

# MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT GOVERNMENT OF INDIA

# MAGNITUDE OF SUBSTANCE USE IN INDIA

2019

**EXECUTIVE SUMMARY** 

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

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### **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

# 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 problems substance use and the 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 categories eiaht of psychoactive substances: Alcohol, Cannabis, Opioids Cocaine, Amphetamine Type Stimulants (ATS), Sedatives. Inhalants 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 been projected for estimated population of the country / state / UT in the vear 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.

<sup>[1]</sup> 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 (nonmedical, 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.

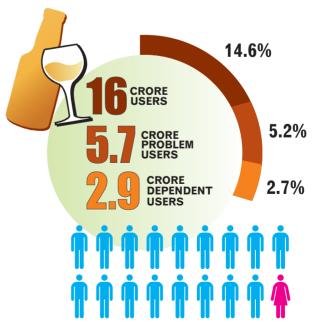
Inhalants (overall prevalence 0.7%) are the only category of substances for which the prevalence of current use among children and adolescents is higher (1.17%) than adults (0.58%).

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

#### **Alcohol Use in India**



#### **Harmful and Dependent Use**

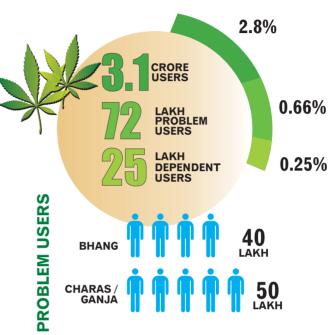
In this survey, a standard and validated tool, WHO ASSIST, was used to determine harmful use and dependence among users of various substances.

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.

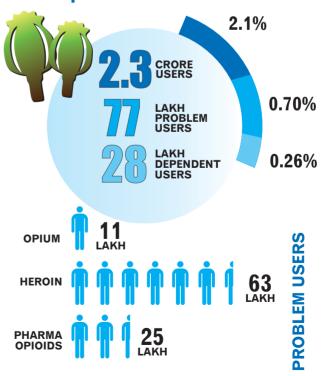
At the national level, as many as 19% of current users of alcohol consume alcohol in a dependent pattern. The prevalence of dependent pattern of alcohol use in the general population (10-75 years) is estimated to be 2.7%, or 2.9 crore individuals. States with high prevalence (more than 10%) of alcohol 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.

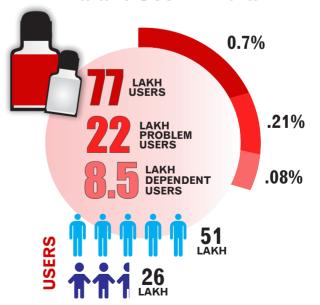
A sizeable number of people using other drugs like sedatives and inhalants also need help. In the general population, about 0.2% of Indians need help for their sedative use problems. At the national level, an estimated 4.6 lakh children and 18 lakh adults need help for their inhalant use (harmful use / 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 is 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, multistakeholder 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.

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