



MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT
GOVERNMENT OF INDIA

MAGNITUDE OF SUBSTANCE USE IN INDIA

2019

National Drug Dependence Treatment Centre (NDDTC),
All India Institute of Medical Sciences (AIIMS), New Delhi

National Investigators

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2019



**National Drug Dependence Treatment Centre (NDDTC),
All India Institute of Medical Sciences (AIIMS), New Delhi**



श्री थावरचंद गहलोत
SHRI THAAWARCHAND GEHLOT



सामाजिक न्याय और अधिकारिता मंत्री
भारत सरकार

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शास्त्री भवन, नई दिल्ली-110001

MESSAGE

The Ministry of Social Justice and Empowerment, in collaboration with the National Drug Dependence Treatment Centre (NDDTC), AIIMS, New Delhi takes great pleasure in presenting the report on the Magnitude of Substance Use in India. This report presents the major findings of the *National Survey on Extent and Pattern of Substance Use in India*, commissioned by the Ministry, in terms of proportion of Indian population affected by substance use. The survey involved interviews of more than 5 lakh individuals across all the 36 States and UTs of the country and use of multiple approaches to collect data.

Aside from its already high cost to the social fabric, public health and the economy, use of alcohol and illicit drugs has come to represent yet another danger for our country over the past few years. Of late, the menace of drug abuse in the younger generation has been rising all over the world and India is no exception to it. This impacts negatively on the academic, social, psychological, economical and physiological development of people using drugs and their families. Drug use among the youth is known to be influenced by education, peer pressure, curiosity or urge to experiment, and availability of drugs and substance. The vulnerability of injecting drug users (IDUs) to get infected with HIV/AIDS due to sharing of needles and syringes and risky sexual behaviour makes the problem of drug use even more serious.

Having accurate knowledge on the extent and pattern of substance use in India is a significant first step in working together to address and ultimately resolve this serious social and health problem. It is our hope that this report will prove useful for all the stakeholders and allow them to develop a better understanding of the current situation of drug use in the country, the means of intervention and a yardstick against which progress may be measured. I congratulate the team which has worked tirelessly to bring this report.

18.2.19

(THAAWARCHAND GEHLOT)



श्री विजय सांपला
SHRI VIJAY SAMPLA

सामाजिक न्याय और अधिकारिता
राज्यमंत्री
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MESSAGE

Providing help and support to people affected by drug addiction is one of the key mandates of Ministry of Social Justice and Empowerment, Government of India. In order to develop effective strategies to deal with this problem, it is essential to have credible evidence regarding the dimension of the drug problem in the country and in various states.

I am pleased that this report, which describes the magnitude of substance use in India, is being released. It is hoped that this data will be utilized by all the stakeholders in their day-to-day work to provide help and relief to lakhs of Indians who are suffering because of drug addiction.



(VIJAY SAMPLA)



सुश्री नीलम साहनी
सचिव
MS. NILAM SAWHNEY
Secretary

सामाजिक न्याय और अधिकारिता मंत्रालय
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FOREWORD

Inadequate research on the magnitude and dynamics of drug use at the national level or states has been a cause of concern. The deficiency of data is due to the lack of resources on the one hand, and the sheer vastness of the country on the other. Cognizant of this fact and in line with its mandate, the Ministry of Social Justice and Empowerment, Government of India conducted a National Survey on Extent and Pattern of Substance Use in India through the National Drug Dependence Treatment Centre (NDDTC), All India Institute of Medical Sciences (AIIMS), New Delhi during 2018.

This survey has attempted to minimize the potential limitations of any single technique and uses different methodologies to project the data for the country and the states. The report presents data on users of various drugs and those affected by drug addiction, obtained through various components of this project, to understand the 'big picture' of the drug scenario in India.

The data and information presented in this report provide a framework to planners, policy makers, researchers and academicians to examine the current infrastructure and the means of intervention and suggest modifications to deal with the problem of drug use. This data would also help in further fine-tuning of the National Action Plan for Drug Demand Reduction formulated by the Ministry of Social Justice and Empowerment for the period 2018-2025.

This report is definitely a catalytic attempt towards generating more meaningful data in the country on drug use and will help address more questions in future.

(NILAM SAWHNEY)

PREFACE

While psychoactive substance use often tends to be framed as a problem or menace in the public-health or social-welfare discourse, the exact dimensions of substance use in India have not been assessed adequately, so far. A wide variety of entities - policy makers, researchers, service providers, law-enforcing agencies - need reliable and credible estimates of how many people in India use addictive substances and how many of them suffer from substance use disorders. Thus, we, the investigators behind the National Survey on Extent and Pattern of Substance Use, are extremely pleased to present this report on prevalence and extent of substance use in India.

This report presents the major findings of the survey in terms of proportion of Indian population using various substances and those affected by substance use disorders. Representing a culmination of efforts of a large number of organizations and individuals, this is the first attempt in the history of India to provide detailed estimates of substance use in the country as well at the level of each state. We are now in a better position to reply as to which state of the country has the largest population of people affected by drug use? Or which substance is consumed by most Indian people who use drugs? After providing a snap-shot of the intricate and robust scientific research methodology, we would provide the results of the survey in terms of each of the major categories of psychoactive substances, at the national as well as at the level of states. We have also provided a broad framework of recommendations on how should the country move ahead in terms of mounting an effective response to the drug use epidemic. This comprehensive survey had multiple components. Considering the complex phenomenon of substance use and its consequences a number of issues need to be explored and studied in depth in order to inform formulation of appropriate policies; and programmes. Thus, a series of reports shall follow this document, with more specific recommendations, after the remainder of the studies conducted as part of this national survey.

We take this opportunity to express our gratitude to all individuals and organizations who made this work possible. We are grateful to the Ministry of Social Justice and Empowerment, Government of India for entrusting us with this humongous responsibility. The project would not have been possible without the guidance and support of the officers of the Ministry of Social Justice and Empowerment. The Hon'ble Minister of Social Justice and Empowerment, the Hon'ble Ministers of State for Social Justice and Empowerment and the Secretaries, Department of Social Justice and Empowerment have always been a guiding light in providing all possible support for facilitating and implementing the National Survey. Their able leadership kept the team motivated to overcome the operational and technical difficulties witnessed during the course of Survey.

The National Institute of Social Defence (NISD) also deserves special credit for effectively managing the work of data collection through Regional Resource Training Centres and NGOs. The NGOs involved in the Survey need special attention who worked tirelessly despite facing

numerous operational challenges. More than 1500 personnel have been involved in this exercise in various capacities throughout the country, and we acknowledge the contribution of each one of them. Administration and staff of all the 11 collaborating medical institutes played a vital role in ensuring quality of the data collection process. State governments and their administration facilitated the data collection process and we are thankful to them. Indian Tourism Development Corporation (ITDC) facilitated the logistics for conducting more than 100 training programmes throughout the country. Finally, it would not have been possible to bring the report to this shape without the cooperation of the respondents - over five lakh men, women and children from all the nooks and corners of the country who agreed to provide us insights about some personal and private aspects of their lives. We are indebted to them.

We sincerely hope and expect that findings and recommendations from this report will be utilized by the political and social leaders, policy-makers, planners, researchers, academicians, development partners, service-providers and the civil society for formulating and implementing evidence-informed policies and strategies to address the challenges posed by drug use in the country. People affected by drug use are one of the most marginalised and under-served populations. It is hoped that this report provides strategic directions, to find ways to help save and improve their lives.

The Team of Investigators
New Delhi, February 2019

EXPLANATORY NOTES

CURRENT USE of any substance is defined as use (even once) within preceding 12 months. Unless specified, 'Use' refers to 'current use' in the results.

HARMFUL USE is defined as current use of the substance, along with scores on WHO Alcohol, Smoking, Substance Involvement Screening Test (ASSIST) between 4 and 26 (for alcohol, between 11 and 26), and experiencing any harmful consequence of substance use within last three months.

DEPENDENCE is defined as current use of the substance along with scores on WHO ASSIST more than 26.

QUANTUM OF WORK combines the prevalence of Harmful use and Dependence, which are understood as categories of consumption-pattern in which the individual requires professional help. It also indicates substance use disorders.

CANNABIS refers to Bhang (cannabis leaf) as well as other forms such as Ganja (Marijuana) and Charas (Hashish), unless otherwise specified.

OPIOIDS refers to Opium (including doda/phukki/poppy husk), Heroin (including brown sugar/smack) and Pharmaceutical Opioids.

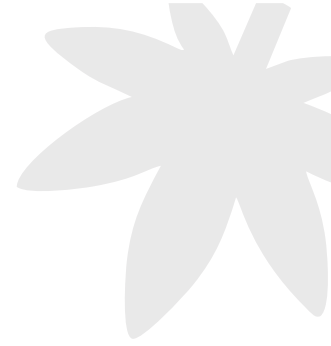
SEDATIVES AND PHARMACEUTICAL OPIOIDS have been included only if they have been used without prescription in a non-medical context.

ONE CRORE is equal to 10 million.

ONE LAKH is equal to 0.1 million.

LIST OF ABBREVIATIONS

AIIMS	All India Institute of Medical Sciences, New Delhi
ASSIST	Alcohol, Smoking and Substance Involvement Screening Test
ATS	Amphetamine Type Stimulants
DDAP	Drug De-addiction Programme, Ministry of Health & Family Welfare
DTC	Drug Treatment Clinics (Scheme of Ministry of Health & Family Welfare)
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HED	Heavy Episodic Drinking
HHS	Household Sample Survey
HIV	Human Immunodeficiency Virus
MOH&FW	Ministry of Health & Family Welfare, Government of India
MoSJE	Ministry of Social Justice & Empowerment, Government of India
NACP	National AIDS Control Programme, Ministry of Health & Family Welfare
NDDTC	National Drug Dependence Treatment Centre, AIIMS, New Delhi
NDPS	Narcotic Drugs and Psychotropic Substances
NISD	National Institute of Social Defence
NGO	Non-Governmental Organisation
OST	Opioid Substitution Therapy
PPS	Probability Proportionate to Size
PSU	Primary Sampling Unit
RDS	Respondent Driven Sampling
RDSAT	Respondent Driven Sampling Analysis Tool
SPSS	Statistical Package for the Social Sciences, IBM
UNODC	United Nations Office on Drugs and Crime
UT	Union Territory
WDR	World Drug report
WHO	World Health Organization



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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

Although the use of various psychoactive substances such as alcohol, cannabis and opioids has been observed in India for centuries, the current dimension of the extent and pattern of psychoactive substance use and the problems associated with their use are not well documented. In the absence of reliable and detailed information about the drug use problem in the country, it has been a challenge to formulate and implement effective policies and programmes to address drug use. In order to bridge this gap, the Ministry of Social Justice and Empowerment (MoSJE), Government of India, commissioned a National Survey on Extent and Pattern for Substance Use in India.

The National Drug Dependence Treatment Centre (NDDTC), All India Institute of Medical Sciences (AIIMS), New Delhi, was entrusted with the responsibility to lead the technical and scientific aspects of the National Survey which was conducted in all the 36 states and Uts of the country, in collaboration with ten other medical institutes and a network of 15 NGOs. This is the first occasion in the history of the country when effort has been made to study and document substance use from all the states and UTs of the country simultaneously. More than 1500 personnel were involved in data collection exercise which was conducted between December 2017 and October 2018.

The primary objective of the National Survey was to assess the extent and pattern of substance use in each state and UT. To achieve this objective, a combination of two data collection approaches was employed. A Household Sample Survey (HHS) was conducted among a representative sample of the 10-75 year old population of all the states and UTs of the country. During HHS, 200,111 households were visited in 186 districts of

the country and a total of 473,569 individuals were interviewed. In addition, a Respondent Driven Sampling (RDS) survey was conducted covering 135 districts and 72,642 people suffering from dependence on illicit drugs. A number of measures were taken to ensure optimum quality, high standards and adherence to ethical principles during data collection and analysis.

Data from HHS and RDS were analyzed and collated to generate estimates for eight categories of psychoactive substances: Alcohol, Cannabis, Opioids Cocaine, Amphetamine Type Stimulants (ATS), Sedatives, Inhalants and Hallucinogens. This report focuses on the magnitude of Current Use and estimation of harmful use and dependence for all the substance categories.¹ The survey was conducted independently in each state / UT and country-level findings were generated by scientifically pooling data from all states and UTs. All the findings have been projected for estimated population of the country / state / UT in the year 2018.

KEY FINDINGS

Use of Psychoactive Substances

The report establishes that a substantial number of people use psychoactive substances in India, and that substance use exists in all the population groups. However, adult men bear the brunt of substance use disorders. This survey also indicates that there are wide variations in the extent and prevalence of use across different states and between various substances.

[1] Description of these terms has been provided under Explanatory notes

Alcohol is the most common psychoactive substance used by Indians (among the substances included in this survey). Nationally, about 14.6% of the population (between 10 and 75 year of age) uses alcohol. In terms of absolute numbers, there are about 16 crore persons who consume alcohol in the country. Use of alcohol is considerably higher among men (27.3%) as compared to women (1.6%). For every one woman who consumes alcohol, there are 17 alcohol using men. Among alcohol users, country liquor or 'desi sharab' (about 30%) and spirits or Indian Made Foreign Liquor (about 30%) are the predominantly consumed beverages. States with the highest prevalence of alcohol use are Chhattisgarh, Tripura, Punjab, Arunachal Pradesh and Goa.

After Alcohol, Cannabis and Opioids are the next commonly used substances in India. About 2.8% of the population (3.1 crore individuals) reports having used any cannabis product within the previous year. The use of cannabis was further differentiated between the legal form of cannabis (bhang) and other illegal cannabis products (ganja and charas). Use of these cannabis products was observed to be about 2% (approximately 2.2 crore persons) for bhang and about 1.2% (approximately 1.3 crore persons) for illegal cannabis products. States with the highest prevalence of cannabis use are Uttar Pradesh, Punjab, Sikkim, Chhattisgarh and Delhi.

About 2.1% of the country's population (2.26 crore individuals) uses opioids which include opium (or its variants like poppy husk known as doda/phukki), heroin (or its impure form – smack or brown sugar) and a variety of pharmaceutical opioids. Nationally, the most common opioid used is heroin (1.14%) followed by pharmaceutical opioids (0.96%) and opium (0.52%). Sikkim, Arunachal Pradesh, Nagaland, Manipur and Mizoram have the

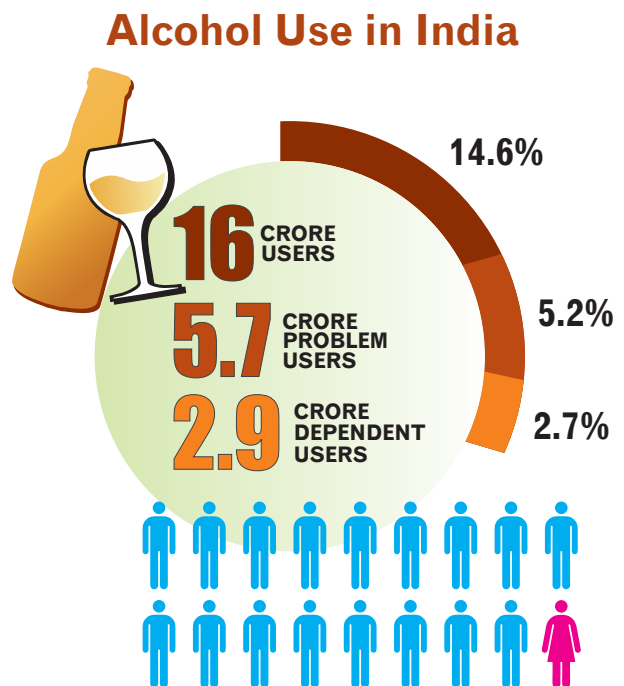
highest prevalence of opioid use in the general population (more than 10%).

The survey indicates that a sizeable number of individuals use sedatives and inhalants. About 1.08% of 10-75 year old Indians (approximately 1.18 crore people) are current users of sedatives (non-medical, non-prescription use). States with the highest prevalence of current sedative use are Sikkim, Nagaland, Manipur and Mizoram. However, Uttar Pradesh, Maharashtra, Punjab, Andhra Pradesh and Gujarat are the top five states which house the largest populations of people using sedatives.

Inhalants (overall prevalence 0.7%) are the only category of substances for which the prevalence of current use among children and adolescents is higher (1.17%) than adults (0.58%).

Other categories of drugs such as Cocaine (0.10%), Amphetamine Type Stimulants (0.18%) and Hallucinogens (0.12%) are used by a small proportion of country's population.

For every one woman who consumes alcohol, there are 17 alcohol using men



Harmful and Dependent Use

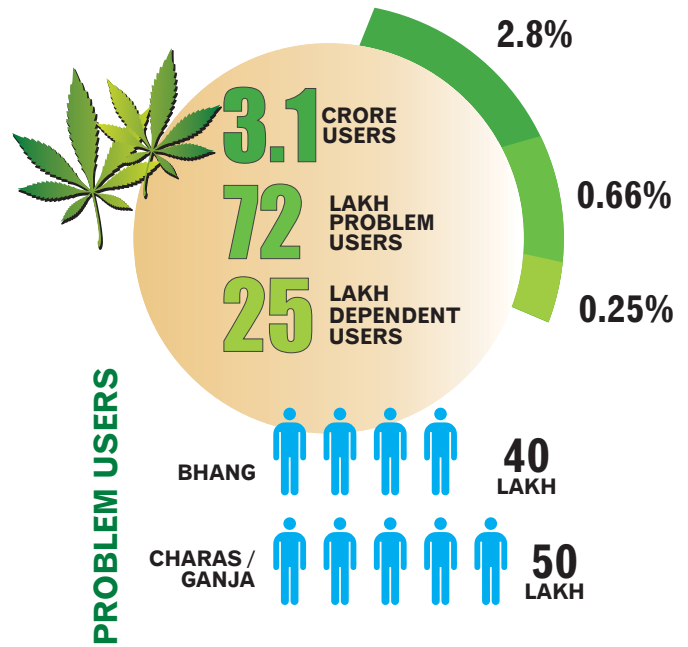
In this survey, a standard and validated tool, WHO ASSIST, was used to determine harmful use and dependence among users of various substances.

For most substances, a minority of users meet the threshold for 'harmful use' and 'dependence'. However, the proportion of harmful or dependent users varied between different substances (indicating the differential propensity of various substances to develop problem use). The sum of estimates of harmful and dependent use represents the 'quantum of work' (i.e. proportion of population which needs help) for the health and social welfare sectors.

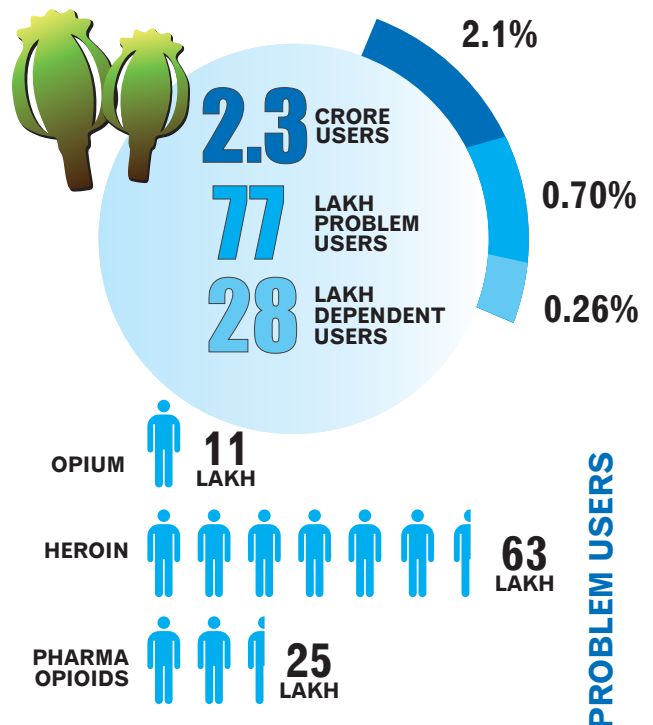
At the national level, as many as 19% of current users of alcohol consume alcohol in a dependent pattern. The prevalence of dependent pattern of alcohol use in the general population (10—75 years) is estimated to be 2.7%, or 2.9 crore individuals. States with high prevalence (more than 10%) of alcohol use disorders are: Tripura, Andhra Pradesh, Punjab, Chhattisgarh, and Arunachal Pradesh. An additional 2.5% of people in the country (about 2.7 crore individuals) consume alcohol in a harmful manner. In other words, about 5.2% of the population (more than 5.7 crore individuals) is affected by harmful or dependent alcohol use and need help for their alcohol use problems. Nearly one in five alcohol users suffer from alcohol dependence and needs urgent treatment.

The proportion of people with problem cannabis use (i.e. those with harmful or dependent pattern of cannabis use) is rather modest. At the national level, about 0.25% (one in eleven cannabis users) suffer from cannabis dependence. However, there is a substantial difference between bhang and ganja/charas in terms of dependent use—while just about one in sixteen users of bhang were dependent on cannabis, this figure was one in seven in case of ganja/charas users.

Cannabis Use in India



Opioid Use in India



About 0.7% of Indians (approximately 77 lakh individuals) are estimated to need help for their opioid use problems. A far higher proportion of heroin users are dependent on opioids when compared with users of other opioids like opium and pharmaceutical opioids. Of the total estimated approximately 77 lakh people with opioid use disorders (harmful or dependent pattern) in the country, more than half are contributed by just a few states: Uttar Pradesh, Punjab, Haryana, Maharashtra, Madhya Pradesh, Delhi and Andhra Pradesh. However, in terms of percentage of population affected, the top states in the country are those in the north east (Mizoram, Nagaland, Arunachal Pradesh, Sikkim, Manipur) along with Punjab, Haryana and Delhi.

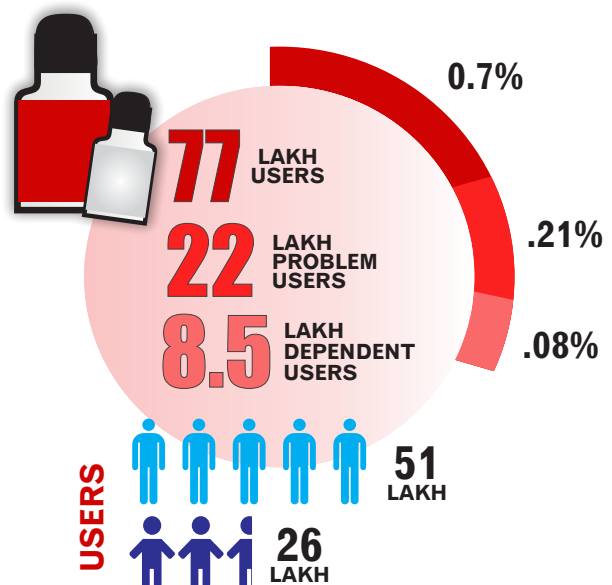
A sizeable number of people using other drugs like sedatives and inhalants also need help. In the general population, about 0.2% of Indians need help for their sedative use problems. At the national level, an estimated 4.6 lakh children and 18 lakh adults need help for their inhalant use (harmful use / dependence). In terms of absolute numbers, states with high population of children needing help for inhalant use are: Uttar Pradesh, Madhya Pradesh, Maharashtra, Delhi and Haryana. The number of people dependent on cocaine, ATS and Hallucinogens is extremely small in comparison to the size of country's population.

Nationally, it is estimated that there are about 8.5 Lakh People Who Inject Drugs (PWID). Opioid group of drugs are predominantly injected by PWID (heroin – 46% and pharmaceutical opioids – 46%). A substantial proportion of PWID report risky injecting practices. High numbers of PWID are estimated in Uttar Pradesh, Punjab, Delhi, Andhra Pradesh, Telangana, Haryana, Karnataka, Maharashtra, Manipur and Nagaland.

In general, a small minority of people affected by substance use disorders have access to treatment services. Only about one in thirty eight people with alcohol dependence report getting any treatment or help with alcohol problems. Among people suffering from dependence on illicit drugs, one among four persons has ever received any treatment. The rates of in-patient treatment / hospitalisation for alcohol and drug problems are even lower. Just about one in 180 individuals with alcohol dependence and one in 20 persons with illicit drug dependence report getting in-patient treatment.

In comparison to other similar surveys in the past, the prevalence of alcohol use appears to have been stable. However, a substantial proportion of Indians (more than 5%) suffer from alcohol use disorders. Comparing the figures for illicit drug use globally with India, while the prevalence of cannabis use is lower, prevalence of opioid use in India is three times that of global average. In the year 2004, opium was the major opioid used by men in India. This survey estimates that not only the overall opioid use is higher than in 2004, the use of heroin has surpassed opium as the most commonly used opioid.

Inhalant Use in India



THE WAY FORWARD

Scientific evidence-based treatment needs to be made available for people with substance use disorders – at an adequate scale

This report makes it evident that a sizeable population in India is affected by substance use disorders and is in need of urgent help. However, reach of the national programmes for treatment of substance use disorders is grossly inadequate.

Considering the wide treatment gap (mismatch between demand and availability of treatment services) in the country, India needs massive investments in enhancing the avenues for treatment. Optimum allocation of resources for treatment of substance use disorders is imperative, based upon the evidence generated through this survey. Planning for a national level treatment programme must be guided by the absolute magnitude of the problem for prioritisation among the states. Addiction treatment programmes focused heavily upon inpatient treatment/hospitalization (in a 'de-addiction centre') are unlikely to cater to the huge demand for treatment. Enhancing treatment services as outpatient clinics, which have all the necessary components (trained human resources, infrastructure, medicines and supplies, a system of monitoring and mentoring) is urgently required. Scaling up of treatment services for substance use disorders would also require large-scale capacity building mechanisms. Overall, a coordinated, multi-stakeholder response will be necessary to scale-up treatment programmes in the country.

Evidence-based substance use prevention programmes are needed to protect the young people

Protecting the youth of the nation is of paramount importance. Very often, prevention of drug use is seen (erroneously)

as synonymous with spreading awareness about dangers of drug use among young people. Evidence for effectiveness of awareness generation as the predominant preventive strategy is very weak. Research has demonstrated that best prevention strategies are those which are based on scientific evidence and which involve working with families, schools and communities in general. Prevention programmes must address the risk and protective factors aimed at not just preventing substance use, but also ensuring that young people grow and stay healthy into adulthood, enabling them to realize their potential and become productive members of their community and society.

A conducive legal and policy environment is needed to help control drug problems

Findings indicate that despite the existence of strict drug control laws and a multitude of agencies working towards drug supply control, a wide variety of controlled drugs are being used and a sizeable number of Indians suffer from addiction to these drugs. Results also indicate a shift in demand for psychoactive substances from traditional, low-potency, plant-based products (e.g. opium) to more potent and processed products (e.g. heroin). Thus, there may be elements of drug supply control which influence the pattern of demand. The nonmedical, recreational use of controlled pharmaceutical products remains a concern. However, ensuring their adequate availability for medicinal purposes is vital for public health. It is important that laws and policies are aimed at providing health and welfare services to people affected by substance use (rather than subjecting them to the criminal justice system). Overall, data from this survey indicate that there is a need of fresh thinking and innovative solutions as far as legal and policy measures aimed at drug supply control are concerned. More

importantly, there needs to be an efficient coordination between the drug supply control sector as well as the entities involved in drug demand reduction and harm reduction.

The approach of generating and utilizing scientific evidence must continue

The survey represents a comprehensive scientific approach to explore and document the dynamics of substance use in the country and utilize the evidence for

informing policies and programmes. Such an approach needs to continue. Subsequent surveys and studies need to be conducted with incrementally enhanced refinement of methodologies. Every piece of the data would serve to incrementally inform evidence-based policies and programmes to protect and promote the health and welfare of Indian society.

INTRODUCTION

The use of mood-altering psychoactive substances² has been part of human civilization for millennia. In India, a variety of psychoactive substances like alcohol, cannabis and opioids have been used for hundreds of years. In modern times, however, the pattern and dimensions of use of such psychoactive substances has assumed pathological proportions.

Till date, the most robust evidence regarding substance use in India has been available only through the 'National Survey on Extent, Pattern and Trends of Substance Use' (2004)³ commissioned by the Ministry of Social Justice and Empowerment (MoSJE) and conducted in collaboration with the United Nations Office on Drugs and Crime (UNODC). The household survey component of the 2004 study reported that the prevalence of 'current' use of Alcohol was 21%, Cannabis 3% and Opiates 0.7% among men aged 12-60 years. Among the current users, about 26% of alcohol users were reported to be dependent, while 25% of cannabis users and 22% of opiate users were reported to be dependent. This was immensely useful data and has been the basis of many policies and programs to address drug use in India.

However, the 2004 survey suffered certain methodological limitations. Data was collected only from males and thus, there have been no estimates of the extent of substance use among female population. The sampling frame permitted findings at the national level only. Consequently, the state-wise variations with regard to the extent of substance use remained unknown. Only one methodology – household survey – was relied upon to estimate the prevalence of all substances (legal, socially-acceptable substances versus illicit, socially-hidden ones). Thus, the possibility of under-reporting and consequently, under-estimation of substance use could not be

ruled out.

In the absence of reliable and in-depth estimates of population affected by drug use problems, it has been a challenge to formulate and implement policies and programmes to address drug use. Consequently, it is imperative that evidence on the extent of use of such psychoactive substances (or 'drugs' in popular parlance) is generated and such evidence informs national policies and programmes. Given the federal nature of governance in India, and considering that addressing drug problems needs a multi stakeholder mechanism, it is important that such estimates are available at the national level as well as at the level of each state or Union Territory (UT) of the country.

Thus, the Ministry of Social Justice and Empowerment (MoSJE), Government of India, commissioned the 'National Survey on Extent and Pattern of Substance Use in India' in the year 2016. National Drug Dependence Treatment Centre (NDDTC), AIIMS, New Delhi was entrusted with the responsibility of developing the methodology and leading the technical aspects of the survey in collaboration with ten other medical institutions. The task of data collection was managed by the National Institute of Social Defence (NISD), through 15 NGOs working with the MoSJE, Government of India. List of regional investigators (faculty from other medical institutions), research staff (engaged by medical institutes for survey monitoring and quality assurance) and supervisory personnel from NGOs has been provided at Annexure .

[2] For the sake of brevity and convenience the terms 'substance' and 'drug' have been used interchangeably in the document to denote the 'psychoactive' or 'addictive' substances.

[3] Ray R. The extent, pattern and trends of drug abuse in India: National Survey. Ministry of Social Justice and Empowerment, Govt. of India & United Nations Office on Drugs and Crime, Regional Office for South Asia; 2004

METHODOLOGY

The primary objective of this survey was to provide national and state-level estimates of the proportion and the absolute number of people who use various substances as well as those suffering from substance use disorders in India. Accordingly, the prevalence in the population and the number of people using the following substances was estimated in the survey: Alcohol, Cannabis, Opioids, Sedative-hypnotics, Cocaine, Amphetamine Type Stimulants (ATS), Hallucinogens and Inhalants (volatile solvents)⁴.

COLLECTION OF DATA

Considering that substance use, particular use of illicit drugs, is a hidden phenomenon, a combination of two distinct approaches was used to generate the estimates.

1. A **Household Survey (HHS)** was conducted among a representative sample of the general population (10-75 years old) in each of the 36 states and UTs of the country. This was aimed primarily at studying the use of common, legal substances (like Alcohol and Cannabis).

2. A **Respondent Driven Sampling (RDS)** survey along with multiplier approach was conducted in 34 states and UTs among people suffering from dependence on illicit drugs (opioids, cocaine, amphetamines, sedative/hypnotics, inhalants and hallucinogens). Since HHS tends to provide an underestimation of prevalence of illicit drug use (due to under reporting), the RDS approach was employed for the purpose.

For the Household Survey (HHS), the survey was planned to visit about 4000 households in each of the state / UT of the country (i.e. about 150,000 households nationally), with a

target sample size of about 12500 completed interviews of individuals for each state. The HHS sample was representative of the general, household population (aged 10-75 years) of that state. The sample size was statistically determined to reliably estimate a phenomenon of 1% prevalence with 95% confidence. The districts in each state and the Primary Sampling Unit (PSU) within each district was chosen with a Probability Proportionate to Size (PPS) approach. Within each PSU, the selected households were chosen through simple random technique. Thus, the sampling design was such that it ensured that the sample was representative of the entire household population of the state (10-75 years). During the HHS, a team of trained interviewers (one male and one female) visited each of the selected households and after obtaining informed consent, interviewed each of the eligible member (10-75 years), ensuring adequate privacy and confidentiality. Overall, 89% of the eligible members residing in the selected households could be successfully interviewed.

The Respondent Driven Sampling (RDS) survey covered 135 districts across the country spread across 34 states and UTs.⁵ Overall, a total of 72,642 people with drug dependence were interviewed. Participants in the RDS survey were referred by their own peers thereby minimizing the selection bias.

Questionnaires for data collection were developed in English language and translated into the local languages as per the requirement. Data from both (HHS & RDS)

[4] Considering that recent, methodologically robust survey reports on Tobacco use in India exist, Tobacco use was not focused upon in this survey.

[5] For operational reasons, RDS survey could not be conducted in A&N islands and Lakshadweep. HHS data has been used to estimate the prevalence of substance use in these Uts.

surveys were collected and submitted using online tools (hosted on the survey website www.ndusindia.in) and were saved in a secure centralised database, accessible only to the national investigators. Data collection in each state lasted for about 4-6 months. Overall, in the country, data was collected between December 2017 and October 2018.

Since data collection was being conducted simultaneously in multiple states, it was a challenge to ensure consistency and standardisation. A number of measures were taken for standardisation of data collection processes and to ensure acceptable data quality.

CAPACITY BUILDING AND QUALITY CONTROL

- Two National level consultations were held with key stakeholders to clarify roles and responsibilities of each agency and solicit support of key government and nongovernment stakeholders in October 2016 and May 2017. All the participating agencies and the key ministries and departments of central and state government participated in the consultations. Similar consultations were held in each of the state and UT.
- A series of training programs were held including a National Training of Trainers workshop (September 2017), six Regional Training of Trainer programmes (October-November 2017) and more than 100 state level training programs across all the states and UTs. Overall, more than 1500 trained personnel were involved in data collection and monitoring activities.
- During the data collection process, an elaborate mechanism of monitoring was put in place, by the local supervisory personnel as well as monitoring by the senior managers at the state levels and experts from the national level institutions. Monitoring included onsite visits and inspection as well as remote monitoring and mentoring through information technology tools.
- Ethical standards of the highest level were maintained during data collection. No identifying information was collected from any of the respondents. Informed consent was obtained from all the respondents. The survey received clearance from an ethical perspective from AIIMS, New Delhi and all the other participating medical institutions.
- Subsequent to the data collection, a 'Revalidation Exercise' was conducted, during which a selected sample of households were revisited to confirm the data collection. In case of any discrepancy, remedial measures were taken.

DATA ANALYSIS AND GENERATING ESTIMATES

All the data were thoroughly checked for consistency and were cleaned before analysis. Analyses were performed using standard statistical software programs [(SPSS and STATA for HHS) and (RDSAT for RDS)].

- All the estimates and results are described in terms of 'weighted' frequencies or means. In other words, the results are applicable to the population of respective states and the country as a whole.
- The results have been presented in terms of prevalence of 'current use', 'dependence' and 'quantum of work' for each of the major substance category for each state and for the country as a whole.

The estimates of 'quantum of work' combine prevalence of 'dependence' as well as 'harmful use'.

- All the results are based upon estimated population of the states in the year 2018 (population from Census 2011 was projected for the year 2018 on the basis of decadal growth rates of each state / UT). For estimations at the national level, findings from all the states were utilized

to generate the weighted means (i.e. according to the proportionate contribution of the state population to the total national population). Thus, the findings truly represent the national estimates (amalgamation of all the state-level estimates).

NOTE ON ESTIMATIONS

- Estimates of current use, harmful use and dependence **for Alcohol and Cannabis** are based upon data collected through HHS.
- In case of other **illicit drugs** (opioids, cocaine, amphetamine type stimulants, sedativehypnotics, inhalants, hallucinogens), data collected through RDS (coupled with multiplier) has been used to generate estimates of number and proportion of population which is drug dependent. For this, 'proportion of the respondents reporting that they were admitted to a specific addiction treatment centre', was used as a multiplier. In situations when suitable multiplier data was not available, modelling exercise was conducted which took into account the variations for estimates of illicit drug dependence obtained through HHS vis-à-vis the RDS approach.
- Once the estimates of prevalence of dependence on illicit drugs were available, then in next step, the prevalence of current use of illicit drugs was estimated. For this purpose, data from HHS has been utilized (i.e. calculating the proportion of illicit drug users in HHS who are dependent and then projecting it on to estimated prevalence of dependence generated through RDS – multiplier, to estimate the prevalence of current use of illicit drugs). This step was performed on the data derived from each of the state, considering the state-wise variations.

FINDINGS

DESCRIPTION OF THE SAMPLE

In the household survey, a total of **200,111** households across 36 states and UTs were visited (spread across **5808** Primary Sampling Units and **186** districts) and a total of **473,569** individuals were interviewed. Notably, at the national level, the sample selected for HHS closely matched that of census 2011 (in terms of male:female and urban:rural ratios, and age-group distribution).

In case of RDS, **72,642** individuals (aged 18-75 years) representing the population of people with drug dependence of the state were interviewed. The RDS sample reflects the profile of people with drug dependence (illicit drugs) in the country. Detailed profile of sample in HHS and RDS has been tabulated in the Annexure.

PREVALENCE AND EXTENT OF SUBSTANCE USE IN INDIA

This report presents data on estimates of Current Use (use within past 12 months), Harmful Use and Dependence, for the following categories of substances: Alcohol, Cannabis (Bhang and Ganja/Charas), Opioids (Opium, Heroin and Pharmaceutical Opioids), Cocaine, Amphetamine Type Stimulants (ATS), Sedatives, Inhalants and Hallucinogens. A standard and validated tool, WHO Alcohol, Smoking and Substance Involvement Screening test (WHO ASSIST), was applied during the survey interviews to determine harmful use and dependence among those individuals who reported use of any psychoactive substance within the preceding one year.

The survey indicates that a large number of people in India use psychoactive substances, though there are wide

variations in prevalence across different states. Apart from tobacco (which was not the focus of the survey), Alcohol is the most common substance used in India. After alcohol, the two next commonly used substances in India are Cannabis and Opioids. A sizeable number of people use other categories of substances like Sedatives and Inhalants. Cocaine, Amphetamine Type Stimulants and Hallucinogens are used by a small proportion of the country's population.

Results also show that not all people who use psychoactive substances use them in a pathological or problematic pattern. Indeed, in case of most substances, only a minority of users met the threshold for characterizing the pattern of their use as 'harmful use' or 'dependence'. Among current users, the proportion who used the substance in a harmful or dependent pattern varied between different substances (indicating the differential propensity of substances to develop problem use). As individuals who use any substance in a harmful or dependent manner need help or treatment for the substance use related problems, the sum of estimates of harmful and dependent use indicates the 'quantum of work' for the health and social welfare sectors.

The extent of use, harmful use, dependent use and quantum of work for each of the substance categories have been described below. For each substance category, tables showing data for different states are presented in Annexure at the end of the report.

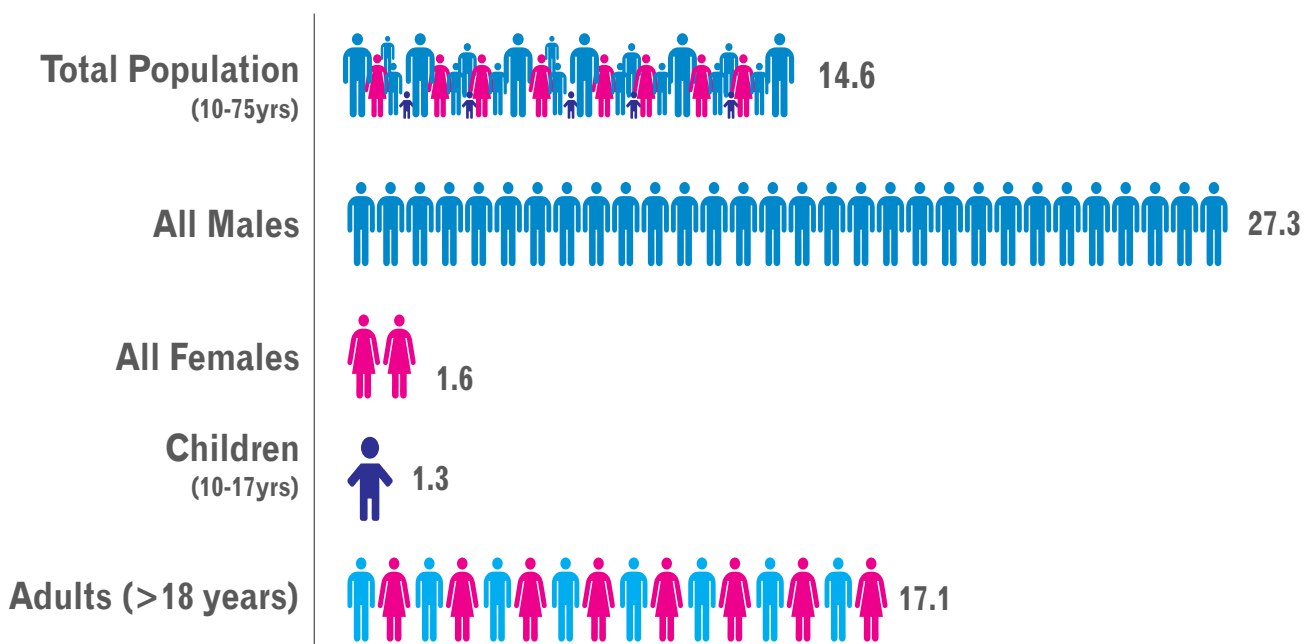
ALCOHOL USE IN INDIA

Alcohol is used in every part of the country including in those states which have enforced prohibition. Moreover, alcohol use does not appear to be an exclusively male phenomena. Though the prevalence of

alcohol use among women is substantially lower than the men, it is notable that alcohol use exists among women in almost all the states of country. It is also noteworthy that alcohol use has been reported in all the age groups, including among children aged 10-17 years. However, the demographic group with the largest prevalence of alcohol use is

men more than 18 years of age. Remarkable gender differences exist in pattern of alcohol use; while 27.3% of men use alcohol, the corresponding figure for women is just 1.6%. Further, about one in five alcohol using men suffer from alcohol dependence, while only one in sixteen alcohol using women is dependent on it.

PREVALENCE OF CURRENT ALCOHOL USE IN DIFFERENT POPULATION GROUPS (%)

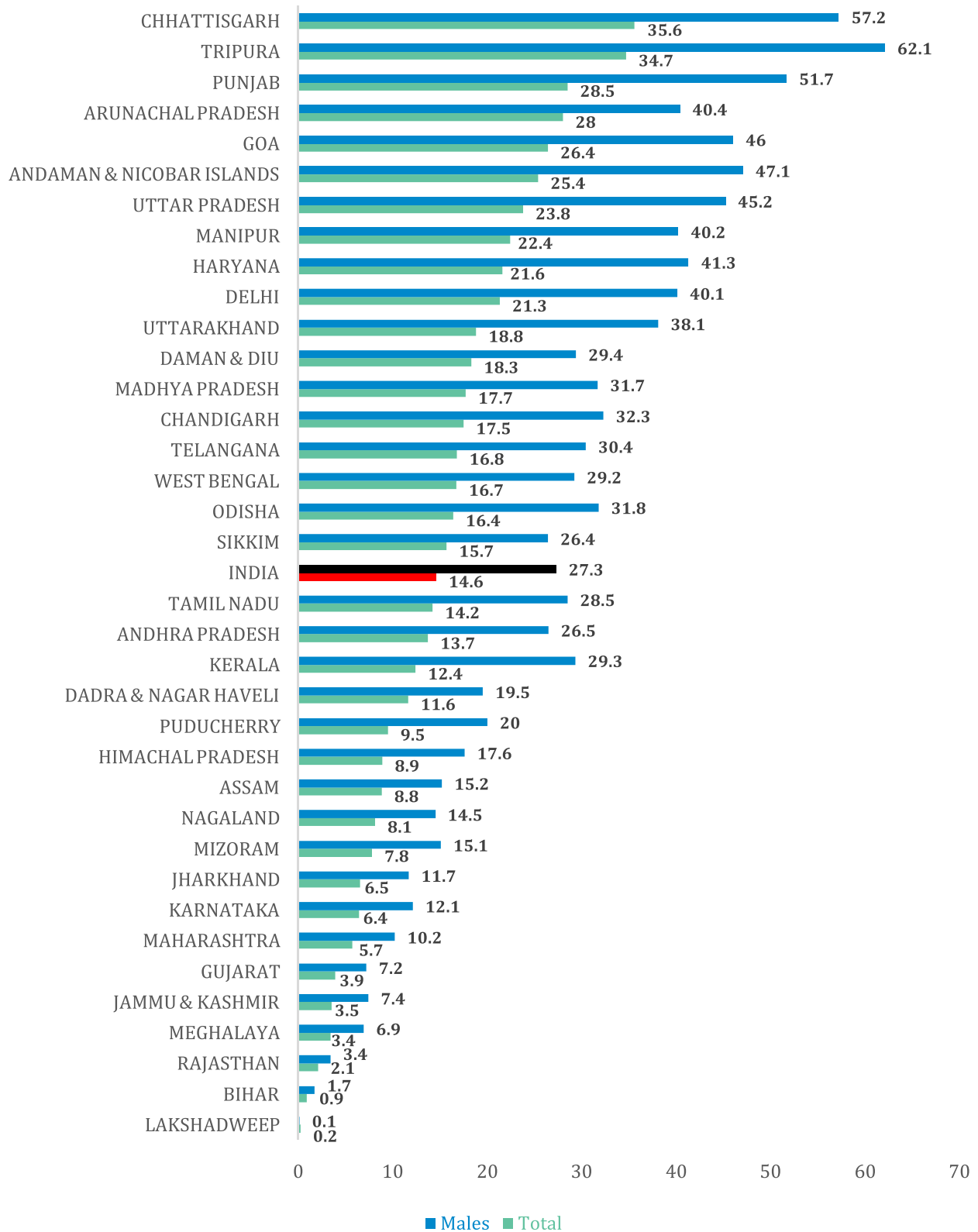


There is considerable heterogeneity regarding prevalence of alcohol use in the country. States with the high prevalence of alcohol use are Chhattisgarh (35.6%), Tripura (34.7%), Punjab (28.5%) Arunachal Pradesh (28%) and Goa (28%). More than half the male population of Chhattisgarh, Tripura and Punjab uses alcohol. In terms of absolute numbers of people consuming alcohol, however, the top ranking states in India are: Uttar Pradesh (4.2 crore), West Bengal (1.4 crore), and Madhya Pradesh (1.2 crore). Among women, states with the largest prevalence (>10%) of alcohol use are: Arunachal Pradesh (15.6%) and

Chhattisgarh (13.7%). Similarly, a high proportion of children reporting alcohol use (more than thrice the national average) was noted in Punjab (6%), West Bengal (3.9%) and Maharashtra (3.8%). Under-reporting (and hence under-estimation) of alcohol use remain a challenge in states with alcohol prohibition like Bihar.

An overwhelming majority of alcohol users are males (about 95%) and fall in the age bracket of 18-49 years (74%). People who use alcohol appear to be evenly distributed across the socio-economic classes. While a majority also use tobacco, very few (6.4%) of them report using illicit substances.

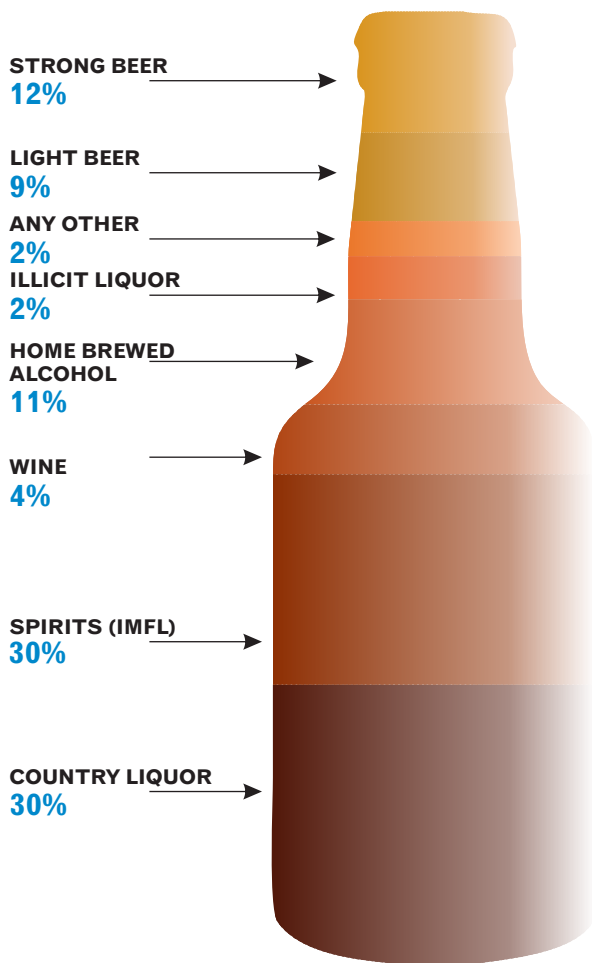
INDIA AND STATES: PREVALENCE OF CURRENT ALCOHOL USE (10-75 YEARS), IN %



Country liquor or 'desi sharab' (about 30%) and spirits or Indian Made Foreign Liquor (about 30%) were the most preferred alcoholic beverages among current users. Proportion reporting predominant use of low-alcohol content beverages (like beer, wine) was small at the national level as well as in almost all the states. It was notable that in the north-eastern states, people using alcohol reported higher preference for home made rice beer, while the highest proportion of drinking illicit distilled liquor (kacchi sharab) was reported from Bihar (30%).

Pattern of drinking also suggests that a

INDIA: MOST COMMONLY CONSUMED BEVERAGE BY CURRENT ALCOHOL USERS



substantial proportion of alcohol users consume alcohol heavily. It is evident from the choice of beverage (i.e. high concentration products are preferred over low concentration ones) as well as from the amount of alcohol consumed on a single occasion. Around half (43%) of alcohol users consume 'more than four drinks on a single occasion' (indicating 'Heavy Episodic Drinking'). A fair proportion of alcohol users experience indicators of problematic consumption like 'getting involved in physical fights' after drinking (26.8%), 'day time consumption of alcohol' (21.2%) and 'road traffic accidents' under the influence of alcohol (4.1%).

At the national level, about 2.7% of population (2.9 crore individuals) is affected by alcohol dependence. However, there are significant state level variations. States with the highest prevalence of alcohol dependence are Tripura (13.7%), Arunachal Pradesh (7.2%), Chhattisgarh, Punjab and Andhra Pradesh (around 6% each).

Proportion of current users of alcohol who are alcohol dependent ranged between 4.7% and 48.3% across various states. At the national level, around 18.5% of current users of alcohol consume alcohol in a dependent manner. However, more than 40% of alcohol users drink alcohol in a dependent pattern in Puducherry (48.3%), Punjab (44%), Andhra Pradesh (43.5%) and Karnataka (40.3%). It is also interesting to note that while overall prevalence of current use of alcohol is lower in the states where alcohol use is prohibited as per law, a substantial proportion of alcohol users in these states fall in the category of harmful or dependent alcohol use (Gujarat – 30%; Bihar – 16%, Manipur – 17%, Nagaland – 20%).

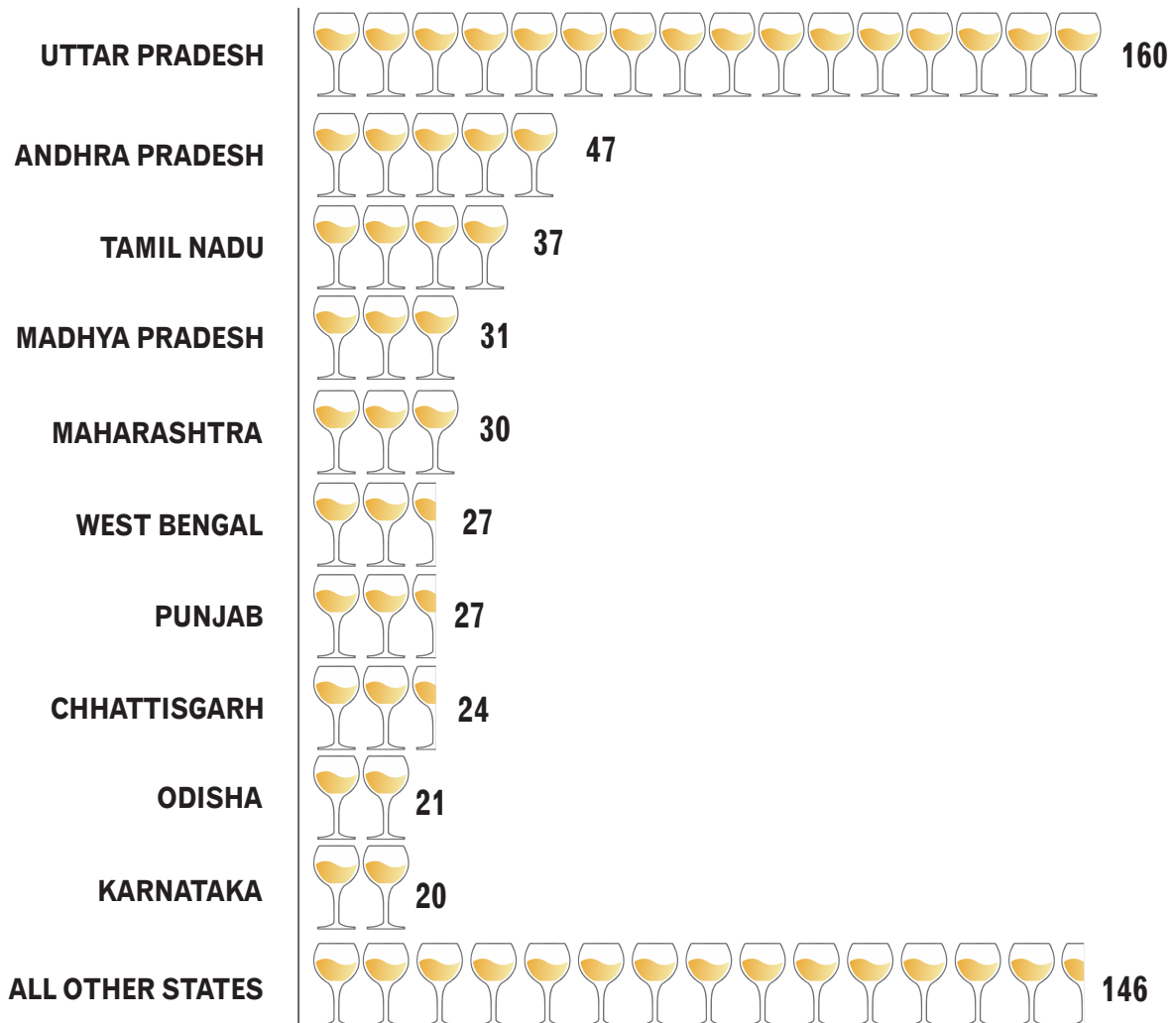
Overall in the country, about 5.2% of population aged 10-75 years (about 5.7 crore individuals) need help for their alcohol use problems (i.e. they consume alcohol in a harmful or dependent pattern).

In terms of absolute numbers, some states of the country have huge burden of people with alcohol problems who need help. About 75% of people with alcohol problems in the country reside in these ten states.

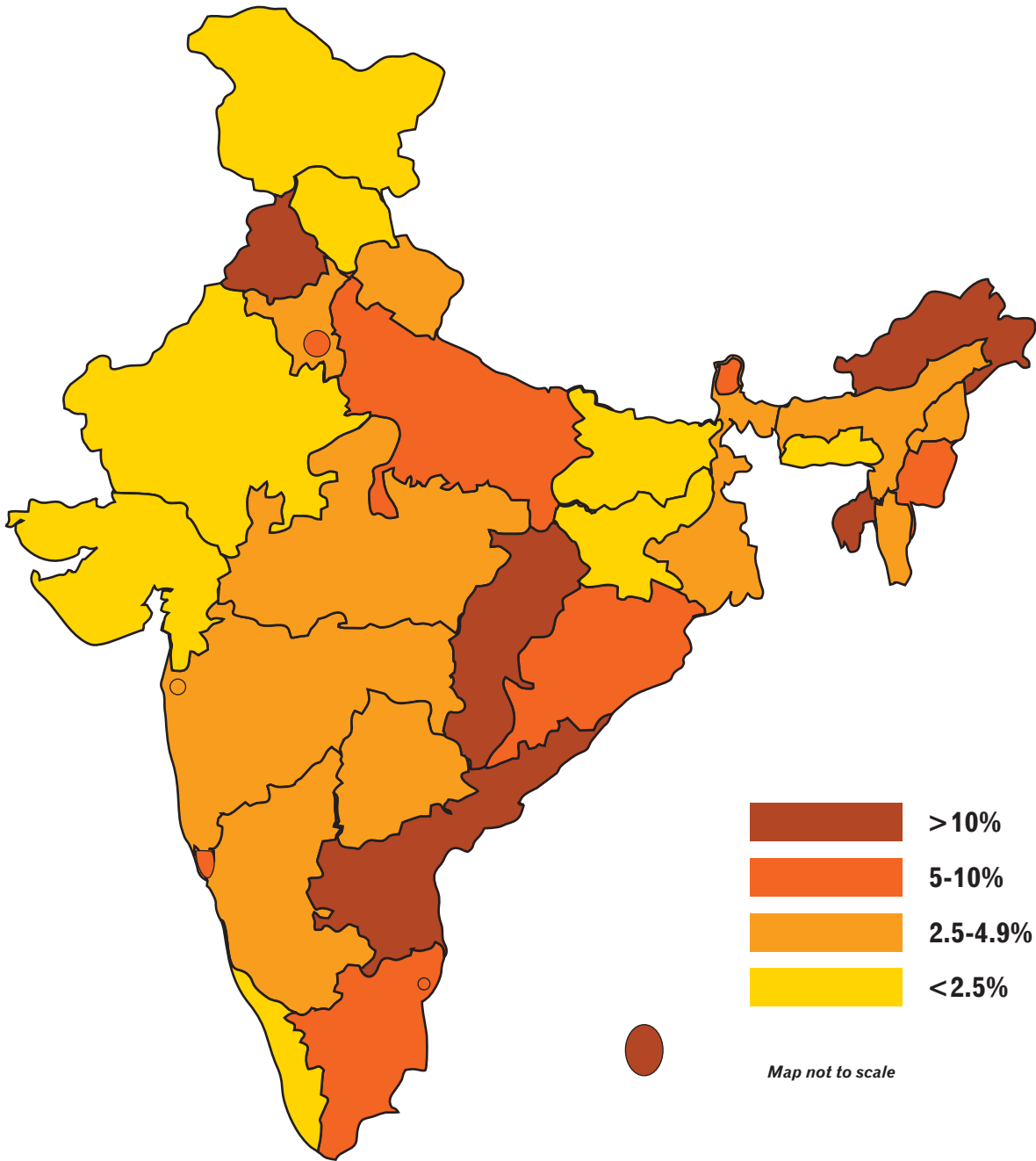
In terms of prevalence of harmful and dependent pattern of use, many Indian states have substantial proportion of general population (aged 10-75 years) who need help

with their alcohol use problems. More than 10% of people residing in Andhra Pradesh, Punjab, Chhattisgarh, Andaman and Nicobar Islands, and Arunachal Pradesh need help for alcohol use problems. Tripura appears to be an outlier state, where 20.2% of the general population aged 10-75 years are problem alcohol users.

TOP TEN STATES: NUMBER OF PEOPLE WHO NEED HELP FOR ALCOHOL PROBLEMS IN 2018 (IN LAKHS)



INDIA AND STATES: PREVALENCE OF ALCOHOL USE DISORDERS (10-75 YEARS), IN %



CANNABIS USE IN INDIA

In India, Cannabis is used as (a) Bhang, which is legally available in many states, and (b) Ganja and Charas which are illegal as per the international drug conventions as well as the Indian law (the NDPS Act, 1985). About 2.8% of Indians aged 10-75 years (3.1 crore individuals) are current users of any cannabis product. More number of people use bhang (2%) as compared to charas/ganja (1.2%). There is a preponderance of men among consumers of cannabis.

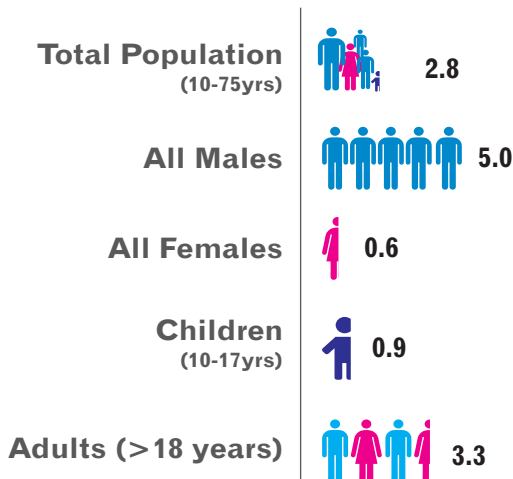
In case of cannabis use too, the variations across the states are visible. States with higher-than-national prevalence of cannabis use are Uttar Pradesh, Punjab, Sikkim, Chhattisgarh and Delhi. Interestingly, there is not necessarily a consistent association between the prevalence figures for bhang and ganja/charas use across different states. In general, the trend in most of the states of the country is a higher prevalence of bhang as compared to ganja /charas. However, the reverse trend is visible in some

of the eastern and northeastern states (like West Bengal, Bihar, Sikkim, Mizoram, Nagaland and Meghalaya). Here, the illegal cannabis products (ganja/charas) are used by a larger proportion of people as compared to bhang.

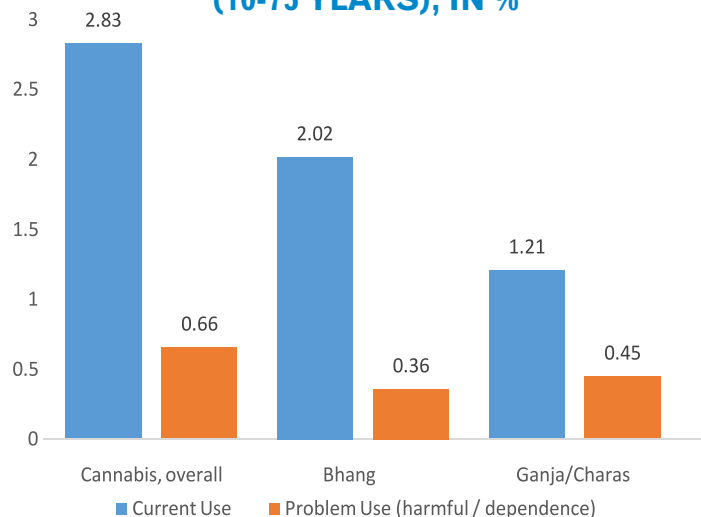
Overall, just about 0.25% Indians use cannabis in a dependent pattern. Though the prevalence of bhang use is higher than that of ganja/charas, prevalence of harmful/dependent use is higher for ganja/charas users (indicating the higher propensity of ganja/charas to cause harms or addiction). One in sixteen users of bhang were dependent on cannabis, as compared to one in seven users of ganja/charas.

At the national level, 0.66% of Indians aged 10—75 years need help with their cannabis use (i.e. they use cannabis in a harmful or dependent pattern). In some states, this proportion is considerably higher than the national average (e.g. Sikkim – 2.9%, Punjab – 2.2%). However, some states of the country have a sizeable number of people who need help with their cannabis use pattern (harmful use/dependence).

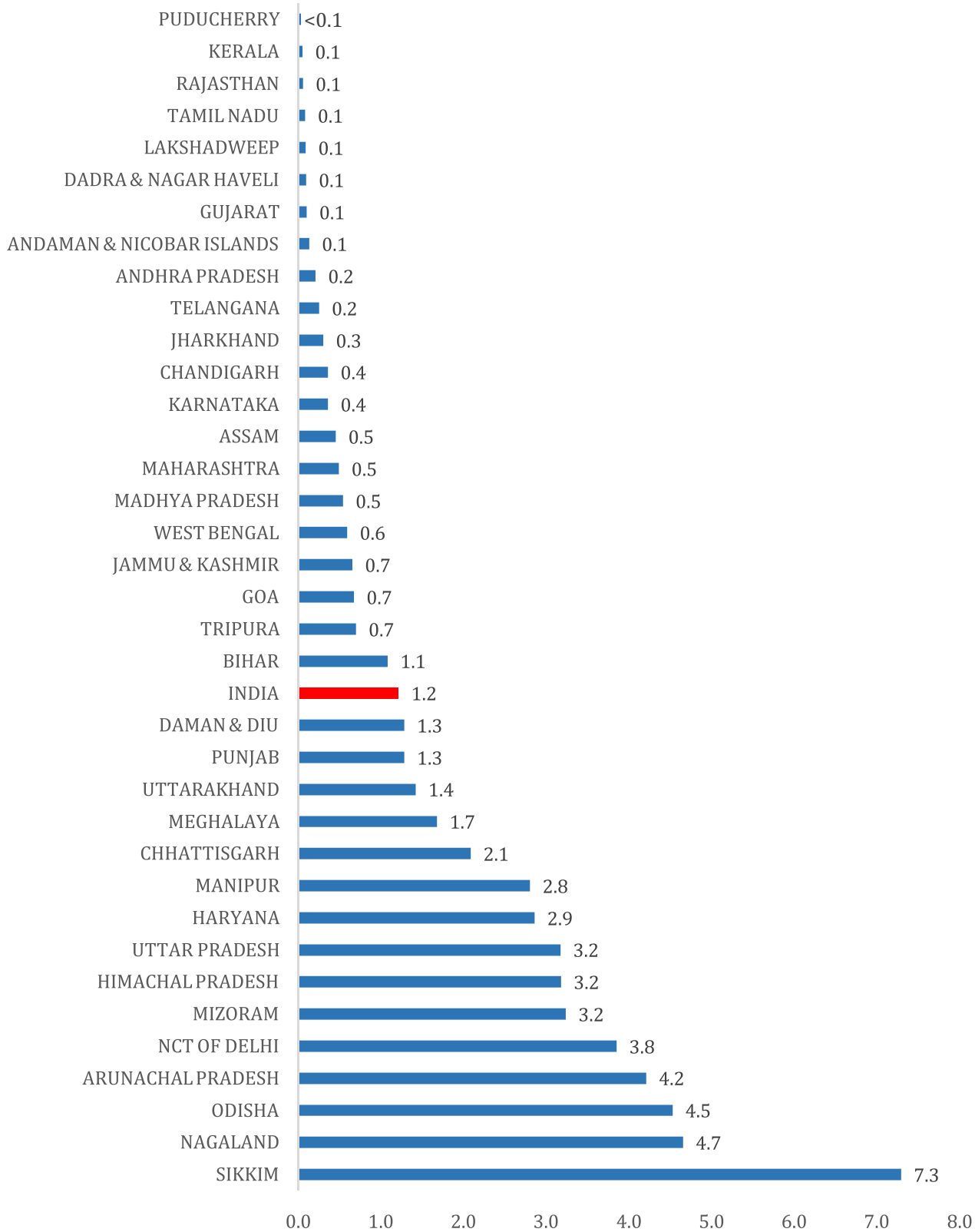
PREVALENCE OF CURRENT CANNABIS USE IN DIFFERENT POPULATION GROUPS (%)



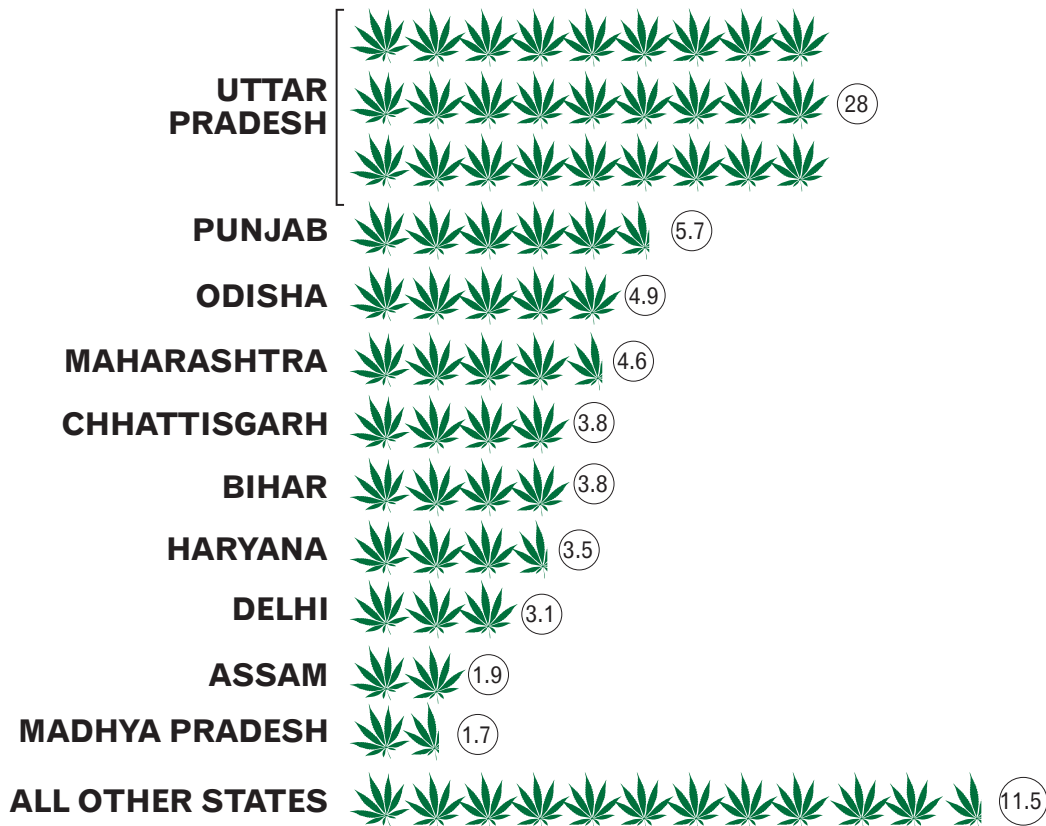
CANNABIS PRODUCTS: PREVALENCE OF CURRENT USE AND PROBLEM USE IN INDIA (10-75 YEARS), IN %



PREVALENCE OF CURRENT USE OF CHARAS/GANJA, INDIA (10-75 YEARS), IN %



TOP TEN STATES: NUMBER OF PEOPLE WHO NEED HELP FOR CANNABIS RELATED PROBLEMS (2018) (IN LAKHS)

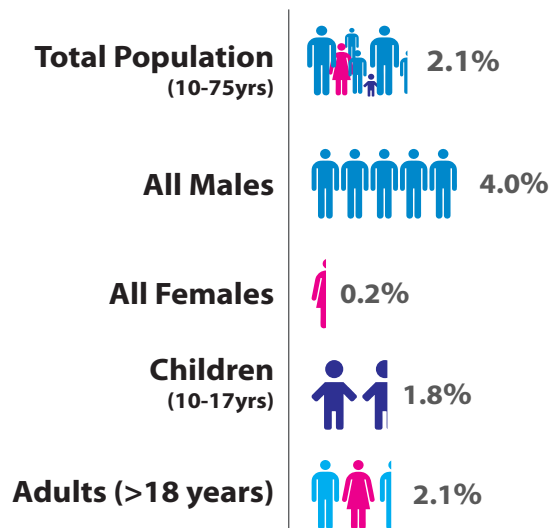


OPIOID USE IN INDIA

The survey looked specifically for the prevalence of current use and dependence on three different sub-categories of substances in the overall category of opioids: (1) Opium (including doda/phukki/poppy husk); (2) Heroin (including brown sugar/smack) and (3) Pharmaceutical opioids (which itself includes a variety of medications of the opioid group).

Overall in the country, the prevalence of current use of any opioid is 2.06%. Heroin is the most commonly used opioid in India(1.14%). This is followed by pharmaceutical opioids (0.96%) and opium (0.52%).

PREVALENCE OF CURRENT OPIOID USE IN DIFFERENT POPULATION GROUPS (%)

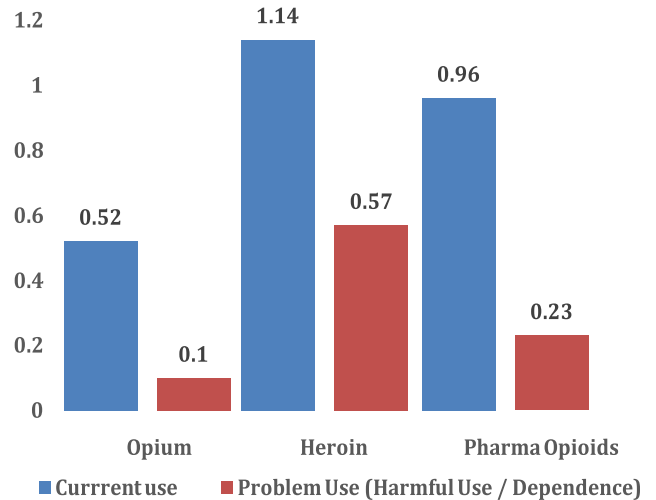


A substantial proportion of people using opioids are using it in a dependent or harmful pattern. The figure below shows the relative prevalence of current use and harmful use / dependence of the three categories of opioids.

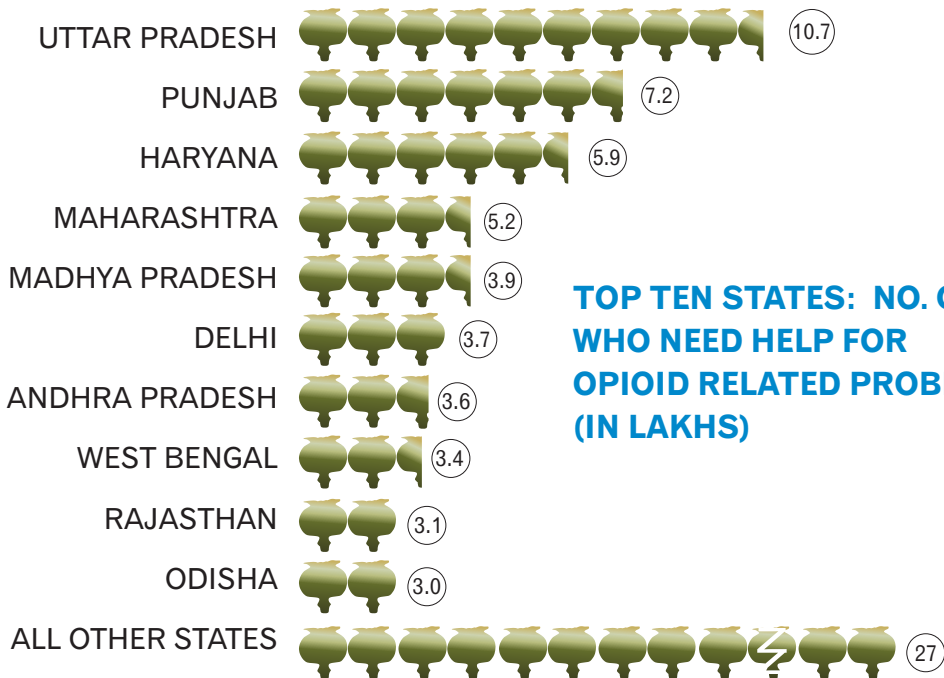
Among opioid drugs, heroin has highest prevalence of current use as well as harmful use / dependent use. While current use of pharmaceutical opioids follows closely behind, the problem use of pharmaceutical opioids is relatively less. Opium is the least commonly used opioid sub-category and also has the lowest proportion of harmful / dependent users. These findings highlight the differences in addictive property of different opioids. Harmful or dependent pattern was observed in half of all heroin users as compared to one fifth of opium users.

Of the total estimated approximately 77 lakh problem opioid users (i.e. those using in harmful or dependent pattern) in the country, more than half are contributed by just a few states. Uttar Pradesh, Punjab, Haryana, Maharashtra, Madhya Pradesh, Delhi and Andhra Pradesh are the states which house the highest number of people with opioid use problems.

CURRENT USE AND PROBLEM USE OF OPIOID DRUGS IN INDIA (10-75 YEARS), IN %



However, in terms of percentage of population affected, the top states in the country are those in the north east (Mizoram, Nagaland, Arunachal Pradesh, Sikkim, Manipur) along with Punjab, Haryana and Delhi.

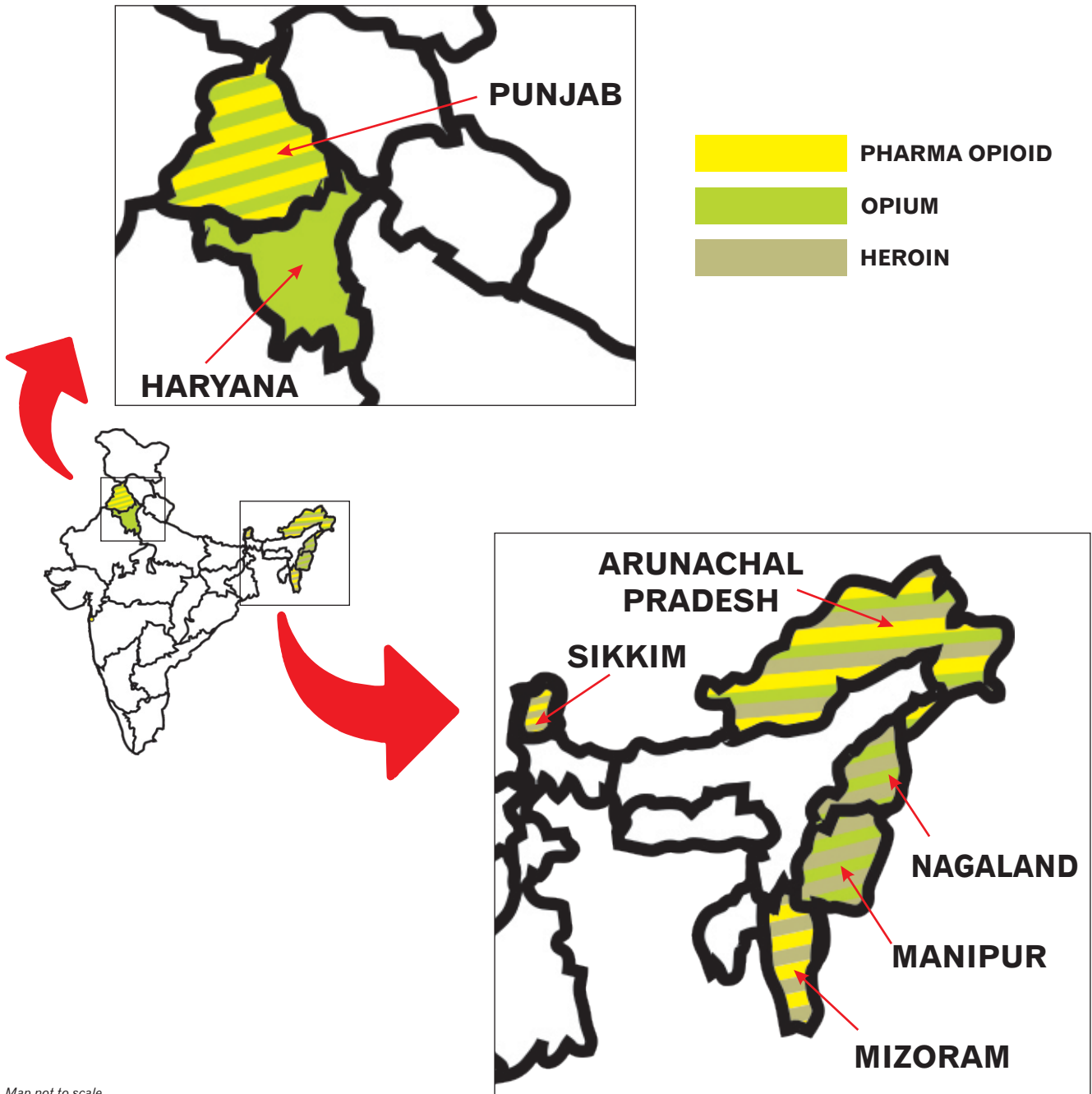


TOP TEN STATES: NO. OF PEOPLE WHO NEED HELP FOR OPIOID RELATED PROBLEMS (IN LAKHS)

In case of opioids too, state-wide variations are clearly visible. In general, the prevalence of opioid use in the north-east and north-west region of India is higher compared to other regions.

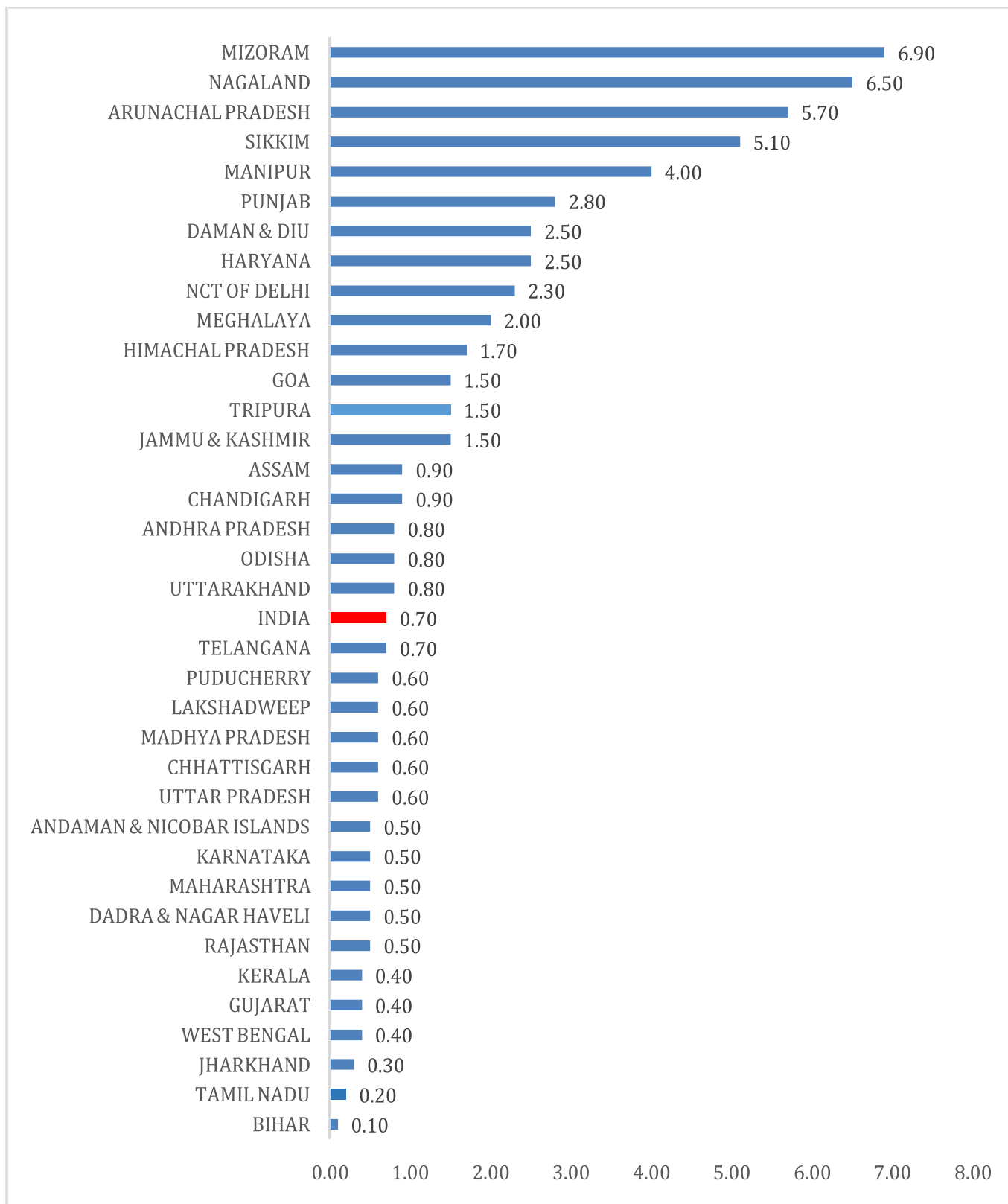
However, among the states, there are slight variations in terms of prevalence of use of different types of opioids.

TOP STATES IN TERMS OF PREVALENCE OF OPIOID USE



Map not to scale

India and states: 'Quantum of Work' - Opioids (10-75 years), in %



USE OF SEDATIVES IN INDIA

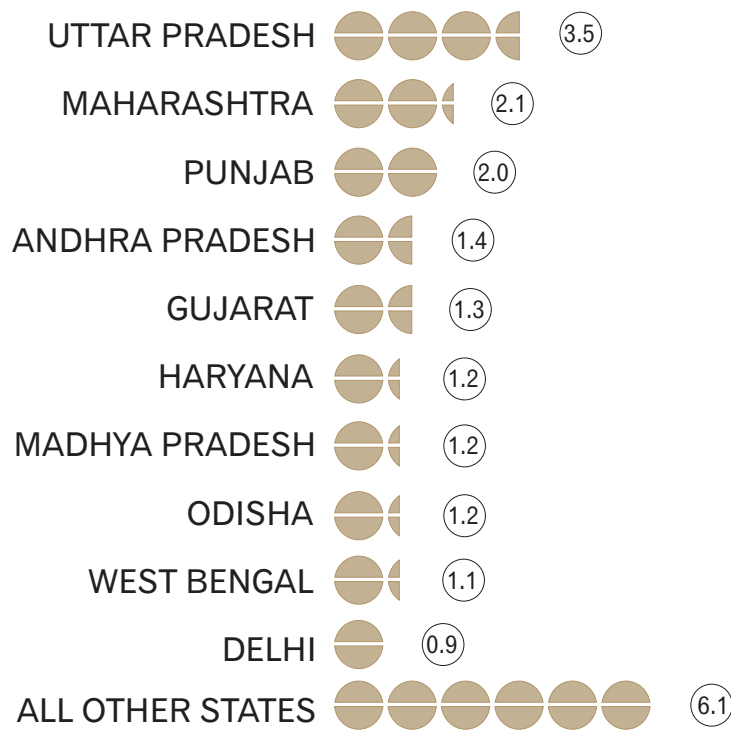
A wide variety of pharmaceutical products, which share the common property of being sedative – hypnotics and possessing dependence liability, are used in India. Many of these products have legitimate and important medical use. It must be noted that this survey has studied the use of these substances in non-prescription, non-medical context. Thus, a respondent was marked as user of these substances only when these were used without a valid prescription by a doctor.

At the national level, about 1.08% Indians (approximately 1.18 crore people) are current users of sedatives. As with other substances, there is heterogeneity in the prevalence of sedative use across different Indian states. States with the highest

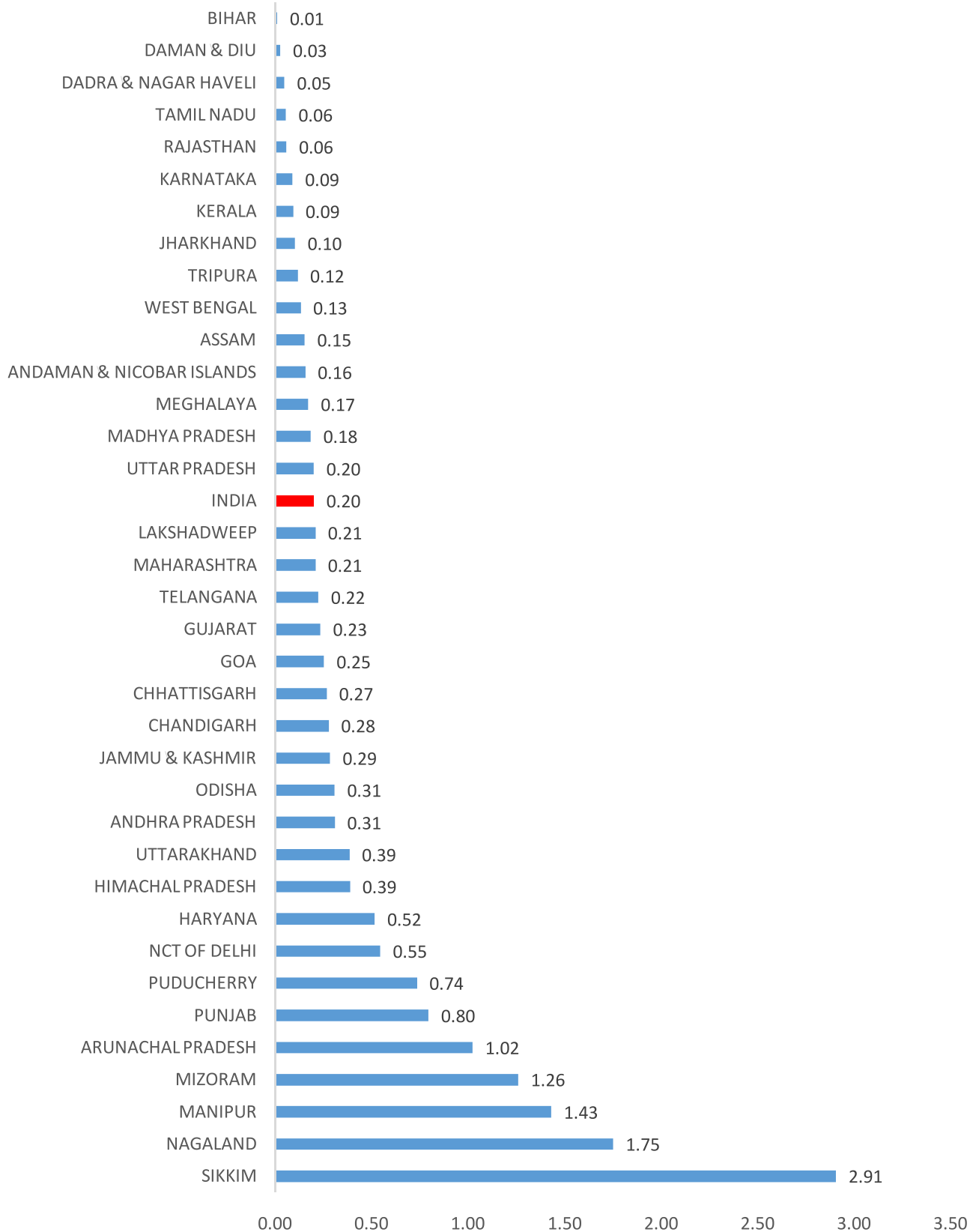
prevalence of current sedative use are Sikkim (8.6%), Nagaland (5.4%), Manipur (4.3%) and Mizoram (3.8%). However, Uttar Pradesh (19.6 Lakh), Maharashtra (11.6 Lakh), Punjab (10.9 Lakh), Andhra Pradesh (7.4 Lakh) and Gujarat (7Lakh) are the top five states which house the largest populations of people using sedatives.

Only a minority of users of sedatives use them in a harmful or dependent pattern. In the general population, about 0.11% (almost 11.8 lakh individuals) are using sedatives in dependent pattern. In terms of absolute numbers of people with problem use of sedatives (harmful or dependent pattern), the top states are those which report high numbers of current users of sedatives as well.

TOP TEN STATES : NO. OF PEOPLE WHO NEED HELP FOR SEDATIVES RELATED PROBLEMS (IN LAKHS)



India and states: 'Quantum of Work' - Sedatives (10-75 years), in %



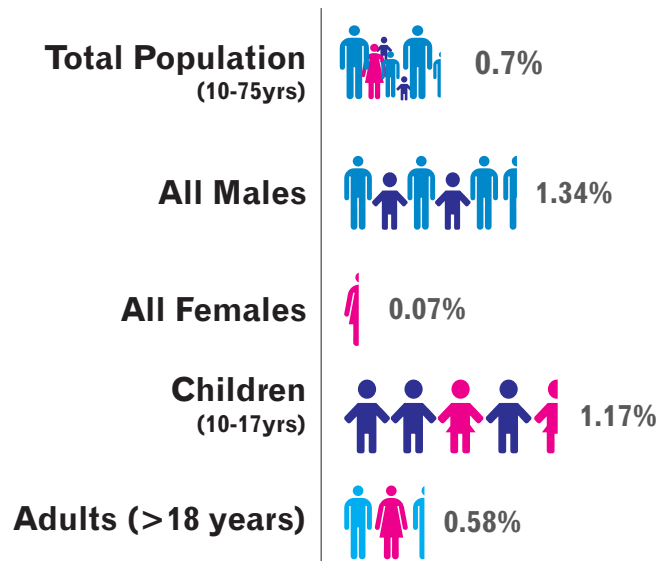
USE OF INHALANTS IN INDIA

These are chemical products which share the common characteristic of being used by inhalational route and possessing psychoactive properties (dependence liability). Overall, at the national level, 0.70% of Indians aged 10-75 years are current users of Inhalant products. Prevalence in the adult population is 0.58%, while the prevalence

among children and adolescents is 1.17%. In case of inhalants too, males greatly outnumber females using inhalants.

Inhalants is the only drug category in which prevalence is higher among children and adolescents as compared to adult population.

PREVALENCE OF CURRENT INHALANTS USE IN DIFFERENT POPULATION GROUPS (%)



A sizeable proportion of inhalant users develop harmful / dependent pattern of use. The prevalence of dependence and harmful

use is almost similar in adult and child population, which is unlike other drugs.

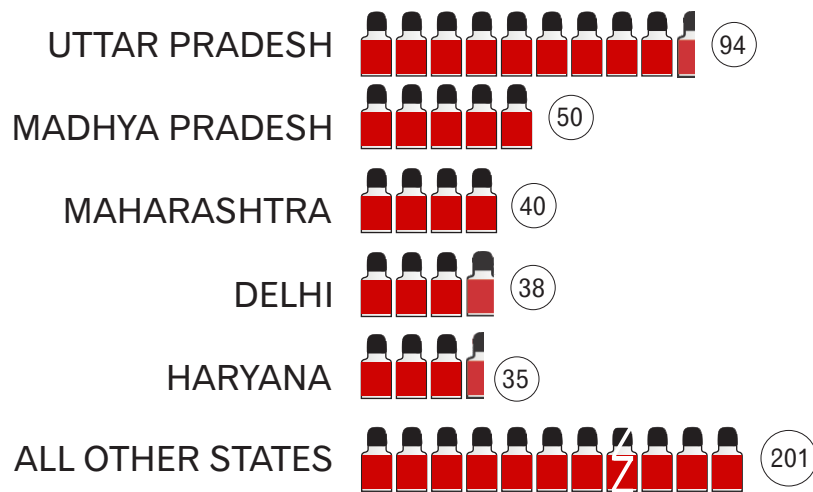
PREVALENCE OF INHALANT USE DISORDERS (IN %)

Pattern of Use	Adults (>18 years)	Children (10-17 years)
Harmful use	0.13	0.12
Dependence	0.07	0.09
Quantum of work	0.20	0.21

Thus, at the national level, an estimated 4.58 lakh children and 18 lakh adults need help for their problematic inhalant use. There are significant state-wide variations in the prevalence of use and dependence of

inhalants among children as well as adults. In terms of absolute numbers, states with high population of children needing help for inhalant use are: Uttar Pradesh, Madhya Pradesh, Maharashtra, Delhi and Haryana.

TOP FIVE STATES: NO. OF CHILDREN WHO NEED HELP FOR INHALANT USE PROBLEMS (IN THOUSANDS)



COCAINE USE IN INDIA

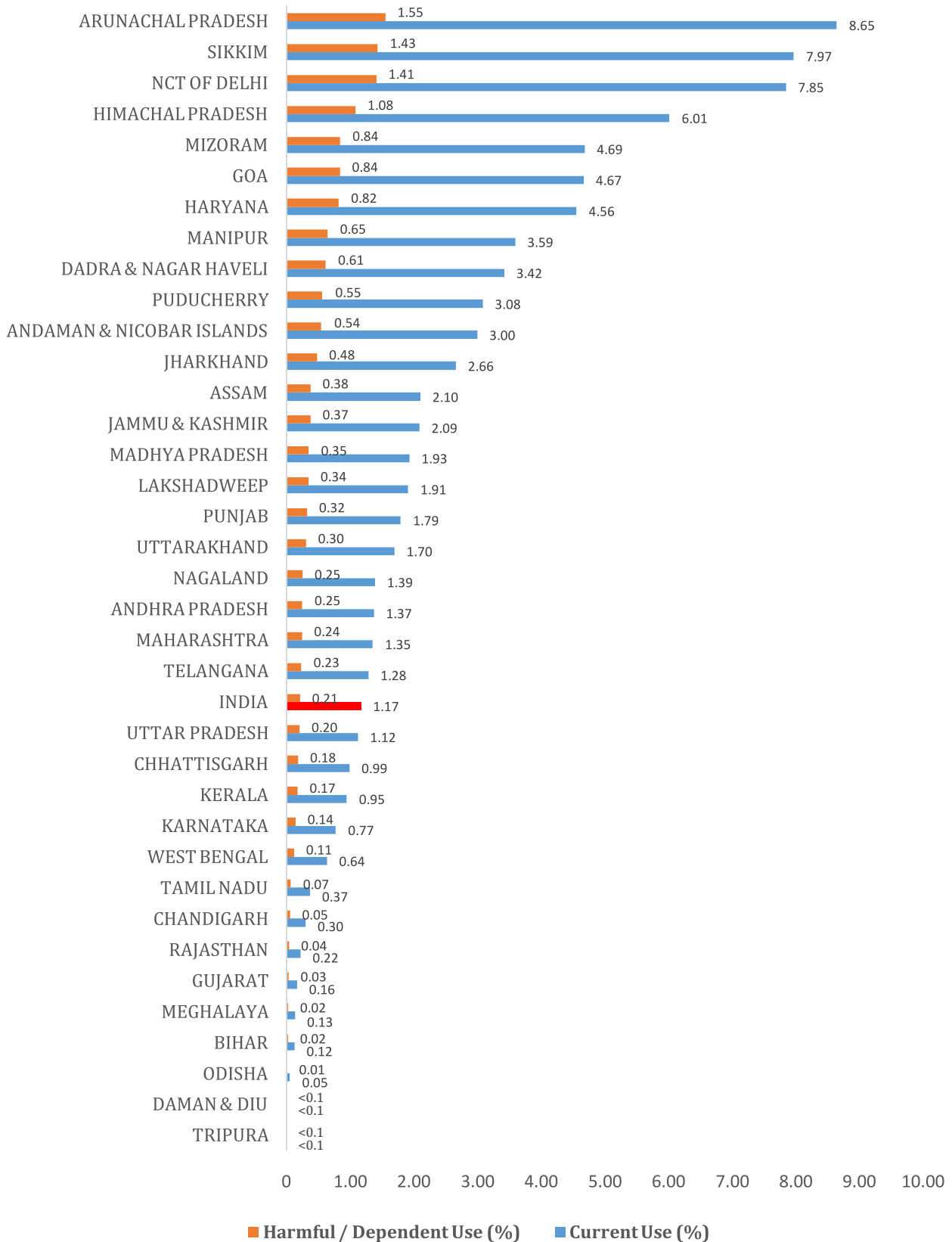
A very small proportion of Indians are estimated to be current users of cocaine (Males – 0.18%, Females – 0.01%). This would mean about 10.7 lakh current users of cocaine in the country. The proportion of people using cocaine in harmful and dependent pattern is also correspondingly small (0.03%, or 3.2 lakh individuals). States with sizeable numbers of current cocaine users are Maharashtra (90,000), Punjab (27,000), Rajasthan (10,000) and Karnataka (8000).

USE OF AMPHETAMINE TYPE STIMULANTS (ATS) IN INDIA

Like cocaine, ATS are also used by a small proportion of Indians. Prevalence is 0.18% in the general population (i.e. about 19.4 lakh individuals). Nationally, just about 0.06% (or approximately 7 lakh individuals) are estimated to use ATS in harmful or dependent pattern. States with sizeable population of ATS users are Maharashtra (5.3 lakh), Telangana (2.4 lakh), Uttar Pradesh (1.7 lakh), Punjab (1.6 lakh) and Manipur (1.3 lakh). Delhi also has an estimated number of about one lakh ATS users.

Prevalence of dependence on ATS is also modest in India. Overall at the national level, just about 0.02% of 10-75 year old population is suffering from ATS dependence.

India and States: Inhalants, Current use and Harmful / Dependent Use, Children 10-17 years (in %)



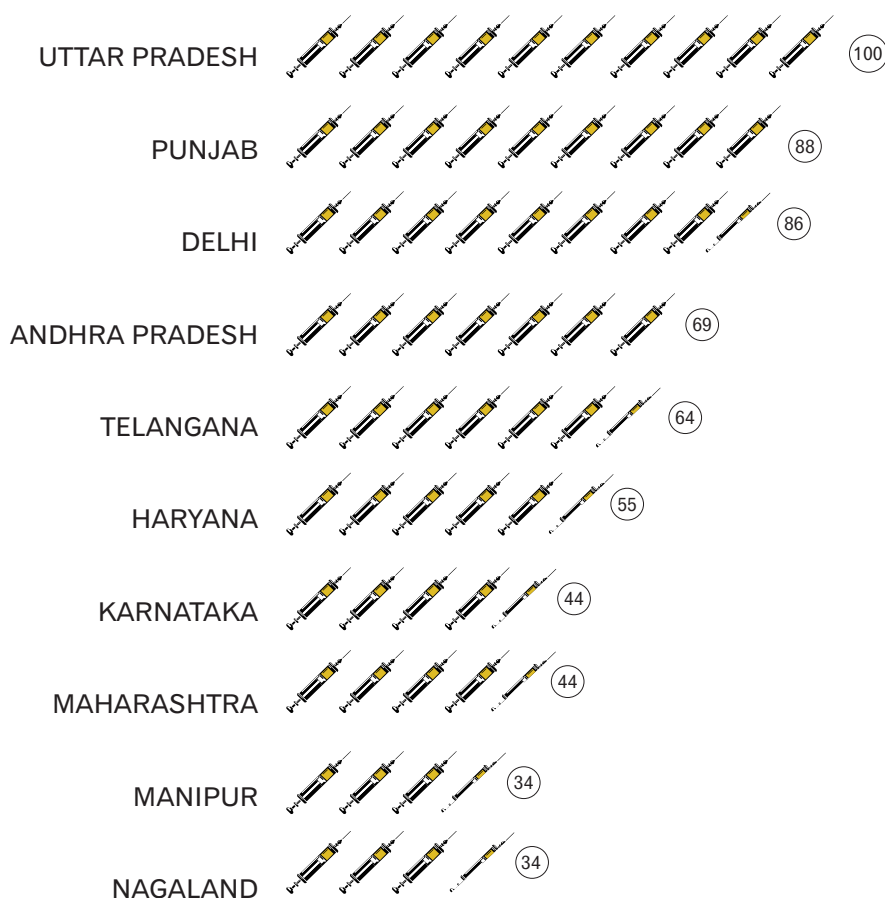
USE OF HALLUCINOGENS IN INDIA

This is also a drug category used by a minority of Indians. Just about 0.12% of population (approximately 12.6 lakh individuals) report using hallucinogens in past 12 months. About 0.03% of Indians (about 3.4 lakh individuals) need help for their harmful or dependent use of hallucinogens. States with sizeable numbers of hallucinogen users are Maharashtra (6 lakh), Telangana (2 lakh), Kerala (1 lakh) and Delhi (63 thousand).

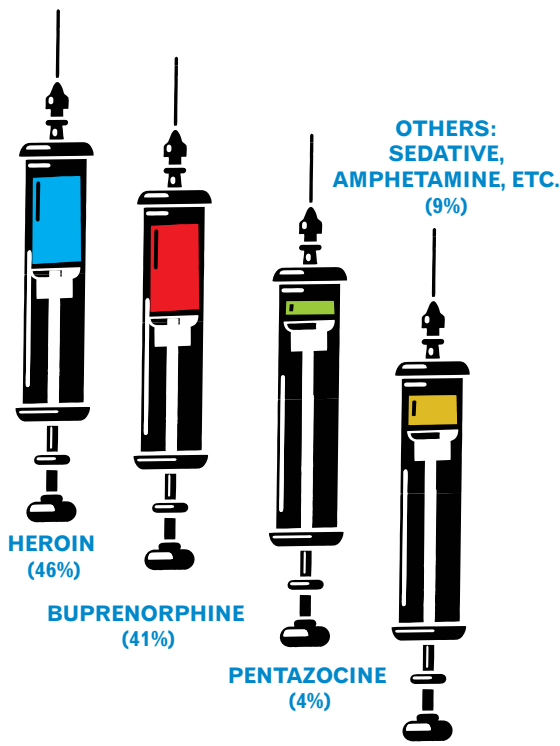
INJECTING DRUG USE IN INDIA

Use of drugs through injecting route is a significant public health concern because of the associated risk of spread of infections like HIV and Hepatitis C and B. Current Injecting drug use is defined operationally in this study as use of any intoxicating substance through injecting route even once within past three months (as defined by the National AIDS Control Programme of India). Findings show that there are estimated 8.5 Lakh people who inject drugs (PWID) in India. Injecting Drug Use was documented in all the regions of the country.

TOP TEN STATES: NO. OF PWID (IN THOUSANDS)



PREDOMINANT DRUG INJECTED IN PAST THREE MONTHS (%)



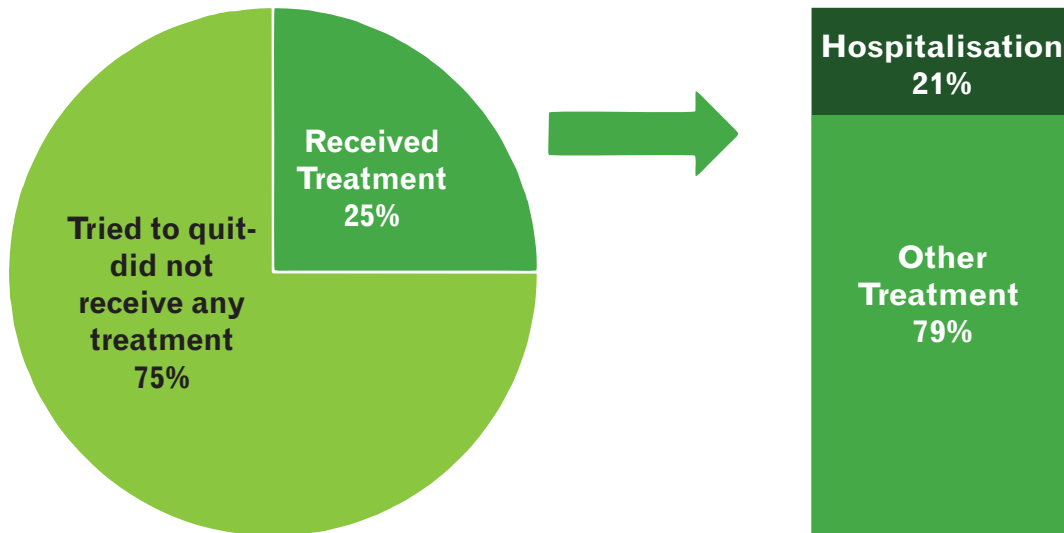
The top ten states in terms of estimated numbers of PWID are provided in the figure. Data on profile of PWID confirms the earlier understanding that Indian PWID prefer injecting one or the other opioid drugs. Almost half (46%) of PWID report injecting heroin predominantly, while the same proportion (46%) report using injectable pharmaceutical opioids. Only a miniscule proportion report injecting sedatives (exclusively) or ketamine. Majority of PWID report injecting frequently (Daily – 49%; 4-6 times per week – 18%). A substantial proportion of PWID report other risky injecting practices. About half report reusing their needles and syringes and about 27% report sharing their needles and syringes with their peers in past 12 months. About a third report experiencing vein-related complications and 28% experienced ulcer or abscess at the injecting sites.

HELP SEEKING AND ACCESS TO TREATMENT

As stated earlier, people who use substances in harmful and dependent pattern (i.e. suffering from Substance Use Disorders) are in need of help. It is thus important to understand as to what extent people who need help are able to access the same. Among people dependent on alcohol who tried quitting, about 25% (or about 2.6% of the total alcohol dependent individuals) reported receiving any help / treatment. Among those who received help / treatment, the largest category of source of help was 'spiritual / religious help' (33%) followed by a 'government doctor or health facility' (25%). A very small proportion (21%) of those who received any help or treatment reported

receiving admission / hospitalization for their alcohol use problems. Just about one in 38 people with alcohol dependence has received any treatment. Only about one in 180 people with alcohol dependence has received inpatient treatment / hospitalisation for help with alcohol problems. About 36% of those admitted report having received inpatient treatment from a general government hospital (the most common setting for hospitalisation). The proportion reporting admission to a government de-addiction centre (23%) or an NGO de-addiction centre (7%) are very small.

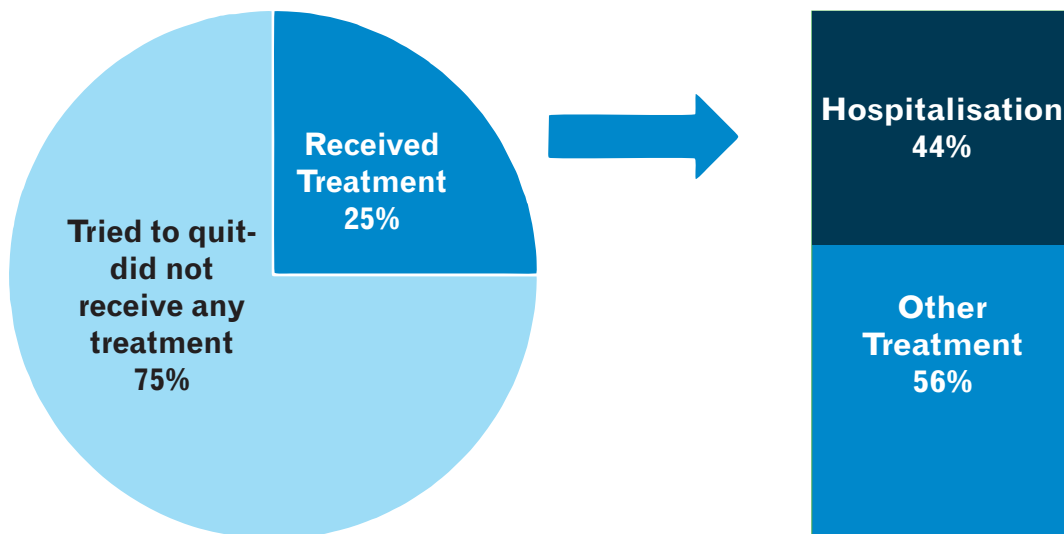
Treatment for Alcohol Dependence

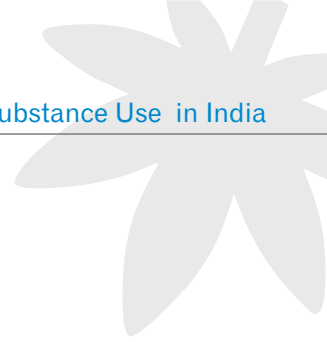


Similar trend is visible among those with dependence on illicit drugs. Among those affected by drug dependence, around 44% reported trying to give up drug use, of which, around 25% (i.e. about 12% of all drug dependent people) reported receiving any help or treatment ever. The most common source of treatment was a government

hospital (40% of those having received treatment). Among those who received treatment, as many as 44% reported having received in-patient treatment. Thus, among people suffering from dependence on illicit drugs, one among 20 people has received inpatient treatment / hospitalisation for help with drug problems ever in lifetime.

Treatment for Drug Dependence





THE WAY FORWARD



THE WAY FORWARD

WHAT DO THESE FINDINGS TELL US?

As an endeavour to explore the epidemiology of substance use in India, this report represents an important milestone in public health and social welfare in India. The vision behind the study and the wide scope of its implementation makes it a historical, unprecedented undertaking. So far, there has been no attempt to comprehensively document the extent and pattern of substance use at the level of states of the country. This is the first occasion when substance use was studied and documented in the populations of all the states and UTs of the country. The data for this survey was collected from districts spanning the entire length and breadth of the country – from Kargil district of Jammu and Kashmir in the North to Nicobar district of Andaman & Nicobar Islands in South and from Barmer district of Rajasthan in the West to Tuensang district of Nagaland in the East. More importantly, all the strata of the population – male and female, rural and urban, adults and children – were represented in the sample. Rather than limiting itself to a certain category of psychoactive drug, this survey has documented the dimensions of use of all the major substance categories in India. Moreover, from the perspective of public health and drug demand reduction, data on people affected by substance use disorders has also been generated. It is imperative that we pay adequate attention to the findings of the survey and reflect upon them for formulating evidence-informed policies and programmes in the country.

This is the first occasion when substance use was studied and documented in the populations of all the states and UTs of the country simultaneously

Findings of the survey served to confirm some of the earlier understanding about substance use situations and simultaneously, provide some fresh insights. Results indicate that there is a sizeable population in India which is affected by substance use disorders and is in need of urgent help. We also understand now that while substance use exists in all the population groups, it is the adult men in India which bear the brunt of substance use disorders, the most. On the other hand, the survey also confirms what has been suspected for a long time; substance use does exist among women in India (though the magnitude of the problem is much smaller as compared to men). Children and adolescents are yet another population group of concern in which substance use has been documented.

It is important to compare the findings of the survey in the light of (a) earlier research in India and (b) the global context. At the national level, prevalence of alcohol use was documented systematically through the 2004 survey by MoSJE which reported prevalence of current (one month) use among men to be 21%. Comparing the findings of the 2004 report with the current survey (prevalence of current alcohol use among men, 27.3%), it may appear that the prevalence of alcohol use has slightly increased in the country. However, on many counts, the current survey has adopted a much more refined and robust methodology, lending credibility to these findings.

Another source of information about the prevalence of alcohol use at the national level is the findings of the National Family Health Survey (NFHS). The most recent round of NFHS (2016) reports the prevalence of alcohol use to be 29.2% in males and 1.2% in females⁶.

Almost similar prevalence was estimated in this survey too (when population aged 15-49 years is considered). We estimate the prevalence to be 29.3% among men and 1.8% among women. However, we must take a note of methodological differences here. NFHS has a much broader mandate and hence, the required rigour in documenting alcohol use is not expected. This survey, on the other hand, was focused only on substance use and hence the findings can be considered as much closer to the real picture.

It is also pertinent to compare the extent of substance use in India vis-à-vis the global data. World Health Organization (WHO) reports that about half of the global population aged more than 15 years is current (past 12 months) user of alcohol⁷. In comparison, India has a much lower

prevalence of alcohol use, as reported in this survey. However we must note that a substantial number of Indians (5.2%) use alcohol in a harmful / dependent pattern, which is almost equal to the global estimates (5.1% according to WHO, 2018). In other words, fewer people in India consume alcohol, but a larger proportion are affected by harmful use or dependence on alcohol. Regarding other substances, in its most recent World Drug Report (2018), the United Nations Office on Drugs and Crime (UNODC) has estimated that around 3.9% of the global population aged 15- 64 years is current (past 12 month) user of cannabis. The figure for India, as estimated by the current survey is 1.2% for the age-group 10 to 75 years⁹. Estimated prevalence of opioid use in India by this survey is considerably higher than the Global and Asian average. However, the prevalence of cocaine and ATS use is much lower. Indeed, findings of this survey is an opportunity for UNODC to take note of the Indian data (and modify the global estimates, if required, in the light of data from India).

PREVALENCE OF ILLICIT DRUG USE: COMPARISON OF GLOBAL, ASIAN⁸ AND NATIONAL (INDIA) ESTIMATES (IN %)

Drug Category	World (15-64 years)	Asia (15-64 years)	India (10-75 years)
Cannabis⁹	3.9	1.9	1.2
Opioids	0.70	0.46	2.06
Cocaine	0.37	0.03	0.11
ATS	0.70	0.59	0.18

[6] National Family Health Survey - 4 (2016) Available at rchiips.org/nfhs/factsheet_nfhs-4.shtml

[7] Global Status Report on Alcohol and Health (2018).

[8] Global and Asian estimates are based on the World Drug Report (2018), published by UNODC

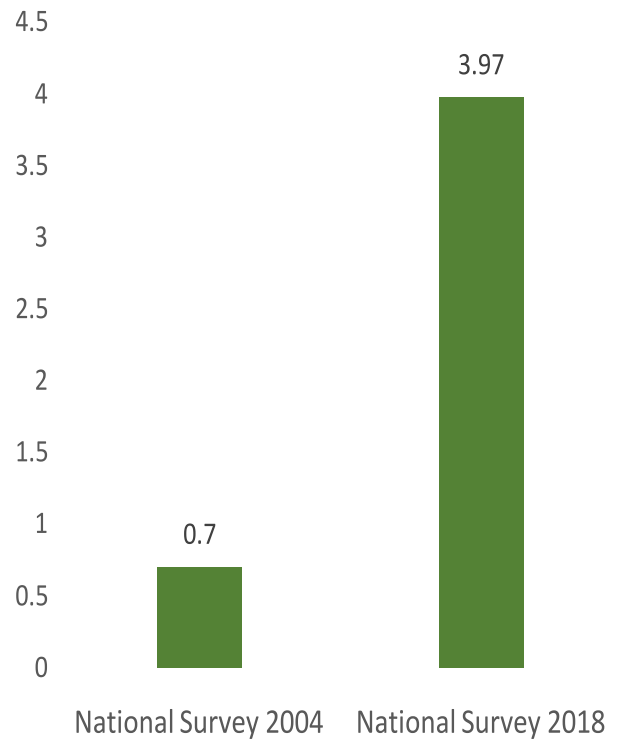
[9] Cannabis data presented here pertain to only the illicit forms (i.e. ganja / charas). Bhang is not included in these estimates.

Regarding opioids, of note is the finding from the current survey that prevalence of heroin use is much higher in India as compared to opium. Let us consider the report of the 2004 survey. Then, the prevalence of opioid use was 0.7% in India (including 0.5% of opium and 0.2% of heroin). Thus, in 2004, among men, opium use was more than twice that of heroin use. The current survey, however, shows that prevalence of heroin use is higher than in 2004 and the ratio with opium use has reversed. Currently, the prevalence of heroin use is twice as much of opium use (1.14% vs. 0.52%) in the combined population of men and women. Compared to the 2004 figures, the overall opioid use is estimated to be higher by more than five times in the current survey. This difference in the figures can be attributed to both an increase in use of opioids in the country as well as the more suitable methodology adopted in the current survey for estimation of illicit drug use¹⁰. Employing additional approach – Respondent Driven Sampling (RDS) with multiplier – served to address some of the limitations of the traditional household survey approach.

Another important and recent source of information about substance use disorders is the report of the National Mental Health Survey (2015-16)¹¹. Conducted in 12 states of the country, the NMHS estimated the prevalence of all mental disorders including alcohol and other drug use disorders. Prevalence of Alcohol Use Disorders reported by the NMHS was 4.6% in the general population. Notwithstanding the methodological differences and relatively limited geographical scope of NMHS, the data presented in this report indicates the prevalence of alcohol use disorders to be slightly higher at 5.2% nationally.

One of the central features of this survey was to generate state level data. As was long

Trends, Opioid Use in Men, India: 2004 - 2018 (in %)



suspected, (but not scientifically documented), the findings show huge heterogeneity and differences within the states and UTs regarding extent of substance use. It is evident that some states are facing much larger challenge of substance use disorders as compared to others. Regarding prevalence of alcohol use, there are at least five states in the country with more than twice the national average. On the other hand, there are also about four states where prevalence is less than half of the national average. Notably, in states with alcohol prohibition, prevalence of use was found to be low. This can be explained by (a) genuinely lesser numbers of people consuming alcohol in these states or (b) discomfort in reporting alcohol use (for the fear of repercussions).

[10] Methodological difference. The 2004 survey: age 15-64 years, current use – past one month, estimates based only on HHS. The 2018 survey: age 10-75 years, current use – past 12 months, estimates based on RDS and HHS

[11] Gururaj et al (2016). National Mental Health Survey of India, 2015-16: Prevalence, patterns and outcomes. Bengaluru: NIMHANS

One of the ways to address this dilemma is to look at the findings on 'ever use' of alcohol vis-à-vis 'current use' of alcohol. In a state like Bihar, where alcohol prohibition has been introduced only recently, a wide gap is expected between the figures for 'ever' and 'current' use of alcohol (since a substantial proportion of alcohol users is expected to have consumed alcohol earlier, but may not have consumed recently or acknowledge having done so, owing to prohibition). Comparing the data on 'ever' and 'current' use of alcohol among men from Bihar, the neighbouring states (Jharkhand and West Bengal) and Gujarat (with long standing prohibition), shows an interesting picture.

As seen here, prevalence of alcohol use 'ever' is much higher in Jharkhand and West Bengal as compared to Bihar. In Bihar, the prevalence of 'ever' as well as 'current' use of alcohol are lower but the prevalence of 'current' use appears disproportionately lower. In Gujarat, while both 'ever' and 'current' use of alcohol is low, the difference between them is small. Thus, it appears that both the reasons explain the lower prevalence of alcohol found in Bihar; lower proportion of people consuming alcohol as well as lower proportion of people reporting that they have consumed alcohol (i.e. under-reporting).

PREVALENCE OF ALCOHOL USE AMONG MEN (10-75 YEARS): SELECTED STATES, IN %

	Bihar	Jharkhand	West Bengal	Gujarat
Ever Use	7.4	18.9	38.0	8.1
Current Use	1.7	11.7	29.2	7.2

In general, under-reporting (and hence underestimation) is the recognized limitation of household surveys, particularly those which involve studying socially deviant or legally prohibited behaviours. In this survey, use of RDS – multiplier method to estimate the dependence on illicit drugs proved to be immensely useful to generate credible data.

From a public health and social welfare perspective, it is the prevalence of substance use disorders (harmful use and dependence) which is of more concern. This figure represents the 'quantum of work' for the health and welfare sectors. In general, the trend that appears in most of the states is, higher the prevalence of current use, higher

the prevalence of alcohol use disorders. However, in some states a disproportionate number of people appear to be affected by alcohol use disorders. For instance, in Andhra Pradesh, prevalence of current use of alcohol is just about 13.7% (not very different from the national average) but the prevalence of alcohol use disorders is 10.5% (ranking second highest in the country). This indicates a high proportion of people consuming alcohol in Andhra Pradesh consume in a harmful / dependent pattern (and hence need help). Similar, situation appears in Puducherry (alcohol current use – 9.5%; 'quantum of work' – 5.3%).

Data on opioid use also display some interesting patterns. It is well known that the north-eastern states (which share borders with illicit opioid producing countries) have a higher problem of opioid use. This survey also shows the similar trend – a higher prevalence of opioid use – in north-eastern states. Besides those in the north-eastern region, a state which stands out in terms of opioid use is Punjab. Punjab has a high prevalence of current use of opioids as well as of opioid use disorders. In the recent past, two large studies focusing on opioid dependence in Punjab have documented the high magnitude of opioid problem in Punjab. Indeed, the estimated numbers of people with opioid dependence in Punjab, presented in this report (3.3 lakh)¹² are largely similar to the other previous studies (Ambekar et al, 2015¹³ – 2.3 lakh and Avasthi et al, 2019¹⁴ – 2.7 lakh). The variation in estimated numbers among these studies is well within the margin of error for any such estimation exercise. Besides Punjab and the northeastern states, Haryana and Delhi also display a high prevalence of current opioid use as well as opioid use disorders. Indeed, in as many as 13 states in the country, the prevalence of opioid use disorders is more than one percent (indicating a major public health concern).

It is also worth noting that India's opioid use scenario shows a significant shift. Traditionally, use of opium is established in many parts of India. However, currently, at the national level, it is the heroin which is predominant opioid being used. In most states of the country, prevalence of heroin use is higher than that of opium. This is true for the traditional legal producers of opium (Rajasthan, Uttar Pradesh and Madhya Pradesh) as well as the known illegal opium cultivation state like Arunachal Pradesh.

Comparing the prevalence of

pharmaceutical opioids with that of heroin, however, reveals a different picture. The trend appears that in the southern states of the country (where, in general, prevalence of use of opioid as a category is low), pharmaceutical opioids have a higher prevalence than heroin. Sikkim is a northeastern state which bucks this trend. Indeed, Sikkim has the highest prevalence of use of pharmaceutical opioids among all the states.

Other than pharmaceutical opioids, another important pharmaceutical drug category is sedatives. Here too, it is Sikkim which has the highest prevalence of current use of sedatives as well as sedative use disorders. This trend is in general apparent for other states too; states with a higher prevalence of use of pharmaceutical opioids, also have a higher prevalence of use of (pharmaceutical) sedatives.

The phenomenon of combining sedatives with opioids by the users to potentiate the psychoactive effects is well-known. It should also be noted that a substantial proportion of people who inject drugs (almost half of them) report injecting pharmaceutical opioids. Previous research from India has established that people who inject pharmaceutical opioids often combine them with one or more pharmaceutical sedatives¹⁵. Thus, it is not surprising to see the figures for use of pharmaceutical opioids and sedatives go hand in hand.

[12] This is the figure for opioid dependence. Estimated number of people who need help (harmful use and dependence) is higher in Punjab: 6.8 lakh

[13] Punjab Opioid Dependence Survey. Available at [http://pbhealth.gov.in/scan0003%20\(2\).pdf](http://pbhealth.gov.in/scan0003%20(2).pdf)

[14] Avasthi et al (2019). Epidemiology of dependence on illicit substances, with a special focus on opioid dependence, in the State of Punjab, India. *Asian Journal of Psychiatry* 39 (2019) 70–79

[15] Ambekar et al (2014). "Type of opioids injected: Does it matter? A multicentric cross-sectional study of people who inject drugs", *Drug Alcohol Rev.* doi: 10.1111/dar.12208

An important piece of data has been generated here, regarding the estimated number of people who inject drugs (PWID). Injecting Drug Use is a known risk factor for HIV epidemic in India. Many states of the country (largely those in northeast) are known for concentrated epidemic of HIV infection among people who inject drugs. While HIV testing was beyond the mandate of this study, the findings do show that many states in the country have a substantial population of PWID and among them a sizeable proportion report risky injecting practices. So far, the number of PWID (estimated by National AIDS Control Organization) was understood to be just under two lakh (among which about 1.2 lakh PWID received services in the year 2016-17)¹⁶. This survey estimates the number of PWID to be about 8.5 lakh in India. Here, it is important to note that NACO estimates the number of those PWID which can be provided services (i.e. in urban areas and closely knit populations). Findings of this survey indicate that there may be a substantial population of PWID, which is scattered and hence, difficult to reach with services.

High prevalence of inhalant use among children and adolescents is another important concern for India. It is the only category of substances where prevalence among children is more than the prevalence among adults. Many states of the country have a substantial population of children using inhalants and affected by inhalant use disorders. Among children, earlier research from India has shown that the street children are particularly vulnerable population for inhalant use¹⁷.

Besides reporting the figures for extent and prevalence of substance use in India, this report also seeks to draw attention towards the abysmally low coverage with treatment

services for people affected by substance use disorders. Among those people with alcohol and drug dependence who make an attempt to quit, just about a fourth report receiving any help. Treatment in the formal, organized sector is accessed by a very small minority. Indeed, 'admission to a de-addiction centre' (which is mistakenly regarded as the primary modality of treatment of substance use disorders in India) is received by a miniscule proportion of affected population. In the light of the finding that most common type of facility where patients receive treatment is the government general hospital, it is evident that neither the program by the MoSJE (support to NGOs for establishing Integrated Rehabilitation Services for Addicts – IRCAs) nor the Drug De-Addiction program of Ministry of Health and Family Welfare (support to government hospitals for establishing de-addiction centres) are able to cater to the vast demand of treatment.

RECOMMENDATIONS

Considering the enormous challenge of substance use disorders in the country, there is an urgent need of policies and programmes which can bring relief to the large number of affected Indian citizens. It is imperative that these policies and programmes are based upon scientific evidence and take into consideration the local, socio-cultural context. Substance use disorders are clearly a significant public health concern in the country, as evident by the findings contained in this report. Thus, we now discuss various measures which must be undertaken to enable the country deal with this concern.

[16] NACO. Annual Report 2016-17.

[17] Dhawan et al (2015) "Treatment seeking behavior of inhalant using street children: Are we prepared to meet their treatment needs". Indian J Psychol Med;37:282-7

Scientific evidence-based treatment needs to be made available for people with substance use disorders – at the required scale

Health sciences have made tremendous progress in last few decades. A number of treatment modalities for substance use disorders exist with a strong evidence base of their effectiveness. Substance use disorders are understood as health conditions for which effective treatment needs to be available to reduce the overall social and public-health burden. International agencies have strongly recommended that national governments must allocate optimum resources for treatment of substance use disorders¹⁸. Due priority needs to be accorded to substance use treatment among other health and welfare needs. India is a signatory to the outcome document of the thirtieth special session of the United Nations General Assembly, 2016 which has recommended treatment of drug use disorders as the key operational objective towards drug demand reduction¹⁹.

Thus, for the health and social welfare sectors of the country, the figures for harmful use / dependence (or 'quantum of work') presented in this report, are much more relevant (as opposed to the figures indicating substance 'use'). Results show that many states of the country have a large number of people who need treatment for their substance use disorders. The figure of more than five percent of general population affected by alcohol use disorders points to a significant public health challenge. In many states, a large proportion of the population (particularly adult males) are affected by alcohol use disorders and are in need of urgent help. At the level of states, the figures for prevalence of 'quantum of work' (i.e. proportion of population affected) is a helpful guide to plan resource allocation and other strategies. At the national level, however, it is also important to be guided by estimated number of people affected in each

state, in order to inform the national programme priorities. For instance, even small proportions of populations being affected in large states like Uttar Pradesh, reflects a very heavy treatment demand in terms of absolute numbers. Thus, it will be important that planning for a national level treatment programme takes into account both the high prevalence as well as absolute magnitude of the problem, for prioritisation among the states.

Data from this survey once again confirms what has been known for a long time; there is a gross mismatch between demand and availability of treatment services for substance use disorders in the country. The National Mental Health Survey (NMHS) reported a high 'treatment gap' (i.e. number of people, in need of treatment but not receiving treatment) for substance use disorders in India. The treatment gap, as reported by NMHS, was more pronounced for alcohol use disorders (86%) as compared to other drug use disorders (73%). A similar trend was observed in this survey; just about one in 37 people affected by alcohol use disorders and one in 20 affected by drug use disorders have received any treatment, ever.

Two major ministries of Government of India (MoSJE and MoH&FW) are mandated to provide treatment services. It is the finding of concern that the flagship treatment programmes of both these ministries hardly have any reach or coverage. Only a minuscule proportion of people affected by alcohol or drug dependence report having received treatment from a NGO de-addiction centre (such as an IRCA supported by MoSJE) or a government de-addiction centre (such as those supported by the Drug De Addiction programme of MOH&FW).

[18] International Narcotics Control Board (2018). Treatment, rehabilitation and social reintegration for drug use disorders: essential components of drug demand reduction. Annual Report 2017. Vienna: INCB

[19] United Nations General Assembly Special Session (UNGASS). Our joint commitment to effectively addressing and countering the world drug problem. (2016). United Nations.

This is not surprising considering that an addiction treatment programme which is focused heavily upon inpatient treatment / hospitalisation is unlikely to cater to the huge demand for treatment. In terms of types of treatment services, focusing only on the hospitalisation (or 'deaddiction centres') is neither feasible nor desirable. A large proportion of people with substance use disorders can be provided help in the outpatient settings by the trained personnel.

Considering the large numbers of people who need treatment and the poor availability of treatment services, India needs massive investments in enhancing the avenues for treatment. Along with the government sector, the civil society and the non government sector needs to be roped in. To the extent possible, there should be either integration or close linkage of substance use treatment services with other general healthcare services. Enhancing treatment services as outpatient clinics, which have all the necessary components (trained human resources, infrastructure, medicines and supplies, a system of monitoring and mentoring) is urgently required. Schemes such as the "Strengthening Drug De Addiction Programme: Establishing Drug Treatment Clinics" of MoH&FW, Government of India need to be scaled- up²⁰. Similarly, the Scheme for Prevention of Alcoholism and Substance (Drugs) Abuse by MoSJE needs innovations aimed at delivery of efficient and effective prevention and treatment services for people affected by substance use disorders. The model of Integrated Rehabilitation Centre for Addicts (IRCA), which so far remains focused largely upon provision of residential treatment, needs to evolve to incorporate additional elements. These can be outreach (aimed at generating the treatment demand and facilitating access to services), outpatient treatment (along with provision of medicines delivered by qualified personnel), etc. Involvement of and partnership with the civil society partners, including those representing the affected communities, would be crucial. It needs to be ensured that the treatment for

substance use disorders is provided within the framework of compliance with human rights and optimum quality and ethical standards.

Considering that more than five percent of Indians suffer from alcohol use disorders and an additional substantial proportion are affected by other drug use disorders, this is clearly a major public health concern for India. Alcohol and drug use disorders are significantly disabling mental health conditions themselves as well as risk factors for many other health conditions. Other than alcohol, it is the opioid use disorders which are the next major public health challenge for many states in India. It must be noted that effective treatment of opioid use disorders requires certain specific modalities of treatment, which in-turn demand some additional resources and capacities of service providers. Long-term pharmacotherapy is the mainstay for treatment of opioid dependence. Due to various reasons (resource crunch, inadequate capacities of service providers, a non-conducive legal and policy environment), it has been a challenge to scale-up the availability of evidence-based treatment for opioid dependence in India²¹.

Scaling-up of treatment services for substance use disorders would also require large-scale capacity building mechanisms. This would mean enhancing capacities at all the levels for the professionals from the medical, para-medical social-sciences and behavioural sciences backgrounds. Resource institutions need to be identified and mandated with implementing large-scale initiatives towards human resource development. In addition, information technology based solutions may be leveraged to enhance the efficiency of capacity building systems.

[20] Dhawan et al (2017) "Treatment of substance use disorders through the government health facilities: Developments in the "Drug De-addiction Programme" of Ministry of Health and Family Welfare, Government of India" *Indian Journal of Psychiatry*. DOI:10.4103/psychiatry.IndianJPsychiatry_19_17

[21] Ambekar et al (2017) "Challenges in the scale-up of Opioid Substitution Treatment (OST) in India" (Guest Editorial), *Indian Journal of Psychiatry*;59:6-9

Overall, a coordinated, multi-stakeholder response will be necessary to scale-up treatment programmes in the country.

Evidence-based substance use prevention programmes are needed to protect the young people

Findings of this survey indicate that substance use does exist even among children and adolescents, though only in small proportions. Thus, protecting the youth of the nation is of paramount importance. Another important component of a demand-reduction based response to the drug problem is in the form of strategies aimed at prevention of initiation of substance use. Very often, prevention of drug use is seen (erroneously) as synonymous with spreading the awareness about dangers of drug use among young people. Evidence for effectiveness of awareness generations as the predominant preventive strategy, is very weak. Awareness programmes can play an important role in establishing substance use disorders as bio-psycho-social health conditions (and not just moral failings). Thus, enhancing the awareness in the society can be an effective tool in minimising the stigma associated with substance use and facilitating access to prevention and treatment services. Research has demonstrated that best prevention strategies are those which are based on scientific evidence and which involve working with families, schools and communities in general²². Such effective prevention strategies are aimed at not just preventing substance use, but also ensuring that children and youth grow and stay healthy and safe into adulthood, enabling them to realize their potential and become productive members of their community and society. Research has identified a large number of 'risk factors' contributing to initiation of substance use and development of substance use disorders.

Many of these risk factors (biological processes, personality traits, mental health disorders, family neglect, growing up in

marginalized communities, etc.) are beyond the control of the individual. Thus, prevention strategies need to address such risk factors and attempt to enhance the 'protective factors' (psychological and emotional well-being, family attachment, affiliation to schools and communities). It will be important for any national or state level prevention program to ensure that strategies employed are those which have strong evidence base for their effectiveness. Since, peer involvement plays an important role in influencing the risk of initiation of substance use, peer-led interventions aimed at promotion of healthier lifestyle are recommended.

A conducive legal and policy environment is needed to help control drug problems

Supply reduction approaches, i.e. those aimed at making the drugs not available to the users are very popular and receive a considerable degree of prominence in most national policies throughout the world. In India, several government agencies are mandated to enforce strict drug control laws and regulations and ensuring that violators are brought to the criminal justice system. Under the primary Indian law related to drugs (the Narcotic Drugs and Psychotropic Substances - NDPS Act 1985), a variety of narcotic and psychotropic substances have been scheduled and brought under stringent control, making their trafficking and even the personal consumption a criminal offence. Yet, as the data indicates, a wide variety of these controlled substances are being used and a sizeable number of Indians suffer from the addiction to these substances. More importantly, it appears that while the law is enforced to control the availability of ALL the controlled substances, there is a variation among substances in terms of proportion of people using them and developing addiction to them.

[22] UNODC and WHO (2018). International Standards for Prevention of Drug Use Disorders.

This is illustrated by the example of opium and heroin. Previous national survey in 2004 estimated that the number of people using heroin was less than half that of opium. Today, while the prevalence of opium use is only marginally higher, heroin is found to be used by more than twice the number of opium. Opium is lower in potency, is permitted to be cultivated legally (and hence much cheaper even in the grey market), enjoys socio-cultural acceptance in many parts of the country and is arguably less harmful than heroin. Exerting the similar degree of control over the availability of opium and heroin does not appear to have been helpful for the Indian society. Indeed, relatively easier access to some of the low-potency opium products (like *doda* or *phukki*) may even prevent the transition to use of more potent and harmful heroin.

Another illustration of challenges with relying on supply control approaches is available with the data on cannabis use. *Bhang* enjoys the status of a legal substance, with considerable degree of social acceptance in many parts of India. Overall, at the national level, *bhang* is used by a larger proportion of people as compared to *ganja* or *charas*. Yet, the prevalence of illegal cannabis products like *ganja* and *charas* surpasses that of *bhang* in many states. It is also interesting to note that these states – where *ganja* / *charas* use is higher than *bhang* – include those where *bhang* is legally available as well as those with no legal availability of *bhang* (i.e. the licensed *bhang* outlets). In yet another example, Sikkim is known as the state which has put in place a specific law (the Sikkim Anti-Drugs Act – SADA 2006), focused largely on controlling the availability of pharmaceutical drugs. This survey estimates that Sikkim has the highest prevalence of use of pharmaceutical products (opioids and sedatives) in the country.

Another manner in which the drug supply control potentially influences the demand

reduction (in the form of treatment of drug addiction) is the case of pharmaceutical products (like opioids and sedatives). Too stringent supply control measures regulating availability of medications may in fact hinder the access for patients who need these products for medical reasons. Poor availability and access to controlled medications in India has been a cause for concern. Data suggests that while a sizeable number of Indians use pharmaceutical products (opioids and sedatives), only a minority among them use these medications in harmful or dependent pattern. Thus, while regulating the availability of controlled medications is important, facilitating the access to these medications for patients is also essential. It is worthwhile to note that controlled pharmaceutical drugs are required for treatment of a variety of health conditions including pain, mental illnesses and substance use disorders themselves. While non-medical, recreational use of these products remains a concern, their adequate availability for medical purpose is vital for public health.

Yet another way in which laws and policies influence the substance use is criminalisation of personal consumption of drugs. Under the NDPS Act (1985), personal consumption of controlled drugs is a criminal offence. Similarly, in the states with alcohol prohibition, consumption of alcohol is a criminal act. This criminalisation of people using substances further enhances the stigma, isolation and hinders access to treatment. In the line of recommendations by International Narcotics Control Board (INCB) and many other international agencies, it is important to take necessary steps to minimise the stigma and discrimination, and provide health and welfare services to people affected by substance use (rather than subjecting them to the criminal justice system).²³

[23] International Narcotics Control Board (2018). Treatment, rehabilitation and social reintegration for drug use disorders: essential components of drug demand reduction. Annual Report 2017. Vienna: INCB

Overall, data from this survey indicate that there is a need of fresh thinking and innovative solutions, as far as legal and policy measures aimed at drug supply control are concerned. More importantly, there needs to be an efficient coordination between the drug supply control sector as well as the entities involved in drug demand reduction and harm reduction.

Harm reduction needs to be embraced widely as a philosophy to deal with substance use

It is well known that for various reasons, many people affected by substance use disorders are unable to lead a drug-free life. Hence, with continued drug use, they remain at risk of suffering from various adverse consequences. 'Harm reduction' as an approach serves to minimise the risk of harms of substance use, even when complete abstinence from drugs is not possible. Harm reduction approach has been endorsed by the Government of India through the National Narcotic Drugs and Psychotropic Substances (NDPS) Policy, 2012 and the National AIDS Prevention and Control Policy, 2002. Primarily, in India, Harm reduction has been seen as an approach to prevent HIV infection among people who inject drugs. The National AIDS Control Programme is being successfully implemented through providing harm reduction services to PWID. However, as the data indicate, estimated numbers of PWID are much higher than are currently being covered under the programme. There is a need to scale-up the programme according to the available evidence. In addition, the scope and ambit of harm reduction needs to be expanded to cover those people who are using drugs but not through the injecting route.

For instance, under the National AIDS Control Programme, a specific intervention aimed at treatment of opioid dependence ("Opioid Substitution Treatment" – OST) is provided only to PWID. It will be necessary to urgently scale-up OST for PWID

(considering the high numbers of PWID estimated in this report) as well for the larger population of (non-injecting) people with opioid dependence (in order to reduce the risk of them initiating injecting drug use). In general, considering the high number of people with substance use disorders in India, harm reduction philosophy needs to be embraced widely in the Indian response to the drug problems. For instance, in order to address the risk of road traffic accidents, measures aimed at prevention of driving under the influence of alcohol are needed at a large scale.

The approach of generating and utilising scientific evidence must continue

As a comprehensive scientific approach, this survey has been a historical initiative to explore and document the dynamics of substance use in the country. Such an approach of generating evidence and making that evidence the basis of policies and programmes needs to continue. Important learning and experiences have been gained in the process of conducting this study. A large number of organisations have been capacitated and empowered to rigorously collect scientific data. All these experiences and learnings need to be distilled so that a system of data collection, analysis and generation of credible information is maintained. Subsequent surveys and studies need to be conducted with incrementally enhanced refinement of methodologies. Significant investments of human resources and efforts which have gone into planning and conducting this survey need to be utilised in an ongoing manner.

For instance, while this report provides estimates of proportion and number of people affected by drug use at the national level and identifies states where the magnitude of the problem is higher, identifying more affected districts within the state was beyond the mandate of this survey. For this purpose, state level surveys will have to be conducted, which can identify the

priority districts within the state. In addition, it must be noted that certain specific population groups such as prison inmates, school and college students, transport workers, homeless people, sex workers, transgender people, etc., have their own unique challenges and are not adequately covered under the populations studied in this survey. Data on extent of substance use among these population will be vital. In addition, more insights on the profile of treatment providers and challenges faced by

them will be important to enhance the capacity and reach of our interventions. These remaining components of the national survey also needs to be concluded in order to generate a comprehensive picture of substance use in the country. Every piece of the data would serve to incrementally inform evidence-based policies and programmes to protect and promote the health and welfare of Indian society.

ANNEXURE – 1

Data Tables for Substance categories (Current Use,
Dependence and 'Quantum of Work'):
National and by states,
10-75 year old population

ALCOHOL

State Code	State/UT	Alcohol Current Use (%)	Alcohol Dependence (%)	Alcohol 'Quantum of Work' (%)
01	JAMMU & KASHMIR	3.5	0.3	1.2
02	HIMACHAL PRADESH	8.9	0.7	1.7
03	PUNJAB	28.5	6	10.5
04	CHANDIGARH	17.5	1.1	4.3
05	UTTARAKHAND	18.8	1.6	4.2
06	HARYANA	21.6	2.7	4.4
07	DELHI	21.3	2.4	6.2
08	RAJASTHAN	2.1	0.7	1.2
09	UTTAR PRADESH	23.8	4.4	9
10	BIHAR	0.9	0.15	0.16
11	SIKKIM	15.7	3.6	5
12	ARUNACHAL PRADESH	28	7.2	10.2
13	NAGALAND	8.1	1.7	2.9
14	MANIPUR	22.4	3.8	9
15	MIZORAM	7.8	1.1	3
16	TRIPURA	34.7	13.7	27.6
17	MEGHALAYA	3.4	0.9	1.2
18	ASSAM	8.8	1.3	3.3
19	WEST BENGAL	16.7	0.9	3.2
20	JHARKHAND	6.5	0.4	1
21	ODISHA	16.4	2.1	5.5
22	CHHATTISGARH	35.6	6.2	10.3
23	MADHYA PRADESH	17.7	2	4.7
24	GUJARAT	3.9	1.2	1.5
25	DAMAN & DIU	18.3	3.3	4.9
26	DADRA & NAGAR HAVELI	11.6	0.5	3
27	MAHARASHTRA	5.7	2.5	2.9
28	ANDHRA PRADESH	13.7	5.9	10.5
29	KARNATAKA	6.4	2.6	3.5
30	GOA	26.4	3.4	8.4
31	LAKSHADWEEP	0.2	0.0	0.02
32	KERALA	12.4	0.6	1.9
33	TAMIL NADU	14.2	4	5.4
34	PUDUCHERRY	9.5	4.6	5.3
35	ANDAMAN & NICOBAR ISLANDS	25.4	7.1	10.2
36	TELANGANA	16.8	1.8	2.9
	INDIA	14.6	2.7	5.2

CANNABIS

State Code	State/UT	Cannabis Current Use (%)	Cannabis Dependence (%)	Cannabis 'Quantum of Work' %
01	JAMMU & KASHMIR	1.31	0.12	0.31
02	HIMACHAL PRADESH	3.18	0.27	0.74
03	PUNJAB	12.55	0.42	2.26
04	CHANDIGARH	0.71	0.12	0.22
05	UTTARAKHAND	3.38	0.53	1.02
06	HARYANA	6.43	0.57	1.51
07	DELHI	8.12	0.73	1.92
08	RAJASTHAN	0.13	0.23	0.25
09	UTTAR PRADESH	7.36	0.50	1.57
10	BIHAR	1.35	0.23	0.42
11	SIKKIM	10.94	1.31	2.91
12	ARUNACHAL PRADESH	7.36	0.74	1.81
13	NAGALAND	4.65	0.39	1.07
14	MANIPUR	3.74	0.33	0.88
15	MIZORAM	3.24	0.29	0.76
16	TRIPURA	2.10	0.11	0.42
17	MEGHALAYA	1.68	0.15	0.40
18	ASSAM	2.27	0.36	0.69
19	WEST BENGAL	0.88	0.04	0.17
20	JHARKHAND	0.60	0.06	0.15
21	ODISHA	5.24	0.52	1.29
22	CHHATTISGARH	4.98	0.86	1.59
23	MADHYA PRADESH	1.35	0.06	0.25
24	GUJARAT	0.69	0.02	0.12
25	DAMAN & DIU	1.86	0.55	0.82
26	DADRA & NAGAR HAVELI	0.28	0.00	0.04
27	MAHARASHTRA	1.95	0.16	0.44
28	ANDHRA PRADESH	1.04	0.09	0.24
29	KARNATAKA	0.54	0.09	0.17
30	GOA	1.34	0.10	0.29
31	LAKSHADWEEP	0.18	0.00	0.03
32	KERALA	1.28	0.11	0.29
33	TAMIL NADU	0.16	0.09	0.12
34	PUDUCHERRY	0.17	0.01	0.04
35	ANDAMAN & NICOBAR ISLANDS	0.27	0.00	0.04
36	TELANGANA	0.62	0.12	0.21
	INDIA	2.83	0.25	0.66

OPIOIDS

State Code	State / UT	Opioids Current Use (%)	Opioids Dependence (%)	Opioids 'Quantum of Work' (%)
01	JAMMU & KASHMIR	4.91	0.62	1.5
02	HIMACHAL PRADESH	5.66	0.75	1.7
03	PUNJAB	9.69	1.28	2.8
04	CHANDIGARH	2.93	0.39	0.9
05	UTTARAKHAND	2.58	0.32	0.8
06	HARYANA	8.68	1.12	2.5
07	DELHI	7.79	1.01	2.3
08	RAJASTHAN	1.48	0.18	0.5
09	UTTAR PRADESH	2.11	0.25	0.6
10	BIHAR	0.19	0.02	0.1
11	SIKKIM	18.74	2.42	5.1
12	ARUNACHAL PRADESH	22.18	2.65	5.7
13	NAGALAND	25.22	3.09	6.5
14	MANIPUR	14.22	1.80	4
15	MIZORAM	25.67	3.26	6.9
16	TRIPURA	5.01	0.67	1.5
17	MEGHALAYA	6.34	0.75	2
18	ASSAM	2.91	0.37	0.9
19	WEST BENGAL	0.84	0.11	0.4
20	JHARKHAND	1.09	0.13	0.3
21	ODISHA	2.85	0.37	0.8
22	CHHATTISGARH	1.55	0.19	0.6
23	MADHYA PRADESH	1.22	0.15	0.6
24	GUJARAT	1.43	0.18	0.4
25	DAMAN & DIU	8.96	1.22	2.5
26	DADRA & NAGAR HAVELI	1.62	0.21	0.5
27	MAHARASHTRA	1.17	0.15	0.5
28	ANDHRA PRADESH	2.21	0.29	0.8
29	KARNATAKA	1.30	0.17	0.5
30	GOA	3.33	0.45	1.5
31	LAKSHADWEEP	2.28	0.31	0.6
32	KERALA	0.85	0.11	0.4
33	TAMIL NADU	0.26	0.03	0.2
34	PUDUCHERRY	2.15	0.29	0.6
35	ANDAMAN & NICOBAR ISLANDS	1.76	0.24	0.5
36	TELANGANA	2.01	0.26	0.7
	INDIA	2.06	0.26	0.70

SEDATIVES

State Code	State / UT	Sedatives Current Use (%)	Sedatives Dependence (%)	Sedatives 'Quantum of Work' (%)
01	JAMMU & KASHMIR	1.54	0.15	0.29
02	HIMACHAL PRADESH	2.07	0.21	0.39
03	PUNJAB	4.25	0.42	0.80
04	CHANDIGARH	1.48	0.15	0.28
05	UTTARAKHAND	2.09	0.21	0.39
06	HARYANA	2.78	0.28	0.52
07	DELHI	2.92	0.29	0.55
08	RAJASTHAN	0.32	0.03	0.06
09	UTTAR PRADESH	1.10	0.11	0.20
10	BIHAR	0.06	0.01	0.01
11	SIKKIM	15.61	1.56	2.91
12	ARUNACHAL PRADESH	5.64	0.56	1.02
13	NAGALAND	9.57	0.95	1.75
14	MANIPUR	7.73	0.77	1.43
15	MIZORAM	6.80	0.68	1.26
16	TRIPURA	0.62	0.06	0.12
17	MEGHALAYA	0.95	0.09	0.17
18	ASSAM	0.82	0.08	0.15
19	WEST BENGAL	0.71	0.07	0.13
20	JHARKHAND	0.56	0.06	0.10
21	ODISHA	1.66	0.17	0.31
22	CHHATTISGARH	1.45	0.14	0.27
23	MADHYA PRADESH	1.00	0.10	0.18
24	GUJARAT	1.26	0.13	0.23
25	DAMAN & DIU	0.14	0.01	0.03
26	DADRA & NAGAR HAVELI	0.25	0.03	0.05
27	MAHARASHTRA	1.12	0.11	0.21
28	ANDHRA PRADESH	1.65	0.17	0.31
29	KARNATAKA	0.48	0.05	0.09
30	GOA	1.34	0.13	0.25
31	LAKSHADWEEP	1.11	0.11	0.21
32	KERALA	0.50	0.05	0.09
33	TAMIL NADU	0.30	0.03	0.06
34	PUDUCHERRY	3.91	0.39	0.74
35	ANDAMAN & NICOBAR ISLANDS	0.83	0.08	0.16
36	TELANGANA	1.20	0.12	0.22
	INDIA	1.08	0.11	0.20

COCAINE

State Code	State / UT	Cocaine Current Use (%)	Cocaine Dependence (%)	Cocaine 'Quantum of Work' (%)
01	JAMMU & KASHMIR	0.01	--	--
02	HIMACHAL PRADESH	0.04	0.01	0.01
03	PUNJAB	0.66	0.11	0.20
04	CHANDIGARH	0.05	0.01	0.01
05	UTTARAKHAND	0.02	--	0.01
06	HARYANA	0.09	0.02	0.03
07	DELHI	0.08	0.01	0.03
08	RAJASTHAN	0.10	0.02	0.03
09	UTTAR PRADESH	0.02	--	0.01
10	BIHAR	--	--	--
11	SIKKIM	0.59	0.10	0.18
12	ARUNACHAL PRADESH	3.01	0.47	0.89
13	NAGALAND	0.27	0.04	0.08
14	MANIPUR	--	--	--
15	MIZORAM	--	--	--
16	TRIPURA	--	--	--
17	MEGHALAYA	0.05	0.01	0.02
18	ASSAM	0.01	--	--
19	WEST BENGAL	--	--	--
20	JHARKHAND	0.01	--	--
21	ODISHA	--	--	--
22	CHHATTISGARH	--	--	--
23	MADHYA PRADESH	0.07	0.01	0.02
24	GUJARAT	--	--	--
25	DAMAN & DIU	1.38	0.23	0.42
26	DADRA & NAGAR HAVELI	0.81	0.13	0.24
27	MAHARASHTRA	0.53	0.09	0.16
28	ANDHRA PRADESH	--	--	--
29	KARNATAKA	0.08	0.01	0.03
30	GOA	0.38	0.06	0.11
31	LAKSHADWEEP	0.63	0.10	0.19
32	KERALA	0.05	0.01	0.02
33	TAMIL NADU	0.01	--	--
34	PUDUCHERRY	--	--	--
35	ANDAMAN & NICOBAR ISLANDS	0.50	0.08	0.15
36	TELANGANA	0.08	0.01	0.02
	INDIA	0.10	0.02	0.03
	-- undetectable			

AMPHETAMINE TYPE STIMULANTS (ATS)

State Code	State / UT	ATS Current Use (%)	ATS Dependence (%)	ATS 'Quantum of Work' (%)
01	JAMMU & KASHMIR	0.02	--	0.01
02	HIMACHAL PRADESH	0.01	--	--
03	PUNJAB	0.64	0.06	0.24
04	CHANDIGARH	0.09	0.01	0.03
05	UTTARAKHAND	0.03	--	0.01
06	HARYANA	0.39	0.04	0.14
07	DELHI	0.63	0.06	0.23
08	RAJASTHAN	0.10	0.01	0.04
09	UTTAR PRADESH	0.10	0.01	0.03
10	BIHAR	0.01	--	--
11	SIKKIM	0.06	0.01	0.02
12	ARUNACHAL PRADESH	3.80	0.34	1.32
13	NAGALAND	0.17	0.02	0.06
14	MANIPUR	4.86	0.46	1.76
15	MIZORAM	0.31	0.03	0.11
16	TRIPURA	0.01	--	0.01
17	MEGHALAYA	0.05	--	0.02
18	ASSAM	0.14	0.01	0.05
19	WEST BENGAL	--	--	--
20	JHARKHAND	0.04	--	0.01
21	ODISHA	0.09	0.01	0.03
22	CHHATTISGARH	--	--	--
23	MADHYA PRADESH	0.14	0.01	0.05
24	GUJARAT	--	--	--
25	DAMAN & DIU	11.41	1.19	4.36
26	DADRA & NAGAR HAVELI	0.14	0.01	0.05
27	MAHARASHTRA	0.51	0.05	0.19
28	ANDHRA PRADESH	0.02	--	0.01
29	KARNATAKA	0.13	0.01	0.05
30	GOA	0.68	0.07	0.26
31	LAKSHADWEEP	0.99	0.10	0.38
32	KERALA	0.13	0.01	0.05
33	TAMIL NADU	0.03	--	0.01
34	PUDUCHERRY	0.19	0.02	0.07
35	ANDAMAN & NICOBAR ISLANDS	0.78	0.08	0.29
36	TELANGANA	0.75	0.07	0.28
	INDIA	0.18	0.02	0.06
	-- undetectable			

INHALANTS

State Code	State / UT	Inhalants Current Use (%)	Inhalants Dependence (%)	Inhalants 'Quantum of Work' (%)
01	JAMMU & KASHMIR	1.22	0.13	0.36
02	HIMACHAL PRADESH	3.38	0.38	1.03
03	PUNJAB	1.01	0.11	0.31
04	CHANDIGARH	0.17	0.02	0.05
05	UTTARAKHAND	1.00	0.11	0.29
06	HARYANA	2.63	0.29	0.78
07	DELHI	4.48	0.50	1.34
08	RAJASTHAN	0.13	0.01	0.04
09	UTTAR PRADESH	0.69	0.07	0.19
10	BIHAR	0.08	0.01	0.02
11	SIKKIM	4.58	0.51	1.37
12	ARUNACHAL PRADESH	5.33	0.56	1.49
13	NAGALAND	0.84	0.09	0.24
14	MANIPUR	2.11	0.23	0.62
15	MIZORAM	2.74	0.30	0.80
16	TRIPURA	--	--	--
17	MEGHALAYA	0.08	0.01	0.02
18	ASSAM	1.24	0.13	0.36
19	WEST BENGAL	0.36	0.04	0.11
20	JHARKHAND	1.61	0.17	0.46
21	ODISHA	0.03	--	0.01
22	CHHATTISGARH	0.58	0.06	0.17
23	MADHYA PRADESH	1.15	0.12	0.33
24	GUJARAT	0.10	0.01	0.03
25	DAMAN & DIU	--	--	--
26	DADRA & NAGAR HAVELI	1.99	0.22	0.59
27	MAHARASHTRA	0.76	0.09	0.23
28	ANDHRA PRADESH	0.78	0.09	0.24
29	KARNATAKA	0.43	0.05	0.13
30	GOA	2.56	0.29	0.80
31	LAKSHADWEEP	1.05	0.12	0.33
32	KERALA	0.53	0.06	0.16
33	TAMIL NADU	0.20	0.02	0.06
34	PUDUCHERRY	1.71	0.19	0.53
35	ANDAMAN & NICOBAR ISLANDS	1.66	0.19	0.51
36	TELANGANA	0.74	0.08	0.22
	INDIA	0.70	0.08	0.21
	-- undetectable			

HALLUCINOGENS

State Code	State / UT	Hallucinogens Current Use (%)	Hallucinogens Dependence (%)	Hallucinogens 'Quantum of Work' (%)
01	JAMMU & KASHMIR	0.01	--	--
02	HIMACHAL PRADESH	--	--	--
03	PUNJAB	--	--	--
04	CHANDIGARH	0.01	--	--
05	UTTARAKHAND	0.08	0.01	0.02
06	HARYANA	0.13	0.01	0.04
07	DELHI	0.39	0.03	0.11
08	RAJASTHAN	0.10	0.01	0.03
09	UTTAR PRADESH	0.02	--	0.01
10	BIHAR	0.02	--	--
11	SIKKIM	0.17	0.01	0.05
12	ARUNACHAL PRADESH	0.28	0.02	0.07
13	NAGALAND	--	--	--
14	MANIPUR	0.22	0.02	0.06
15	MIZORAM	0.08	0.01	0.02
16	TRIPURA	0.01	--	--
17	MEGHALAYA	--	--	--
18	ASSAM	0.02	--	0.01
19	WEST BENGAL	0.01	--	--
20	JHARKHAND	0.03	--	0.01
21	ODISHA	--	--	--
22	CHHATTISGARH	--	--	--
23	MADHYA PRADESH	0.05	--	0.01
24	GUJARAT	--	--	--
25	DAMAN & DIU	0.03	--	0.01
26	DADRA & NAGAR HAVELI	0.11	0.01	0.03
27	MAHARASHTRA	0.59	0.05	0.16
28	ANDHRA PRADESH	--	--	--
29	KARNATAKA	0.06	--	0.02
30	GOA	0.07	0.01	0.02
31	LAKSHADWEEP	0.84	0.07	0.23
32	KERALA	0.35	0.03	0.10
33	TAMIL NADU	0.05	--	0.01
34	PUDUCHERRY	0.03	--	0.01
35	ANDAMAN & NICOBAR ISLANDS	0.94	0.08	0.26
36	TELANGANA	0.63	0.05	0.17
	INDIA	0.12	0.01	0.03
	-- undetectable			

PEOPLE WHO INJECT DRUGS

State Census Code	State	No. of PWID
01	JAMMU AND KASHMIR	25098
02	HIMACHAL PRADESH	4004
03	PUNJAB	88165
04	CHANDIGARH	1500
05	UTTARAKHAND	6216
06	HARYANA	55358
07	DELHI	86909
08	RAJASTHAN	4522
09	UTTAR PRADESH	100113
10	BIHAR	16933
11	SIKKIM	4336
12	ARUNACHAL PRADESH	8580
13	NAGALAND	33888
14	MANIPUR	34344
15	MIZORAM	28288
16	TRIPURA	11544
17	MEGHALAYA	11420
18	ASSAM	17466
19	WEST BENGAL	17136
20	JHARKHAND	20592
21	ODISHA	8184
22	CHHATTISGARH	12928
23	MADHYA PRADESH	9792
24	GUJARAT	-
25	DAMAN AND DIU	-
26	DADRA AND NAGAR HAVELI	-
27	MAHARASHTRA	44323
28	ANDHRA PRADESH	69916
29	KARNATAKA	44530
30	GOA	2299
31	LAKSHADWEEP	-
32	KERALA	19095
33	TAMIL NADU	2773
34	PUDUCHERRY	44
35	ANDAMAN AND NICOBAR	-
36	TELANGANA	64000
	INDIA	854296
-- undetectable		

ANNEXURE – 2

Key Organizations and
Individuals Behind the Survey

KEY GOVERNMENT OFFICERS BEHIND THE SURVEY

Ministry of Social Justice and Empowerment	
Smt. Nilam Sawhney	Secretary
Smt. G. Latha Krishna Rao	Ex- Secretary
Smt. Anita Agnihotri	Ex- Secretary
Ms. Upma Srivastava	Additional Secretary
Sh. Surendra Singh	Joint Secretary
Sh. Khagesh Garg	Director
Sh. Rajesh Kumar Sinha	Under Secretary

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Andaman & Nicobar	Shri. Ashok Biswas	Probation Officer, Directorate of Social Welfare
Arunachal Pradesh	Shri. Yumlam Kaha	Director, Social Justice & Empowerment
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ANNEXURE – 3

Description of Survey Sample

PROFILE OF PEOPLE INTERVIEWED IN HHS AND RDS

HOUSEHOLD SAMPLE SURVEY	
Variables	Proportion (%)
Gender	
• Male	50.85
• Female	49.12
• Transgender	0.03
Age (years)	
• 10-18	17.5
• 19-35	38.9
• 36-50	26.1
• 51-75	17.4
Educational Attainment	
• Illiterate	15.0
• Some Education/Schooling (below high school)	37.8
• High School and above	47.2
Marital Status	
• Never Married	30.7
• Currently Married	61.7
• Other marital status	7.6
Employed in any income generating activity in past 12 months	
34.4	
Occupation	
• Professional	2.4
• Semi- Professional	2.5
• Clerical	1.5
• Shop owner	3.9
• Farmer	8.3
• Skilled worker	5.4
• Semi-skilled worker	4.7
• Unskilled worker	8.1
• Unemployed	63.2
Socio-economic Status²⁵	
• Upper	14.1
• Upper Middle Class	20.1
• Middle Class	19.0
• Lower Middle Class	19.7
• Lower	27.1

²⁵ As per the Kuppuswamy classification.

RESPONDENT DRIVEN SAMPLING SURVEY	
Variables	Proportion (%)
Gender	
• Male	96.1
• Female	2.9
• Transgender	0.4
Age (years)	
• 18	1.2
• 19-35	60.1
• 36-50	30.1
• 51-75	8.5
Educational Attainment	
• Illiterate	11.2
• Some Education/Schooling (below high school)	41.3
• High School and above	47.6
Marital status	
• Never Married	34.5
• Currently Married	58.8
• Other marital status	6.7
Employed in any income generating activity in past 12 months	
86.2	
Occupation	
• Professional	8.3
• Semi- Professional	9.1
• Clerical	3.2
• Shop owner	7.6
• Farmer	9.1
• skilled worker	15.6
• semi-skilled worker	14.9
• Unskilled worker	18.6
• Unemployed	13.6
Have a place to stay	
96.6	
If yes, type of residence	
• Kachha	15.9
• Semi-Pucca	34.0
• Pucca	45.3
• Other	4.8
Current living arrangement	
• Joint Family	44.2
• Nuclear family	45.3
• Alone at home	3.8
• with friends	3.2
• Homeless	0.6
• Cohabiting with a partner	0.7
• At workplace	1.5
• Any other	0.5

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