is 18.3, 1.3 and 0.5 percent (Table 4.4).

From another perspective, it was seen that among current drug users of specific drug types, between 11.4, 18.3 and 21.8 percent belong to an urban background (see Box 4.3).

Box 4.3

Rural/Urban Distribution of Specific Drug Types

- Among current alcohol users (N=8,002) 78.2% were from a rural background
- Among current cannabis users (N=1,089) 88.6% were from a rural background
- Among current opiates users (N=251) 81.7% were from a rural background

4.1.9 Prevalence of Drug Use in Different Centres / Regions

The survey was designed to project the data for the country as a whole. Strictly speaking, from a methodological perspective, collapsing the data for any specific state would have limitations. Despite these caveats, an attempt has been made to provide broad indicators for a particular site. At best, the data reflect trends in a region and readers are cautioned against treating this data as robust for the state level.

High prevalence (about three times the national average) of alcohol use was noticed in the three centres covering North and North East regions (see Box 4.4). The Ahmedabad centre covering Gujarat had the lowest prevalence.

Prevalence of cannabis use was high in the three centres covering the Eastern and North East regions. Centres covering South and Western regions (Vishakhapatnam, Ahmedabad, Bangalore and Thrissur) reported low prevalence.

Box 4.5

High Prevalence of Cannabis Use-Regions

- Centre: Patna covering Eastern Region (North Bihar)
- Centre: Imphal covering NE Region (Manipur, Mizoram and Nagaland)
- Centre: Ranchi covering Eastern Region (South Bihar and Orissa)

Table 4.4

Rural/Urban Distribution of Drug Use

Drug Type	*Rural (N=31,159) %*	*Urban (N=9,538) %*
Alcohol	20.1	18.3
Cannabis	3.1	1.3
Opiates	0.7	0.5

Source: NHS

Box 4.4

High Prevalence of Alcohol Use-Regions

- Centre: Dibrugarh covering NE Region (Assam and Arunachal Pradesh)
- Centre: Chandigarh covering Northern Region (Himachal Pradesh, Punjab and Haryana)
- Centre: Imphal covering NE Region (Manipur, Mizoram and Nagaland)

Box 4.6

High Prevalence of Opiate Use-Regions

- Centre: Imphal covering NE Region (Manipur, Mizoram and Nagaland)
- Centre: Chandigarh covering Northern Region (Himachal Pradesh, Punjab and Haryana)
- Centre: Jaipur covering Western Region (Rajasthan)

Prevalence of opiate use was high in Imphal, Chandigarh and Jaipur.

Injecting drug use (IDU) was recorded in the following six centres (see Box 4.7): Vishakhapatnam, Imphal, Jaipur, Kolkata, Lucknow and Chennai.

The data on high use for the various drugs in the regions is summarised in the Box 4.8.

Thus, it appears that for all the three substances: alcohol, cannabis and opiates, high prevalence of current use is seen in the North East states, which include Manipur, Mizoram and Nagaland. Trends of high cannabis use were detected from Patna (Bihar). High prevalence of IDU is evident in the North East states. However, IDUs were also reported from five other centres, which represented the population outside the North East states of India.

4.1.10 Profile of Current Users

Table 4.5 describes briefly the profile of current (used within the last 30 days) users of alcohol, cannabis and opiates using select parameters. The onset of drug use begins in early twenties. Between 22 and 32 percent were illiterate and between 11 and 27 percent were single. Most were employed and only a very small minority (around 3%) was unemployed. Few were students (2-10%). Based on some of these parameters the profile of non-users was a bit different. Non-users were more often literate and more often unmarried. The proportion of unemployed persons and students among non-users was higher.

Summarising, it would appear that the

Box 4.7

IDU (Ever) Various Regions

- High in Imphal centre covering NE Region (Manipur, Mizoram and Nagaland)
- Six centres reported IDU

Box 4.8

High Current Drug Use in Different Regions (Trends)

Alcohol (NE and N)	*Cannabis (NE and E)*	*Opiates (NE and N)*
Nagaland	Manipur	Mizoram
Arunachal Pradesh	Bihar	Haryana
Himachal Pradesh	Orissa	Nagaland

profile of current alcohol, cannabis and opiate users in this study was very similar on most of the parameters (Table 4.5).

Viewed from another perspective, the characteristics of users can be examined for intra-group variations. To illustrate, we may examine the proportion of illiterate users of alcohol, cannabis and opiates among all those subjects who are illiterate i.e. belonging to a specific sub class within a group. It was seen that among those who were from nuclear family background, 31.1 percent, 3.3 percent and 0.9 percent were current users of alcohol, cannabis and opiates respectively. Similarly among illiterates, 28.6 percent were users of alcohol and 4.4 percent and 0.7 percent of cannabis and opiates respectively. Among students, between 0.3 percent and 2.6 percent reported current use of opiates, cannabis and alcohol.

4.1.11 Injecting Drug Users (IDUs)

It has been stated earlier that 52 subjects reported ever injecting any drug. The mean age at onset of IDU was 19.0 years (with a standard deviation of 4.1). Currently propoxyphene was the commonest substance being injected (92.9%) followed by heroin (85.7%). About 60 per cent had used other substances prior to injecting use and most (55%) had used heroin before using drugs through the injecting route. Common reasons cited for shifting from the oral/inhalation route to IDU were better high (49%) and peer pressure (42.9%). About 97 percent reported having shared syringes and 74.2 percent reported having shared needles. Several of them reported health complications like skin infection (87.1%).

4.1.12 Reasons for Drug Use

Common reasons given for drug use were curiosity, experimentation, being in the company of drug users and to experience the effects (see Box 4.9). By and large, the reasons were similar regardless of the substance being used. Some reported that it was a common practice in the society and others said they took drugs to relieve tiredness after a hard day's work. Some users reported use of opiates to enhance sexual pleasure.

Box 4.9

Common Reasons for Drug Use

- Curiosity
- Need to experiment
- Drug use a group activity
- Experience the acute effects

4.1.13 Hazards of Drug Use

Current alcohol users reported several hazards. Commonest among these were generalised weakness of the body (33%), followed by inability to visit friends / relatives and inability to perform as husband / father (27% each). Additionally, about 20 percent complained of depression, anxiety and irritability. Some, varying between 2 and 10 percent complained of memory loss, coughs and difficulty in breathing and poor sexual performance. A large number of cannabis users (around 80%) complained of chest infection and absenteeism. Among opiate users

Table 4.5

Profile of Current Users

Item	*Alcohol Users (N=8,002)*	*Cannabis Users (N=1,089)*	*Opiate Users (N=251)*
Mean age of onset (years)	21.3	22.5	23.3
Family Type (%)			
Nuclear	44.3	34.4	43.8
Joint	18.1	24.9	13.5
Illiterate (%)	28.5	31.9	22.3
Unmarried (%)	14.6	11.3	26.7
Unemployed (%)	2.9	2.9	4.4
Students (%)	2.5	2.5	9.6
Rural (%)	78.2	88.6	81.7
Urban (%)	21.8	11.4	18.3

Source: NHS

Box 4.10

Treatment Seeking (% among drug types)

- Current alcohol users - 2%
- Current cannabis users - 4%
- Current opiate users - 18%

commonly reported symptoms were chest infection, weakness and an inability to fulfil the social role as a husband or father.

4.1.14 Treatment Seeking

Very few current users of these drugs contemplated treatment for drug use (see Box 4.10). Only a small minority did actually seek help. Out of a total 8,002 alcohol users, only 163 (2%) actually sought help, 44 cannabis users (4%) and 47 opiates users (18.7%) reported that they had visited treatment centres to quit drug taking. However, a large number of IDUs (73%) had reported for treatment.

4.2 Drug Abuse Monitoring System (DAMS)

4.2.1 Sample

A total of 203 centres participated. It was seen that except for the NGOs funded by the MSJE, the response rate was low for most agencies. Only around 57 percent of NGOs, around 27 percent of GOs and only 7 percent of private psychiatrists provided data. For further analysis, the agencies have been divided into two categories. Category 'A' comprised the treatment centres (GO and NGOs) and private psychiatrists. Category 'B' consisted of agencies whose primary mandate is not to provide care to subjects with drug abuse problems, although they may come across such individuals. The information from drug users from the agencies under category 'B' is discussed in the latter portion of this chapter. A total of 16,942 individuals were reported by the agencies under Category 'A'. As some were multi-drug users, the information was available on users of 20,169 drug types. The subsequent Tables 4.6 and 4.7, Figures 4.4 and 4.5 and Maps 4.1-4.4 reflect the data from the agencies under Category 'A'.

4.2.2 Information on Drug Users from Agencies in Category 'A'

It can be seen from Table 4.6 and Figure 4.4 that five states together namely Uttar Pradesh, Maharashtra, Punjab, Bihar and Kerala provided information on 54.6 percent of the subjects. The remaining 18 states, 2 Union Territories (UTs) and 1 National Capital Territory (NCT) contributed 45.4 percent of the data. It can also be seen that these five states had the maximum number of participating centres.

Table 4.6

Ranking of Various States and Participating Centres (descending order)

Amount of Data Obtained from Various States	*Number of Participating Centres in Various States*
1. Uttar Pradesh (2,473)	1. Uttar Pradesh (27)
2. Maharashtra (2,230)	2. Maharashtra (26)
3. Punjab (1,798)	3. Kerala (21)
4. Bihar (1,394)	4. Bihar (17)
5. Kerala (1,360)	5. Punjab (14)

Source: DAMS

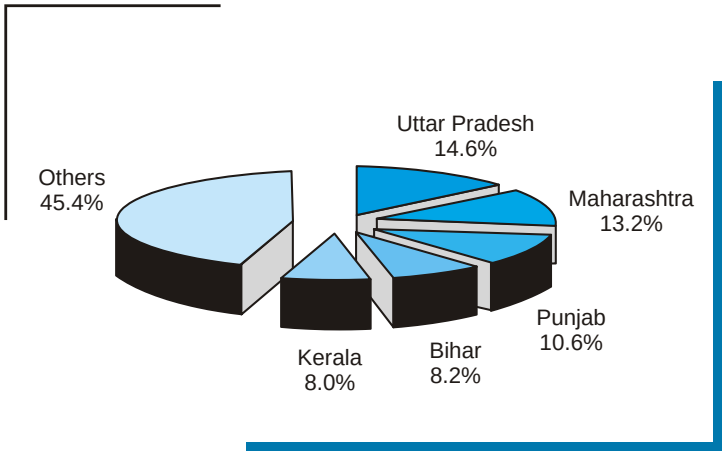
Box 4.11

Respondents and Participating Centres in Various States

- The highest number of respondents (patients) reported was from Uttar Pradesh (N = 2,473) followed by Maharashtra (N = 2,230), Punjab (N=1,798), Bihar (N=1,394) and Kerala (N=1,360)
- These five states reported 9,255 (54.6%) of the responses
- The highest number of participating centres was from Uttar Pradesh (N=27) followed by Maharashtra (N=26), Kerala (N=21), Bihar (N=17) and Punjab (N=14)
- The average number of respondents reported from a centre was 83, over three months in which data was collected

Figure 4.4

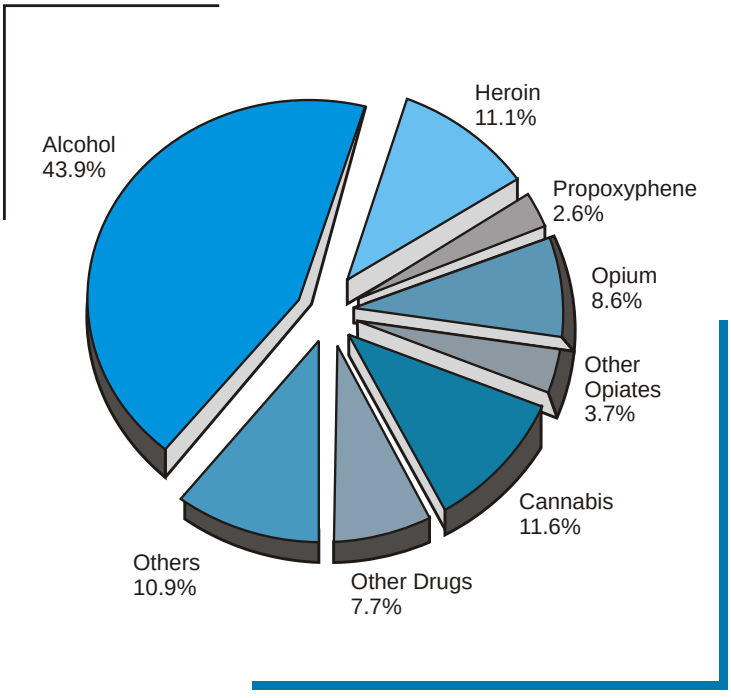
Distribution of Respondents in Various States (N=16,942)



Source: DAMS

Figure 4.5

Abuse of Different Drugs in India



Source: DAMS

4.2.3 Drugs of Abuse

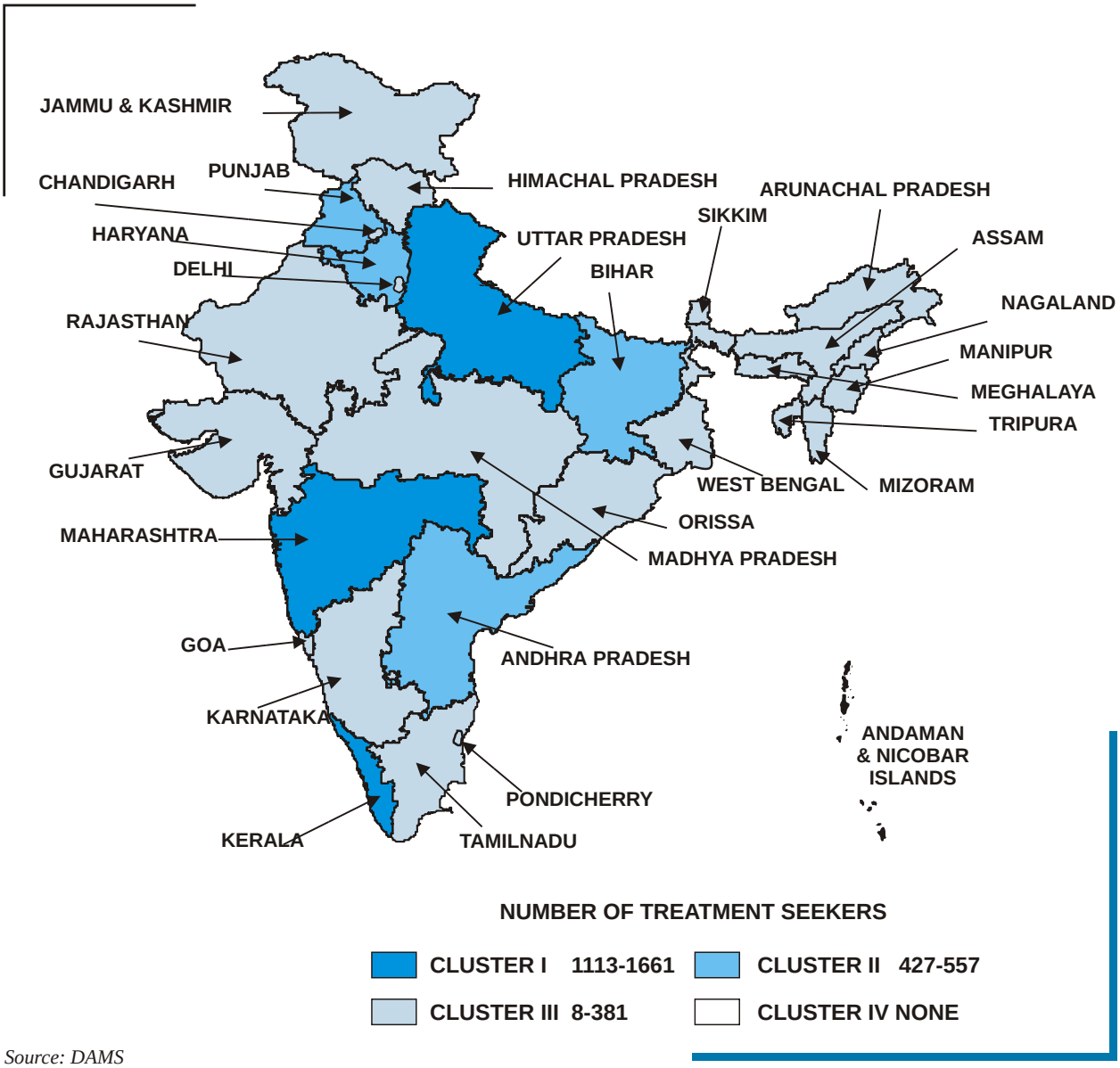
Figure 4.5 depicts the percentage distribution of different drugs. The four most commonly abused substances were alcohol, cannabis, heroin, and opium. It can be seen that alcohol, the commonest reported drug of abuse, was reported by 43.9 percent of treatment seekers. This was followed by opiates as a group (26.0%) and cannabis (11.6%). Other drugs include substances like barbiturates, minor tranquillizers, other sedatives, cocaine, amphetamines, hallucinogens, inhalants and cough syrup. Their percentage varied between 0.2 (barbiturates and amphetamines) and 1.7 percent (cocaine). Others (10.9%) reflect use of tobacco and related products. Opiates as a group include heroin, opium, buprenorphine, morphine, propoxyphene and other opiates.

The profile of various states and four most commonly abused drugs are seen in the Maps 4.1-4.4. The number of persons reporting use of the four most commonly reported substances namely alcohol, cannabis, heroin and opium was variable in the various states.

In these maps, cluster I reflects high use and cluster IV reflects no use in a particular state. It can be seen that the use of various drugs goes beyond the geographical boundaries of a particular state and thus use of a substance is not restricted to a group of adjoining states.

Map 4.1

Alcohol Abuse in Various States (N=8,857)

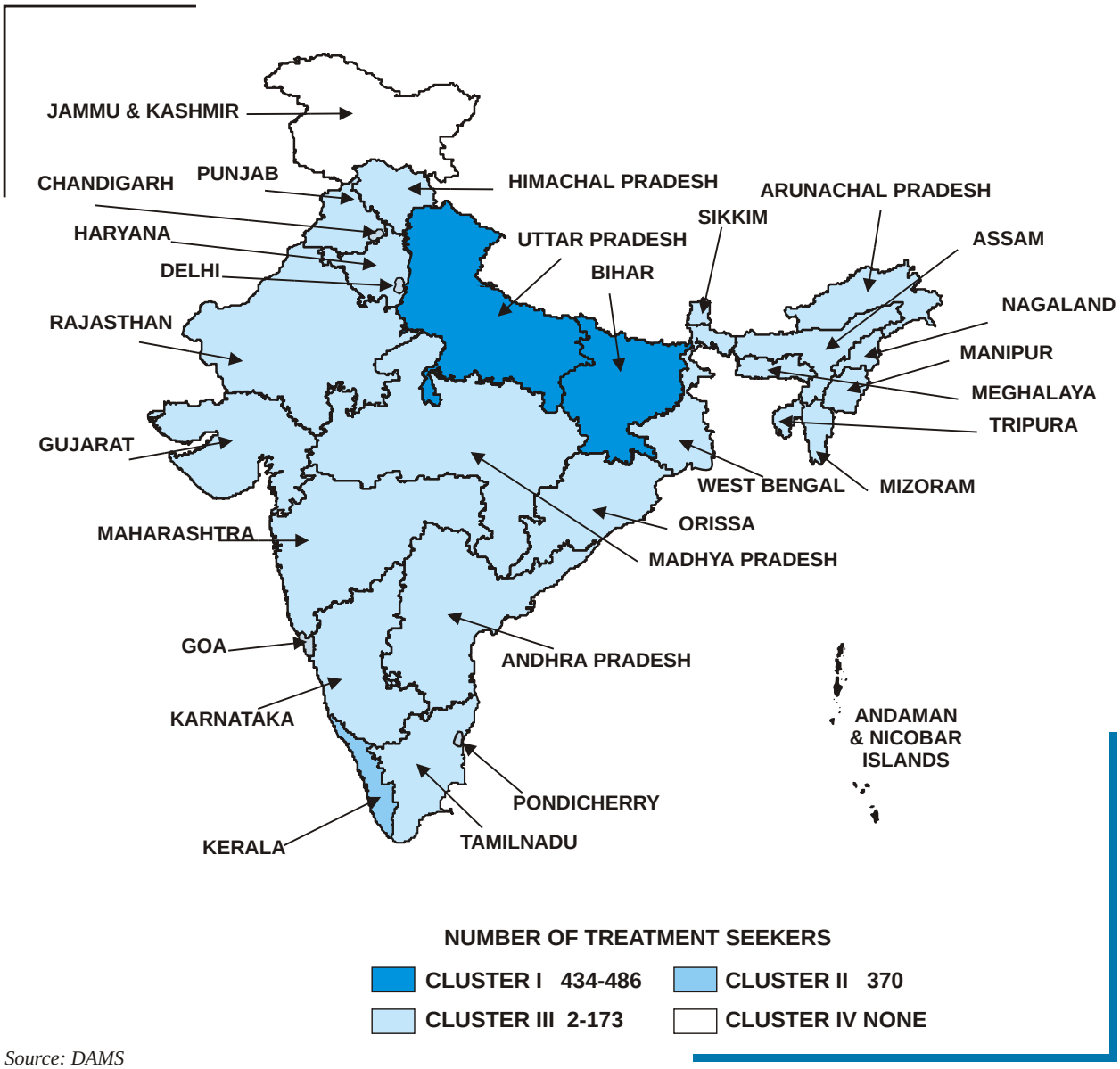


Source: DAMS
Data reported from 23 states, 2 UTs and 1 NCT.
The boundaries and names showed in this map do not imply official endorsement or acceptance by the United Nations

Among all alcohol users reported in this study, the highest percentage was from Maharashtra (approximately 19%). An equal percentage (approximately 13% each) was from Uttar Pradesh and Kerala. Around 12 percent were reported from Bihar and Haryana (around 6% each). The remaining 18 states, 2 UTs and 1 NCT reported around a total of 43 percent of alcohol users (Map 4.1).

Map 4.2

Cannabis Abuse in Various States (N=2,335)

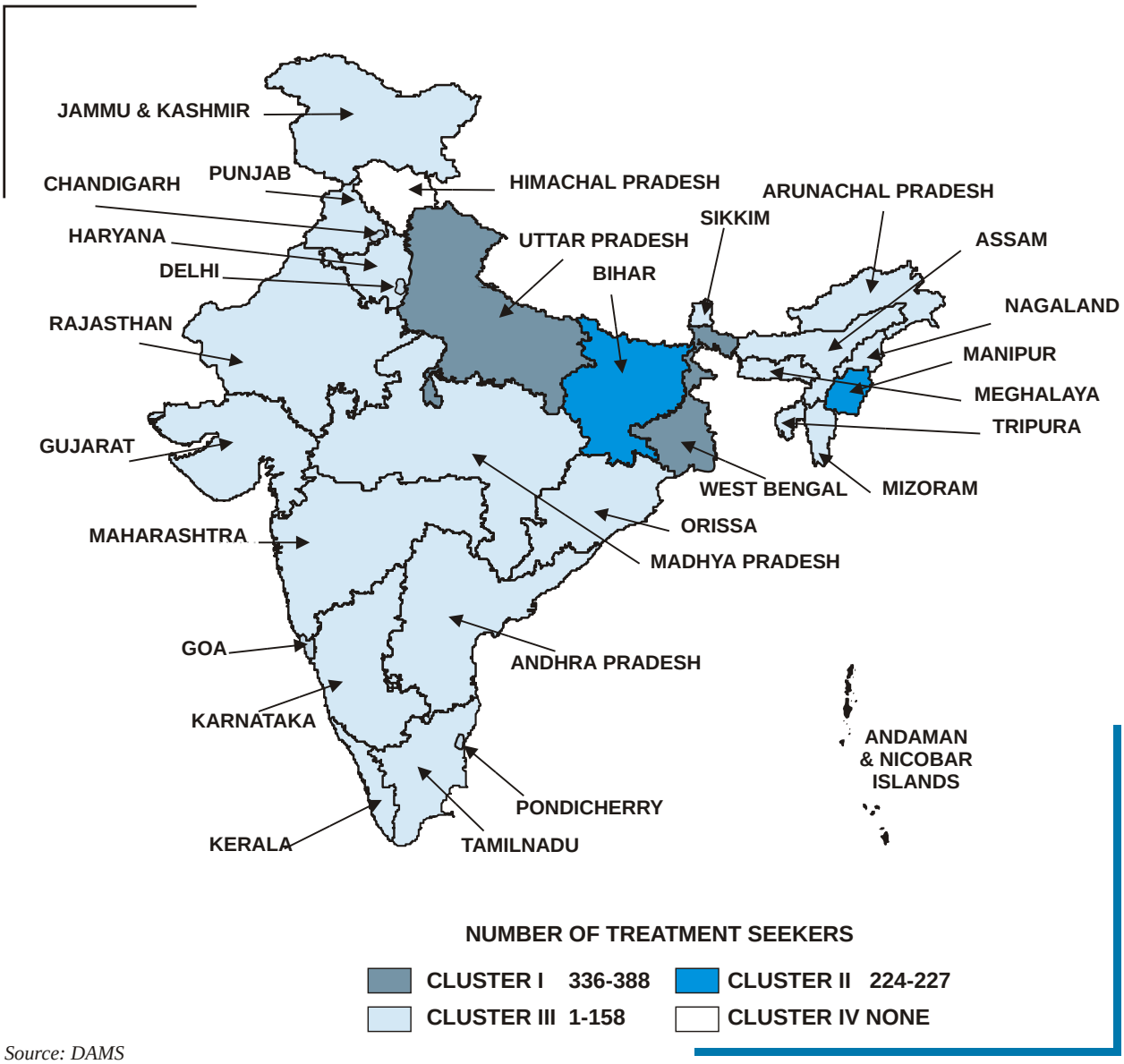


Source: DAMS
Data reported from 22 states, 2 UTs and 1 NCT.
The boundaries and names showed in this map do not imply official endorsement or acceptance by the United Nations

Cannabis abuse was reported from 25 states (Map 4.2). There were none from Jammu and Kashmir. Around 20 percent of cannabis users were reported from Uttar Pradesh followed by Bihar (approximately 19%) and Kerala (approximately 16%). The remaining (approximately 45%) were reported from the remaining 25 states, 2 UTs and 1 NCT.

Map 4.3

Heroin Abuse in Various States (N=2,246)

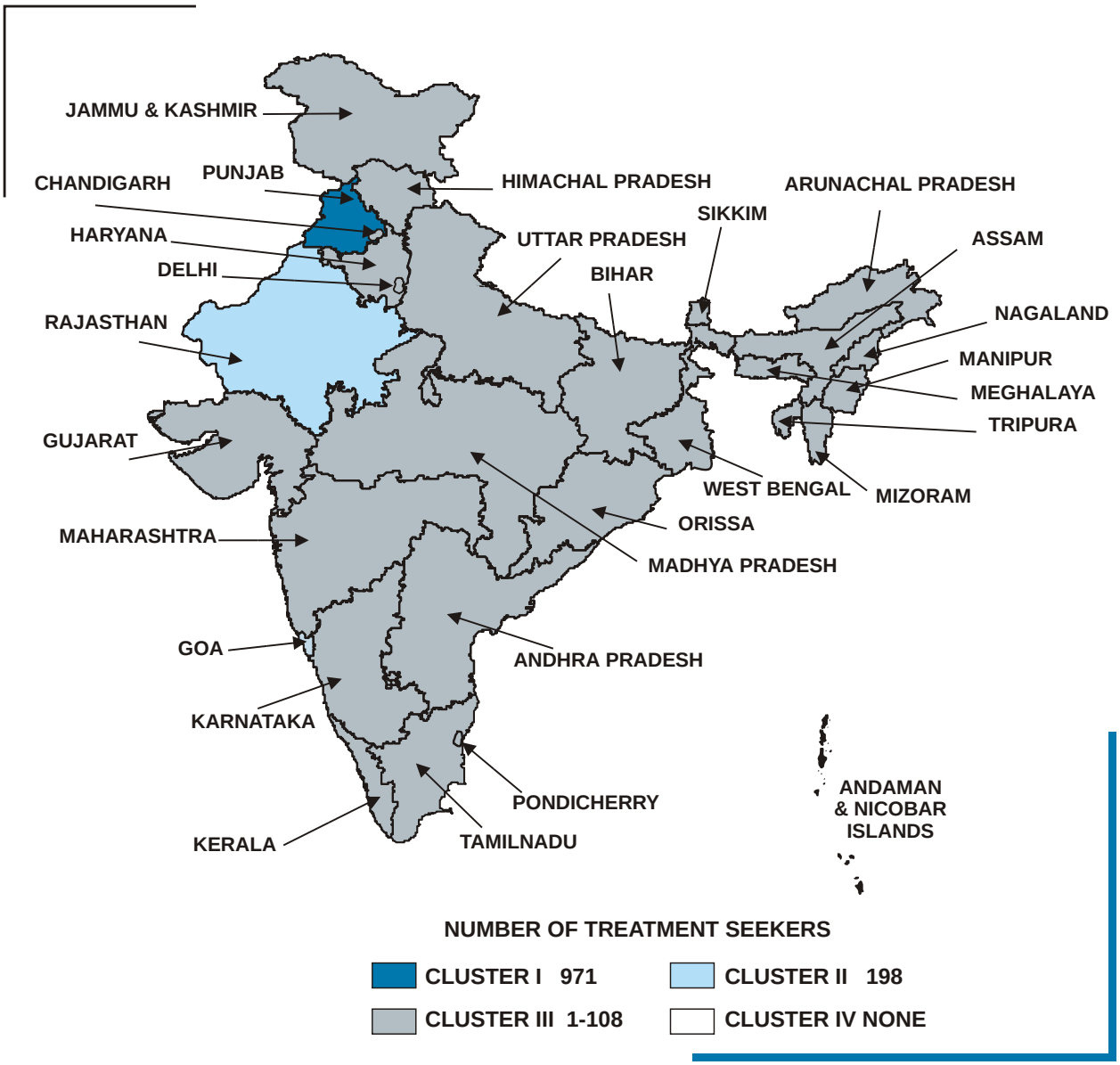


Source: DAMS
Data reported from 21 states, 2 UTs and 1 NCT.
The boundaries and names showed in this map do not imply official endorsement or acceptance by the United Nations

Heroin abuse was reported from all the states except Tripura and Himachal Pradesh. Altogether 2,246 heroin users seeking treatment were reported from 21 states, 2 UTs and 1 NCT. The highest number of heroin users was from Uttar Pradesh (around 17%) followed by Delhi (around 16%) and West Bengal (around 15%). Around 20 percent were from Manipur and Bihar (10% each). The remaining 17 states and 2 UTs reported 31 percent of heroin users (Map 4.3).

Map 4.4

Opium Abuse in Various States (N=1,725)



Source: DAMS
Data reported from 22 states, 2 UTs and 1 NCT.
The boundaries and names showed in this map do not imply official endorsement or acceptance by the United Nations

Altogether 1,725 opium users were reported from 20 states, 2 UTs and 1 NCT. No opium users were reported from Mizoram, Tamil Nadu and Tripura. The highest number of opium users was reported from Punjab (around 56%) followed by Rajasthan (around 11%) and Haryana (around 6%). The remaining (around 26%) was reported from 18 states and 2 UTs (Map 4.4).

The other commonly abused opiate was propoxyphene and a total 519 users of propoxyphene were reported. Most (N=147) were from Punjab followed by Nagaland (N=123) and Mizoram (N=88).

It was seen that even though states like Goa, Meghalaya, and Tripura did not have a large number of subjects seeking treatment, most of those who sought treatment did so for alcohol use. The use of cannabis was commonly reported from the following four states: Bihar, Himachal Pradesh, Orissa and Assam. Opium use was often reported from Punjab and Rajasthan and heroin use was commonly reported from Delhi and Manipur. Finally, the use of propoxyphene was restricted to Punjab and the two north eastern states namely Nagaland and Mizoram.

4.2.4 Other Drugs

In addition to the five commonly abused substances as listed above, abuse of several other substances was reported. These substances comprised other opiates, tranquillizers, hallucinogens, cocaine, amphetamine and inhalants and are discussed briefly in Boxes 4.12 and 4.13.

As seen in Box 4.12 between 219 and 299 subjects reported abuse of various other opiates. Additionally, 244 subjects mostly from Mizoram and Kerala reported abuse of cough syrup.

A total of 34 subjects reported abuse of amphetamines (0.2%), mostly from Uttar Pradesh, Manipur and Kerala. A total of 337 subjects reported abuse of cocaine (1.7%). These cocaine users were predominantly from Maharashtra (N=129), Uttar Pradesh (N=58) and Madhya Pradesh (N=56).

A variable number of subjects reported abuse of other drugs namely tranquillizers, sedatives, barbiturates, hallucinogens and inhalants.

Box 4.12

Opiates Other than Heroin and Opium

- Morphine- 232 subjects reported from 16 States, 1 Union Territory and 1 National Capital Territory (Uttar Pradesh-97, Punjab-32, Kerala-31)
- Buprenorphine- 299 subjects reported from 14 States, 1 Union Territory and 1 National Capital Territory (Punjab-70, Delhi-63, Kerala-50)
- Other Opiates- 219 subjects reported from 16 States and 1 National Capital Territory (Punjab-87, Uttar Pradesh-27)

Box 4.13

Other Drugs

- Minor Tranquillizers- 329 subjects reported from 22 States, 2 Union Territories and 1 National Capital Territory (Kerala-117, Punjab-48)
- Other Sedatives- 302 subjects reported from 13 States, 2 Union Territories and 1 National Capital Territory (Maharashtra-175, West Bengal -39, Kerala-36)
- Barbiturates- 42 subjects reported from 10 States and 1 Union Territory (Kerala-14, Uttar Pradesh-10)
- Inhalants- 191 subjects reported from 9 States, 1 Union Territory and 1 National Capital Territory (Kerala-70, Manipur-50, Andhra Pradesh -21)
- Hallucinogens- 67 subjects reported from 12 States, 1 Union Territory and 1 National Capital Territory (Uttar Pradesh-17, Bihar-12)

Box 4.14

Demographic Features

- Most (70%) were between 21-40 years
- Largely (97%) males
- Most (77%) were married
- A few (16%) were illiterate
- Some (20%) were unemployed

4.2.5 Profile of Treatment Seekers

The subjects reported through DAMS were overwhelmingly male (97.2%). About 33 percent were between 21-30 years and around 37 percent were between 31-40 years. Only about 5 percent were below 20 years of age. Overall, around 23 percent were unmarried and about 16 percent were illiterate. Very few (1.1%) were separated due to drug abuse. A small number of the sample was unemployed (19.8%) and students (3.5%). Largely, the sample in this study was comprised of farmers. About 30 percent of their fathers and 50 percent of their mothers were illiterate. The parents of drug users were generally farmers, service related workers or labourers. Very few parents were professional or white-collar workers. A majority of the drug users seeking help from treatment centres were from the low-income group. The median monthly income was Rupees 2,500/- (US$ 53) [Mean Rs.3,050/- (US$ 65), calculated at US$ 1= 46.8 INR]. Overall, 49 percent reported drug use in the family.

Box 4.15

Drug Use Parameters

- Age of first use-mostly 21 to 30 years.
- Duration of use for more than five years-53%
- Current IDU-9%
- Drug related arrest (Current)-4%
- Drug related violence-66%
- Sex with multiple partners-4%
- Previous treatment attempt-27%

The data on drug-use-related variables show that most (around 46%) had been introduced to drugs between the age of 21 and 30 years. There were a significant number of users (around 53%) who had reported for treatment after five years of drug use. Overall, 14.3 percent reported injecting drug use (IDU) at least once in their lifetime and 9.4 percent were current IDUs. Overall, 7.7 percent reported sharing of needles at least once and 4.4 percent had shared needles within the preceding month. A small number (approximately 13%) of users reported drug related arrest 'ever' in their lifetime and about 4 percent reported drug related arrest in the preceding one month. Overall, about 66 percent reported drug related violence in the family. About 27 percent reported previous attempt(s) to abstain. A small minority (around 4%) reported multiple sexual encounters including those with commercial sex workers (CSWs).

Certain other characteristics of users in the various states were also noticed and are mentioned below:

- Young subjects (<20 years) were more often reported from Mizoram, Jammu and Kashmir and Nagaland.
- Older subjects (>40 years) were more often reported from Kerala, Goa, Karnataka, Pondicherry and Andhra Pradesh.
- Unmarried subjects were more often reported from Mizoram, Jammu and Kashmir, Manipur, Assam and Orissa.
- Illiterate subjects were more often reported from Rajasthan, Punjab, Andhra Pradesh and Uttar Pradesh.
- A higher number of "never employed" subjects was more often reported from Nagaland, Mizoram, Gujarat and Andhra Pradesh.
- Student subjects were more often reported from Mizoram and Nagaland.
- A higher number of subjects reporting injecting drug use and sharing of needles was reported from Mizoram, Manipur and Nagaland.

Table 4.7

Distribution of Respondents as Regards Place of Residence

Items	*Rural N=10,417 %*	*Uraban N=9,752 %*
Age (years)		
<15	0.3	0.4
16-20	3.6	5.6
21-30	30.3	36.0
31-40	37.5	36.2
>40	28.2	21.7
Age at 1st use (years)		
<15	9.1	10.2
16-20	25.5	32.2
21-30	47.3	45.3
31-40	13.9	10.4
>40	4.2	2.0
Drugs used		
Heroin	7.9	14.6
Other opiates	16.6	10.7
Cannabis	13.4	9.6
Alcohol	46.2	41.5
Others	15.9	23.6
IDU (ever)	10.6	18.2
Needle sharing (ever)	5.3	10.1
Family violence (present)	66.1	66.6
Sex with CSWs	3.2	5.7
Safe sex (practised)	40.4	36.4

Source: DAMS

The data is available as a separate monograph entitled "Drug Abuse Monitoring System-A Profile of Treatment Seekers" (Siddiqui 2002).

4.2.6 Profile of Users from Rural and Urban Background

In this study altogether 51.6 percent of the subjects were reported from a rural background (place of residence) and the remaining 48.4 percent were from urban India. Table 4.7 shows some of the distinguishing features of these two groups. There were more (70.1-90.9%) drug users from an urban background in Mizoram, Meghalaya, West Bengal, Jammu and Kashmir, Tamil Nadu and Maharashtra (in descending order). In Goa, Punjab, Haryana and Kerala subjects from a rural background were more often reported (69.9-78.0%). They resembled each other on most of the parameters. People from an urban background more often reported heroin abuse, injecting drug use (IDU) and needle sharing. In contrast, users of other opiates and cannabis were generally from a rural background. A marginally higher percentage of urban users had been

introduced to drug use earlier, i.e. before the age of 20 years (42% versus 34%). An equal and high percentage of the population reported family violence (66%) due to drug use.

The data on mean and standard deviation (SD) on select parameters namely age, age of first use, and number of treatment attempts were also similar between the two groups (Table 4.8). The monthly income was slightly higher among subjects from an urban background. The duration since last treatment was 3.3-3.8 months. Thus average time between one treatment contact and another was about 3 months. It can also be seen that the duration for relapse to take place and income per month were both highly variable (SD was higher than the mean). The subjects spent about 50 percent of their income on drugs (mean expenditure on drugs for the total sample per month was Rs 1,653).

Table 4.8

Data on Select Parameters (Mean and SD)

Items	*Rural subjects N=10,417*	*Urban subjects N=9,752*	*Total subjects N=20,169*
Age	36.6 ± 13.6	34.0 ± 11.3	35.3 ± 11.0
Age of first use	24.7 ± 10.0	23.1 ± 7.9	24.0 ± 7.8
Number of treatment attempts	1.0 ± 1.1	1.2 ± 1.4	1.1 ± 1.2
Income per month (INR)	3,050 ± 3,390	3,789 ± 3,668	3,408 ± 2,409

Source: DAMS

4.2.7 Non-Response Categories

There were a few data items where the response rate was very low from large number of states. Many subjects provided answers like "No Response", "Not Known" and "Not Available". It was seen that there were altogether ten items where the percentage of non-response was higher than 10 percent from the subjects. These were: sexual practice, IDU, sharing of needles, educational status of parents, occupation of mother and family violence. This may mean that information on these data items may be difficult to obtain as the subjects may themselves be unaware or feel uncomfortable answering. Data from Delhi state was particularly poor in this regard as the non-response rate was very high on many data items. These observations are important for future refinement of the survey instrument.

4.2.8 Information on Drug users from Agencies in Category B

In this study (DAMS), an attempt was made to capture information on drug abuse/users from various other sources as well. The following participated and provided data: NGO-children (N=11), youth organisations NYKs (N=30), NGO-HIV/AIDS (N=13), prison (N=18) and psychiatric hospitals (N=3). Many were contacted. However, the response was not encouraging and varied between 3 and 20 percent. Altogether information on 2,365 individuals was obtained from 75 such centres (Category B).

The subjects from these five organizations (Category B) between themselves and as against the subjects from treatment centres (Category A) were different as regards their background and drug use variables. There were nonetheless some similarities. Between 87 and 100 percent of the subjects reported upon were males. The subjects were older (31 years and above) in psychiatric hospitals and

prisons, and resembled the sample from the treatment centres (Category A). The largest number (50%) of illiterate subjects were reported from NGO-children. The large numbers of subjects (92%) from the prison were "Never Employed". Between 24 and 34 percent of subjects were unmarried and between 32 and 67 percent were from rural background. In NGOs working with children, about 70 percent were from an urban background. Between 25 and 54 percent reported having a drug using family member. This was around 50 percent for the sample reported from the treatment centres.

The data shows that alcohol was the commonest drug of abuse followed by cannabis and opiates. Most were introduced to drugs at a young age (below 15 years and 16-20 years). However, this was not so for the subjects from the treatment centres (Category A). Here a majority (46%) were introduced to drugs between the ages of 21-30 years. Injecting drug use (IDU) was reported by about 20 percent of the subjects from NGO-children, NGO-HIV/AIDS and NYKs and this was slightly higher than the subjects reported from the treatment centres (Category A). Between 7 and 15 percent of these subjects from these three centres reported sharing of needles. Only a few (around 20%) had attempted to give up drug habit in the past. This was slightly lower than the figure reported from the treatment centres, which was around 27 percent.

Box 4.16

Drug Users Reported from Other Agencies

- Largely male
- Illiterate: 7-50%
- Unemployed: 12-92%
- Rural: 32-67%
- Cannabis abuse mostly among NGO-children and prisoners
- Heroin abuse among NGO-children and NGO-HIV/AIDS
- Alcohol abuse in all the agencies
- IDU: 14-20 percent in NGO-children, NGO-HIV/AIDS and NYKs

Some (12-34%) had been arrested by police due to drug related offences. Many (42-64%) subjects from the other sources (Category B) did not respond to questions regarding sexual practice and safe sex. About 60 percent of the subjects across various centres reported drug related violence in the family. This was, however, higher among subjects from the prison (82%).

4.3 Rapid Assessment Survey (RAS)

4.3.1 Sample

In this component data was obtained from 14 urban sites (Map 3.1). Altogether 4,648 drug users were interviewed. Out of these, 2,831 drug users were interviewed in the 9 sites sponsored by UNODC (Group A) and the remaining 1,817 drug users were recruited from four major metros and Imphal (Group B) and were sponsored by UNESCO. Out of these 4,648 subjects, 371 (8%) were women. A higher percentage (20%) of women were interviewed in Goa followed by Thiruvananthapuram, Shillong, Hyderabad and Dimapur. In Jamshedpur, Ahmedabad, Bangalore and Amritsar, very few female drug users were interviewed.

The consolidated data for the entire pooled sample from the nine sites sponsored by UNODC (Group A) has been described. As no consolidated report is as yet available for the subjects in Group B (sponsored by UNESCO), the data from each centre is discussed separately. Where necessary inter-centre differences have been brought out.

4.3.2 Demographic Characteristics

The demographic characteristics of the entire sample (combined groups A and B) can be seen in Table 4.9.

It was seen that most of the drug users interviewed were young adults. The mean age of the sample in Group A was 29.8 years (SD 8.9). The subjects were younger in Shillong / Jowai (around 23 years) and older in Ahmedabad (around 35 years). In Group A, about 3 percent were below 18 years, 10 percent between 18 and 20 years and 11 percent were above the age of 40 years. Most (92%) were males. Overall, about 26 percent of the subjects interviewed were homeless, 45.5 percent were currently married and about 5 percent were widowed or divorced. In this study about a quarter (21.3%) were illiterate. The remaining had varying levels of education. Currently about a third (29.1%) of the subjects were unemployed. Many (28.7%) were daily wage earners and about 17 percent were farm/factory workers. Very few (1%) were professionals.

Certain differences across cities were also observed. A majority of the users were younger (mean age 23 years) in Shillong as against Ahmedabad where most were in the mid-thirties (mean age 35 years). The three cities namely Ahmedabad, Hyderabad and Mumbai

Table 4.9

Background Feature on Select Items (N=4,648)

Items	*Number %*
Male	4,277 (92.0)
Homeless	1,192 (25.6)
Unmarried	2,267 (48.8)
Illiterate	992 (21.3)
Unemployed	1,238 (29.1)
Average monthly income (INR)	4,050 (US$ 87)
Range (INR)	300 - 60,000 (US$ 61,282)

Source: RAS

Box 4.17

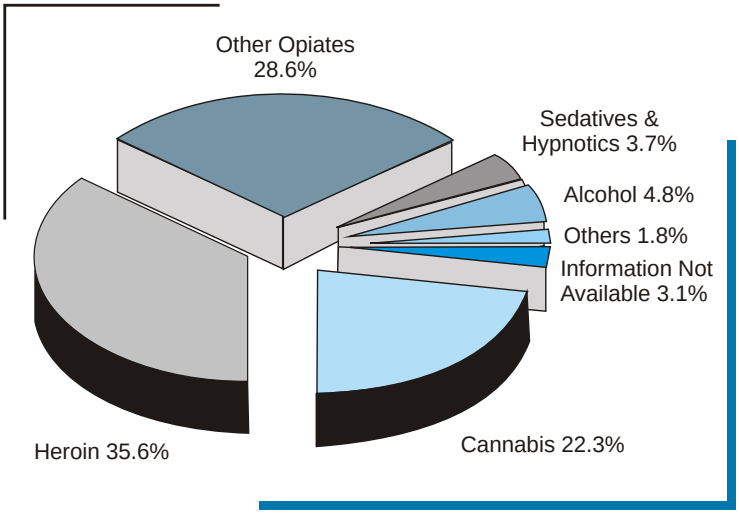
Drugs of Abuse Across Sites

- Cannabis-Mostly in Bangalore, Shillong, Thiruvananthapuram, Hyderabad and Goa
- Heroin-Mostly in Imphal, Thiruvananthapuram, Ahmedabad, Chennai, Mumbai and Delhi
- Buprenorphine-Mostly in Jamshedpur, Chennai and Kolkata
- Propoxyphene-Mostly in Dimapur
- Inhalants-Mostly in Bangalore

had a very high proportion of homeless population (82.8%, 65.3% and 54.0% respectively). Jamshedpur, Shillong, Dimapur and Imphal had a negligible homeless population (0.33.0%). Ahmedabad, Jamshedpur, Amritsar and Thiruvananthapuram had a greater number of married subjects. A majority of drug users in Shillong, Hyderabad, Bangalore, Dimapur and Kolkata were unmarried. Shillong, Goa and Dimapur reported a higher number of unemployed drug users. Imphal had a very high proportion (61%) of unemployed drug users. In Kolkata only 9 percent were unemployed. The average monthly income of the drug users ranged from Rs.300 to Rs.60,000 per month. There was high variability on this parameter (standard deviation was high), however, most had a monthly income around Rs.4,050.

Figure 4.6

Current Primary Drugs of Abuse



Source: RAS

4.3.3 Current Primary Drugs of Abuse

As seen in Figure 4.6, the highest proportion (35.6%) of subjects was currently (last one month) abusing heroin followed by other opiates (propoxyphene, opium, buprenorphine, and pentazocine) at 28.6 percent. About 22 percent were abusing cannabis, about 5 percent were alcohol users and 3.7 percent had abused sedatives and hypnotics. The data was missing for 143 subjects (3.1%).

Certain inter-city differences were observed (see Box 4.17). Among subjects in Group A (UNODC sites) abuse of cannabis was quite prevalent (36.7%), but there were no cannabis users interviewed among subjects in Group B (UNESCO sites). Abuse of heroin was highest in Imphal (83%) followed by Thiruvananthapuram (45.5%) and Ahmedabad (37.9%). Abuse of buprenorphine (other opiates) was highest in Jamshedpur (78.5%) followed by Chennai (54.0%). Abuse of propoxyphene was highest in Dimapur (71.3%). Cannabis abuse was reported from all the sites in Group A and was highest in Bangalore (69.8%) followed by Shillong/Jowai (66.3%). Inhalant abuse was reported mostly from Bangalore (10.5%) and abuse of sedatives was mostly from Hyderabad (31.3%). Alcohol was the primary drug of abuse in Goa among 35.7 percent. However, most of these subjects (alcohol users) had used other substances too including cannabis, heroin and sedatives. Poly-drug use was observed in many cities and varied between 32 and 94 percent.

4.3.4 Drugs of Initiation

Cannabis was the commonest drug of abuse to begin with, followed by alcohol across various sites. Only a few (2-6%) were initiated with other drugs like sedatives, tranquillizers, heroin and inhalants. A few differences across centres were noticed (see Box 4.18).

4.3.5 Age of Initiation

The mean age of initiation of drug use in the sample in Group A (N = 2,831) was 18.9 years (SD 5.6) and 72.9 percent of the drug users started their drug use before completing the age of 20. Among the subjects in Group B, it was similar and varied between 15 and 20 years.

4.3.6 Mode of First Drug Use and Duration

By and large, most of the subjects smoked (cannabis) or drank (alcohol) as their first drugs of abuse. A small minority (2-16%) began their drug use as IDUs. Among the subjects in Group A, about 42 percent had used drugs regularly for more than five years and an additional 23 percent for 4-5 years. Not much variation across cities was evident in this regard.

4.3.7 Drug Use by Family Members and Friends

Drug use among family members and friends was common. Between 7 (Chennai) and 60 percent (Mumbai) of the subjects reported that one or more of their family members and around 86 percent of their friends were drug users. In Jamshedpur, Thiruvananthapuram, Shillong/Jowai, Dimapur, Bangalore, Delhi and Amritsar (7 out of 14 sites) over 90 percent reported that they had drug-using friends. Thus it was seen that there was more likely to be a drug-using peer as against a drug user in the family.

4.3.8 Injecting Drug Use (IDU)

Overall, 43 percent of the total sample reported injecting drug use (ever). The proportion of IDUs between the two broad groups (Group A and Group B) was different. Among subjects in Group A, 945 (33.4%) subjects and among subjects in Group B, 1,072 (58.7%) subjects reported injecting drug use. The percentage of IDU varied from 10 percent (Ahmedabad) to 100 percent (Chennai). The percentage of IDUs interviewed was high and above 50 percent in Jamshedpur, Thiruvananthapuram, Chennai, Imphal and Kolkata. Among the subjects in Group A, it was noticed that the age of starting IDU varied between 15 and 28 years. There was a gap of 2-10 years before shifting to injecting practices. The details regarding injecting drug use and their profile are discussed in a subsequent section.

4.3.9 Adverse Health Consequences

These subjects reported several health hazards due to chronic drug use (see Box 4.19). Loss of body weight (39.6%) was most often reported. Between 4 and 33 percent reported various other illnesses like TB, jaundice, diarrhoea and fever.

Box 4.18

First Drug Used

- Dimapur-*Propoxyphene* among 34 percent
- Amritsar-*Sedatives* among 32 percent
- Dimapur, Ahmedabad, Mumbai and Kolkata-*Heroin* among 12-21 percent

Box 4.19

Common Illnesses Reported

- Loss of Body Weight
- Fever
- Diarrhoea
- Jaundice
- TB
- STDs
- Abscess

Several other illnesses like abscess, genital ulcers and other sexually transmitted diseases (STDs) were also reported. Many (37-97%) did not seek any help for these symptoms except in Thiruvananthapuram. Among subjects in Group A, about 45 percent reported that they knew someone who has had a medical complication due to overdose. Among IDUs (Group B) evidence of excess occurrence of health hazards including abscess and overdose were observed.

4.3.10 Sexual Behaviour

Data obtained from the subjects in Group A revealed that overall about 70 percent of the unmarried drug users (N=1,019) reported having had sexual experience (Table 4.10). Such behaviours among the unmarried drug users were common in almost all the sites. Among married subjects (N=658) about 58 percent reported extra-marital sexual experience. Between 28 and 80 percent reported such behaviour (extra-marital sex) across various centres. Among the subjects in Group B, 47 percent of subjects in Kolkata reported having had sex with partners other than the spouse. The subjects in Group A reported having had first sexual experience at an early age. The mean age varied between 14 and 20 years across various cities.

Many drug users interviewed in this study reported sex with commercial sex workers. Between 2 percent (Dimapur) and 79 percent (Kolkata) reported sex with a sex worker. These figures were somewhat higher in the four cities namely Kolkata, Delhi, Chennai and Bangalore (varying between 55 and 79%). Some of the subjects from Group A reported group sex, and the prevalence varied between 44.8 percent (Hyderabad) and 4.7 percent (Dimapur). Overall, among subjects in Group A about 36 percent reported use of condoms. The prevalence varied between 19 percent (Hyderabad) and 64 percent (Imphal and Kolkata). Consistent use of condoms was relatively uncommon. Even with sex workers the consistent use of condoms was uncommon, and among subjects in Group A about 47.6 percent reported that they used it rarely. However, on many of these items "non response" rate and data "not available" was high and varied between 27 and 65 percent across various sites.

Overall, about 23 percent of subjects in Group A reported drug use with members of opposite sex. Among IDUs, there was increased reporting of sex with sex workers (40-66%). However, use of condom was very similar to the entire group. The data is insufficient among subjects in Group B except from subjects in Mumbai where about 74 percent reported drug use with opposite sex.

Table 4.10

Sexual Behaviour (%)

Items	*%*
Sexual experience by unmarried drug users	69.9
Sex with person other than the spouse	58.1
Sex with sex worker	24.4
Use of condoms	35.9
Drug use with members of opposite sex	23.4

Source: RAS (UNODC sites)

4.3.11 Knowledge of HIV/AIDS

Adequate knowledge about HIV/AIDS and its transmission was lacking and the risk perception was low. Indeed, the majority of drug users interviewed perceived "no possibility" of contracting HIV. Between 3 percent (Amritsar) and 37 percent (Bangalore) had been tested for HIV. In Imphal about 23 percent reported that they had been tested for HIV. Most however, did not care to know the test results. Among the drug users in the sites who knew the HIV test finding, a majority were willing to share the result.

4.3.12 Treatment Seeking

Overall, among subjects in Group A, about one-third had attempted to reduce drug consumption on their own in the preceding six months. However, only a minority (27%) had ever reported to any organisation for help and an even smaller percentage (12%) was currently receiving treatment. Some reported that they faced difficulty in obtaining help for treatment from the established treatment centres. Amongst those who reported for treatment, the level of satisfaction was not high. Some (in Chennai and Kolkata) were not aware of treatment facilities in the city.

Thus, it was seen that though some had contemplated reducing consumption, few actually reported to the organised treatment sector for help. In Goa, Imphal and Delhi a large majority did not comment on the various issues related to treatment and help-seeking behaviour. However, it would appear from the available responses that there were certain factors which discouraged them from undergoing treatment. Various reasons cited were: cost of treatment, lack of infrastructure, lack of facilities and indifferent attitude of staff. The treatment environment was not perceived to be conducive to treatment by many.

Between 8 percent (Goa) and 75 percent (Mumbai) reported that they have been in a police lockup in their lifetime. Between 4 percent (Goa and Shillong/Jowai) and 72 percent (Kolkata) reported that they have been jailed at least once in their lifetime. Of those who had ever been to jail, it was reported that between 4 and 83 percent had been in jail last year. The composite data on these parameters among subjects in Group A is seen in Table 4.11. Many drug users in various sites reported that they were physically abused in the prison. It was seen that a higher number of IDUs had been in a lockup / jail.

Box 4.20

Treatment Seeking and Treatment Facilities

- Lack of treatment infrastructure and limited access to treatment
- Cost was a major factor for not being treated
- Some felt they did not require treatment
- Some felt that treatment was not possible
- Many were dissatisfied with treatment

Table 4.11

Self Report of Anti-social Behaviour, (N = 2,803)

Items	*% Reporting 'yes'*
Ever been in a police lockup	33.2
Been in a police lockup in the last year	17.6
Ever been to a jail	20.9
Been to jail in the last year	11.3

Source: RAS (UNODC sites)

4.3.14 Violence

Some drug users interviewed in this study reported being subjected to violence. Between 22 percent (Ahmedabad) and 45 percent (Delhi) reported that they were physically cts in

assaulted. Overall, about 25 percent of the subjects in Group A reported that friends, co-workers, neighbours and/or police had beaten them up. Most of these fights occurred under the influence of drugs. By and large, the proportion of subjects involved in fights / violence varied and was between 5.4 and 39.6 percent (subjects in Group A). A majority of these events had taken place in the previous six months.

4.3.15 Projected Number of Drug Users

As part of the methodology, a rough estimate of number of users of various drugs in these sites is given. This information is available only from two sites, namely Bangalore and Amritsar.

The projected number of users from Bangalore for various drugs was:

Opiates	8,195
Cannabis	27,951
Inhalants	25,000

The projected number of users from Amritsar for non-alcoholic drugs was variable:

6,000 (as per the research team)

10,000 (as per key informants and service providers)

Box 4.21 shows the projected number of IDUs in the other cities (UNESCO sites).

Box 4.21

Projected Number of IDUs

- Chennai 11,500
- Mumbai 6,700
- Imphal 11,400
- Delhi 18,000-20,000

Summarising, it was seen that the drug users studied in these RAS sites were predominantly young males, a majority were living in homes, nearly a half were unmarried, about a third of them had secondary level education, three-fourths were employed, with a significant number of them employed as daily wage earners and an average monthly income of Rs. 4,050. Opiates (heroin, buprenorphine and propoxyphene) and cannabis were the major drugs abused. Cannabis was also abused mainly as a drug of initiation. Most were introduced to drugs during late teens (15-19 years). The time lag between initiation of drug use and shifting to injectable practice was variable and varied from 2-10 years, although most IDUs shifted within the first three years. Sharing of needles and syringes was quite common. Most were sexually active, had their first sexual experience at an early age (around 19 years) and some had sex with commercial sex workers without practicing safe sex. In most centres, sex and drug use coexisted though their proportion across centres was variable.

Several adverse consequences including health and psychosocial problems were reported. Between 8 and 75 percent had been arrested for drug related offence and between 4 and 72 percent had been in the prison for such anti-social behaviour. Most had not sought or received any formal help to give up their habit. Only a minority, about 12 percent were currently in contact with some treatment agency. The details are available as a separate monograph entitled “Rapid Assessment Survey of Drug Abuse in India” (Kumar 2002).

4.4. Focussed Thematic Study: Drug Abuse among Women

4.4.1 Sample

The focussed thematic study on Drug Abuse among Women interviewed 75 (non-randomly selected) women drug users in three cities namely Mumbai, Delhi and Aizawl and from three different settings as described in the section on methodology. The subjects were mostly young adults and up to 30 years, about 33 percent were illiterate, about 30 percent were never married and a similar number were divorced or separated. Many (about 66%) were employed. With regard to these variables, the centres resembled each other except on a few parameters as seen in Box 4.22.

Box 4.22

Select Demographic Parameters

- The subjects in Mumbai were more often older
- The subjects in Aizawl had higher level of education
- About 40 percent in Mumbai were separated/ divorced
- A few subjects besides being involved in sex trade, were also involved in other anti-social behaviour
- In Aizawl, 80 percent of the subjects were currently unemployed

4.4.2 Drugs of abuse

Commonly abused drugs by these women were heroin, propoxyphene, alcohol and minor tranquillizers. Many were poly-drug users. There were very few cannabis users. Heroin users were seen in all the three cities. However, propoxyphene users were seen exclusively in Aizawl and users of minor tranquillizers were more often reported from Delhi. There were large numbers of alcohol users in Mumbai. Thirty out of 75 subjects (40%) were injecting drug users (IDUs) and were seen mostly in Aizawl and Mumbai. In Aizawl, propoxyphene was most often injected as against heroin in Mumbai.

Most were introduced to drugs before the age of 20 years by their friends. Some (16%), mostly in Delhi and Aizawl, reported that their husbands or sexual partners introduced them to drugs. In Delhi, some reported that their physicians prescribed these substances to them. However, they continued to use these prescribed substances unsupervised. The common reasons for initiation are seen in Table 4.12. Several reasons for continuation of drug use were cited. These include: pleasure, to relieve stress and to avoid withdrawal symptoms. Some even reported that use of drugs helped them work harder and earn more money.

Many (approximately 40%) reported long duration of drug use. Most from

Box 4.23

Commonly Abused Drugs - Women

- Heroin
- Propoxyphene
- Alcohol
- Minor Tranquillizers

Note: Thirty out of the 75 subjects interviewed were IDUs

Table 4.12
Reasons for Initiation (% Distribution), N=75

Reasons	*%*
Introduced by friends	48.0
Being in sex trade	13.3
Drug use to discourage husband/sexual partner	5.3
Prescription by general practitioner	5.3
Others	28.0

Source: Focussed Thematic Study: Drug Abuse among Women

Delhi could support their drug habit through legal personal earning (Box 4.24) though some (30-40%) supported their drug habit through commercial sex work and drug peddling.

Box 4.24

Means of Supporting Drug Habits

- Legal personal earning
- Sex work
- Drug peddling
- Pocket money
- Selling household items

4.4.3 Complications

These subjects reported several health and psychological hazards as seen in Box 4.25. About 20 percent of IDUs from Aizawl were hospitalised on a number of occasions for overdose and treatment of abscesses. Some reported that substance abuse caused fracture and hospitalisation. Others reported irregular menstrual cycles, amenorrhoea, and medical termination of pregnancy due to their substance use. Several psychological problems like insomnia, depression and anxiety were reported. Eight subjects reported suicidal attempts in the past. Several women in Delhi reported guilt for having neglected their children and other family members.

Almost 44 percent of the women across sites reported a history of incarcerations due to their peddling activities, sex work, pick pocketing and theft charges. Harassment and physical violence by police was reported by 28 percent of the women. In some exceptional cases reported in Aizawl and Mumbai, the police constables referred the arrested women to drug treatment and rehabilitation services.

Box 4.25

Common Complications

A. Health
- Physical weakness
- Headache
- STD
- Abscess
- TB

B. Psychological
- Insomnia
- Depression
- Anxiety

C. Others
- Incarceration
- Physical violence

4.4.4 Self-Esteem and Spiritual Orientation

A majority of the subjects interviewed in the study reported poor self-image, a lack of confidence, poor goal orientation, a lack of trust in self and others, and a lack of contentment with self and others. Women in recovery reported a marginal improvement in self-esteem.

4.4.5 Household Dynamics and Social Support System

A majority of the women in Aizawl and Delhi were living with other family members. In contrast, many subjects in Mumbai were living on the streets, railway stations, municipal gardens or rented shacks. Many in Mumbai, were living with their sexual partners rather than their husbands. Most of the subjects in Mumbai had left their children with their grand parents. There were instances of the child being sent for adoption or growing up somewhere else. About 50 percent of the subjects reported that they had drug using household members. The household cohesion and emotional bonding was strong among subjects from Aizawl. As against this, the intensity of ties was much less in Mumbai and Delhi. In Mumbai, the subjects reported that they rarely visited their family of origin. In most situations, women users in Mumbai had undergone traumatic relationship with other family members. Many subjects reported that non-drug using husbands were often supportive and understanding.

4.4.6 Organised Support System (Treatment Facility)

All the women users in Mumbai had contacted a treatment agency at least once in the past. Many had visited treatment centres more than once. Though as per the research design, all the subjects in the study in Aizawl were from treatment centres, 80 percent reported no previous treatment history. In Delhi, about 50 percent reported that they had never sought treatment. The reasons for not seeking help were many. These included being unaware of the treatment facilities in their town; most women were not aware of the fact that addiction was an illness, and thought that they could quit on their own.

4.4.7 Information from Key Informants

Altogether 29 key informants from several walks of life could be interviewed in Mumbai and Delhi. Most felt that the data was extremely inadequate as drug abuse among women was camouflaged. Commonly abused substances as reported by these key informants are listed in Box 4.26.

Several health, psychological and social problems were reported. These were very similar to those reported by the subjects themselves. Many felt that women users received inadequate social support from their families compared to their male counterparts. Women dependent on drugs often found it difficult to fulfil their traditional role, which created disharmony in family relationships. Mothers and sisters were more sympathetic and supportive than the male counterparts. By and large, the key informants felt that the family members were generally harsh and indifferent to the women drug users. They were seen as deviant and as carrying a negative social label.

In Mumbai, it was reported that separate treatment centres and drop-in centres existed for women. However, these services were limited in scope, were poorly designed and had few resources. In Delhi, there were very few exclusive services for women. Many felt that there was a need to enhance these facilities.

Many key informants felt that there was a need to conduct additional research to understand the problems and the special needs of women drug users. They felt that the government should develop more de-addiction centres for women, which should adopt a gender-based approach. Case studies on women drug users described the causes that lead to their initiation into drugs, the drugs being abused, drug purchase situation as well as social and economic consequences.

Finally, it should be remembered that this sample is purposive and does not reflect the general population. This data should, therefore, not be generalised for women in India as a whole.

Box 4.26

Commonly Abused Drugs by Women

- Alcohol
- Cannabis
- Heroin
- Sedatives, Psychotropics
- Cocaine abuse in upper strata

4.5 Focussed Thematic Study: Burden on Women Due to Drug Abuse by Family Members

The information on drug abuse by women was supplemented by this study, which examined the perceived burden on women due to drug abuse in the family.

4.5.1 Sample

The data was obtained from 179 women having affected family members from eight sites and 143 key informants from these sites. The demographic features of the women interviewed showed that an equal percentage (around 30%) belonged to the three age groups namely 20-30, 31-40 and above 40 years. About 84 percent were married. Only a few, about three percent were divorced. About 21 percent were illiterate and an equal percentage (around 45%) was either employed outside or were housewives.

Most (55.3 %) of these drug using family members were husbands and about one-third were sons. None of the respondents had any female drug-using family member. Most (57-85%) were within the age group of 16-35 years and were educated. Only a small minority (5.9%) was illiterate. Some were employed, however, about 40 percent of them were unemployed. About 41 percent were current users of heroin and about 52 percent reported abuse of psychotropic drugs (buprenorphine, propoxyphene, barbiturates, minor tranquillizers, other sedatives and cough syrups). Many were poly-drug users. Most (67%) of them had been using these intoxicants for more than five years and about 41 percent were currently undergoing treatment for drug abuse.

Health problems such as weight loss, tuberculosis, aches, pains, chronic cough and psychological symptoms like anxiety, depression and sleeplessness were reported.

4.5.2 Subjects' Involvement in the Process of Drug Abuse

Most women interviewed in the study reported no involvement during purchase, procurement and drug use. A minority (5-15%) did however, purchase drugs on behalf of the drug abusing family members. Most were not present during the consumption and did not do any thing to encourage or facilitate drug use. On the contrary, most tried several methods to discourage and dissuade family members from drug use. Most attempted several methods to motivate family members to seek treatment.

4.5.3 Impact of Drug Abuse

The sample (women interviewed) reported several hazards on self and the family due to drug use by their family members. These could be broadly categorised as health, economic, occupational and psychosocial problems (impact) and are listed in Table 4.13 Several health, psychological, occupational and economic problems were reported. The money spent on treatment was an additional burden for which loans had to be taken and

sometimes savings were spent for day-to-day running of the household. It was also reported that a substantial number of drug using family members was spending significant amount of their income to support drug consumption. The family environment and the relationship with the affected member were also disturbed. Neglect of children and violence was also quite common.

Table 4.13

Impact of Drug Use on the Subjects, (% Distribution*)N=179

Items	*%*
Health problems	
Aches and pain	26.5
Weight loss	29.6
Psychological problems	
Depression	43.0
Anxiety	54.7
Sleeplessness	46.9
Neglect of self	22.9
Occupational problems	
Neglect of work	20.1
Neglect of household work	34.6
Absence from work	22.3
Economic problems	
Loss of income	39.7
Debts	15.6
Less money available at home	42.5
Family environment	
Disruption of family routine	43.6
Disturbance of family celebrations	49.2
Reduced leisure time activity	51.4
Violence	
Physical	42.5
Verbal	49.7

Source: Focussed Thematic Study: Burden on Women due to Drug Abuse by Family Members

* Since each subject could provide more than one response, the total is more than 100%.

The subjects were asked to quantify the degree of burden (overall) on a continuum scale from 0 to 100, where 0 represented no burden felt and 100 was the maximum possible burden. Overall, the composite burden score of 75 was reported by 64 percent.

4.5.5 Information from the Key Informants

Most of these experts reported that the magnitude of drug abuse was high in their cities. Heroin and cannabis were uniformly reported as major drugs of abuse followed by abuse of pharmaceutical products. Injection drug use was also reported from most of these centres. A majority of the users were malnourished and in poor health. The addicts often got involved in petty crime. Instances of broken homes, neglect of children and breakdown in family communications were often seen. People who suffered most because of their drug abuse were women who were mostly wives, mothers or sisters. They (women) continued to look after the addict despite continued drug use and in the process suffered from constant worry and depression. These women were often subjected to violence and lived in a hostile environment. Most reported that these women rarely sought help and that it was usually obtained through informal networks. Even when help was sought, it was mostly for treatment of the affected member and not for the women themselves. In the event of their own health problems too women rarely sought help. Suggestions to reduce the

burden on women can be seen in Box 4.27. The issues emerging from this study are summarised in Box 4.28.

Box 4.27

Measures to Reduce Burden

- Women's empowerment
- Economic independence
- Establish helpline for women
- Legal aid cells
- Community action
- Self-help group

Box 4.28

Emerging Issues

- Burden on women has not received adequate attention
- Women are often the victims
- Several health, social and economic hazards were reported
- Domestic violence common
- Overall, self report of burden was significant
- Formal measures to reduce burden is lacking

4.6 Focussed Thematic Study: Drug Abuse among Rural Population

4.6.1 Sample

The information was obtained from 202 drug users from 57 villages in six states. The average age of the sample was 40 years. Most (97%) were males; about 30 percent were illiterate. The remaining had varying level of education, only about 6 percent were graduates and above. Most (92%) were employed and married, and were engaged in agricultural work. About 25 percent reported history of drug abuse in the family.

It can be seen in Figure 4.7 that 202 users reported abuse of 337 drug types. This is because 53.5 percent of the users were using more than one substance. Cannabis, alcohol and opium were the major drugs of abuse. There were certain differences seen across the states as seen in Box 4.29.

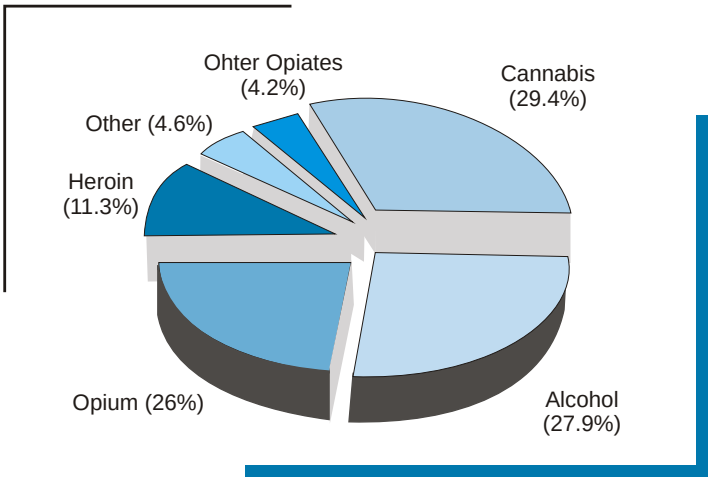
It was seen that most were introduced to drugs between the ages of 16 and 20 years. Most (around 80%) had used drugs for ten years and longer. Only 2.5 percent reported ever using any drug, as injection and one percent were current IDUs and were observed mostly in Uttar Pradesh.

4.6.2 Complications

The information on hazards due to drug use can be seen in Table 4.14. Several psychosocial problems related to drug use were reported. Commonest being

Figure 4.7

Drugs Used by Rural Population, N=337 (% distribution)



Source: Focussed Thematic Study: Drug Abuse among Rural Population

Box 4.29

Drugs of Abuse in Different States

- Rajasthan had the highest proportion of opium users (76.7%), followed by Haryana (58.0%)
- Uttar Pradesh had the highest proportion of heroin users (43.9%)
- Cannabis users were seen predominantly in Himachal Pradesh (60.8%) and Madhya Pradesh (56.5%)
- Orissa (40.7%) and Himachal Pradesh (37.3%) had the highest proportion of alcohol users

Table 4.14

Hazards of Drug Abuse (% Distribution) N=202

Characteristics	*%*
Change in behaviour	44.1
Strained family relations	40.1
Neglect of family responsibilities	29.7
Loss of income	28.7
Reduced work output	28.2
Absenteeism from work	27.7
Humiliation by neighbours	27.2
Loss of respect by the spouse	25.2
Loss of respect by the children	14.4
Social boycott	12.9
Divorce/separation due to drug abuse	4.5

Source: Focussed Thematic Study: Drug Abuse among Rural Population

Box 4.30

Common Drugs of Abuse in Rural Areas

- Alcohol
- Opium
- Cannabis
- Heroin (in some areas)

"change in behaviour" and "strained family relations". Violence in the family due to drug abuse was reported by about 25 percent. However, very few of these resulted into police complaint or imprisonment.

Several health problems like weakness, loss of appetite and cough due to drug abuse were reported by most of the subjects. Only a minority, about 8 percent did not report any health problem related to drug abuse. Most of these subjects interviewed in this study had sexual relationship with single partner (73.8%). Overall, about 12 percent reported sex with multiple partners and with commercial sex workers (CSWs). However, only a small minority reported use of condom. There was no difference seen across states on these parameters. About 50 percent did contemplate giving up drug taking, however very few (10%) had ever received treatment. About 8 percent were currently undergoing treatment.

4.6.3 Drug Use and Related Activities

The subjects were asked about the details regarding activities carried out along with drug consumption. About 35 percent reported that they consumed food/snacks along with drug and an additional 35 percent reported that they performed various social activities following consumption. Only 4 percent, and mostly from Madhya Pradesh reported that drug use was permitted in these villages during certain social rituals and functions. Surprisingly, a large number from Haryana and Rajasthan reported that these drugs had certain beneficial effects like increased productivity, lessening of fatigue and better performance.

4.6.4 Information from The Key Informants (KIs)

The KIs interviewed in this study were mostly service providers (counsellors / project directors) of various de-addiction centres in the districts. Some local leaders like village pradhans and panchayat leaders were also interviewed. Commonly abused drugs in these villages as reported by the key informants are given in Box 4.30.

The KIs interviewed from Himachal Pradesh reported that there were little or no de-addiction services available in the district. The KIs from Uttar Pradesh, Haryana, Madhya Pradesh and Rajasthan however, reported that de-addiction services were available in close proximity. Most KIs reported that only a minority completed their treatment and hence relapse following treatment was quite common.

4.6.5 Information Obtained from Police Officials

The official statistics obtained from these villages provided little information. Very few persons had been arrested, very small amount had been seized and very few cases were registered over last three years. Most officers however, felt that the problem of drug abuse has increased over the years. Many reported that peddlers were often drug users themselves.

4.7 Focussed Thematic Study: Availability and Consumption of Drugs in Border Areas

4.7.1 Sample

Another focussed thematic study enquired into the availability and consumption of drugs in border areas of the country. Altogether 195 drug users and 80 key informants (KIs) were interviewed. The data showed that the mean age of the subjects varied between 26.6 and 38.8 years. Overall, about 26 percent were illiterate and 27 percent were unemployed. About 40 percent were unmarried and between 4 and 12 percent were separated due to drug abuse at three sites.

4.7.2 Drugs of Abuse

As per the self-report by the users, common drugs of abuse were opium, poppy husk, heroin, cannabis and psychotropic substances (see Box 4.31). A few inter-centre differences were observed. Abuse of opium and poppy husk was more often reported from R. S. Pura and Barmer (Indo-Pakistan Border). Abuse of heroin was reported from all the sites except the above two sites. Subjects from villages / towns adjoining Indo-Pakistan, Indo-Nepal, Indo-Bangladesh, Indo-Myanmar and Indo-Sri Lankan Borders reported availability and consumption of heroin. Availability and consumption of cannabis products were more often reported from Sonauli (Indo-Nepal), Lalgola (Indo-Bangladesh) and Tuticorin (Indo-Sri Lankan) borders. Abuse of psychotropic (propoxyphene, buprenorphine and tranquilizers) was reported from Atari (Indo-Pak), Sonauli (Indo-Nepal), Tuensang and Moreh (Indo-Mayanmar) and Tuticorin (Indo-Sri Lanka). Seventy four persons were IDUs and mostly from Tuensang and Moreh (North-Eastern states).

Box 4.31

Common Drugs of Abuse in Border Towns

- Abuse of opium and poppy husk- R.S.Pura and Barmer
- Abuse of heroin- all sites except the above two
- Abuse of cannabis- Sonaulii and Lalgola
- Abuse of psychotropic- most sites
- IDUs-Tuensang and Moreh

4.7.3 Reasons for Drug Use

There was near uniformity as regards reasons for drug use in the various sites. These were easy availability, to overcome stress and to achieve pleasure. Most (about 87%) sustained drug use through their legitimate earnings. However, at the same time between 40 and 60 percent adopted other illegal means (theft, pick pocketing, etc.,) to enhance their income for drug consumption. Overall, about 42 percent reported that they themselves (users) were involved in drug trafficking. In most of the sites, the subjects reported that drugs were easily available and were "inexpensive / cheap / affordable" in these sites. Some had reported to various treatment agencies.

4.7.4 Availability

Most of the respondents reported that there was a direct link between availability and consumption of various drugs. However, the relationship is complex and the responses were variable at different sites. The fencing and physical barriers cut down trafficking substantially as seen in the Indo-Pakistan

border, but the domestic network was active and heroin was available through home-grown production. Further, as availability of heroin declined, a strong demand of psychotropic substances grew. In certain sites, strict norms imposed by the underground insurgent groups resulted in non-availability of heroin, but other opiates and psychotropic substances were available for local consumption.

Box 4.32

Abuse and Availability of Drugs in Border Towns

- Common drugs of abuse - opium, cannabis, heroin and psychotropic
- Drug user - dealer (about 40%)
- Availability - easy
- Price - inexpensive
- Treatment Facilities - inadequate

The core findings as regards consumption, availability, pricing and treatment services as reported by the users themselves can be seen in Box 4.32.

It can be inferred from Table 4.15 that Indo-Pakistan border is closely guarded and there is a presence of large number of security persons. Despite the vigilance by the Indian security forces, some amount of drug trafficking takes place. Some KIs reported that some times packets containing heroin were 'thrown' over the border fencing. Some of the seizures in these areas (Indo-Pakistan border) were large and of high purity. The other three borders (Indo-Nepal, Indo-Bangladesh and Indo-Myanmar) were open and not fenced. People could move freely across these borders. There were reports that people cross the border in search of manual / agricultural work, to sell vegetables, to work as carpenters during stipulated time and go back to their country of origin. The whole process was informal. Some people worked as couriers to carry small amounts of drugs. In addition, presence of organised network and syndicates for drug trafficking was also suggested.

Table 4.15
Summary of Information Obtained from Key Informants

Items	*Indo-Pakistan Border (R.S.Pura, Attari and Barmer)*	*Indo-Nepal Border (Sonauli)*	*Indo-Bangladesh Border (Lalgola)*	*Indo-Myanmar Border (Tuensang and Moreh)*	*Indo Sri Lanka Border (Tuticorin)*
Uniqueness of the border	Cross-border terrorism, some part of the border has electrified fence, presence of security personnel.	Border is open not guarded. People can cross the border easily.	No physical demarcation of the border. Free movement of people takes place.	No physical demarcation of the border. Free movement of people takes place.	The town is gateway to Sri Lanka through the sea route and a major drug trafficking centre.

Cross-border drug trafficking	Drug trafficking is uncommon and minimal, some amount of trafficking of heroin suggested. Precursor chemical being smuggled out of India.	Trafficking of cannabis suggested.	Heroin is trafficked out of India.	In Moreh only: Commonly trafficked drugs are heroin, cannabis, pharmaceutical drug, and methamphetamine and precursor chemicals.	Some evidence of cross border drug trafficking of heroin (high purity).
Drug trafficking as a part of larger network	Some linkages were proposed.	Yes, smuggling of contraband items along with drug trafficking take place.	Yes, smuggling contraband items along with drug trafficking take place.	Yes, smuggling of of weapons, counterfeit currency and drug trafficking take place together.	Yes, smuggling of contraband items and drug trafficking take place together.
Drug consum-ption in these areas	Opium, poppy husk, cannabis, heroin and psychotropic substances.	Cannabis, heroin and psychotropic substances.	Largely a transit point, some consumption of cannabis heroin and psychotropic substances.	Heroin and pharmaceutical drugs. Presence of IDUs.	Cannabis, pharmaceuticals products and IDUs.
Linkage between availability, trafficking and consum-ption	Drugs were freely available, inexpensive and consumed by some.	Drugs are cheap and are consumed.	Drugs are easily available, cheap and consumed by some.	Drugs are easily available and are consumed by some.	Drugs are easily available, affordable and used.

Source: Focussed Thematic Study: Availability and Consumption of Drugs in Border Areas

Drug trafficking also meant the movement of drugs out of India. Most KIs reported that drugs were available fairly easily, inexpensive and thus affordable at these border sites. Some consumed them as they were available. However, a significant quantity of the drugs were smuggled out of these sites to other destinations in India.

4.7.6 Secondary Data

Data on seizures for the year 2000 from these border states/areas revealed that (Table 4.16) out of total national data, between 39 and 71 percent of the seizure of opium, heroin and cannabis (ganja and charas) was reported from these eight border states. Fifty six percent of total seized opium in the country was from these eight border states, corresponding figures for heroin, ganja and charas were 71.3 percent, 38.9 percent and 39.3 percent respectively om from these states. Seizures of heroin and opium were mostly from Punjab and Rajasthan. Between 20 and 29 percent of seized opium and between 19 and 22 percent seized heroin in the country was from Punjab and Rajasthan respectively. Cannabis (charas) was seized mostly from Uttar Pradesh (39%) and about 13 percent of seizure of cannabis (ganja) was from Nagaland. Some amount (11-16%) of seizure of heroin was reported from Tamil Nadu and Uttar Pradesh as well. Data on seizure for the year 2000, suggested domination of drug trafficking through northwest border of the country.

According to the drug seizure data (2000) among the eight sites, Amritsar contributed to the highest percentage of total drug seizure for the state of Punjab. At Barmer it was around 13 percent of total drug seizure for the state of Rajasthan and at Moreh (Manipur) it was around 70 percent of the total drug

Table 4.16
Seizure of Various Drugs from the Border States in kilograms, 2000*

States	*Opium*	*Heroin*	*Cannabis (Ganja)*	*Cannabis (Charas)*
Jammu and Kashmir	78 (2.9)	38.7 (3.1)	353.5 (0.35)	__
Punjab	528 (19.7)	272.4 (22.0)	5.3 (--)	__
Rajasthan	771.5 (28.7)	240.1 (19.3)	316.9 (3.16)	2.0 (0.03)
Uttar Pradesh	123.7 (4.6)	136.1 (11.0)	9012 (9.0)	1979 (39.2)
West Bengal	0.8 (--)	12.0 (0.1)	5431.5 (5.4)	__
Nagaland	__	0.02 (__)	12910.0 (12.9)	__
Manipur	4.0 (0.1)	1.72 (0.14)	5901.0 (5.9)	__
Tamil Nadu	0.7 (0.02)	193.9 (15.6)	2475.0 (2.5)	2.0 (0.03)
National Data	2684.0	1240.0	100056.0	5041.0

**Percentage of national seizures in parentheses.*
Source: Focussed Thematic Study: Availability and Consumption of Drugs in Border Areas

Box 4.33

Indo-Pakistan Border (Attari and R. S. Pura)

- Drug trafficking - low key / negligible
- Drugs are easily available locally
- Illicit cultivation of cannabis
- Recent change - abuse of pharmaceutical products

Box 4.34

Drug Abuse in Border Areas

- Easy availability of drugs in most of these sites
- Drugs are inexpensive
- Easy availability promotes consumption
- Choice of intoxicants is variable and is linked with local availability

seizure for the state. In Tuticorin (Tamil Nadu), seizures of large quantities of cannabis 77 kg and 123 kg were reported for the year 1999 and 2001 respectively. Seizure of acetic anhydride (a precursor chemical) was reported from R.S. Pura (Jammu and Kashmir) in 1999-2000.

Summarising, it was noted that the information on the following five themes were available from more than one source, namely the users, the community resource persons and the law enforcement experts. These could be further supplemented by data on seizure of various drugs from the sites / states.

There was near uniformity of responses from various sources on all the above themes from R.S. Pura, Attari, Lalgola, Tuensang, Moreh and Tuticorin. The key features of Attari and R.S. Pura can be seen in Box 4.33.

By and large, it was apparent from various sources that heroin, opium and methamphetamines (only at Moreh, Indo-Myanmar Border) were being brought into the country, whereas precursor chemicals (ephedrine and acetic anhydride) were being smuggled out of India. At many sites it was reported that drug trafficking was a part of larger network. Drug trafficking was linked to smuggling of counterfeit currency, electronic items, etc.

The drugs available at these sites were consumed locally. The choice of intoxicants was closely linked with the availability of various substances. Several hazards and social impact of drug abuse were noticed. Many users reported the desire to quit drug taking. Treatment facilities were, however, inadequate.

4.8 Focussed Thematic Study: Drug Abuse among Prison Population

The data is presented for 6,800 individuals admitted to an NGO treatment centre in Tihar Jail called "An Association for Scientific Research on the Addictions" (AASRA), during a period of four years (1997-2000). Overall, about 8 percent of prisoners admitted to the jail were drug users. Most drug users undergoing treatment in AASRA were arrested under accusation of theft, about 17 percent were arrested under the NDPS Act and mostly under section 27 (Small Quantities). The details can be obtained from the monograph-Drug Abuse among Prison Population-A Case Study of Tihar Jail (Sethi 2002).

4.8.1 Demographic Parameters

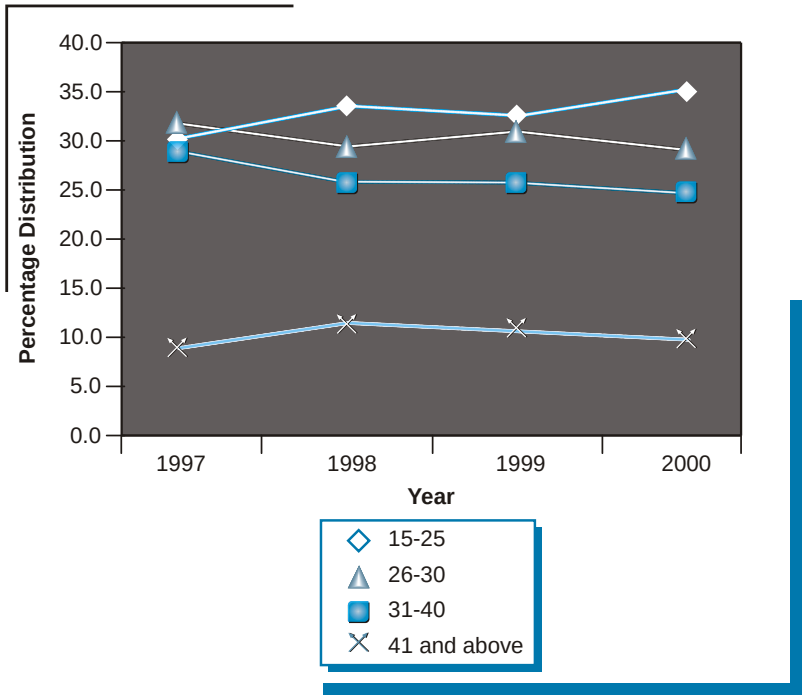
By and large most (60%) were young adults and within the age group of 21-30 years. About 50 percent were married and illiterate. A small proportion (0.8-3%) of the subjects had separated due to drug abuse. Most (80-93%) were employed and only a minority (0.3-16.3%) were unemployed. It was seen that the age (Figure 4.8), marital status and literacy level had not changed appreciably over these four years.

4.8.2 Drugs of Abuse

The primary drug of abuse in this study was heroin. Some did report abuse of other opiates, alcohol and cannabis

Figure 4.8

Age Distribution over Four Years (%)



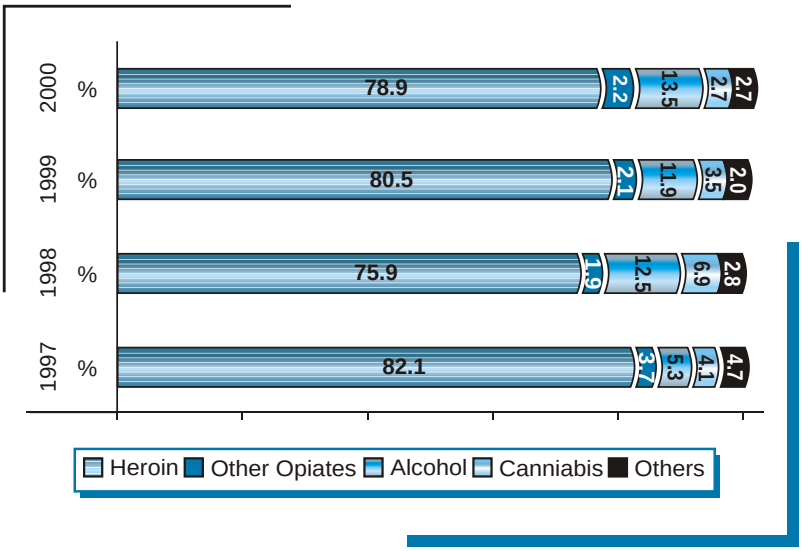
Source: Focussed Thematic Study: Drug Abuse among Prison Population

(Figure 4.9). Between 75 and 82 percent of the entire prison population were heroin users. A minority varying between 2 and 3 percent were abusing other opiates like opium and synthetic opiates. About 40 percent were using more than one substance and the most commonly reported secondary and tertiary drugs of abuse were alcohol and cannabis. The proportion of users of heroin as their primary drugs of abuse had remained stable over these four years.

The other drug-abuse-related parameters are shown in Table 4.17. Most of those surveyed had used heroin through inhalation (chasing), a minority (0.6-5.9%) had used drugs through injecting route. Most (57-75%) had used drugs for

Figure 4.9

Primary Drug of Abuse



Source: Focussed Thematic Study: Drug Abuse among Prison Population

more than five years. Some (17-40 %) had been arrested previously before their current arrest (admission to AASRA). Around 30-47 percent reported that the severity of drug problem was "mild-moderate" and additional 41-65 percent reported the drug problem as "severe". Only minority (between 5-14%) reported that drug abuse did not cause any problem.

4.8.3 Age of Initiation

Usually, introduction to drug abuse started at a young age. Here too, most (around 40%) were introduced to drugs between the age group 16-20 years and an additional 20-25 percent between the age of 21-25 years. The proportion of subjects belonging to various age groups and their initiation to drug abuse has remained stable over these four years (Figure 4.10).

Table 4.17

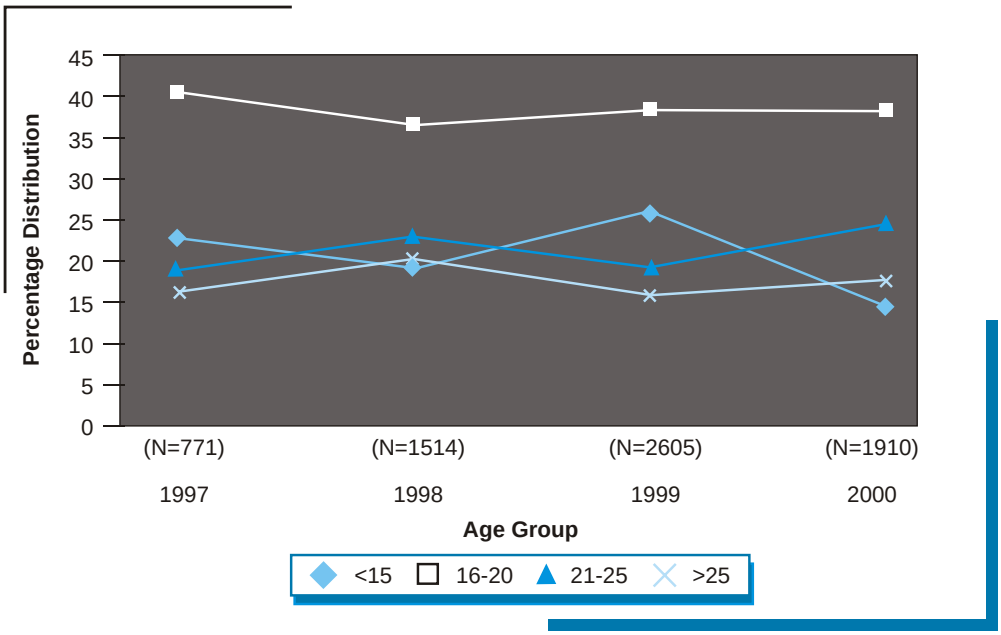
Drug Related Items (% Distribution)

Items	*1997 (N=771)*	*1998 (N=1,514)*	*1999 (N=2,605)*	*2000 (N=1,910)*
Route of administration				
Inhalation/Chasing	79.9	72.9	78.5	70.7
Injecting drug use	5.9	2.6	0.6	1.3
Duration of use (Year)				
<1	8.6	11.3	3.1	5.1
1-5	22.8	29.9	21.2	33.4
>5	67.1	57.1	75.4	61.5
Number of previous arrests				
Nil	56.6	77.7	82.4	50.5
Once	16.3	12.2	12.5	34.0
More than once	24.3	9.1	5.1	13.3
Severity of drug problem				
None	7.1	7.7	5.3	14.2
Mild-Moderate	47.2	46.6	29.9	44.8
Severe	45.5	45.6	64.6	40.9

Source: Focussed Thematic Study: Drug Abuse among Prison Population

Figure 4.10

Age of First Use



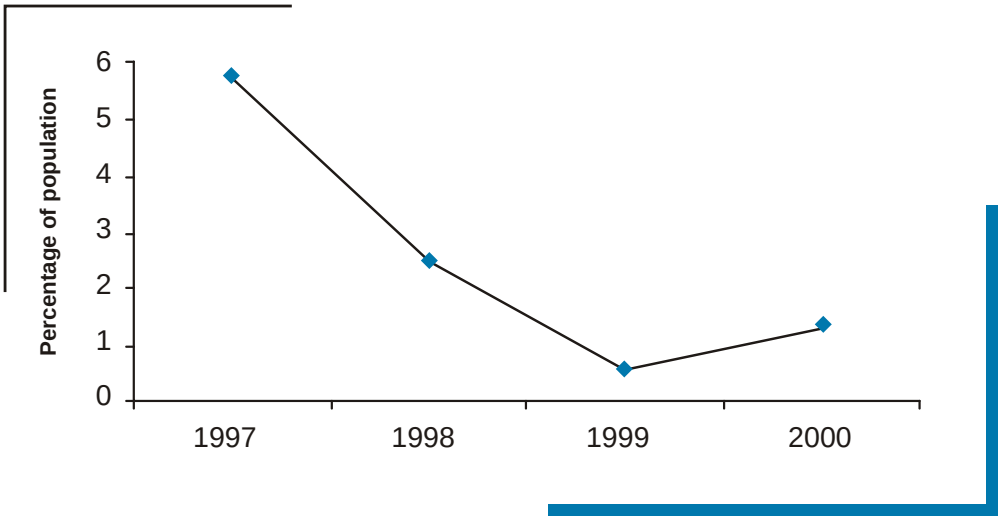
Source: Focussed Thematic Study: Drug Abuse among Prison Population

4.8.4 Injecting Drug Use (IDU) in Prisons

Between 0.6 and 5.9 percent of these subjects had used drugs through the injecting route. Figure 4.11 shows that the proportion of IDUs had declined significantly from 1997 to year 2000.

Figure 4.11

Injecting Drug Use (IDU)



Source: Focussed Thematic Study: Drug Abuse among Prison Population

Table 4.18
Treatment History

Items	*1997 (N=771)*	*1998 (N=1,514)*	*1999 (N=2,605)*	*2000 (N=1,910)*
No. of prior treatment contact (Other agencies)				
None	20.0	36.3	39.1	25.9
One	40.0	27.6	32.7	26.0
Two	28.0	25.5	21.8	36.7
Three	11.4	10.1	6.2	11.4
Type of admission				
First admission	64.3	66.6	68.1	42.6
Re-admission	33.8	32.4	29.5	41.8

Source: Focussed Thematic Study: Drug Abuse among Prison Population

Table 4.18 indicates the treatment history of the subjects. Over these four years between 20-40 percent did not seek any treatment for drug abuse. About 50-65 percent had received treatment once or twice in the past. Between 29-41 percent had received treatment from AASRA in the past and the remaining were admitted for the first time.

4.8.5 Non-response/ Data not available

There were instances where information was not available on all the subjects on all the parameters. However, the percentages for "non-response" / "not available" / "not known" were small and varied between 0 and 12 percent. The percentage of such responses was highest (12%) for occupation / employment status / dropout from employment. For drug related variables (drugs used, frequency of use, route, duration of drug use, etc.) the non-response rate varied between 0.4-1.0 percent. Thus the data was complete on most of the items.

Summarising, over these four years the parameters that had remained stable are seen in Box 4.35.

Box 4.35

Stable Parameters (1997-2000)
- Age
- Religion
- Marital status
- Illiteracy
- Employment / occupation
- Heroin as the primary drug of abuse
- Frequency of use of heroin
- Age of initiation

A few changes were noticed over these years.

- In the year 2000 percentage reported alcohol as the primary drug (13.5%) had increased from 5.3 percent in the year 1997 (Figure 4.9).

- The percentage reporting Injecting Drug Use (IDU) decreased to 1.3 percent (2000) from 5.9 percent (1997) (Table 4.17 and Figure 4.11).
- The percentage reporting duration of drug use for "five years or more" was highest (75.4%) in the year 1999 over these four years (Table 4.17).
- There was a marginal rise of subjects being previously arrested "once", and a drop of being previously arrested "more than once" in the year 2000 (Table 4.18).
- The proportion of subjects reporting "no problem" related to drug use had increased in the year 2000 as against the earlier years (Table 4.17).

The following sections describe briefly three major themes: (a) Drug abuse among special populations (b) Injection drug use in India and (c) Qualitative information obtained in this study. The section draws information from all the sources (components and thematic studies) of the project.

4.9 Drug Abuse Among Special Populations (comparison of data across components of the current survey)

The following section describes drug abuse among special populations namely urban subjects in treatment versus not in treatment, adolescent and youth, elderly, the homeless, those in psychiatric hospitals, among women and among prisons population. The information presented in this section covers data from all the sources (major components and focussed thematic studies) of the current survey. The research design of this project excluded people above the age of 60 years and thus the data on drug abuse on elderly population (above the age of 60 years) is not available. However, an attempt has been made to provide the information on population above the age of 50 years, wherever it is available.

4.9.1 Comparison of Profile of Urban Subjects in Treatment versus those not in Treatment

The sample obtained through the DAMS component are treatment seekers (currently in treatment). Against this, only about 12 percent of the sample in Group A accessed through the RAS component was currently in treatment. In other words, most of the subjects in RAS can be categorised as "urban individuals not in treatment". Even though no consolidated report of the RAS data from Group B (the four metros and Imphal sponsored by UNESCO) is available, it is still possible to compare the profile of sample in Group A (nine urban sites sponsored by UNODC,) with the subjects from urban background from the DAMS component (Table 4.19).

Table 4.19
Profile of Urban Subjects in Treatment (DAMS) versus not in Treatment (RAS)

Items	*RAS (not in treatment) N=2,831*	*DAMS (in treatment) N=9,752*
Age (in years)		
<20	13.1	6.0
21-30	49.1	36.0
31-40	26.8	36.2
>40	11.0	21.7
Income (INR Rs.) Median	3,000	3,000
Current drugs of abuse (%)		
Cannabis	36.7	9.6
Heroin	12.9	14.6
Other opiates	30.5	10.7
Alcohol	7.9	41.5
Others	8.1	23.6
Not available	3.9	0.0
Age of first Use (Mean and SD)	18.9 + 5.6	23.1 + 7.9
IDU Ever (%)	33.4	18.2
Needle sharing ever (%)	57.9	10.1
Sex with CSWs (%)	24.4	5.7
Safe sex practised (%)	35.9	36.4
Drug related family violence present (%)	24.8	66.6

Source: DAMS and RAS (UNODC sites)

In the sample studied through the RAS, about 91 percent were males as against 97 percent in the DAMS total sample. Thus, there were a few more women drug users in the RAS sample. The age of the subjects not in treatment (RAS-Group A) was slightly younger, mean

Box 4.36

Differences in Profile of Drug Users in DAMS versus RAS

- RAS-Subjects were younger
- RAS-Percentage of cannabis abusers higher
- DAMS-Proportion of alcohol abusers higher
- RAS-Early initiation to drugs
- RAS-Percentage of IDU higher
- RAS-Sex with CSWs higher
- DAMS-Drug related family violence more frequent

age being 30 years as against 34 years in the treatment seekers (DAMS). The proportion of illiterates in both the groups was similar. About 17 percent were illiterate in the RAS sample and their proportion was about 16 percent among the subjects in the DAMS study (entire sample). The mean age of initiation to drugs was lower in the sample accessed in the RAS (not in treatment). In the RAS sample about 42 percent were using drugs for five years or longer and their percentage was slightly higher and was around 57 percent among the entire sample of the DAMS study. More subjects in the DAMS study reported positive family history of drug abuse and more subjects from the RAS component reported ever being in jail.

Summarising, there were a few differences noticed among subjects in treatment (DAMS component) as against those contacted (interviewed) through the RAS component.

Box 4.37

Socio-demographic Parameters - Drug Users from NGO-children and NYKs

- 87-94 percent males
- 7-50 (NGO-Children) percent illiterate
- 12-19 percent unemployed
- 32-56 (NYK) percent from rural background
- 43-54 (NGO-Children) percent reported positive history of drug abuse in the family

4.9.2 Drug Abuse among Adolescents and Youth

Information on drug abuse among youth is available from (a) National Household Survey NHS; (b) Rapid Assessment Survey RAS; and (c) Drug Abuse Monitoring System DAMS, (Agencies under Category A and B).

The data from NHS revealed that among current alcohol, cannabis and opiates users about 21 percent, 3 percent and 0.1 percent respectively were below 18 years (Table 4.3). The mean age of onset of various drugs was during youth, between 21 and 23 years (Table 4.5).

Among treatment seekers, there were a few young subjects (below 15 years and between 16-20 years) being reported from the DAMS component. Overall, 0.4 percent and 4.6 percent of total treatment seekers in various states belonged to the above age groups respectively (Table 4.7). Among users of heroin, cannabis and propoxyphene 0.5-0.8 percent were in the group below 15 years. The proportion of opium and alcohol users in this age group was considerably low. The proportion of users of various drugs belonging to the age group 16-20 years varied between 2.7 and 18.8 percent, the percentage of users of propoxyphene being highest. It was noted that young people reporting to treatment were more often users of propoxyphene, heroin and cannabis (Table 4.20).

Further, it can be seen that propoxyphene users were mostly from Mizoram and Manipur. Young users of heroin were more often reported from Punjab, Haryana, Bihar and Orissa (between 10-18%). Chandigarh had the highest proportion of young cannabis users.

Some information on drug abuse by youth is also available from the data obtained from NGO (children) and NYKs who participated in the DAMS component (Category B). Altogether, eleven NGO centres catering to children contributed data on 253 individuals and 30 NYKs provided information on 1,017 youth drug users. The socio-demographic parameters of the sample reported from these two types of organisations are described in Box 4.37.

Table 4.20
Commonly Abused Drugs (%) in Five Major States among Adolescent and Youth (descending order)

	Heroin	Opium	Alcohol	Cannabis	Propoxyphene
A. Below 15 Years					
	Rajasthan (1.3)	Uttar Pradesh (1.7)	Chandigarh (1.3)	Chandigarh (4.4)	Haryana (4.2)
	Delhi (1.1)	Punjab (0.1)	Gujarat (1.2)	Haryana (1.3)	Mizoram (3.4)
	West Bengal (0.6)	-	Manipur (0.7)	Bihar (0.9)	-
	Madhya Pradesh (0.5)	-	West Bengal (0.6)	Madhya Pradesh (0.8)	-
	Uttar Pradesh (0.5)	-	Goa (0.5)	Maharashtra (0.6)	-
Total	**0.5**	**0.1**	**0.3**	**0.5**	**0.8**
B. 16-20 Years					
	Punjab (18.6)	Chandigarh (9.8)	Manipur (9.6)	Chandigarh (13.0)	Mizoram (40.9)
	Haryana (16.3)	Kerala (6.3)	West Bengal (5.6)	UP (9.2)	Manipur (36.7)
	Bihar (12.5)	Maharashtra (5.4)	Chandigarh (5.1)	Bihar (9.0)	Punjab (11.7)
	Orissa (10.5)	Uttar Pradesh (5.0)	Assam (4.8)	Manipur (7.5)	Delhi (4.8)
	Manipur (9.3)	Bihar (2.9)	Bihar (4.5)	West Bengal (7.5)	Haryana (4.2)
Total	**7.6**	**3.0**	**2.7**	**6.8**	**18.8**

Source: DAMS and RAS (UNODC sites)

Table 4.21 shows that alcohol was the commonest drug of abuse followed by cannabis and opiates. About 25 percent reported use of 'other drugs' i.e. mostly tobacco products. The proportion of alcohol users was higher among subjects from NYKs. Most, especially among NGO-children, were introduced to drugs at young age (below 15 years). Injecting drug use (IDU) and needle sharing were not uncommon. Only a few (around 20%) had attempted to give up drugs in the past. Between 5 and 19 percent reported sex with multiple partners including commercial sex workers and only about 1 percent reported use of condom 'always' during sexual activity. The items "sex with multiple partners" and "arrests by police" were more often reported by the subjects seeking help from NGO-children. Some (19-34%) had been arrested by police due to drug related offence and many (52-54%) reported violence related to drug use in the family. Finally, many (33-48%) subjects did not respond to questions regarding sexual practice and safe sex and thus the information regarding sexual history in this table is not complete.

Table 4.21
Profile of Drug Users from NGO-Children and NYKs

Items	*NGO-Children N=253 %*	*NYKs N=1,017 %*
Drug use by the subjects		
Alcohol	31.7	51.0
Cannabis	28.5	6.9
Heroin	9.7	3.3
Opium	4.2	5.2
Propoxyphene	1.7	0.3
Others	24.2	3.3
Age of first use (years)		
<15	63.6	22.8
16-20	27.7	34.5
21-30	8.3	38.2
31-40	0.4	4.1
>40	0	0.4
Injecting Drug Use (IDU) (Ever)	13.8	20.1
Sharing of needle (Ever)	7.1	15.3
Previous treatment (Yes)	18.2	20.6
Sex with multiple partners including CSWs	19.0	4.8
Arrest by police (Ever)	34.0	18.7
Family violence related to drug use (Present)	54.5	51.9

Source: DAMS

Some information on drug abuse by young and very young subjects is available from the data from the Rapid Assessment Survey (RAS). A total of 368 out of 2,831 subjects (13% - Group A) were below the age of 20 years. Consolidated data among subjects in Group B (sites sponsored by UNESCO) is not available. Further, case description of drug abuse by the young population is available from several sites. The data from the RAS site in Chennai described drug abuse by street children. Although no specific figures are provided with regard to number of users, it clearly showed that street children use a variety of substance including inhalants, cannabis, alcohol and heroin. Some of these children were involved in drug dealing. The Bangalore city report provided three case vignettes of drug abuse by this population age group. One such case report described abuse of inhalants by an eight-year-old boy who lived on the street. Another case history of a boy of 22 years age (rag picker)

reflected abuse of heroin, inhalants and injecting drug use. The case history further described a group of 30-40 young rag pickers who were users of alcohol and cannabis. Many of them were sexually active and had genital ulcers due to unprotected sex. At least one of them was HIV positive. The report also described the injecting drug use of a young girl of 22 years. The city report from Jamshedpur revealed drug abuse by a 22-year-old boy from a middle class background who was introduced to drug use with cannabis and subsequently moved to heroin. After being reprimanded by his parents for his habit, he left home and joined a gang involved in several anti-social activities (theft, etc.). He earned his income through illegal means, which sustained his drug habit. At a later date he started using injectable drugs (buprenorphine) and developed several health complications due to IDU.

Many drug users in Shillong/Jowai (N=320) were secondary school dropouts, unmarried, unemployed and users of cannabis and propoxyphene. Some were IDUs. They were sexually active and 43 percent reported drug abuse along with sexual activity. About 16 percent reported being arrested by the police and about 4 percent in the prison for drug related offence. Only 5 percent reported ever taken any help for treatment and 2 percent were currently in treatment. Finally, it was seen that across all sites the mean age of initiation to drug use was around 19 years.

Summarising, the information obtained in this study revealed that drug abuse among youth is common. Most get introduced to drugs at an early age and some continue to abuse them. It was worrying to note that some young subjects from Mizoram and Manipur abuse propoxyphene via injection. Besides being seen in the regular treatment centres (GO and NGOs), drug users are also seen at youth organisations like NGO-children and NYKs. Here too, some are IDUs, sexually active and engage in high-risk behaviours.

4.9.3 Drug Abuse among Elderly Population

Data on drug abuse among subjects above the age of 60 years is not available from this survey as all the components excluded sampling above the age of 60 years. Thus information can only be obtained for the sample above the age of 50 years. Information on subjects above the age of 40 years is available from a) NHS, b) DAMS and c) Focussed Thematic Study on Rural Subjects. Information on the sample above the age of 50 years is available from the data from the prison (Tihar Jail) study. Some information on drug abuse among elderly women (above 50 years of age) is available from the focussed study on Drug Abuse among Women.

In the NHS component, 13 percent of the subjects were above 50 years. In this age group, about 27 percent, about 5 percent and around 1 percent were current users of alcohol, cannabis and opiates respectively (Table 4.3).

The data from treatment centres (DAMS) showed that around 6 percent

Box 4.38

Homeless Drug Users - Hyderabad (RAS)

- Less often poly-drug abusers
- About 50 percent IDUs were homeless
- Early onset of IDU
- More often sex with CSWs
- High prevalence of health hazards including STDs

of those seeking treatment were above the age of 50 years and about 2 percent was above the age of 60 years. Predominant drugs of abuse among this population were opium, followed by alcohol and cannabis. There were a few heroin users as well.

The focussed thematic study on rural subjects reported about 37 percent of the total sample (N=202) as above age of 40 years. They were seen from all the sites selected. They were largely users of opium and alcohol. There were few subjects (1.5%) who started their drug use after the age of 40 years. In the study on prisoners in Tihar Jail, it was seen that around 2 percent of the subjects was above the age of 50 years. Finally, a few subjects (3%) in the focussed study on drug abuse among women belonged to the age group 50 years and above.

Summarising, the available data on drug abuse by the elderly population though inadequate, suggests abuse of alcohol, cannabis and opium among elderly population. Only a small minority (2-5%) reported for treatment.

4.9.4 Drug Abuse among Homeless Subjects

Among 4,648 drug users interviewed in the RAS, 1,192 (25.6%) were homeless. The proportion of homeless drug users was high in Hyderabad (65%), Mumbai (54%) and Delhi (39%) and less often seen in Jamshedpur, Dimapur, Shillong and Imphal. The city report from Hyderabad provided detailed information on homeless drug users as against those who were living at home.

The analysis showed that on certain parameters the two groups differed and is seen in Box 4.38.

It was also seen that the homeless drug users, though mostly employed, had a low monthly income. Surprisingly, they had less frequent legal complications related to drug abuse including having been in prison. Very few of them had ever reported to a treatment centre. The need for treatment among homeless drug users was acutely felt.

4.9.5 Drug Abuse in Psychiatric Hospitals

As a part of DAMS, information was also collected from patients from psychiatric hospitals. The data is inadequate and only three psychiatric hospitals provided data on 108 subjects. A majority of the subjects were above the age of 30 years, about 20 percent were illiterate and about 24 percent were unmarried. Alcohol (48%) and cannabis (21%) were the predominant drugs of abuse and as in other setting most were introduced between the age of 16 and 20 years. A few (8%) had reported injection drug use and only about 18 percent reported history of previous treatment for drug abuse. About 37 percent reported positive family history of drug abuse and about 70 percent reported drug related violence in the family.

4.9.6 Drug Abuse among Prisoners

Besides the data quoted earlier from the focussed study on drug abuse among prisoners from Tihar Jail, some

additional information on drug abuse is available from various prisons in the country from the DAMS component. It has been stated earlier that only a minority participated and provided data. Altogether, information on 118 prisoners from 18 prisons was available. It was noted that:

- The sample was older, about 44 percent were within 21-30 years.
- About 25 percent were unmarried.
- Largely they were users of alcohol (37%) and cannabis (38%).
- Only about 7 percent were heroin users.
- Many (32-44%) were introduced to drugs between the ages of 16-20 years.
- About 3 percent were IDUs.
- About 13 percent reported a higher percentage of previous arrest.

4.9.7 Drug Abuse among Women

Information on drug abuse among women is available from two sources namely, (a) the Rapid Assessment Survey (RAS) and (b) the Focussed Thematic Study on Drug Abuse among Women. This information is supplemented by the data available through another Focussed Thematic Study on the Burden on Women due to Drug Abuse by their Family Members. The details on this theme are available as separate monograph entitled "Women and Drug Abuse: The Problem in India" (Murthy 2002). The current report touches these issues briefly.

Among 4,648 drug users interviewed in the 14 urban sites of RAS (sites sponsored by UNODC-Group A and UNESCO-Group B) 371 (around 8%) were women. The numbers varied across sites. Jamshedpur had a single female user, Goa (N=76), Mumbai (N=53) and Thiruvananthapuram (N=50) could recruit sizeable number of women drug users. The mean age of the women subjects in these centres was around 30 years. The distribution of the subjects with regards to marital status, education, employment and other background variables were not uniform in the various cities. Between 25 percent (Goa) and 100 percent (Bangalore) were married, about 6 percent (Thiruvananthapuram) and 45 percent (Hyderabad) were divorced. Between 6 percent (Thiruvananthapuram) and 71 percent (Delhi) were illiterate. In Goa about 37 percent were graduates. Information on employment and occupation was available only in some of these centres. It showed that about 70 percent in Thiruvananthapuram and 75 percent in Mumbai and Dimapur were employed. There were very few students and about 10 percent in Thiruvananthapuram were student drug users. Three centres reported that in the sample studied, from 2 percent (Thiruvananthapuram) to 75 percent (Dimapur) were commercial sex workers. In three of the centres, some of the women were involved in drug peddling as well. Three centres (Thiruvananthapuram, Delhi and Mumbai) reported between 51 and 80 percent homeless women drug users.

The data from these 14 sites showed that

their mean age of initiation to drug use was in the early twenties. Uniformly, in all the 14 sites, the commonest drug of abuse to begin with was alcohol (60-90%) followed by cannabis and heroin. Currently, alcohol, cannabis, heroin and pain killer tablets were most frequently abused substances. In Delhi, the highest percentage (99%) was heroin users. In Dimapur, about 45 percent and a few subjects (7%) in Imphal had been using propoxyphene (opiate analgesic - pain killer tablets). Only in Bangalore, two subjects reported abuse of cough syrup. In Chennai, it was noted that some women from higher socio-economic groups were users of heroin and were introduced to drugs by their boy friends. The RAS report from Chennai reflected that drinking alcohol by young girls was acceptable in social gatherings. It was also felt that abuse of pharmaceutical substances like diazepam, alprozolam etc. was on the rise. Poly-drug use was common. Reasons for initiation to drug use were to reduce depression and anxiety; some used it for curiosity and relief from frustration. Between 50 and 83 percent had positive family history of drug abuse, however, large majority (75-90%) had drug-using friends.

Data on IDU among women is available from 11 sites and the proportion of IDUs among women varied between 3 and 73 percent. The data showed that among women IDUs the mean age of starting drug use was 23 years, most (75%) reported having shared needles and syringes 'almost always'. Most (88%) used injections to get more pleasure and some in Imphal reported that injections were less costly. Between 50 and 86 percent reported several unhygienic practices such as re-use and cleaning of injecting equipment with any available water / saliva. Most obtained the needles and syringes from the pharmacy and without prescription.

As was seen among men, several health hazards were also reported among women drug users. These included TB, jaundice, fever and weight loss. Between 20 and 94 percent reported drug use with opposite sex and a similar percentage reported sex with drug using partner. The use of condom was variable. In Bangalore, 58 percent reported use of condoms as against 20 percent in Amritsar. Thus the practice of safe sex was not uniform. Some (4-51%) reported having acquired sexually transmitted diseases (STDs) in the past. In Delhi, 26 percent reported drug related overdose. Between 7 percent and 20 percent reported several legal problems due to drug abuse *viz*. being in a police lockup or being in prison.

Very few were currently undergoing treatment and many did not know of any drug de-addiction centre in the city. Amongst those who sought treatment, many were dissatisfied with the available treatment facilities and were of the view that there were inadequate facilities for treatment for women drug users and the staff was often indifferent to their needs.

Very few women drug users were reported from the treatment centres. In the DAMS component, only 3 percent were women. In the other two focussed

thematic studies, one woman was reported from the study in border areas and five from the study from rural areas.

Other Issues

The following few pages describe briefly two major themes namely, (a) Injecting Drug Use and other High-Risk Behaviour and (b) Qualitative Information obtained in this survey. Here too, the section draws information from various components of the survey.

Box 4.39

Emerging Issues - Women Drug Users

- Drug abuse exists among women
- Low education achievement
- Low level of self-esteem
- Poor household communication and cohesion
- Drug use in the family
- Low level of social network
- Several health and psychosocial hazards
- Stressful life events (family and work site)
- Neglect of children and family
- Lack of awareness / knowledge about treatment and treatment centres by the women themselves
- Gender sensitive treatment centres are lacking

4.10 Injecting Drug Use and other High-Risk Behaviour

4.10.1 Injecting Drug Use

Information on this aspect is available from several components of the Survey. These include:

- National Household Survey (NHS)
- Drug Abuse Monitoring System (DAMS)
- Rapid Assessment Survey (RAS)- subjects from 14 sites
- Focussed Thematic Studies-Rural, Border and Prison population
- Finally, some information on IDU among women is also available along with data from the focussed study on women.

In the NHS component (N=40,697), a total of 52 subjects (0.1 percent of general population) were identified as IDUs (ever injecting any drug). Common drugs of abuse by the injecting route were propoxyphene and heroin. The mean age of these subjects was 19 years; 60 percent of them had used another substance prior to the current IDU, most (55%) had used heroin earlier. Various reasons cited for IDU were "better high and peer influence." High-risk behaviour like sharing of needles and syringes was common. Several of them reported health complications due to injecting practices.

In the DAMS component (N=20,169), 14.3 percent reported ever used drugs through injectable route and 9.4 percent could be called current (use within last one month) IDUs. The sharing of needles in the last one month was reported by around 4 percent of the subjects. Here too, drugs commonly injected were propoxyphene followed by heroin. Abuse of heroin was largely reported from Uttar Pradesh, Delhi, West Bengal and Manipur, while propoxyphene abuse was reported from Punjab, Nagaland and Mizoram.

In the RAS component, which was carried out in fourteen urban sites, 43 percent of the total sample reported injecting drug use (ever). The proportion of IDUs among the subjects studied in two broad locations (the sites sponsored by UNODC and four major metros and Imphal sponsored by UNESCO) somewhat different (Figure 4.12). Cumulatively among subjects in Group A (UNODC assessed sites), 945 (33.4%) and among subjects in Group B (58.7%) subjects reported injecting drug use. Thus the percentage of IDUs was higher among subjects in Group B. The proportion of IDUs was very high in Chennai (100%) and Imphal (92%) and was lowest in Ahmedabad (10%). The percentage of IDUs interviewed was above 50 percent (though below 90%) in Jamshedpur, Thiruvananthapuram and Kolkata.

Most subjects in Group A reported that they had been initiated to IDU early, in most cases between 15 and 28 years of age. It was also noticed that there was some time lapse between initiation to drug use and to IDU per se. The period was however variable and could be as short as two years and may extend up to ten years. Here again as was seen in the earlier two components (NHS and DAMS), commonly injected drugs were buprenorphine, propoxyphene and

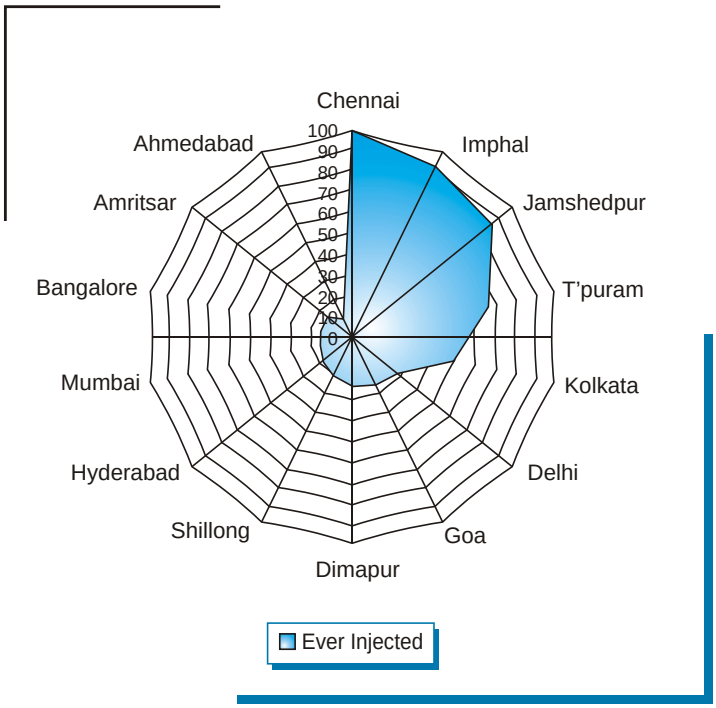
Box 4.40

Injecting Drug Use in India

- About 0.1 percent of general population reported ever injecting drugs (NHS)
- About 14.3 percent of treatment seekers reported ever injecting drugs (DAMS)
- Commonly abused drug as IDU Propoxyphene and heroin (NHS and DAMS)
- Abuse of pharmaceutical products like buprenorphene as IDU (DAMS)
- IDU more commonly seen in NE states (NHS and DAMS)

Figure 4.12

Injecting Drug Use (Ever) as a % of user population



Source: RAS

Box 4.41

Injecting Drug Use - Data from RAS

- Overall 43 percent out of 4,648 drug abusers interviewed
- Commonly abused drugs-buprenorphene, propoxyphene and heroin
- Initiation to IDU - 15-28 Years
- Sharing of needle - Common
- Highest - Chennai (100%)
- Lowest - Ahmedabad (10%)

Box 4.42

Reasons for IDU

- Non availability of heroin (Brown Sugar)
- Injections are less expensive
- Better and quicker high
- Peer influence

heroin. Buprenorphine was often injected in Kolkata and Chennai and heroin and propoxyphene in Imphal. Sharing of injecting equipment was common and varied between 53 percent (Mumbai) and 85 percent (Imphal). Indirect sharing e.g., sharing of cotton swab, filter, spoons, etc. was also common. Often these subjects reported that they shared injecting equipments with three or more persons. Of the total sample 1,519 current injectors reported that around 50 percent of them had shared needles and syringes during the last time they had injected. Most did not clean the needles and syringes. Many used only water, in fact any available water, to clean. Most reported that they could easily obtain needles and syringes from the pharmacy. Common reasons cited for injecting drugs can be seen in Box 4.42

Although, it was observed that most had shifted from non injecting to the injecting route, some others had also reported a 'reverse switch' i.e. shifting to non-injecting route from injecting practices. The data from RAS in Kolkata referred to such a phenomenon although no percentage distribution was provided. The report mentioned that many reverted back to smoking because of non-availability of veins (blocked veins), health hazards, increased awareness, availability of good quality heroin and treatment.

Table 4.22

High-Risk Behaviour among Current Users - Data from Various Sources

Items	*NHS (National) Drug users*	*DAMS (National) Subjects in category-A (N=16,942)*	*RAS All 14 sites (States) (N=4,648)*	*RAS Non-metros 9 sites (States) (N=2,831)*
IDU (%)				
Lifetime	0.1	14.3	43.0	33.4
Current	--	9.4	--	--
Sharing of needles/ syringes (%)	97.0	7.7	--	57.9
Sex with CSWs (%)	--	4.4	--	24.4
Practice of safe sex (%)	--	38.5	41-64	35.9

4.10.2 High Risk Behaviour

The current users were engaged in several high-risk behaviours. In addition to injecting drug use and sharing of needles, it included unsafe sex. These can be seen in the Table 4.22.

It has been stated above that in the community sample (NHS), overall 0.1 percent reported using drugs via injecting (ever IDU), and in the treatment centres overall, 14.3 percent were IDUs. However, this was disproportionately higher in the sample interviewed in the RAS. The corresponding figure of the current IDUs in the treatment centres was around 9 percent. IDUs were also identified through the focussed thematic studies. The prevalence of current IDUs (those who injected within the previous one month) among rural treatment seekers (DAMS-rural) was around 11 percent, in the sample from rural study and sample from the prison study was 1.0 percent and 1.3 percent respectively. However, this was higher in the border study (around 38 percent). Uniformly in all the studies, heroin, propoxyphene and buprenorphine were the predominant drugs injected. Among current treatment seekers (DAMS), buprenorphine (around 53%) was most often injected followed by propoxyphene (around 25%) and heroin (around 17%). Thus it was seen that the IDUs could be detected in all sections of the population. However, the prevalence was higher depending upon the setting and population sub-group. It was definitely higher in the urban sample and more so recruited from the street (non-seekers of treatment). IDUs were also detected among women drug abusers. Finally, even among rural sample though its prevalence was low, IDUs were detected.

Among IDUs there was an increased reporting of sex with commercial sex workers (40-66%). However, safe sexual practices (use of condoms) were very similar as seen among non-injecting drug users. A few subjects in Chennai, Imphal, Amritsar and Hyderabad had been tested for HIV and the proportion varied between 7 percent (Chennai) and 47 percent (Hyderabad). An even smaller proportion was aware of their HIV test

report. The risk perception regarding acquiring HIV/AIDS was low among the drug users. Several health hazards like loss of body weight, fever, diarrhoea and tuberculosis were also reported. Surprisingly among the subjects (IDUs) in Group A there was no report of excess occurrence of health hazards like abscess and drug overdose.

Thus it can be seen that buprenorphine, propoxyphene and heroin were the common drugs injected. The subjects were often poly drug users and the abuse of pharmaceutical products was popular with them. IDUs were more often seen in urban settings although IDUs were reported in this project even from rural sites. IDUs among women were also seen though, in a select group of the population. A majority of IDUs indulged in several risk taking behaviours such as needle sharing and sex with CSWs. HIV sero-positivity among IDUs was highest in Imphal followed by Delhi. The HIV risk perception was low among the IDUs. In addition to the common domestic, social, economic, legal and health consequences of drug abuse, IDUs suffered from many health consequences such as abscesses in superficial veins, subcutaneous tissues and muscles, septicaemia, HIV infection and Hepatitis B and C infections.

Detailed information on IDU is available through a separate monograph titled "Injecting Drug Use in India" (Kumar 2004 *under publication*). Additional information on IDUs is also available from another monograph titled "Drug Abuse in North Eastern States" (Panda 2004 *under publication*).

4.11 Qualitative Data

Qualitative information on several aspects of drug abuse is available from (a) RAS, (b) the focussed thematic studies from border areas and rural areas. The study on drug abuse among women also provides such data specifically pertaining to women.

In the RAS component, qualitative data from various sites were obtained through focus group discussions, interview with key informants and in-depth interviews with drug users. At certain sites the field staff was involved in participant observations as well to obtain ethnographic data. The information has not been obtained uniformly and in a systematic fashion across centres. Several case vignettes and description of various themes have been provided in the city reports. These are summarised below.

4.11.1 Injecting Drug Use

Qualitative data analysis in the study showed that injecting drug use was not seen uniformly in a city, rather there were pockets where IDUs were more prevalent. This was particularly exemplified in the city of Amritsar. The data also suggested that non-availability of heroin and easy over-the-counter availability of injectable pharmaceutical products such as pentazocine and buprenorphine led to a transition towards injecting. This should be seen in the context of a lack of availability of traditional drugs of abuse such as *bhukki**, *dodha** or other opium-based preparations. Furthermore, the price of a pharmaceutical product (injection buprenorphine) is cheaper than the price of heroin. Needles and syringes were also easily available through the pharmacies. Often injecting drug use was a group activity. These users injected in their own group and locality, while they procured it from different localities. In Dimapur, some reported that these injections could be purchased from the drug peddlers as well, though these were most commonly obtained from the pharmacy. Sharing of needles and syringes was the norm rather than the exception. Several case studies depicting the initiation, transition, drugs used and the methods of injecting drugs are available. These case histories show several atypical features and prevailing myths among the users to enhance the effects of the drugs. A description from Jamshedpur illustrates these points where some IDUs reported "soaking cigarettes in their blood, drying it and smoking it thereafter". Another unusual practice reported was that of withdrawing blood into a syringe and re-injecting it with the belief that it would enhance the effect. A focus group discussion held in Dimapur described a typical session of drug injecting. In the group, members often contributed money jointly to purchase drugs. Box 4.43 shows a typical case history of an IDU.

Box 4.43

"Venkat is an opiate user who has been in the drug scene for over a decade. He is now using buprenorphine injections along with diazepam and pheniramine injections. He does not have a regular job and he lives with his sister. He supports his habit by selling drugs to his peers. He has a network of using friends who are also dependent on buprenorphine and diazepam injections. He travels to Thirupathi, a neighbouring town on a weekly basis and gets the injectable preparations from a pharmacy and gets back home. He makes profit by selling to his friends. He does not see himself as a drug dealer and he believes that he is helping his own set of drug using friends who otherwise would be running around and spend a lot of money to procure their regular supplies."

Source: RAS, Chennai

* *Bhukki* is crushed and powdered dried poppyfruit, while **dodha* is dried poppy fruit (which is boiled with water and then consumed).

4.11.2 Recent Trends

Much of the information in this regard was qualitative in nature and obtained from the interviews of key informants (KIs). The RAS reported abuse of LSD from Goa and Ahmedabad. Certain anecdotal reports from Ahmedabad suggested abuse of LSD by leaking laced postal stamps. Abuse of methaquolone was reported from both Bangalore and Ahmedabad. Abuse of inhalants like paint thinner, solvents, petrol and 'Xerox solution' was reported from Delhi, Bangalore and Thiruvananthapuram. A new method of cannabis consumption was reported from Thiruvananthapuram. Here some abusers reported consumption of *ganja* in eatables like egg omelettes and *vadas.* In Imphal and Dimapur abuse of propoxyphene (spasmoproxyvon) as injections was reported. Abuse of pharmaceutical products as a recent development was reported from many sites like Amritsar, Ahmedabad, Imphal, Dimapur, Mumbai and Kolkata. As a matter of fact, most of these RAS sites reported injecting drug abuse as a recent development.

4.11.3 Description of a Typical Day

Two case reports from Bangalore described a typical day of drug users. One of the descriptions is that of a 8 year-old boy living in the streets and doing odd jobs in a temple to sustain his drug habit of inhalant. The other case history shows the entire day centred on planning, procurement and consumption of cannabis products. Often the money was obtained through begging.

4.11.4 Sexual Behaviour

A focus group discussion held in Shillong reported that the sexual experience had happened before being initiated to drugs. There was contradictory opinion with regard to drugs and sexual performance. Drug use in company of sex workers and even group sex were reported.

4.11.5 Treatment Facilities

The treatment facilities available and the needs of drug users were assessed through interview of key informants (KIs), experts and drug users themselves. Secondary data (information obtained from treatment centres) also provided some information in this regard. The information from experts regarding treatment and intervention was extremely sketchy and inadequate. The users themselves mostly were unaware of the treatment facilities available in their towns except in Jamshedpur and Shillong. However, there was general consensus that the treatment facilities were inadequate in most of these centres. Most treatment centres were understaffed, received poor funding and the skills of the service providers were low. Treatment was not free and many drug users found the cost of treatment unaffordable. Many other inadequacies were also pointed out. These included poor follow-up and after care programme, no facilities for rehabilitation, no peer education programme and no linkages between treatment centres and self help groups like Alcoholics Anonymous (AA) and

Narcotics Anonymous (NA). In general, health education and awareness building activities were low. These programmes were rarely evaluated.

The reports from Dimapur and Shillong mentioned innovative programmes like "needle exchange programme," "buprenorphine maintenance programme" and "therapeutic community."

The needs of the drug users could not be assessed well in any of the sites. In Amritsar, the subjects reported that they were so stigmatised that they had no clear expectations from treatment or service delivery agencies. They felt that they had no right to expect anything from the government or society at large. Most requested for detoxification. Additionally, some others replied that emotional, social and financial (jobs) support was also required. Most people requested free treatment. Some emphasised the need for 'good confidential treatment'.

Focus group discussions with drug users revealed the following needs of drug users:

- Treatment should be free and available to all who wish to give up drugs.
- The identity of the person seeking treatment should not be revealed.
- Proper medication and counselling should be available.

A relatively small proportion of the general sample expressed the need for drug substitution.

Box 4.44

Available Treatment Facilities - Perception of Users and KIs

- Inadequate treatment facilities
- Most treatment centres are understaffed
- Lack of resources
- Treatment is often not free
- Many drug abusers find the cost of treatment expensive
- Low emphasis on rehabilitation and peer education
- Low level of linkages with treatment centres and self-help groups

4.11.6 Drug Abuse and Women

Qualitative data in this regard provided information on self-esteem and spiritual orientation, household dynamics, social support system, and facilities for treatment. Some of these have already been discussed earlier in the section on drug abuse among women. Thus, this will be touched upon briefly here. Most of the women drug users interviewed reported lack of confidence and lack of trust in self and others. Many believed in a higher power or God. With regards to social support system some (women in Aizawl and Delhi) had well-knit families, wherein this wasn't so for the subjects in Mumbai who were predominantly sex workers. Often, the family members expressed their irritability and anger towards these drug using women. Strong negative feedback was often the dominant theme. Women in Mumbai living with their drug using husbands or sexual partners found harmony in their otherwise chaotic life style. Many KIs interviewed reported that women received inadequate support from their family and service facilities

Box 4.45

Drug Abuse among Women

- Poor self image
- Emotional instability
- Low level of household cohesion and emotional bounding
- Inadequate treatment facility
- Need for dedicated gender sensitive treatment centres
- Significant amount of burden among non-drug using women because of drug abuse in the family

for women drug users were inadequate. Many recommended dedicated / exclusive treatment centres for drug using women.

The other study on the burden on women due to drug abuse by their family members documented several kinds and degree of burden. Thus, a women even though a non-user became burdened due to drug abuse in the family.

4.11.7 Prisons

The subjective experience of being incarcerated was very unpleasant. Some of the subjects interviewed in Dimapur reported that following a prison sentence they could not return home directly and had to spend some time elsewhere before they came home. In Dimapur, some subjects reported that even until the year 1996 the relatives of some addicts forcibly took the subjects to the jail and insisted that they should be incarcerated as prison would "cure" them.

Most of the prisons had no separate budget for treatment of drug abusers, though in some prisons certain programmes had been initiated. These included detoxification, allowing NGOs to function from the premises, availability of the counselling services and advice for vocational rehabilitation.

4.11.8 Human Rights

The information in this regard is scanty. In Jamshedpur, the policemen interviewed were not aware of any issues related to human rights. In Dimapur, the police reported that through a mutual agreement between the police and the families, the "addicts" had often been arrested and kept behind bars. These informants did not see this as violation of human rights. In Thiruvananthapuram, it was reported that violations of human rights of addicts took place at various levels in the community, treatment centres and in the workplace. The addicts were often discriminated against, ridiculed and arrested for possessing small amounts of drugs.

4.11.9 Role of the Media

Opinion among the service providers (NGOs) varied with regard to the role of the media. However, most felt that the issues related to drugs did not receive prominence in the press/media. Some media personnel interviewed in Shillong were totally unaware of the drug situation in the city. The press in Dimapur often highlighted the arrest of drug peddlers and on occasions printed success stories of recovering addicts.

The city (RAS sites) reports have suggested certain plan of action and strategies to control drug abuse in their locality. Several key issues such as prevention of drug abuse, availability of treatment facilities and community-based programmes are discussed at length in the next chapter.