

RAPID
ASSESSMENT
SURVEY

of
DRUG
ABUSE
IN INDIA





Ministry of Social Justice and Empowerment Government of India

# RAPID ASSESSMENT SURVEY of DRUG ABUSE IN INDIA

## National Survey on Extent, Pattern and Trends of Drug Abuse in India

Ministry of Social Justice and Empowerment, Government of India

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United Nations International Drug Control Programme, Regional Office for South Asia

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n order to generate more knowledge in the area of drug abuse, the Ministry of Social Justice and Empowerment and the United Nations International Drug Control Programme, Regional Office for South Asia commissioned a few thematic studies as part of their project, National Survey on Extent, Pattern and Trends of Drug Abuse in India. What has emerged from these studies are monographs, which attempt to analyze and disseminate data based on this research. One component of this project was the Rapid Assessment Survey, carried out to study vital issues in the area of drug abuse, the results of which are presented in this monograph.

The monographs attempt to provide the reader an insight into drug abuse patterns relating to thematic issues, including: drug abuse among rural population, drug abuse among women, burden on women due to drug abuse by family members, drug abuse among prison population, and drug abuse in border areas. These studies will form a national baseline for later assessments of drug abuse problems, thus helping in determining trends over the years.

These studies are essentially a stepping-stone towards generating meaningful data in future. I hope that these studies will raise more questions than they can answer, because the purpose of every study is not merely to provide answers to known questions but to begin a quest for more informative knowledge and understanding. I hope the monographs succeed in doing first that.

Jayati Chandra, IAS

Joint Secretary (SD)

Ministry of Social Justice and Empowerment



he drug menace touches millions of lives in both developed and developing countries. Its most negative impact is concentrated amongst the vulnerable and marginalized in societies. Drug addiction threatens the health of men, women and children and ultimately the vitality and strength of communities.

No country can claim immunity from drug abuse and India is definitely not an exception. In order to understand and validate claims of shifts in pattern in the area of drug abuse it is crucial to provide necessary information on the extent and nature of the phenomenon. Given the paucity of research in identifying the magnitude, development and dynamics of drug abuse at the national level, partly due to the lack of resources and the sheer vastness of this country, this is without doubt a tall order.

Cognizant of this fact and in line with its mandate, the United Nations International Drug Control Programme, Regional Office for South Asia (UNDCP, ROSA) and the Ministry of Social Justice and Empowerment have launched major initiatives in the area of drug demand reduction through various projects. One of these is the National Survey on Extent, Pattern and Trends of Drug Abuse in India, designed to study vital issues in the area of drug abuse. The project includes a national household survey, data collection through a drug abuse monitoring system, a rapid assessment survey and five focused thematic sub-studies: drug abuse among rural population, drug abuse among women, burden on women due to drug abuse by family members, drug abuse among prison population, and drug abuse in border areas. The key findings of this research are being published as monographs to make this important data available, and to provide an understanding of the issues involved in drug abuse.

The monographs are thus an important step forward in the joint efforts of UNDCP, ROSA and the Ministry of Social Justice and Empowerment to generate knowledge on vital drug related issues in the region. It is hoped that this research will also provide reference points for assessing long-term change in the years to come. We hope to undertake a number of specialized studies in the future, with greater depth of analysis, to serve as useful tools for decision makers in the region.

Renate Ehmer Regional Representative UNDCP, ROSA



uch of the information on drug abuse in India is anecdotal, and the few reports available are from small-scale surveys carried out in isolated parts of the country. Rational responses and national programme planning require accurate data accumulated through painstaking research covering many parts of the nation. In 1999, the Ministry of Social Justice and Empowerment, Government of India and the United Nations International Drug Control Programme, Regional Office for South Asia decided to undertake a large-scale national survey to obtain information on the extent, pattern and magnitude of drug abuse in the country. Multiple indicators and several methods to assess the situation were chosen for this purpose.

The major components of this study are National Household Survey, Drug Abuse Monitoring System and Rapid Assessment Survey (RAS). Additionally, focused studies on specific populations like women, rural subjects, people living in border towns and prison population have also been carried out. RAS has been carried out in fourteen cities of the country, of which four are major metros, and nearly all the regions have been covered. The current monograph reports the core findings of the RAS component. In addition to this comprehensive report, individual city reports will soon be available.

RAS is a methodology for obtaining information quickly on areas in which precise information through population surveys is lacking. It is particularly useful to procure data on hidden populations, who are unlikely to be detected through household surveys or treatment centres. This study has used both qualitative and quantitative techniques to collect data. The information is rich, and provides an important overview of the dimensions and dynamics of drug abuse in the areas covered. There are commonalties as well as differences across the sites, and the data points to unique features of particular cities. The results of the RAS can also strengthen data on drug abuse obtained through other methods. However, it is important to bear in mind that the data should be interpreted within the social and cultural context of each site, and that these findings should not form the basis for national estimates. It is also worth noting that since the drug abuse scenario can change rapidly, the RAS cannot be a one-time event and may have to be repeated later.

This report is the collective effort of several persons who designed, executed and analyzed the data obtained by a multitude of field research staff. The effort has been enormous and the completion of the RAS is no mean achievement.

It is expected that the detailed information in this monograph will provide policy makers the necessary framework within which to develop responses and strategies for intervention.

Rajat Ray Scientific Editor



he United Nations International Drug Control Programme, Regional Office for South Asia and the Ministry of Social Justice and Empowerment, Government of India gratefully acknowledge the United Nations Educational, Scientific and Cultural Organization (UNESCO) for its support in conducting this Rapid Assessment Survey, and the publication of this monograph, as part of the overall project 'National Survey on Extent, Pattern and Trends of Drug Abuse in India'.

The study was coordinated by Dr. M. Suresh Kumar, who is also the principal author of the monograph. It was carried out at fourteen sites by the following site investigators: Ms. Mukta Sharma (Amritsar, SHARAN), Mr. Mahesh Nathan (Jamshedpur, Calcutta Samaritans), Mr. Sundar Daniel (Shillong and Jowai, North East India Drugs and AIDS Care), Mr. C.G. Chandra (Dimapur, Vivekananda Society), Fr. Joe Arimpoor (Hyderabad, SAHAI Trust), Dr. Pratima Murthy (Bangalore, National Institute of Mental Health and Neuro Sciences), Dr. V.S. Mani (Thiruvananthapuram, SAHAI Trust), Dr. D.R. Singh (Goa, Tata Institute of Social Sciences), Mr. Gabriel Britto (Ahmedabad, National Addiction Research Centre), Mr. Jimmy Dorabjee (Delhi, SHARAN), Mr. Hijam Dineswar Singh (Imphal, The Kripa Society), Mr. Samiran Panda (Kolkata, RIICE, Society for Applied Studies), Dr. M. Suresh Kumar (Chennai, SAHAI Trust), and Mr. Eldred Tellis (Mumbai, Sankalp Rehabilitation Trust).

We are grateful for UNESCO's support in sponsoring the study at five sites (Delhi, Imphal, Chennai, Mumbai and Kolkata), under its Drug Abuse Prevention Programme for Marginalized Youth in Asia. We are especially thankful to Mr. Mehboob Dada, Senior Programme Officer (Division of Basic Education), UNESCO, and Mr. Jimmy Dorabjee and Mr. Luke Samson, both of SHARAN, Society for Service to Urban Poverty, for their generous assistance to this endeavour.

This monograph is a compilation of individual site reports by site investigators.

#### National Survey on Extent, Pattern and Trends of Drug Abuse in India (AD/IND/99/D-83)

#### Project Team:

Dr. Rajat Ray, National Consultant

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# XECUTIVE SUMMARY

his Rapid Assessment Survey of drug use was conducted in fourteen sites: Amritsar, Jamshedpur, Dimapur, Shillong and Jowai, Hyderabad, Bangalore, Thiruvananthapuram, Goa, Ahmedabad, Delhi, Imphal, Kolkata, Chennai and Mumbai. Research in the first nine sites was sponsored by the United Nations International Drug Control Programme, Regional Office for South Asia while the rest were supported by the United Nations Educational, Scientific and Cultural Organization, under its DAPPA project — Drug Abuse Prevention Programme for Marginalized Youth in Asia. A uniform methodology was adopted — rapid assessment teams with wide experience in the field of drug abuse and community research gathered qualitative and quantitative information on determined indicators. However, in five sites (Delhi, Imphal, Kolkata, Chennai and Mumbai) the special focus of the survey was on opiate and injecting drug use, and data from these sites reflects this emphasis. The overall aim was to describe the nature and extent of drug use and its adverse health and social consequences, and then to recommend an action plan aimed at reducing drug use and related harms.

The study teams conducted site mapping through ethnographic observations. They established contact with key informants from varying disciplines, and in-depth interviews and focus group discussions were held with drug users. In addition, secondary data was collected and analyzed to reveal wider trends. Altogether, four thousand six hundred and forty-eight drug users were recruited for structured survey interviews.

#### **Users**

The drug users in this study are young and predominantly male. More than a fourth are homeless, nearly half are unmarried, more than a fifth are illiterate and the same proportion has studied only up to the primary level. Less than a third are unemployed, and a significant number of the employed are daily wage earners. The average monthly income in the sample is INR 4,050. Many drug users, particularly those in metropolitan cities, hail from impoverished environments.

#### **Drugs Used**

The majority (36%) reported heroin as their primary drug of abuse. Other opiates (buprenorphine, propoxyphene and opium) accounted for 29 percent and cannabis 22 percent. The primary drug of abuse in Delhi, Imphal, Kolkata, Chennai and Mumbai (N=1,817) was predominantly heroin (71%), followed by injectable buprenorphine, and then others. In the rest of the sites (N=2,831), cannabis was the most common primary drug of abuse, followed by opiates and heroin, an even smaller share abusing painkillers (mostly propoxyphene). Forty-three percent of the drug users in this sample abused opiates. Across the entire spread of the study most used more than one drug, and were part of strong networks of drug-using friends and associates.

More than three fourths of the total sample started drug use before they turned twenty. The average user began with cannabis, though alcohol was the first drug for a third of those in the study. Significantly, very few users began drug use with the injecting mode. This mode of consumption was found to be adopted at a later point in the average pattern of drug use.

#### **Injecting Drug Use**

Injecting drug use was observed in every study site. A disturbingly large share of the total sample (43%) admitted to injecting drugs at some point in their drug using history, and the drugs most frequently injected were buprenorphine, heroin, propoxyphene and other synthetic opiates like pentazocine. The mean age of starting injection use ranged between fifteen and twenty-eight. Among a sub-sample of current injectors, about half admitted to having shared syringes and needles the last time they injected. Unhygienic injection practices were frequently observed.

#### **Unsafe Sex and HIV**

The other high risk behavior noted was unsafe sex. The mean age at first sexual act ranged from fourteen to twenty-two. Many users reported encounters with sex workers, and condom use was low, even with sex workers. Sexually transmitted diseases were thus common among drug users in many sites. Despite this, most drug users thought that they were unlikely to contract the HIV virus. In some sites, however, significant numbers of users were concerned. For instance, in Chennai, Dimapur, Thiruvananthapuram, and Delhi a third or more of those interviewed perceived the risk of becoming HIV positive. Only a small proportion of drug users was found to have been tested for HIV.

#### **Health and Social Complications**

Some health problems were commonly reported: jaundice, tuberculosis, genital ulcers, and abscesses. In most sites, users knew someone who had overdosed but they lacked any knowledge and skills for dealing with such an eventuality.

A considerable proportion of drug users said they had been in police lock-ups and jails. Many also reported being subjected to physical violence.

#### **Available Treatment and Care Facilities**

Most drug users were not in touch with any treatment agency at the time of the study. The treatment capacity in each of the fourteen sites was found to be woefully inadequate with respect to treatment demand. Users expressed a desire for home based detoxification services, primary medical care, and community outreach services. Many opiate injectors requested substitution treatment to replace opiate use with less harmful substances, as a first step towards abstinence.

#### **An Action Plan**

Based on these findings, an action plan with intervention strategies has been suggested for drug abuse prevention, health promotion among drug users, drug abuse treatment and policy changes. Interventions have been designed to 1) enhance behavior change; 2) produce changes in service delivery; 3) facilitate a community based approach; 4) encourage community participation; and, 5) facilitate changes in the environment. The key issues of concern are:

- targeting services for poor drug users
- preventing drug injecting
- the association between high risk drug and sexual activities
- reducing drug related harm
- improving treatment services, and
- increasing 'quality coverage' for majority of drug users.

# 1 NTRODUCTION

Drug abuse can emerge rapidly, and bring with it related social and health consequences. The swift and wide global spread of drug use, along with associated problems like HIV, Hepatitis B and sexually transmitted diseases, is ample evidence. This phenomenon, in all its complexity, can change in an equally speedy manner. Such volatile public health problems require prompt responses. Rapid Assessment Surveys are an effective tool in assessing and understanding issues like this, and they are increasingly being used to assist in the development of public health interventions for drug problems.

Patterns of drug use, injecting practices and associated consequences vary across areas and social groups, even within a country, and alter quickly over time. Responses to these problems are also diverse and are influenced by social, cultural, economic, religious and political factors. Drug surveillance information systems often fail to deliver information of practical relevance. Located in drug treatment and medical care centres, they can only cover people who are in touch with such agencies, and cannot reveal much about the problem in wider society. Nor can they help evolve effective strategies to address drug use. Conventional research is similarly limited. Much of its output may not be relevant for response development. While conventional research methods with emphasis on fixed data fields are essential for routine data collection and analysis, they may not contribute much to the understanding of subtle changes in existing patterns of drug use, nor show up new forms of use. In contrast, rapid assessments enable us to properly identify and target interventions, and to develop interventions that are both appropriate and resource-effective.

This Rapid Assessment Survey (RAS) is part of a national survey jointly commissioned by the United Nations International Drug Control Programme, Regional Office for South Asia (UNDCP, ROSA) and the Ministry of Social Justice and Empowerment, Government of India. The RAS is an important component that can contribute to an understanding of the nature of drug abuse in India,

and the adverse health and social problems stemming from it. This knowledge helps to

- identify resources and opportunities for intervention
- develop socially, culturally, politically, and economically appropriate interventions
- identify factors that impede or enhance the effectiveness of interventions
- develop action plans for interventions.

The RAS was carried out in fourteen cities during 2000-01, and covered 4,648 drug users. Nine of these sites were supported by UNDCP, ROSA and five by the Drug Abuse Prevention Programme for Marginalized Youth in Asia, UNESCO. The survey was carried out on the basis of guidelines for collection of qualitative and survey data developed by UNDCP, with the overall aim of supporting the development and implementation of effective strategies to address drug use and associated adverse consequences. In five sites (Delhi, Imphal, Kolkata, Chennai and Mumbai) the special focus of the survey was on opiate and injecting drug use.

#### Structure of this Monograph

This monograph highlights some of the major findings of the RAS, and suggests responses and an action plan. Section 2 lays out the objectives of the Survey, and section 3 details the methodology adopted. Section 4 presents the main findings of the Rapid Assessment Survey, including a profile of users, drugs used, drug using practices (especially injecting use), and related health complications. Sections 5 and 6 then develop responses and an action plan on the basis of the findings, the former drawing attention to those findings which merit immediate attention, and the latter detailing necessary interventions. Section 6 concludes with a summary of the key findings and suggested interventions under four broad heads: prevention, health promotion, treatment and policy planning. The limitations of the study are briefly listed in section 7 and the monograph is concluded in section 8.

# 2 BJECTIVES

#### The RAS set out to:

- 1. Study the extent and nature of drug use (demographic characteristics, drug use patterns, risk behaviors) and its associated adverse health and social consequences in the fourteen sites
- 2. Assess the extent and nature of opiate use, in particular injecting drug use. This was the main focus of the survey in the five sites of Delhi, Imphal, Kolkata, Chennai and Mumbai
- 3. Study the demand for services among drug users as well as the existing treatment interventions available to users in the above sites
- 4. Recommend an action plan to reduce the adverse consequences of drug abuse.



### 3.1 Locations and Demographic Characteristics

The RAS study was carried out in fourteen urban sites of India. (All sites, except Amritsar, Jamshedpur, Jowai and Dimapur are state capitals.) Table 1 lists the sites and their key demographic characteristics.

Thus, the study covered three sites in Western India, four in South India, two each in the North and East, and three in North East India. At each of these sites, selected agencies with experience in drug abuse prevention and/or treatment conducted the RAS.

#### 3.2 Data Collection and Research

As per the Rapid Assessment methodology, a core Rapid Assessment Team was established and trained. The team conducted an initial community consultation through which the parameters of the study were determined. Fieldwork was then undertaken, and data analyzed to translate findings into an action plan.

Field researchers with sufficient experience in research with drug users were recruited at each site by selected research coordinators and non-governmental organizations. With their site-specific knowledge, field workers helped in identifying the locales for drug use as well as drug using populations, and further in recruiting from these populations for study. Many sites recruited female researchers to enable better recruitment and study of women drug abusers. Training programmes were organized for staff before

Table 1. Demographic Profile of Sites*				
Site	Region	Population	Females per 1000 males	
Supported by UNDCP, ROSA				
1. Amritsar, Punjab	North India	709,000	882	
2. Jamshedpur, Bihar**	East India	815,219	911	
3. Shillong & Jowai, Meghalaya	North East India	250,000	955	
4. Dimapur, Nagaland	North East India	65,978	886	
5. Hyderabad, Andhra Pradesh	South India	3,449,878	972	
6. Bangalore, Karnataka	South India	4,292,223	960	
7. Thiruvananthapuram, Kerala	South India	1,200,000	1,036	
8. Goa	West India	479,752	967	
9. Ahmedabad, Gujarat	West India	3,515,361	934	
Supported by UNESCO (DAPPA)				
10. Delhi	North India	9,817,439	827	
11. Kolkata, West Bengal	East India	4,580,544	917	
12. Imphal, Manipur	North East India	711,261	958	
13. Chennai, Tamil Nadu	South India	4,216,268	974	
14. Mumbai, Maharashtra	West India	11,914,398	934	
* Based on 1991 Census data. ** Now Jharkhand.				

they began data collection. Among other issues, the programmes covered:

- community participation
- methods
   ethnography and mapping, observation,
   focus groups, interviews (unstructured and
   structured), estimation techniques, sampling
- assessment and data analysis (qualitative and quantitative).

Researchers were trained on various strategies for data collection, including participant observation and ethnographic fieldwork. They were also encouraged to maintain field diaries and record observations. Ethnographic mapping helped to select geographical locations for the study; additional indicators like drug abuse treatment data, outreach data, enforcement data and previous research were also used, and a list of sites was thus drawn up. Members of the research team started the mapping process by conducting an observational survey of the neighbourhood. Local drug experts including current users, ex-users, and community and youth leaders were engaged in informal conversations. Through this process field workers gathered basic knowledge about local drug use patterns, and established contact with current users.

#### 3.3 Qualitative Data

The qualitative data was obtained through:

- in-depth interviews with drug users
- interviews with key informants
- focus group discussions.

Altogether 496 drug users were interviewed in-depth. These interviews were unstructured and thus different from the survey-based interviews of the study. In addition, several categories of key informants — law enforcement officers, government officials, treatment professionals, drug users, youth leaders, media experts and drug dealers — were interviewed. A total of 453 such key informants contributed to the data. And 63 focus group discussions were held to elicit responses on pattern of drug use, service demand and provision for treatment from drug users themselves.

## 3.4 Sampling for Quantitative Survey

The strategy of gathering quantitative data consisted of the following steps: 1) initial mapping of site-specific indicators of drug use and IDU (injecting drug use); 2) ethnographic mapping of certain neighbourhoods, geographical locations and populations identified as having high prevalence of drug use and drug injecting; and 3) development of a recruitment plan for each site. Before quantitative data collection, potential respondents were screened to ensure that the sample represented the targeted populations of drug users and/or injecting drug users. Through quota sampling, drug users were recruited for the study from each site. This was followed by the interviews which yielded data for analysis.

Table 2. Numbers of Drug Abusers Interviewed			
Site Sample Size			
Amritsar	327		
Jamshedpur	353		
Shillong	320		
Dimapur	261		
Hyderabad	300		
Bangalore	275		
Thiruvananthapuram	308		
Goa	373		
Ahmedabad	314		
Delhi	465		
Kolkata	388		
Imphal	308		
Chennai	300		
Mumbai	356		
Total	4,648		

#### 3.5 Community Participation

A community advisory board comprising key stakeholders representing various constituencies was established in many sites. The stakeholders discussed priority issues for assessment and intervention. Some of the crucial issues included ways of accessing the unreached, winning the trust of users and their families, dealing with legal issues and resistance from the community or threat from antisocial elements.

#### 3.6 Informed Consent

After recruitment, respondents' informed consent for an interview according to a structured schedule was sought. This was necessary because appropriately conducted qualitative methods are highly invasive of intimate aspects of peoples' lives. The research was carried out only after obtaining the consent of participants.

## 4 RESULTS

The data, both quantitative and qualitative, obtained in this study is discussed in this section. Information for all the fourteen sites has been combined and collated. Significant inter-site differences have also been pointed out. It should be borne in mind that in five sites (Delhi, Imphal, Kolkata, Chennai and Mumbai) the special focus of the survey was on opiate and injecting drug use, and data from these sites reflects this emphasis.

## 4.1 Demographic Characteristics of Users

The demographic parameters of the entire sample (N=4,648) are presented in Table 3 (see page 6).

#### Age and Gender

The mean age of drug users across the fourteen sites was lowest in Shillong (23 years) and highest in Ahmedabad (35 years), while the median age in the sample had a similar range from 23 to 34 years. Most drug users in the sample were in their late twenties or early thirties. Overall, 371 women (8% of the total sample) were interviewed. Goa recruited a relatively higher percentage of female drug users (20%), followed

by Thiruvananthapuram (16%), Mumbai (15%), Shillong and Dimapur (11%), Imphal (10%) and Hyderabad (10%).

#### Homelessness

About 26 percent of respondents were homeless and high numbers of this category were found in Ahmedabad (83%), Hyderabad (65%), Mumbai (54%), Delhi (39%) and Thiruvananthapuram (31%). The proportion of homeless drug abusers was less in the remaining sites, while Jamshedpur, Dimapur, Shillong and Imphal had negligible numbers of homeless persons (0.3 - 3%). (See Figure 1)

#### **Marital Status and Religion**

Roughly equal percentages of respondents were married (45.5%) and unmarried (48.8%) in the total sample. The sites where married respondents outnumbered the unmarried ones were Ahmedabad (77%), Chennai (61%), Jamshedpur (59%), Delhi (55%), and Thiruvananthapuram (48%).

Among the drug users interviewed, Christians constituted a majority in Shillong (70%), Dimapur (70%) and Goa (49%). Thiruvananthapuram presented a more balanced sample, with 37 percent Hindus, 34 percent Muslims, 18 percent Christians, and others. Hindus formed the majority in the remaining sites.

#### **Education**

Overall, about 21 percent were illiterate. Their proportion was somewhat uniformly high among drug users in Delhi, Kolkata and Hyderabad (44%), and then Mumbai (34%) and Bangalore (32%) (see figure 2, page 6). Remarkably, Imphal had zero illiteracy, followed by Chennai where less than one percent of the sample was illiterate. A significant number of users (about 32%) were better educated and had attained

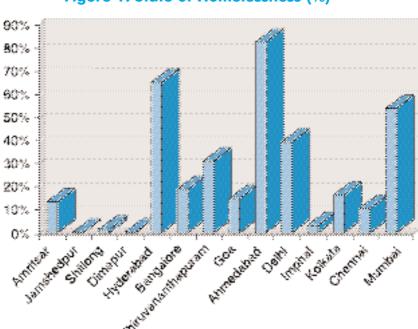
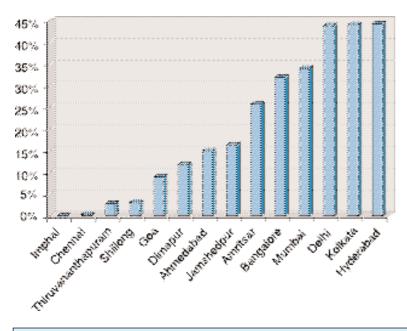


Figure 1. State of Homelessness (%)

secondary level degrees. Imphal (24%), Goa (24%), Shillong (18%) and Chennai (10%) reported the highest number of college educated drug users.

#### Figure 2. Illiteracy (%)



#### **Employment**

About 29 percent of all respondents were unemployed. While Shillong and Goa (68%), Imphal (61%) and

Dimapur (49%) reported higher numbers of unemployed users, the majority of drug users at the remaining sites were employed. Among those employed, Hyderabad (62%), Amritsar (45%)Bangalore (42%),Thiruvananthapuram (41%), Delhi (34%), and Dimapur (23%) had more daily wage earners. Factory workers were preponderant in Ahmedabad (58%) and Goa (43%). Users engaged in small businesses ranged from five to eighteen percent and those employed in the private sector constituted three to thirty-one percent across the sites.

The average monthly income of drug users was INR 4,050 overall, though in most of the fourteen sites, drug users had a monthly income of around INR 3,000.

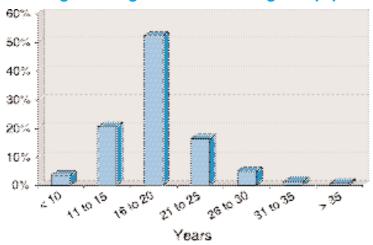
Table 3. Socio-Demographic Characteristics of Drug Users (N=4,648)					
Variable 1	Number	(%)	Variable	Numbers	(%)
1. Sex			6. Employment**		
Female	371	(8.0%)	Unemployed	1,238	(29.1%)
Male	4,277	(92.0%)	Employed	3,022	(70.9%)
2. Homelessness			7. Type of employment*	*	
Homeless	1,192	(25.6%)	Daily wage earners	867	(28.7%)
Have homes	3,438	(74.0%)	Private sector	416	(13.8%)
3. Marital status			Farm/factory worker	s 523	(17.3%)
Unmarried	2,267	(48.8%)	Small business	375	(12.4%)
Currently married	2,113	(45.5%)	Government sector	175	(5.8%)
Widowed/divorced/others	242	(5.2%)	Professional	36	(1.2%)
4. Religion*			Others	630	(20.8%)
Hindu	2,187	(56.0%)	8. Average monthly inco	me***	
Christian	831	(21.3%)	Mean	INR 4,050	(US \$87)
Muslim	633	(16.2%)	Range	INR 300 -	60,000
Others	221	(5.7%)	, and the second		
5. Education	000	(0.1, 0.07)			
Can't read/write	992	(21.3%)	28%)  ** Data not available for Kolkata  *** Data not available for Kolkata and Delhi		
Can read/write	223	(4.8%)			
Up to Primary School	772	(16.6%)			
Up to Secondary School	1,479	(31.8%)			ents on various
Above Secondary School	1,039	(22.4%)	2. 1 US \$ = INR 46.50/-		

#### 4.2 Patterns of Drug Use

#### Age of Initiation into Drug Use

In all sites except Ahmedabad, the mean age at initiation was nineteen and below. Ahmedabad's sample had a higher mean age at initiation at 24 years. Overall, more than half (52%) the users in the study sample began use between the ages of sixteen and twenty; about a fifth (21%) initiated drugs at the age of eleven to fifteen; and four percent at age ten or even younger. Thus, more than three fourths of the sample (67%) initiated drugs before the age of twenty. Goa and Bangalore presented higher shares of early onset of use — about a tenth of the sample in each site started use before the age of ten.

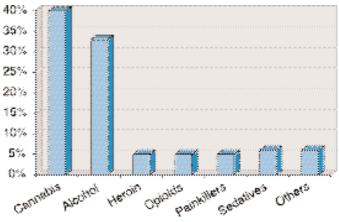
Figure 3. Age of Onset of Drug Use (%)



#### **Drug of Initiation**

Cannabis was the most common first drug of abuse in the combined sample, with a share of 40 percent, followed by alcohol (33%), sedatives and tranguillizers (6%), heroin (5%), painkillers (5%), opioids (5%) and inhalants (1%). However, in Chennai, Imphal, Goa, Bangalore, Thiruvananthapuram and Ahmedabad, alcohol was the most common first drug of abuse, varying between 34 and 59 percent. Dimapur presented another divergence from the norm for 34 percent of that sample, the first drug of abuse was the painkiller propoxyphene, and around 30 percent started their drug use with heroin. Ahmedabad's sample conformed to the latter pattern. Twelve percent of users interviewed in Bangalore cited inhalants as their first drug of abuse.

Figure 4. First Drug of Use (%)



#### **Mode of Use at Initiation**

Of the total sample studied, the vast majority (98.7%) began drug use via smoking or inhalation. Only sixty-

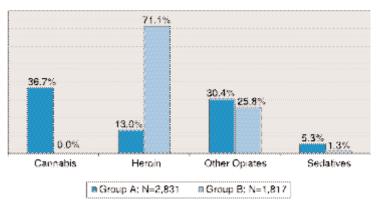
two users began their drug career with the injecting mode of administration. More than half of them are from Imphal and Hyderabad. The injectable drugs often mentioned as first drugs of abuse were synthetic opiates like pentazocine, buprenorphine, and opioids like propoxyphene and injectable heroin.

#### **Primary Drugs of Abuse**

In the total sample, the majority (36%) reported heroin as their primary drug of abuse. Other opiates (buprenorphine, propoxyphene and opium) accounted for 29 percent and cannabis 22 percent. In nine sites — Amritsar, Jamshedpur, Dimapur, Shillong and Jowai,

Hyderabad, Bangalore, Thiruvananthapuram, Goa, and Ahmedabad — cannabis was the most common primary drug of abuse and it was abused by more than

Figure 5. Primary Drug of Abuse (%)



Note: 1. Group A covers Amritsar, Jamshedpur, Dimapur, Shillong and Jowai, Hyderabad, Bangalore, Thiruvananthapuram, Goa, and Ahmedabad. Group B covers the four metros and Imphal.

2. The category of 'other drugs' is not shown.

a third of users (Group A in Figure 5). Other opiates were next (30%), among which twelve percent primarily abused painkillers (mostly propoxyphene), followed by heroin (13%). Combined together, opiate type of drugs contributed to 43 percent of this sample. The results from the four major metros — Delhi, Kolkata, Chennai and Mumbai — and Imphal were more stark (Group B in Figure 5). Here, 71 percent of the respondents had been primarily using heroin, and about a fourth used buprenorphine as the primary drug.

#### **Primary Drug Used in Last Month**

Significant inter-site differences were noted for this indicator. Cannabis was the prominent primary drug of abuse during the past month in Bangalore, Shillong, Thiruvananthapuram, Hyderabad and Goa, while heroin was prominent in Ahmedabad and Thiruvananthapuram. This was because Thiruvananthapuram sample had large usage of both cannabis and heroin (46% each). Other opiates were common in Jamshedpur and Dimapur. More than a third of the sample interviewed in Goa reported alcohol as their primary dug of abuse in the preceding month. Sedatives and tranquillizers (nitrazepam and alprazolam) were primary drugs for nearly a third of the Hyderabad sample. In line with the relatively high incidence of inhalants as the first drug of use in the Bangalore sample, about eleven percent reported inhalants as their primary drug in the last month. (See box)

#### Other Drugs Used (past month)

The findings from the four major metros and Imphal revealed very high poly drug use — 94 percent at Chennai, about two-thirds in Kolkata (64%), and more than half in Mumbai (54%) admitted to abusing additional drugs. In some of the other sites, significant

## Street Children and Inhalant Use (Bangalore)

V is an eight year old boy who lives on the street. He looks after after footwear left by devotees outside a temple in the mornings and evenings, and plays with other street children throughout the day. Older friends introduced him to *sheesha* (inhalant) and taught him how to imbibe it. He likes the smell and enjoys inhaling *sheesha*. Recently, he has learnt to smoke *bidis*, and says that they help him keep warm and sleep soundly at night as he has nothing to cover his body and the cold keeps him awake. Occasionally, he eats charcoal with other street children.

#### **Poly Drug Use (Bangalore)**

J is a 38 year old who started ganja use at the age of thirteen, while in the sixth standard, along with his friends. Ever since, he has smoked bidis and cigarettes, taken mandrax (methaqualone), nitravet (nitrazepam), brown sugar and tidigesic (buprenorphine) and fortwin (pentazocine) injections. He has also been abusing cough syrup and phenargan (promethazine) syrup for several years.

His father and brother abused alcohol. He is currently married and works as a dog trainer. Though he earns INR 15,000 every month, he still suffers financial problems, as most of his money is spent on drugs. His relationship with his mother, wife and children is strained. Although he loves them, they resent his drug use and he feels they do not like him. He has tried to stop, but finds the withdrawal symptoms horrible. He stopped injecting because he could not find veins, and currently uses mainly ganja and alcohol. J describes his drug taking 'just as it happens in the movies'.

He had sex for the first time at the age of seventeen with a neighbor, but has been faithful to his wife since marriage. He is aware of sexually transmitted diseases from films and magazines and has also had counseling. He was once arrested for drug possession and was in prison for a month. He says ganja is available in prison.

numbers of respondents reported using other drugs in the past month, in addition to their primary drug of abuse: 66 percent in Amritsar, 52 percent in Jamshedpur, 39 percent in Ahmedabad, 32 percent each in Thiruvananthapuram and Bangalore. Such use was relatively less in Goa, Shillong and Hyderabad.

#### **Years of Regular Use**

Many persons interviewed in Thiruvananthapuram (57%), Ahmedabad (49%), Amritsar (45%), Jamshedpur (44%), Goa (40%) and Shillong (31%) had been using drugs for five years or more. Only sixteen percent in Jamshedpur have been users for less than three years, while eleven percent of the sample in Goa and ten percent in Shillong have used drugs for less than a year.

#### **Drug Use in Family and Friends**

Drug use among family members was common in Mumbai, Amritsar, Imphal, Thiruvananthapuram, Bangalore, Delhi, Goa, Jamshedpur and Ahmedabad, and varied between 30 and 60 percent. However, it was less frequent in Chennai, Dimapur, Hyderabad,

Shillong and Kolkata, where it ranged between seven and eighteen percent.

The incidence of drug abuse among friends was very high in all the sites except Goa. Almost everyone interviewed admitted that they had a drug-using friend. Sites where 90 percent or more had a drug-using friend were: Thiruvananthapuram (99%), Jamshedpur (98%), Shillong (96%), Dimapur (94%), Bangalore (92%), Delhi and Amritsar (91%).

#### 4.3 Injecting Drug Use

Overall, 43 percent of the total sample confirmed injecting drug use (ever). Figure 6 shows that the proportion of IDU was higher in the four major metros and Imphal (Group B) as against the other nine sites. The proportion of IDUs was high in Chennai (100%), Imphal (92%), Jamshedpur (87%), Thiruvananthapuram (67%) and Kolkata and Delhi (50%). However, the percentage was low in Ahmedabad and Amritsar (10% and 16% respectively).

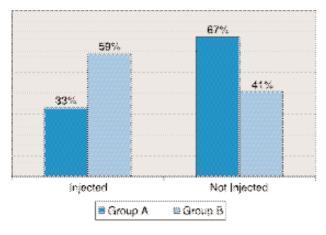
#### **Mean Age of Starting Injecting Drugs**

The mean age of IDU initiation varied between fifteen and twenty-eight, with Thiruvananthapuram at the low end and Jamshedpur and Kolkata at the higher end. At most sites, the mean age fell in the early twenties, and there was a certain time gap between the age of initiation of drug use and starting IDU.

#### **Frequency of Sharing Needles**

The percentage that reported 'always' sharing varied across centres. It was common among injectors in Amritsar (51%). In Hyderabad, Delhi, Dimapur, Thiruvananthapuram and Chennai, the proportion

Figure 6. Ever Injected Drugs (%)



Note: Group A covers Amritsar, Jamshedpur, Dimapur, Shillong and Jowai, Hyderabad, Bangalore, Thiruvananthapuram, Goa, and Ahmedabad. Group B covers the four metros and Imphal. stood at around fifteen percent. Very few (0.02 - 9%) reported such behavior in Shillong, Imphal, Jamshedpur, Mumbai and Bangalore.

Safe injecting in the form of 'no sharing' was reported by 50 percent or more at Jamshedpur, Ahmedabad, Bangalore, Delhi and Shillong.

#### **Number of Persons Sharing Needles**

Sharing injecting equipment with three or more persons was common in Amritsar, Delhi, Thiruvananthapuram and Hyderabad. In Chennai too, the mean number of persons with whom syringes and needles were shared was three.

Of the total sample of 1,519 current injectors for whom data could be analyzed, about half reported that they had shared syringes and needles the last time they injected. Sharing during last use was common in Amritsar, Mumbai, Chennai, Jamshedpur, Thiruvananthapuram, Hyderabad, Kolkata and Delhi.

#### **Cleaning Practices**

Majority of the drug abusers reported that they cleaned their needles and syringes with only water, as a matter of fact, with any available water. Many reported that they wiped the needle with a cloth or saliva. Use of bleach or disinfectant was uncommon. Thus, unhygienic methods were predominant in cleaning needles and syringes.

#### **Procurement**

Most drug abusers reported that they obtained syringes and needles very often from pharmacies frequented by their drug-using friends. They also reported that this paraphernalia was easily available from the pharmacies.

#### **Reasons for Injecting Drugs**

Non-availability of heroin was responsible for many opiate users switching from non-injecting to injecting modes of administration. Some other users from Bangalore, Hyderabad and Thiruvananthapuram reported that impure heroin contributed to the transition to injecting pharmaceutical products. Many found it less expensive. Peer influence was another significant reason for the shift to injecting drugs in Amritsar, Mumbai, Chennai, Shillong and Bangalore.

#### **4.4 Adverse Health Consequences**

Tuberculosis, jaundice and ulcers in genitalia were commonly reported. **Tuberculosis** was found in a small proportion of drug users interviewed at the various sites

#### **Injecting Drug Use**

In-depth interviews with drug users provided information on injection drug use and associated risks. Pharmaceutical products were very popular as injections. Some, however, injected heroin. Here is an excerpt from ethnography on Dimapur:

#### Propoxyphene Injecting (Dimapur)

First, the capsule cover is unwrapped and the powder poured on the lid of a bottle or any small container that does not soak water. The powder is then stirred into the water, using the needle jacket. Wads of cotton are also used sometimes for this purpose, and the solution is drawn inside the syringe. The undissolved substance is separated out with another cotton wad used as a filter while drawing the drug solution into the syringe. Usually, two capsules are used for one shot and the quantity of water depends on individual choice for effect. If the volume of water is less the solution will be too thick for injecting. The air is let out of the syringe before the needle is pushed into the vein. Unlike heroin, Spasmoproxyvon is never dissolved with blood.

and its prevalence varied between 0.6 percent in Jamshedpur and nineteen percent in Imphal. Between two (Jamshedpur) and 67 percent (Imphal) reported occurrence of **jaundice**. About one in a third of the sample in Hyderabad admitted to **genital ulcers**, followed by smaller proportions in Delhi, Mumbai and Chennai. In the remaining sites, 0.3 - 12 percent reported genital ulcers. **Gonorrhoea**, indicated by pus and burning micturation, was reported by three-fourths of the Delhi sample, about a half in Hyderabad, and a third in Mumbai. **Abscesses** are fairly common among drug injectors indulging in unhygienic practices. In Kolkata, Imphal, Delhi, Shillong, Thiruvananthapuram, Dimapur and Chennai between fourteen and 54 percent reported abscesses.

#### **Overdose**

The range of those reporting that they knew someone who had experienced overdose due to drug abuse varied from 31 (Dimapur) to 75 percent (Thiruvananthapuram). When asked about the frequency of overdose, the majority (as many as 80% in some sites) chose not to respond.

#### 4.5 Sexual Behavior

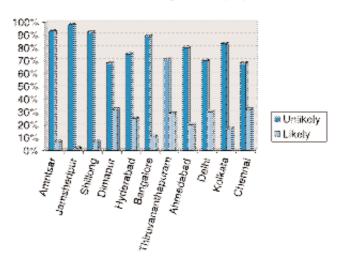
Several aspects of sexual behavior were enquired into. The mean age of first sexual activity was around eighteen years at most sites. The sample from Thiruvananthapuram reported first sexual activity even earlier, at the age of fourteen. Many drug users reported sex with sex workers, with the percentage ranging as high as 50 to 71 percent in Delhi, Imphal, Kolkata, Chennai, Amritsar and Thiruvananthapuram. Condom use was not uniformly prevalent among these drug users. Even with sex workers the consistent use of condoms was uncommon in most sites. However, the practice of safe sex was better in Imphal, Shillong, Bangalore, Thiruvananthapuram and Mumbai where consistent condom use varied between 41 and 64 percent.

Considerable numbers of drug abusers in Mumbai, Delhi, Dimapur, Shillong, Hyderabad and Bangalore reported use of drugs with members of the opposite sex. However, it was uncommon in Ahmedabad, Chennai and Jamshedpur. A number of drug abusers also reported that they had drug-using sexual partners. This was most often reported from Bangalore, Mumbai, Shillong, Delhi and Hyderabad.

#### 4.6 Knowledge of HIV/AIDS

The risk perception of HIV/AIDS was low among drug users interviewed. In all sites, only a small proportion indicated that they were at risk for acquiring and transmitting the HIV virus. Indeed, the majority perceived no possibility of contracting HIV. Between two and 32 percent reported risk of the disease (Figure 7). Thus, the subjects interviewed in this study displayed a false sense of security. In Imphal about 23 percent had been tested for HIV, while only a small proportion (3 - 15%) in the remaining centres reported having been tested.

Figure 7. Perceived Possibility of Contracting AIDS (%)



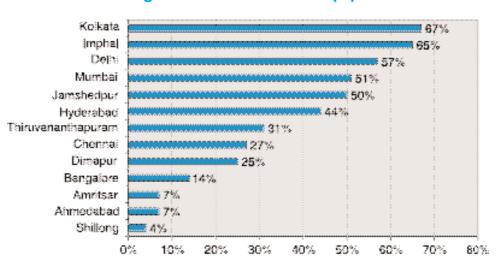
Note: Information on three sites not available.

#### 4.7 Treatment

In some centres, between 40 (Dimapur) and 78 percent (Thiruvananthapuram) reported taking help from a drug treatment organization. However, the majority of drug users in Amritsar, Goa, Shillong and

Hyderabad had not done so. In Hyderabad and Thiruvananthapuram, about one in four had difficulty obtaining help from the organizations that provided care and treatment for drug users. Some reported dissatisfaction with the available services and the reasons cited varied from lack of infrastructure, and high cost to indifferent attitude of the staff. (See box) Other than the Ahmedabad sample, very in police lock-ups in the past year. Between four (Shillong) and 67 percent (Kolkata) reported ever being in jail (Figure 8). Of those who have ever been to jail, a significant proportion had been imprisoned in the past year.

Figure 8. Ever Been to Jail (%)



Note: Data not available for Goa.

few drug users were currently in touch with any treatment centre. Some, however, made efforts to reduce drug consumption on their own.

#### 4.8 Anti-Social Behavior

Between 48 and 85 percent of drug users in Kolkata, Mumbai, Delhi, Jamshedpur, Hyderabad, and Thiruvananthapuram reported having been in a police lock-up (ever). A significant proportion of drug users sampled (41 - 73%) in Hyderabad, Dimapur, Thiruvananthapuram, Jamshedpur, Mumbai, Amritsar, Bangalore, Goa and Shillong reported being

### Treatment Seeking and Dissatisfaction with Treatment

- 4% (Amritsar) 78% (Thiruvananthapuram) have sought treatment
- Only around 10% and below had sought help in five of the sites
- Many treatment centres were found inadequate in providing services
- No separate services for female drug users
- Some found treatment expensive
- Users placed more trust in service providers who were ex-users
- Most were satisfied in Goa.

#### 4.9 Violence

Drug abusers interviewed in the RAS reported being subjected to violence — between 22 (Ahmedabad) and 45 percent (Delhi) said that they had been physically assaulted. Furthermore, recent violence was admitted by the majority and an even greater proportion confirmed physical assault during the past six months.

#### 4.10 Women Drug Users

Altogether 371 women drug users (8% of the total sample) were interviewed in these fourteen sites. The proportion of women was lower in the four major metros and Imphal (6.6%) as against 8.9 percent in the rest. Kolkata, Amritsar, Jamshedpur, Bangalore and Ahmedabad had very few women drug abusers, and Chennai had none. Women constituted around 20 percent each of the samples at Thiruvananthapuram and Mumbai.

Several categories of drugs of abuse were reported by women. These included heroin, alcohol and pharmaceutical products. IDU was also reported — in Shillong, thirteen out of 36 women drug users were IDUs. Details on drug abuse by women are provided in a separate monograph (Women and Drug Abuse: The Problem in India, forthcoming).

# 5 EVELOPMENT OF RESPONSES

As mentioned in the introduction, rapid assessment is critical to the development of speedy and effective responses that are appropriate to assessed needs. An action plan has to be developed at multiple levels targeting different behaviors, and it should be integrated into existing services.

#### **Profile of Drug Users**

The drug users studied in the fourteen sites are young and predominantly male, with the majority living in homes. Nearly half are unmarried, more than a fifth are illiterate and roughly the same proportion have received only primary education. A fourth are unemployed, a significant number of whom work as daily wage earners, and the average monthly income of the sample is INR 4,050. Many drug users hail from impoverished environments and the locations they live in can be described as 'risk locations', as their vulnerability in general, as also to drug use, is very high.

This profile helps us gauge the effectiveness and reach of existing prevention and treatment interventions. Current strategies usually do not reach poor drug users in such settings, and future interventions should target them and specifically address their needs. Special attention also needs to paid to the development of IEC materials targeting illiterate and semi-literate drug users.

#### **Prevention of Drug Abuse**

Since drug abuse is now understood to be progressive and chronic, with multiple origins and pathways, it is imperative to target varied preventive strategies at different stages of the emerging problem. Effective strategies for comprehensive drug abuse prevention require multiple programme components that address risk factors across at least four groups: individual, family, peer group and community (which includes school, workplace and local neighborhood). By nature, these four groups are not stagnant but dynamic within and across risk factors.

An especially important and obvious factor in preventive strategies is that of drug use initiation, i.e.

the age of the individual at the onset of drug use. The risk of initiating use for most drugs reaches a peak during mid-to-late adolescence, and falls thereafter. The likelihood of consumption of alcohol, cannabis, inhalants and other drugs is greatest before the age of twenty. While the use of opiates, sedatives, and painkillers may typically begin in young adulthood, the pattern of use may change because of easy availability and affordability of drugs. In most cases, the introduction to illicit and pharmaceutical drugs has occurred subsequent to the use of drugs like alcohol and cannabis. Since a large number of users begin drug use in their late teens, prevention programmes should target young people. The RAS has confirmed that a large number of those who have dropped out of school or not entered school are at risk for drug use. Prevention programmes should therefore be organized not only in schools but also in non-school settings. Of course, the content of the programmes needs to be suitably modified to match the needs of target populations.

Qualitative data collection in this study has yielded valuable information about differences in the needs and motivations of users across various cultural and geographical settings. Such knowledge can help design appropriate strategies. Prevention interventions should be developed keeping in mind the cultural needs and community standing of the vulnerable/target populations.

#### **Social Networks of Drug Abusers**

One of the key findings of this study is that drug users have deep roots in their networks of friends and associates. Most users in the sample were in touch with other users. Such peers not only influenced them with regard to initiation to drug use and to injecting, they were the ones that drug users listened to most. Users trusted their drug-using peers more than professionals, and interventions where users and ex-users provided services were found most attractive. During the rapid assessment survey, the outreach team at many sites was able to identify a number of users and ex-users who

#### **Group Drug Use**

Ethnographic observations by research staff provided a glimpse of drug use and related activities. An important finding was that drug use was often a group activity. Here is an excerpt from field notes on a non-injecting scene in Shillong:

A group of six males, who were friends, met at 7.00 pm everyday. Four of them are residents of Shillong, involved in business and other vocations, while the other two are students in Shillong but hail from other states in North East India. The group procured ganja in the evening from Shillong's main bazaar. They spent INR 70 for about 250 gm. They smoked in a small room in a house that belonged to one of them. The room was isolated from the main house, and was made of tin sheets and wood. It was dusty and had poor ventilation as there were no windows. The dry ganja plant was converted into powder form by removing the seeds. It was then put into a chillum of earthen clay and lit. The chillum was passed around from one person to another. The men mostly refrained from engaging in conversation while consuming.

can be trained. Past users can be a very valuable resource in preventive and treatment strategies. They can provide accurate information on drug use and risk practices, gaining access to treatment and other available interventions, referral to services, risk management skills, life saving interventions like overdose management, basic nursing skills, and community relations. In this way, messages can be more effectively reached to target populations through their own peers.

#### **Primary Drugs of Abuse**

Ninety-five percent of users interviewed in the five sites of Imphal and the four major metro cities abused heroin and buprenorphine. In the rest of the nine sites, opiates/opioids (including heroin, pharmaceutical opiates and opium) were the primary drugs used by forty-three percent. About a fourth of all drug users abused injectable buprenorphine. Thus, special attention must be paid to the availability and use of opiates. A related problem is poly drug use which is largely the norm, especially among opiate users who concurrently use sedatives and painkillers. Cannabis use is also prevalent — it was the primary drug of abuse for more than a third of users in nine sites (excluding the metros and Imphal). Escalation of the abuse of pharmaceutical drugs is occurring in most sites, with easy availability and lax control contributing to this trend. Interventions need to be designed to address this profile of drugs being abused.

#### **Injecting Drug Use**

Injecting drug use is present in all the fourteen sites covered in the RAS, and the trend towards injecting is on the rise. Injecting drug users exhibit very high levels of unsafe behavior. characterized by direct sharing of needles and syringes, indirect sharing of cotton, water and spoon, unhygienic cleaning practices, use in dealer's places and in common shooting locations. Current levels of unsafe behavior are also unacceptable, as indicated by high levels of sharing during the last event. These findings are particularly disturbing because they indicate the

high potential for rapid diffusion of blood borne pathogens.

In order to discourage the diffusion of injecting use to new social groups, we need to understand the issues that facilitate injecting. Key factors include the cost of heroin (Crofts et al. 1998a), impurity of the drug, high rate of police arrests which can push users towards licit pharmaceutical preparations as drugs of choice become unavailable (Panda et al. 1997, Vicknasingam 1998), and the social acceptance or normalization of drug injecting (Stimson 1993). Drug injecting and risk behaviors may be influenced by the 'risk environment' (Rhodes et al. 1999) and by local drug use settings (Latkin et al. 1994b). This assessment indicated that geographical locations, settings subpopulations (such as the homeless, slum dwellers and street children) had increased risk. We need to track changes in behavioral risk over time to contain the spread of HIV. Many of the problems of HIV transmission and other adverse health consequences among IDUs are linked to poverty, slum dwelling, unhygienic surroundings, access to primary health care, and high levels of demoralization. Without addressing these issues pertaining to the environment of risk groups, it is doubtful that the full potential of HIV interventions for IDUs will be realized. For instance, delivery of basic health care facilities (Ball 1998), and providing vocational opportunities (Singh 1998), may help IDUs stay in intervention programmes.

#### **Prevention of Initiation to Injecting**

There is usually a time lag between the onset of drug use and the initiation to injecting. As the present study indicates escalating trends of injecting in all settings, preventing the transition to injecting is critical. Rapid escalation to injecting has been noted in certain sites including Imphal, Chennai, Delhi, Kolkata, Jamshedpur and Thiruvananthapuram. We know very little about preventing this transition and all efforts should be made to understand the issues involved so as to develop effective interventions. Some important issues are the availability of pharmaceutical drugs that can be injected and their relatively low cost, both of which have contributed significantly to the escalation of injecting. Increasing peer approval of IDU is also responsible.

#### **HIV Risk Perception**

Most drug users are of the opinion that they are unlikely to contract the HIV virus, despite numerous high risk practices such as IDU and unsafe sex. Altering this flawed risk perception calls for behavioral interventions that target drug users. In addition, given the low number of drug users who have been tested for HIV, there is a need for large-scale HIV testing and counseling programmes. The suggestion by the National AIDS Control Organization to appoint a hundred HIV counselors in drug counseling centres is a welcome initiative.

#### **Sexual Risk Behavior**

Sexual risk behavior is equally important, and India's HIV epidemic is largely driven by heterosexual transmission. Unprotected sex, including commercial sex, is very common with the inevitable high prevalence of sexually transmitted infections among drug users (Chowdhury et al. 1998). Condom use is very low with all sexual partners, notably spouses and regular sex partners and even sex workers. Alcohol consumption and intoxication is clearly associated with high risk behavior, and this important link needs to be addressed in HIV interventions among drug users (Latkin et al. 1994a, Rhodes et al. 1996). The combination of high injection risk with high sexual risk can lead to an explosive situation. There is thus an urgent need to develop interventions targeting sexual risk behavior among drug users.

#### **Adverse Health Consequences**

The RAS confirmed the poor health status of drug users. Many users reported adverse health consequences, in particular, jaundice, tuberculosis, sexually transmitted diseases and abscesses. Providing primary

health care for drug users is extremely important and interventions should incorporate this as an integral component. Overdose appears to be common and drug users have to be educated about identification, prevention and emergency management of this phenomenon.

#### **Anti-Social Behavior**

Drug use is often considered criminal behavior, and a significant numbers of drug users have been in lock-ups and jails. Prison based programmes are an urgent priority and harm prevention interventions need to be rigorously implemented in prison settings. Training of law enforcement officials and partnerships with law enforcement are equally important strategies to ensure a consistent and effective approach to the problems of drug abuse.

#### **Treatment Seeking Behavior**

Most drug users are not currently in touch with any treatment organization. In none of the fourteen sites does treatment capacity match treatment demand. Building capacity is, therefore, a must. Furthermore, existing services need to be expanded, enhanced and new pragmatic components have to be added. Treatment professionals require ongoing training and capacity should be developed in this way too. Many drug injectors in the study sites indicated a preference for substitution treatment, and this requires attention. Drug users also expressed the need for home based detoxification services and outreach services. The overall emphasis in treatment needs to be on reducing harm stemming from drug use, rather than on abstinence.

#### **Special Populations**

Women drug users have been largely ignored in most existing programmes, and future work needs to target this important group. Street children are another important subpopulation that merits special attention. Other populations that need to be targeted include slum dwellers and migrant workers. While the study has clearly indicated the high vulnerability of these groups to drug use, it is also apparent that users from these environments lack the resources to address the problem. Special efforts are therefore needed.

## 6 ACTION PLAN

This Rapid Assessment Survey has indicated the key areas requiring immediate attention through intervention strategies to tackle drug abuse. The findings clearly indicate the need to create awareness about the harmful effects of drug use, in particular opiate abuse. Of increasing concern is the escalation of pharmaceutical drug abuse in various settings. The initiation of IDU occurs later than initiation to drug use and this transition time is critical for prevention. Preventive strategies targeting the prevention of transition to injecting use is thus a top priority.

An outline of an action plan based on the findings of this study is presented below. Types of intervention suitable for the necessary responses (see section 5) are discussed. These are followed by tabular presentations of the key issues and relevant strategies under four broad heads: prevention of drug abuse, health promotion, intervention and policy planning.

#### **6.1 Types of Intervention**

There are many types of intervention that can be employed. A judicious selection of multiple types is needed for targeted and effective interventions. The following components are suggested:

- provision of information and knowledge
- distribution of materials
- education
- · training and skills development
- · community based action
- regulatory activities
- treatment.

## Provision of Information and Knowledge

Information provision is a core element of most intervention strategies. It can be used to:

 provide accurate and essential advice about the harms of drug use, problems stemming from drug use, harmful effects of IDU, including adverse health consequences

- inform people and organizations about important services available for dealing with drug use and related adverse consequences
- promote or defend key concepts and interventions (for instance, preventing HIV and other blood borne pathogens among drug users).

Basic information dissemination is a cheap, quick and useful method of intervention. Its most common forms are leaflets, fliers or posters containing clear and simple messages. However, the use of other mediums — such as fact-sheets, comics, street plays, theatre, public meetings, workshops, video — can also be employed. It is unrealistic to expect information alone to prevent health risk behaviors. However, it is important that people are given accurate and honest information that can allow them to make informed choices. The effectiveness of information based interventions is enhanced significantly when used with other types of intervention.

More sophisticated forms of information delivery are sometimes referred to as social marketing. These are based on the recognition that:

- one-time or limited exposure to information is less successful than interventions which reinforce positive behaviors or values
- a single message is insufficient to reach the multiple and diverse communities who may engage in health risk behaviors
- the adaptation of commercial marketing techniques can improve the analysis, execution and evaluation of programmes designed to facilitate behavioral change.

Consequently, social marketing aims to be more sophisticated in its approach (thereby encouraging its audience to engage with material more than once) and with a greater emphasis on research evidence. The latter aim often involves basing interventions on research findings or pre-testing materials on people from different social groups or populations.

#### **Distribution of Materials**

Providing information alone is not enough: individuals also have to be in a position to act on the knowledge they possess. Interventions targeting individual behavior are likely to be more effective if they provide people with both the knowledge and the means to enhance current protective behavior or change their behavior. In the case of HIV prevention this usually involves distributing condoms or sterile injecting equipment. The development of resource packs to support specific activities — such as trainers who educate health professionals about people who engage in injection and sex related risk behaviors — can also help people to take positive action. Given the findings that there are unacceptable levels of injection and sex related risk behavior, distribution of condoms and injection equipment are a high priority.

#### **Education**

Educational approaches include:

- improving skills that are conducive to health and well-being
- developing positive attitudes, behaviors and values
- advancing self-esteem, personal responsibility and autonomy
- developing decision making skills and interpersonal communication skills
- stimulating participation and social integration
- promoting alternative or diversionary activities to health risk behaviors.

Most people who are at risk for drug use — such as the poor and the socially excluded, slum dwellers and internally displaced young people or those living in certain geographical locations within a city — may have little or no contact with the formal education system. Hence, educational programmes can also be conducted in a range of other locations including the family, residential homes, criminal justice system, brothels, and the workplace. Devising programmes that reach disadvantaged groups is the challenge.

#### **Training and Skills Development**

People who come into regular contact with those engaging in health risk behaviors — such as law enforcement officers, health care workers, youth workers, teachers — sometimes have low levels of

knowledge and harbor many misconceptions about drug use related risk behavior, and associated harms. Imparting training and skills to them is vital for intervention success.

#### **Community Based Action**

Many people affected by drug use and related consequences may have limited contact with existing health and prevention organizations. Innovative methods are needed in order to reach the populations most likely to be affected.

- Outreach involves entering settings where those engaging in risk behaviors gather, and distributing health education and prevention materials through one-on-one interaction. This is normally done by health workers or those familiar with drug use (e.g. ex-substance users).
- Peer education was developed in the recognition that those engaging in risk behavior (e.g. streetchildren and substance users) could act as effective prevention advocates in their own social networks. The assumption here is that risk reduction ideas can be communicated through the network along pre-existing channels.

Though found to be effective, outreach and network programmes are reaching only a small proportion of drug users and injecting drug users in the fourteen sites. Coverage is critical for successful drug use prevention and intervention. Given the fact that community interventions in the study sites are carried out by few NGOs, the challenge now is to increase the programmes in number, to a scale commensurate with the magnitude of the problem.

Community based action is particularly important in addressing the HIV issue. The critical factor in control of the HIV epidemic among IDUs would seem to be large-scale behavioral change and risk reduction while HIV

### Barriers in Implementing De-addiction Programmes

- Low level of funding by government
- Inadequate training and skill of service providers
- Many are treated in psychiatry wards and thus face stigma
- Inadequate after-care facilities.

Community based de-addiction programme is needed.

sero-prevalence is still at very low levels (Des Jarlais et al. 1998). Comprehensive HIV prevention requires multilevel interventions and multi-sectoral involvement ensuring quality of services provided (e.g. adequate supply of sterile syringes, adequate dose of buprenorphine). Access to health and welfare services and reaching out to the majority of drug using populations through community outreach may help to contain HIV transmission among drug users and their sexual partners.

The greatest strength of this RAS is community participation. The survey aimed to encourage the active participation of key members of the local community, including:

- those who are vulnerable to health risk behaviors
- those affected by health risk behaviors
- those engaging in risk behaviors
- health, welfare and human rights organizations
- community advocacy and policy groups
- · law enforcement representatives, and
- · religious groups.

Community participation facilitated an assessment and response, defined, planned and organized by affected communities themselves. This experience confirms that basing interventions directly in the community encourages action at the level of people's everyday lives, and contributes to the strengthening of primary and community health care. Without the broad support and involvement of the community from the early stages of intervention, even the best designed action plan may not be implemented effectively.

Community based interventions have been implemented in India (Hangzo et al. 1997), and the impact of community based outreach intervention in reducing injecting risk behavior has been demonstrated in the region (Kumar et al. 1998, Kumar et al. 2000, Crofts et al. 1998b). It is critical that intervention responses simultaneously target individuals and the social environment (Fisher and Needle 1993, Rhodes and Hartnoll 1996) and are integrated into the social and political structure of neighborhoods.

#### **Regulatory Activities**

Drug control measures are lax and easy availability of pharmaceutical drugs has resulted in increasing abuse of pharmaceuticals in most sites. This is one of the areas requiring regulation. Legislative and regulatory approaches can be effective in preventing/reducing health risk behavior, and can also reduce the associated harms. Although effective, such changes may carry the danger of criminalizing a lifestyle or further marginalizing an already disadvantaged community. At times, vigilant law enforcement activity may inadvertently lead to escalation of injecting drug use. This tool must therefore be used cautiously.

#### **Treatment**

Treatment options for drug users are limited in all fourteen sites and there is a need to scale up treatment programmes. What is urgently required are cost effective programmes and pragmatic treatment approaches that can reach out to the majority of users and can be sustained with local support. Prevention of HIV and other blood borne pathogens has to be high on the priority list, and treatment interventions should target injection and sex related risk behaviors among drug users. Community outreach services, primary medical care for drug users, drug detoxification services that are easily accessible, home based detoxification services, outpatient treatment centres and substitution treatment are some of the treatment options demanded by drug users themselves. These should therefore be prioritized. There is also a need to train treatment professionals in drug treatment Since large numbers of treatment professionals are oriented only to abstinence, they require training in community based treatment services focused on harm reduction.

#### **Service Providers' Views**

The views of service providers were also obtained during the study. Some NGO functionaries working on the issue of drug use had extreme views. Statements such as the following demonstrate these views:

- They should suffer for their act of drug use.
   They should be segregated, treated, made drug free and counseled.
- They should not be taught about using sterilized needles and syringes.
- Education about the use of Nirodh (condom) by drug users will also not be much help. They should rather be sterilized.

#### **6.2 Key Findings and Action Plan**

Below is a tabular presentation of the key findings of this study, and the interventions necessary to address them (tables 4 - 7). In accordance with the guiding principles for developing responses to public health issues, the RAS used sound assessment, innovation, pragmatism, hierarchical approach and multilevel strategies to gather

critical findings required for intervention. Based on the findings, suggested interventions have been designed to

- 1) enhance behavior change
- 2) produce changes in service delivery
- 3) facilitate a community based approach
- 4) encourage community participation and
- 5) facilitate changes in the environment.

Table 4. Prevention of Drug Abuse				
Key finding	Suggested intervention	Remarks		
Mean age of initiation into drug use — below 20	Prevention programme targeting young people	<ul> <li>Discourage initiation of drug use</li> <li>Effective interventions need to be supported</li> <li>Human and material resources required</li> </ul>		
School drop-outs, poor people at risk	<ul><li>Slum based programs</li><li>Target drop-outs</li></ul>	Multiple problems faced by slum dwellers		
Predominant initiating drugs — cannabis and alcohol	Target cannabis and alcohol in prevention programmes	Educational campaign against abuse of alcohol and cannabis required		
Mean age at injection use — 18 - 28	Interventions which focus on preventing transition to injecting	Important to avoid new patterns of injecting drug use before they become established practice		
Mean age at first sexual act — 14 - 20	Interventions to delay first sexual act to ensure responsible and safe sex practices	Adolescent health programme to target sexual behavior		

Table 5. Health Promotion				
Key finding	Suggested intervention	Remarks		
Syringe sharing common	Enhance distribution of needles	Needle syringe exchange programmes may face opposition from community		
Indirect sharing common	Drug substitution process to be initiated	Important for reducing transmission of hepatitis		
Low condom use	Condom promotion for drug users	Sexual behavior most difficult to modify		
Low levels of HIV risk perception	Voluntary counseling and testing (VCT) for drug users	<ul> <li>Training counselors to prevent HIV</li> <li>Scaling up of VCT for drug abusers</li> </ul>		
Low levels of HIV testing	Easy access to HIV testing programmes	Promotion of large-scale VCT for drug abusers		

Table 6. Treatment				
Key finding	Suggested intervention	Remarks		
Treatment centres inadequate for burden	Enhance treatment capacity	<ul><li>Treatment options should be available</li><li>Training of caregivers</li></ul>		
Majority not currently in treatment	Facilitate entry into treatment	<ul><li>Pragmatic treatment approaches</li><li>Emphasis on reducing harms related to drug use</li></ul>		
Adverse health consequences common	Interventions to treat health damage	Interventions to target primary health of drug users		
Sexually Transmitted Infections (STI) common	Treatment for STIs	<ul><li>Prevention of STIs</li><li>Screen for STIs and appropriate treatment</li></ul>		
Overdose common	<ul> <li>Peer educators training in identification of overdose</li> <li>Prompt treatment and upgrading of emergency wings</li> </ul>	Overdose management critical to reduce mortality related to drug abuse		

Table 7. Policy Planning				
Key finding	Suggested intervention	Remarks		
Easy availability of pharmaceutical drugs	Rigorous drug control for pharmaceutical drugs	Number of pharmaceutical drugs have medicinal value		
Potential of law enforcement for adverse impact (transition to injecting)	Work closely with law enforcement	Training of law enforcement officials in harm reduction		
Drug abusers in prisons	Prison based interventions to reduce harms related to drug use	Prison reform policies		
National/regional/state/city level planning required	Advocacy to influence policy makers	Coherent policy that favors provision of many treatment options for drug abusers		

# IMITATIONS OF THE STUDY

The study yielded quantitative data from the total sample of 4,648 drug users interviewed in fourteen sites, as well as qualitative data on a smaller sample. Although significant information has been gathered and important findings generated by the Rapid Assessment Survey, there are several limitations which should be addressed in subsequent attempts.

- In most sites, the number of women drug users interviewed was very small. In addition, the female users interviewed were mainly commercial sex workers and it was difficult to access other women drug users.
- Drug users at most sites belong to low socioeconomic groups and are from locations with high prevalence of drug use. The sample did not have adequate representation of higher socioeconomic groups.
- The recruitment plan for obtaining samples for the quantitative survey was not uniform across sites.
- The questions enquiring about lifetime use of drugs in the survey questionnaire were complicated and coding difficulties made it almost impossible to present combined data for lifetime use.

- Qualitative data was gathered in local languages.
   It was therefore extremely difficult to translate material into English for comparison and overall analysis.
- In the states in North East India, fear of the underground (militants) sometimes created a serious problem in interviewing drug users.
- Some drug users demanded exorbitant sums of money for giving interviews. The ethical issues around compensating drug users' time with cash created serious complications in many settings.
- Drug users were reluctant to share information in some settings. Their fear stemmed largely from the possibility of information reaching the police or family members, or from their identities being revealed in the press.
- Interviews in prison settings were difficult as eliciting reliable information from imprisoned users was difficult.
- Some NGOs were unwilling to share information with local research teams.

# 8. CONCLUSION

The epidemic of drug use and associated adverse health consequences pose a formidable public health problem. It is widely acknowledged that drug abuse is a community problem, and that it is multi-dimensional. Thus, a combined and coordinated strategy involving different sectors of the community is needed in order to effectively address drug prevention and intervention. Based on the findings from the study, an action plan that incorporates multiple intervention strategies (community based drug prevention, community outreach, peer intervention, drug treatment) targeting

multiple behaviors (poly drug use, pharmaceutical drug use, injection related risk behavior, sexual risk behavior, overdose) at multiple levels (street level, family, community, schools, workplace, institutions, nonformal institutions) involving multiple sectors (policy, law enforcement, treatment professionals, drug users) has been proposed. The process of rapid assessment has laid the foundation for community based action through initial consultations with stakeholders and affected communities. These findings have to be used to advocate necessary policy changes.

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#### Rapid Assessment Survey of Drug Abuse in India

This report presents the findings of a survey covering 4,648 drug abusers in 14 Indian cities. The study gathered valuable qualitative and quantitative information on the extent and nature of drug abuse in urban settings in India. Significantly, it revealed that:

- Most drug abusers are young adult males
- Cannabis, heroin and pharmaceutical drugs are the major drugs of abuse
- Many use more than one drug
- · Nearly half have injected drugs
- · Serious health hazards are common
- Most have not had contact with treatment programmes
- Current treatment facilities are inadequate.

Based on these findings, the report suggests improvements in intervention strategies and programme planning.

This Rapid Assessment Survey is part of a larger study on the pattern and magnitude of drug abuse in India. The National Survey on Extent, Pattern and Trends of Drug Abuse in India is a jointly sponsored project of the Government of India and UNDCP.