SUBSTANCE ABUSE AMONG THE STUDENTS OF DELHI

THE EPIDEMIC WE ARE NOT TALKING ENOUGH ABOUT

EXECUTIVE SUMMARY

This study involved a cross-sectional survey with 1710 students, 379 parents and a Focused Group Discussion with relevant stakeholders. Students and parents were represented from all the 11 districts of Delhi. Students belonging to classes 8 to 12 were sampled from 110 schools representing Government, Private and other types of aided schools.

The study in line with the literature and other surveys has revealed a very high prevalence of substance abuse in the schools of Delhi. 47 percent of the students have tried at least one substance. This includes 12 percent of girls. 25 percent of the students have tried more than one substance. Cigarettes/tobacco (34 percent) was the substance most students had ever tried, followed by Beer or wine (23 percent) and cough syrup, isotonitazene, codeine, flubromazolam (16 percent). For all substances, students who said access to substances was easy or very easy were more likely to try them.

The age of initiation has also been alarming, reaching below 10. 9 percent of the students have tried at least one substance below the age of 10. 25 percent of those who have ever tried cough syrup, isotonitazene, codeine, flubromazolam and 12 percent of those who have ever tried gasoline, rubber solution, glue, etc. have done it before the age of 10. 15-16 is the age where most students have ever tried cigarettes/tobacco, whiskey, rum, vodka, gin or substances such as *charas, ganja, bhang, sulfa, afeem.*

In terms of geography, 84 percent of students in New Delhi district have tried at least one substance. 20 percent of students in the districts of New Delhi and Shahdara each have tried a substance before the age of 10.

In terms of extent of abuse, cigarette or tobacco is the most abused with about 10 percent of the students using it habitually. Government schools (48 percent) on an average have a higher prevalence of students ever trying a substance than private schools (39 percent). Students in a government school are about 5 times likely to have tried a substance before the age of 10 than those in a private school. But when it comes to habitual use of substances, private schools are no better and in fact have a slightly higher prevalence (5 percent) than the government schools (4 percent) for most substances.

Half the students have a close friend who uses a substance; about half the students have an addict as parent. It is clear that students grow in an environment where substances are routinely abused. But having an addictive parent does not seem to have had an effect on students trying to abuse a substance.

Majority of the students fully agree that it is quite common for students who drink or consume drugs regularly to get into incidents such as petty crime. This is to earn money to support their habit which leads to a vicious cycle of crime and addiction. Experts consulted in the study suggested that opioids could lead to bipolar, mood disorders, schizophrenia and impact on brain development. This proves highly detrimental for young adolescents who are still in their stages of brain development. Students also agreed that household fights are a regular phenomenon for students who drink or consume drugs regularly. Addiction thus is not only an individualised problem but a societal nightmare.

72 percent of the students and 60 percent of the parents interviewed use the internet for leisure activities almost daily. This could be explored as a medium to spread awareness on substance abuse. Most of the parents (44 percent) like to consult the schoolteacher when their child gets into trouble and faces a complaint. Teachers could serve as an effective partner with the parent in addressing the issue of substance abuse. In terms of interventions at school, 'random checks for drugs and substances of abuse' and 'awareness talks on drugs and substance abuse' have been reported by parents the highest at about 36 percent. Students are attracted to substances as it is considered 'cool' in the social and mainstream entertainment. Targeted messaging and positive young role models can help address this. Special attention should be given to the rising case of students abusing substances that are illegal even for adults, like *charas*, cocaine and non-traditional substances like cough syrup, solution and glue etc., As some of these are readily available like a whitener, limiting their access needs further alacrity from those in charge of law and order. The Union Government in a parliamentary debate in December 2022 has reiterated its stance to view a substance user as a victim and not as a culprit but will act with zero tolerance on those involved in the transit and trafficking of substances. MPs had suggested the use of sports and sports complexes to engage the youth in meaningful activities. Future studies should explore the actions and their outcomes as a result of this debate.

Delhi faces a high prevalence of substance abuse, with school-going children starting to abuse even below the age of 10. As the child's brain is still at the formative stage addictive behaviours developed so young can cause a lifetime of damage. Easy access and peer acceptance are contributory factors. Smart use of the internet, parent-teacher collaborations and continuous accountability of associated government proposals and actions on policies such as sales and distribution of substances should be explored to address this menace which is taking the shape of an epidemic.

CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

ATS	Amphetamine Type Stimulants
DoE	Directorate of Education, Government of NCT of Delhi
LSD	Lysergic acid diethylamide
MoSJE	Ministry of Social Justice and Empowerment
MP	Member of Parliament
NCPCR	National Commission for the Protection of Child Rights
NCT	National Capital Territory
NDMC	New Delhi Municipal Committee
OBC	Other Backward Castes
PWID	Persons Who Inject Drugs
SC	Scheduled Castes
SDGs	Sustainable Development Goals
ST	Scheduled Tribes

CHAPTER ONE - CONTEXT

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. A psychoactive substance is a drug or other substance that affects how the brain works and causes changes in mood, awareness, thoughts, feelings, or behaviour. Examples of psychoactive substances include alcohol, caffeine, nicotine, marijuana, and certain pain medicines. Many illegal drugs, such as heroin, LSD, cocaine, and amphetamines are also psychoactive substances. Also called psychotropic substance. A substance abuser is defined as 'anyone who has accepted having used one or more mentioned substances during the past 1 year and has been taking it at least once in a week or several times in the previous month.'[1] In this study we have classified a student as a habitual user if they had used a substance more than 20 times in their lifetime.

NEED FOR THIS STUDY

The first occasion when substance use was studied and documented in the populations of all the states and UTs of the country on a very large scale is the National Survey on Extent and Pattern of Substance Use in India[2] in 2019. This survey estimated that 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, and pharmaceutical opioids. It also showed that about 2.8% of Indians aged 10-75 years (3.1 crore individuals) were using cannabis as *bhang*, *ganja* and *charas*. Among children aged 10 – 17 alcohol use was estimated at 1.3%, cannabis at 0.9%, opioid at 1.8% and inhalants at 1.17% (more than adults at 0.58%). 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. States with the highest prevalence of cannabis use are Uttar Pradesh, Punjab, Sikkim, Chhattisgarh and Delhi. States with higher-than-national prevalence of cannabis use are Uttar Pradesh, Punjab, Sikkim, Chhattisgarh and Delhi. 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, Delhi, Maharashtra, Rajasthan, Andhra Pradesh and Gujarat. High numbers of PWID are estimated in Uttar Pradesh, Punjab, Delhi, Andhra Pradesh, Telangana, Haryana, Karnataka, Maharashtra, Manipur and Nagaland. Delhi also has an estimated number of about one lakh ATS users.

[1] (Juyal, et al., 2006)

[2] (Ambedkar, et al., 2019)

States with sizable numbers of hallucinogen users are Maharashtra (6 lakh), Telangana (2 lakh), Kerala (1 lakh)and Delhi (63 thousand). Besides Punjab and the north-eastern states, Haryana and Delhi also display a high prevalence of current opioid use as well as opioid use disorders. Thus, we see that for a union territory that has less than 1.5% of the Indian population it has high levels of substance abuse among most categories of substances. But even with this elaborate set of data across different populations, there was no specific data available on school-going children in Delhi. Hence this study was commissioned by Society for Transformation, Inclusion and Recognition through Sports (STAIRS)

OTHER STUDIES DONE SO FAR ON THIS SUBJECT

Studies on substance abuse have been done from as early as between 1977 and 1987 in India. One of the earlier studies revealed use over the past year, among college students, that alcohol was the most commonly abused substance (4 - 13 per cent), followed by tobacco (3 - 6 per cent), and minor tranquilizers (1 - 4 per cent). There were no reports of cannabis or opiate use (Mohan et al., 1985b; 1987)[3]. This trend has now changed over the years with cigarette topping most substance abuse patterns.

In 2004, the Ministry of Social Justice and Empowerment and the UN Office on Drugs and Crime (UNODC) jointly sponsored a survey[4] to measure the extent and pattern of the problem in India. It identified a mismatch between pockets of high use and availability of treatment centres.

A 2010 study with male school students in Uttarakhand showed more substance abuse among adolescents with good relationship with family members (44.3%) in comparison to adolescents having tensed (37.7%) family relationship. The study also showed lower prevalence of substance abuse (34.4%) among adolescents who have lost their one or both the parents in comparison to adolescents with both the parents alive (47.7%). The study also reported higher levels of substance abuse in nuclear families (48.8); however, Sarangi *et al* (2008)[5] reported significantly higher proportion of substance abuse among adolescents from joint family (47.3%). Peer pressure was the most common factor for substance abuse (52.8%) in the study by Sarangi *et al.* and Bansal *et al.*, similar to this study, findings of where it is revealed that in most of the cases (75.5%) friends were providing the substances [6].

[3] (Ray, 2004)

[4] (Ministry of Social Justice and Empowerment, Government of India and United National Office on Drugs and Crime, Regional Office for South Asia, 2004)

[5] (Sarangi L, 2008)

[6] (Saxena, Saxena, Kishore, & Kumar, 2010)

A 2011 study in Imphal, among senior secondary schools indicated that substance use was higher among males and those students whose fathers or siblings used substances. A majority of the students reported that their friends introduced them to substance use[7].

In 2013 the Government of India sponsored a national level survey to assess the drug abuse problem among children. The children were spread across 135 sites in 27 states and two Union Territories (including Delhi) and focussed exclusively on profile, pattern and types of substance use among children[8]. This NCPCR sponsored national level study had 347 respondents from Delhi. Among the sample, 242 (69.7%) children surveyed used tobacco, 80 (23%) used alcohol, 119 (34%) used cannabis, 136 (39%) used inhalants and 26 (7.5%) used pharmaceutical opioids (pharm. Op.). The sample included children who lived with families, went to school and those who were homeless[9].

A 2017 study in New Delhi among male adolescents revealed that adolescents who studied less than 10th standard reported more usage of any kind of substances than who studied more than 10th standard. More prevalence of substance use was seen among adolescents who were from nuclear family. Subjects who had less than two siblings reported more substance use[10]. More than half of the subjects (55.4%) who were using any kind of substances presently, of which, 60.7% were using the substance once or twice in a month. About 44.3% of the adolescents started to use substances before 13 years of age. Most common reason specified by the subjects to take substance was to be liked by friends (57.38%), to feel like an adult (24.6%), and few of them reported liking the feeling of substances (13.11%) as reason for taking substances. Common substances used by the subjects were any kind of tobacco (77.05%), inhalants (26.23%), and alcohol (11.47%). Most of the subjects were getting substances from their friends (85.25%) and only a few (14.75%) by themselves. In this study, none of the adolescents reported the use of heroin, opiates, and cannabis.[11]

[7] (Ningombam, Hutin, & Murhekar, 2011)

[8] (Sanyal, Singhal, & Sakshi, 2016)

[9] Ibid

[10] (Daniel, Krishnan, & Gupta, 2017)

[11] Ibid

In 2019, alcohol consumption in the world, measured in litres of pure alcohol per person of 15 years of age or older, was 5.8 litres, which is a 5% relative decrease from 6.1 litres in 2010.[12] The ABCD 2018 Cannabis Price Index report placed Delhi third for the most amount of weed smoked in the world[13].

The National Crime Records Bureau Report of 2021 saw a dip in cases filed against The Narcotic Drugs & Psychotropic Substances Act in 2020 which again recovered in 2021. 72,721 cases in 2019, 59,806 in 2020 and 78,331 in 2021[14].

CAUSES

Family: A recent study with school-going adolescents in Jaipur shows that the risk of drinking was 9 times more in students whose parents' drink. Parents occupation had a significant association with tobacco use risk (P=0.006), risk increased with decreasing position of parents[15]. Poor communication with parents is a key factor that leads to substance abuse amongst adolescents in Delhi (Kaushik, 2020). Higher level of substance abuse in nuclear families was also reported in a 2017 study with male adolescents in Delhi. Subjects who had less than two siblings reported more substance use [16].

Friends: Friends are the key source of substances and their initiation of substance use[17,18]. Teens considered the ease of access to substances within one's social circles, in the form of peer pressure, as a powerful contributor to their engagement substance abuse in Delhi. (Kaushik, 2020).

Easy Access: Research shows that access to 'hard drugs' like opioids is now accountable for driving adolescents toward substance abuse (Jasani et al., 2019). Similarly, Basu et al., (2004) reported that all the patients in their study, primarily young males (10–18 years), reported using inhalants as an addictive substance because of their easy accessibility. Malhotra (2007) also reported that children in India could easily procure several types of drugs, thus facilitating their gradual progression from non-use to tobacco and alcohol, then to marijuana, and ultimately to other drugs (Population Council & UNICEF, 2013) (Kaushik, 2020)

Vulnerability of a brain in development: The brain in children below 18 is not fully developed, hence the addictive patterns tend to stick. Plus, brain development research also shows that the maturing brain

[12] (WHO, 2022)

[13] http://weedindex.io/#fullstudy

[14] (Crime in India , 2021)

[15] (Dobhal, Kashyap, Dobhal, & Mattas, 2022)

[16] (Daniel, Krishnan, & Gupta, 2017)

[17] Ibid

[18] (Saxena, Saxena, Kishore, & Kumar, 2010)

may be particularly vulnerable to the acute effects of drugs, and that drug use during adolescence may significantly increase a young person's risk for developing a substance use disorder later in life (Casey, Jones, & Hare, 2008). Research has also indicated that adolescent substance users show abnormalities on measures of brain functioning, which is linked to changes in neurocognition over time. Abnormalities have been seen in brain structure volume, white matter quality, and activation to cognitive tasks, even in youth with as little as 1–2 years of heavy drinking and consumption levels of 20 drinks per month, especially if >4–5 drinks are consumed on a single occasion[19]. Thus, it can be seen that the role of brain is in two stages. Once, at the point of habit forming and next as a consequence of substance abuse.

Media and Social Media: Researchers found that, compared to nonusers or infrequent users of social media, regular users of social media were: 5 times more likely to buy cigarettes, 3 times more likely to drink and 2 times as likely to use marijuana[20]. More than $25 billion per year is spent in advertising tobacco, alcohol and prescription drugs and such advertisements have been effective too. Apart from advertisements, movies, especially R-rated have also had a tremendous impact on the lives of the people. They watch their favourite personalities / heroes use illicit drugs, tobacco and alcohols finding themselves more familiar with these and eventually end up using them[21]. Tobacco companies have to replace their customers who they lose to death, hence tend to cultivate young consumers who will likely be loyal to them for a longer duration.

STATE ACTION

Article 47 of the Indian Constitution provides that "The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health."

In 2012, the Ministry of Finance (Department of Revenue) issued a National Policy on Narcotic Drugs and Psychotropic Substances. The provisions of this Policy specifically related to children included strategies to curb drug peddling and reduction of sale of drugs to schoolchildren[22].

[19] (Squeglia, Jacobus, & Tapert, 2009)

[20] (Hilliard, 2019)

[21] (Bhadani & Balamurugan, 2018)

[22] (Sanyal, Singhal, & Sakshi, 2016)

In order to prevent substance use and dependence in the country, the Ministry of Social Justice & Empowerment formulated and enacted National Action Plan for Drug Demand Reduction (NAPDDR) (2018-2025)[23].

Ministry of Social Justice & Empowerment which is the Nodal Ministry for Drug Demand Reduction has formulated and launched Nasha Mukt Bharat Abhiyaan (NMBA) on 15th August 2020, in 272 Districts across 32 State/Union Territories identified as most vulnerable in terms of usage of drugs in the country. These vulnerable districts were identified on the basis of findings from the Comprehensive National Survey and the inputs provided by the Narcotics Control Bureau (NCB)[24]. Radhika Chakravarty, Joint Secretary, MoSJE[25] during the launch of the Nasha Mukt Bharat Abhiyaan said, "Over six crore people are involved in substance abuse in the country and out of them, more than 1.2 crore are children under the age of 18. These disturbing figures led to the launch of the Nasha Mukt Bharat Abhiyaan by the Ministry of Social Justice and Empowerment (MoSJE)"

Replying to a parliamentary debate on drug abuse the Home Minister Amit Shah stressed that the official policy of the government is to view the addict as a victim and the drug trafficker as the perpetrator[26]. MPs had suggested the use of sports and sports complexes to engage the youth in meaningful activities[27].

State governments have also not been behind in this endeavour. According to Tamil Nadu State Health and Family Welfare Minister, M. Subramanian, "Ever since the Dravida Munnetra Kazhagam (DMK) government came to power in Tamil Nadu, the authorities had seized 152.96 tonnes of the banned gutka and pan masala products, which was valued at Rs 9.19 crore, and had collected a fine of Rs 2 crore from traders who sold those banned products[28]

Use of role models is a useful tactic. Given that some of these behaviours are modelled by young people based on what is shown in the movies and celebrities, using them to steer the same youth towards positive behaviour could work. Launching the state-wide campaign against the drug menace and substance abuse in Kerala, Chief Minister Pinarayi Vijayan appointed the then Board of Control for Cricket in India (BCCI) president and former Indian cricket team captain Sourav Ganguly as the brand ambassador of the campaign.

---

[23] (Scheme of National Action Plan for Drug Demand Reduction , 2020)

[24] (https://nmba.dosje.gov.in/, 2020)

(PTI, 2021) [25]

[26] (Times of India, 2022)

[27] (Hindustan Times, 2022)

[28] (Deccan Chronicle, 2022)

SUBSTANCE ABUSE AND SDGS

Substance abuse is one of the global issues of the current times. So much so that they have a target under the third goal of Health for All. It also has it associated target and an indicator.

Target 3.5: Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

Alcohol, total per capita (15+) consumption (in litres of pure alcohol) (SDG Indicator 3.5.2)

But unfortunately, this is not one of the indicators that is tracked by the Niti Aayog that tracks India's performance against the SDGs. This could be a recommendation from this study, as things which get monitored get acted up on.

RECOMMENDATIONS FROM THE LITERATURE

The findings of a 2017 study (Kaushik, 2020) provide invaluable insights that could be translated into practical measures such as parental training programmes, family intervention therapy, media campaigns, school- and community-based programmes, and youth-centric services at substance de-addiction centres.

Sports has often been suggested as an antidote to substance abuse, especially with young people. Initially, a 2004 study[29] had expressed doubts if using vehicles like sports against drug abuse or crime had any effect at all. And if they had, which component of sport actually yielded the result. But these doubts are being answered in studies conducted in more recent times. A study[30] in 2005 warned that educators cannot assume all sports/physical activities have a positive relationship with youth substance use. In this study, school-sponsored, male-dominated sports appeared to be associated with an increased substance use risk for males, whereas out-of-school, mixed-gender sports appeared to be for females. A 2010 systematic review[31] provided an exhaustive review of 34 peer-reviewed quantitative data-based

[29] (Smith & Waddington, 2004)

[30] (Moore & Werch, 2005)

[31] (Lisha & Sussman, 2010)

studies completed on high school and college sports involvement and drug use. The studies reviewed suggest that participation in sport is related to higher levels of alcohol consumption, but lower levels of both cigarette smoking and illegal drug use.

In another 2012 study[32] in the United States (US), sports participation was associated with higher levels of alcohol use among all males and among 8th grade females who did not identify as high-risk takers. Despite being a risk factor for alcohol use, sports participation did demonstrate a promotive effect against marijuana use among 10th grade females only, and especially so for high risk-taking females (i.e., protective effect).

A 2018 study in Iran showed that membership in sports teams of a college, especially for females should be expanded, and preventive programs should be designed through sport in a professional way – in terms of timing and content - for males and females. In this study sport did not have an effect on reducing substance abuse in men but had in women[33].

A brand-new systematic review in 2022[34] has found a positive relationship between physical activity and adherence to addiction cessation treatment. This study considered open-access articles published between 2016 and 2021. Physical activity has been incorporated into coadjuvant treatments in combination with other pharmacological or behavioural treatments. These results strengthen the importance of promoting physical activity in rehabilitation and substance-withdrawal treatments. Complementarily, physical activity programmes improve other health variables that influence the quality of life, such as sleep quality and mood, and reduce the risk of social exclusion. Social exclusion has been cited as one of reasons for substance abuse.

It has also been noted that interventions designed to prevent other issues like HIV[35] have had a positive effect on reduction of substance abuse.

It should be observed that all these studies mentioned in this section are from outside India. The situation may be different in India which is not adequately covered in published evidence.

[32] (Dever, et al., 2012)

[33] (Ahmadabadi, 2018)

[34] (Castillo-Viera, Gago-Valiente, Giménez-Fuentes-Guerra, Abad-Robles, & Moreno-Sánchez, 2022)

[35] (Chhabra, et al., 2017)

CHAPTER TWO – METHODOLOGY OF THE STUDY

The 'Substance Abuse in Delhi Schools Survey' was carried out between December 12th and 17th, 2022. A total sample of 1,710 students and 388 parents or guardians was achieved after targeting 1,980 students and 550 parents or guardians. All students who were approached were studying between class 8th and 12th, spread across 110 schools spanning through all 11 districts of Delhi. The parents or guardians were interviewed in areas in the sampled school's neighbourhood.

The survey employed a Multi-stage Stratified Random Sample Design. At the first stage 110 schools were randomly sampled and finalized after checking that the sample included all types of schools in Delhi – Delhi Government schools, Public or Private schools, and all other types of schools such as Kendra Vidyalayas, Jamia Islamia schools and other aided schools. Pre-primary, primary, and middle schools were dropped from the master list from which the sample was drawn as the target was to interview students only from class 8th to 12th. The students were approached outside the school premises while parents or guardians were approached at their residences. All respondents were randomly selected applying the 'right hand rule.'

The data collection method employed was CAPI (Computer Assisted Interpersonal Interviewing) and all interviews were conducted face-to-face using an in-house Android application for data collection and transmission. Before starting the questionnaire, each respondent's Informed Consent was recorded after reading out the Statement of Informed Consent. Along with questions on experience, opinion and attitudes, a complete 'background section' of the instrument focused on gathering demographic information such as caste-community, parents' occupation, household income, etc.

Geo-tagging of respondents helped in monitoring movement, and variables such as time stamps helped in identifying systematic errors. A rigorous back check of 15 percent of the total interviews ensured high standards of data quality. All field investigators were trained in data collection methods in a day long Training Workshop. A team of experienced supervisors supervised their work.

The quantitative analysis in this study was done using Microsoft Excel and Epi Info 7.2.5.

The Focused Group Discussion was conducted virtually. It was facilitated by a STAIRS member of staff, and recorded by a volunteer. It was a free-flowing discussion based on loosely structured questions based on the objectives of the study. The profile of the participants included two teachers, two psychologists, two schoolteachers, two social workers, one advocate, one researcher and a community member. Participants to the FGD were chosen based on their expertise or relevance to the subject. The FGD was conducted to complement the surveys delving on the push and pull factors

involved in the substance abuse practices of students. Salient points from the FGD have been incorporated into the findings and recommendations of the study.

CHAPTER THREE - FINDINGS OF THE STUDY

SOCIO-DEMOGRAPHIC PROFILE OF THE RESPONDENTS

The survey was conducted with 1710 students (34% female and 66% male) and 379 parents in Delhi covering all the districts of the National Capital Territory of Delhi. **Students** were chosen from Class 8 and above. Majority of the students were from Class 12 (30%). Seven types of schools have been included in the study: Government Schools, New Delhi Municipal Corporation (NDMC) Schools, Kendra Vidyalaya Sangathan (KVS) Schools, Delhi Cantonment Board (DCB) Schools, Jamia Millia Islamia Schools, Government Aided Schools and Public Schools Recognised by Department of Education (DoE). About 20% of the students were from private schools, the rest from different forms of Government/aided schools.

The age of the students ranged from 8 to 20 with the majority at the median age of 16. 87% of the students live with their parents/family. Majority of 46% of the students are from General category. There were more than 50 communities represented in the sample. The highest single community at 8.6% were Brahmins, followed by Bangria and Rajput. In truth, 14% didn't know or did not want to say their community. Three-fourths of the sample are Hindus, followed by 15% of Muslims. Christians, Sikh, Buddhists and Jain make up the rest of the sample. Sikhs (77%) and Jains (59%) had their population skewed towards the General castes while other religions were better spread across the castes. Majority of the students have their ancestors coming from Bihar (15%), followed by Haryana (13%) and Western Uttar Pradesh (10.4%).

The average education of the fathers of students is Intermediate education and of the mother is Matric. It should also be noted that after Matric the next highest cohort of education of mothers in the sample is Non-literate. Majority of the fathers are in Private job (51%) while a majority of the mothers are Homemakers (51%).

In terms of activities with which students engage themselves, using the internet for leisure activities (chats, music, games, social networks, videos, etc.) topped the list with 72% involved in it almost every day. This was followed by going around with friends to shopping centres, streets, parks, etc., going out in the evening (to a disco, cafe, party, etc.) just for fun and then reading books for enjoyment. Interestingly 35% of the students have reported to have never played computer games. So, one would assume the internet is used through the mobile phone.

In the **Parent's survey**, 24% reported that they were involved in the daily lives of their students while 24% reported that they were not involved at all. Majority of the parents (62%) were parents of a single child. About 60% of the parents use the internet for leisure activities. The average qualification of parents was at the Intermediate level. Most of the parent respondents were in a private job. Their average household income is ₹10,000 - ₹20,000/- Most of the parents were from the General Caste, followed by OBC, SC and ST in that order. Majority of the parents were Hindus (77%), followed by 11% of Christians, 4% of Sikhs, 3% each of Christians and Jains and 2% of Buddhists.

ACCESS TO SUBSTANCES

On an average a majority of 30% of the students found it very difficult to access most of the substances that are abused. Whiskey, rum, gin and vodka had an interesting response. While 23% felt they had easy access to it, 31% found it to be very difficult. Of the statements presented to students on reasons for substance abuse majority of students (62%) of the students either agreed or fully agreed to the statement that "Ever since private wine shops have come up in Delhi, buying alcohol has become much easier." The same percentage of parents also agreed to this statement. As shows in Table 1 for all substances, students who said access to substances was easy or very easy were more likely to try them (r-0.5). This is in line with studies already done (Jasani et al., 2019, Basu et al., 2004, Malhotra 2007,Population Council & UNICEF, 2013 and (Kaushik, 2020))

Ease of access vs Trying a substance	**Cigarette/tobacco**	**Beer or wine**	**Whiskey, rum, vodka, gin, etc.**	***Charas, ganja, bhang, sulfa, afeem, etc.***	**Cough syrup, isotonitazene,codeine, flubromazolam, etc.**	**Smack, heroin, crack, cocaine, white powder, etc.**	**Gasoline, rubber solution, glue, etc.**
Can't say/Don't Know	7.55%	6.56%	2.15%	2.01%	1.82%	1.62%	1.06%
Difficult	25.51%	10.16%	4.29%	2.11%	7.77%	5.56%	1.68%
Easy	51.25%	40.14%	30.05%	41.02%	51.95%	19.33%	26.67%
Very Easy	41.25%	41.75%	22.63%	21.00%	65.00%	7.94%	20.00%

Ease of access vs Trying a substance	Cigarette/tobacco	Beer or wine	Whiskey, rum, vodka, gin, etc.	*Charas, ganja, bhang, sulfa, afeem, etc.*	Cough syrup, isotonitazene,codeine, flubromazolam, etc.	Smack, heroin, crack, cocaine,	Gasoline, rubber solution, glue, etc.
Neither Difficult Nor Easy	27.51%	19.90%	15.38%	13.14%	12.90%	11.18%	12.61%
Very Difficult	8.55%	4.97%	3.57%	1.47%	3.15%	0.99%	1.69%
Average	33.63%	23.22%	12.16%	9.65%	16.37%	4.50%	4.04%

Table 1 : Relationship between Ease of Access and Trying a substance

SUBSTANCE USE BY FRIENDS OR FAMILY

At least 30% of the students agreed that cigarette/tobacco or beer or wine were commonly used by students they know. Students who feel that substance use is very common or common around their schools are more likely to try a substance themselves (r-0.44). About 30% of the Parents felt that cigarette/tobacco is Very common among students. This shows that parents have an increased perception of cigarette smoking prevalence than the students.

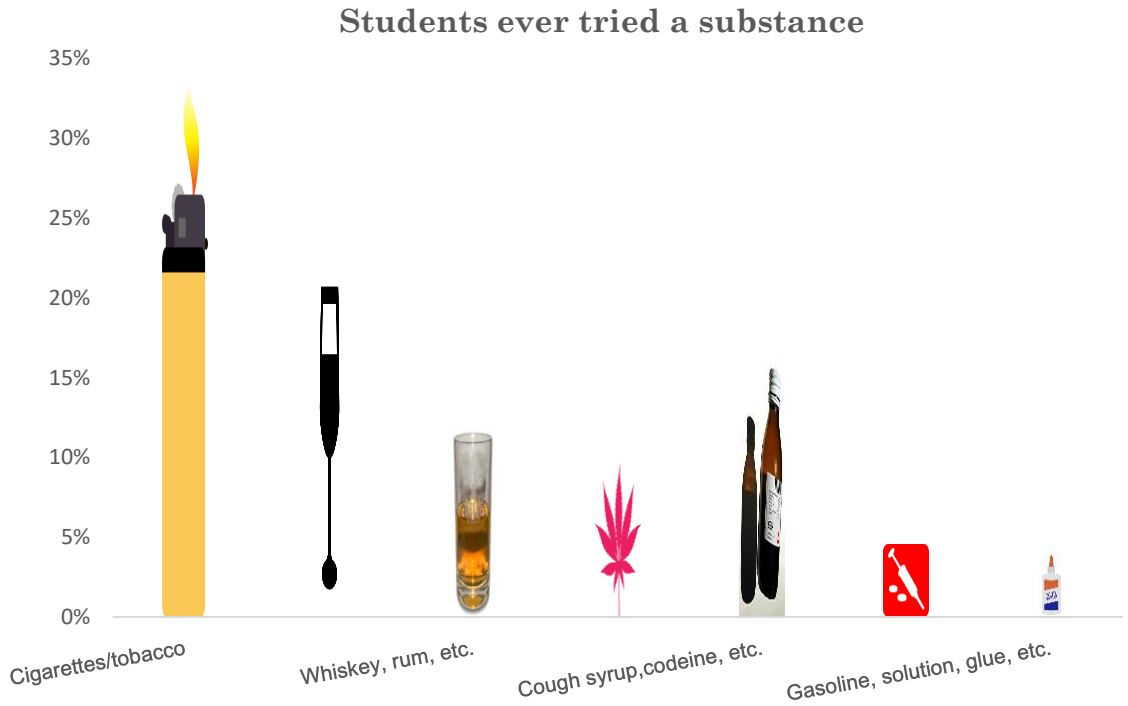
50% of the students reported that they have a close friend who uses any substance. Table 2 shows that when a close friend uses substance students are more likely to themselves use substance on a habitual basis. Of the 50%, 15% were females who reported they had a close friend who uses any substance. Close to 48% (15% female) reported that their parents were addicted to substances such as cigarettes/tobacco, beer or drugs. In reality 58% of the parents responded that there was an adult addict in their family. If half the students have a close friend who uses any substance and if about half the students have an adult addict as parent, it is clear that students grow in an environment where substances are routinely abused. More than half of the respondents in the parents' interview admitted that there was an adult addict in their families. But having an addictive parent does not seem to have had an effect on students trying to abuse a substance. This is slightly different from what was observed in other studies like (Kaushik, 2020).

	Habitual use of substance	
Close friend uses substance	**Yes**	**No**
Yes	27.62%	72.38%
No	8.72%	91.28%
Don't know	9.72%	90.28%
Grand Total	18.25%	81.75%

Table 2: Close friends using substance vs becoming a habitual user of substance

PREVALENCE AND EXTENT OF SUBSTANCE USE IN DELHI SCHOOLS

47.3% of the students have tried at least one substance at some point in their lives. This also includes 12% of girls. 25% of the students have tried more than one substance. Cigarettes/tobacco (34%) was the substance most students had ever tried, followed by Beer or wine (23%) and Cough syrup, isotonitazene, codeine, flubromazolam (16.4%).



8.6% of the students have tried at least one substance below the age of 10 or below. 25% of those who have ever tried Cough syrup, isotonitazene, codeine, flubromazolam and 12% of those who have ever tried Gasoline, rubber solution, glue, etc. have done it before the age of 10. 15-16 is the age where most students have ever tried Cigarettes/tobacco, Whiskey, rum, vodka, gin, etc. or Charas, ganja, bhang, sulfa, afeem, etc.

83% of students interviewed in NDMC schools (n=104) have tried at least one substance of which 32% by the age of 10. No other type of school comes close to this.

84% of students in New Delhi district have tried at least one substance. 20% of students in the districts of New Delhi and Shahdara each have tried a substance before the age of 10.

Students from the Scheduled Tribes are more likely to try a substance followed by students from Scheduled Castes, and Other Backward Castes.

In terms of extent of abuse, cigarette or tobacco is the most abused with about 10% of the students using it more than 31 times in their lifetime. No other substance comes close to this. This is in line with what other studies had found for instance, Sanyal, Singhal, & Sakshi, (2016). As seen in Table 1Table 3 below for those who used a substance more than 20 times (whom we classify as habitual users), students from Government schools fared at 4.4%, Private school at 5.3% and Others at 5%. Except Cough syrup and codeine, the incidence of habitual users (more than 20 times) was higher in Private schools than Government schools.

	Government (n=1055)	Others (n=331)	Private (n=324)
Having a close friend who uses substance	51.9%	37.2%	58%
Parent who is an addict	46.9%	40.8%	57.1%
Have tried at least one substance	47.7%	54.1%	38.9%
Have tried a substance before the age of 10	10.4%	9.4%	1.9%
Habitual user of substance	4.4%	5.0%	5.3%

Table 3: Type of schools and the pattern of substance use

Table 4 talks about the different elements in the patterns of abuse among students and parents. A quarter of the students have tried a cough syrup and associated prescription drugs before the age of 10. Cigarettes is the most abused both at the level of more than 5 times and at the level of habitual use (more than 20 times). This pattern is also reflected in the parents' survey. Even the adults have answered that the adult addict in the family uses tobacco and so does the parent. If these substances were divided into two categories – traditional and non-traditional, cigarettes/tobacco, beer or wine and whiskey or rum would fall under the traditional category. Cough syrup, marijuana (*charas, ganja*), *sulfa, afeem,*

smack, heroin, crack, cocaine, white powder, gasoline, rubber, glue, solution etc., would fall under the non-traditional category. Cigarettes/tobacco is used/abused the highest under the traditional category both by students and adults. Cough syrup and associated prescription drugs are abused the highest in the non-traditional category.

Different elements about the patterns of abuse among students and parents	Cigarettes/tobacco	Beer or wine	Whiskey, rum, vodka, gin, etc.	Charas, ganja, bhang, sulfa, afeem, etc.	Cough syrup, isotonitazene,codeine, flubromazolam, etc.	Smack, heroin, crack, cocaine, white powder, etc.	Gasoline, rubber solution, glue, etc.
Students ever tried a substance	33.6%	23.2%	12.2%	9.6%	16.4%	4.5%	4.0%
Sub. Abuse Very Common according to Parents	27.2%	16.9%	10.6%	7.7%	10.3%	1.6%	2.1%
Sub. Abuse Very Common according to students	14.1%	9.9%	5.6%	3.5%	10.2%	1.9%	2.9%
Students trying a substance @ age<10	10.3%	8.8%	3.8%	5.5%	24.6%	6.5%	11.6%
Students trying a substance >5 times	22.4%	13.4%	9.4%	8.0%	13.9%	3.3%	3.5%
Habitual users of substance (students)	12.4%	4.2%	3.6%	4.1%	4.7%	1.9%	2.0%
Adult addict in a family of a parent respondent	43%	33.8%	23.2%	11.6%	20.6%	2.6%	3.4%
Parent an addict according to parent respondent	55.2%	43.8%	50.0%	25.0%	47.4%	20.0%	0.0%

Table 4: Different elements about the patterns of abuse among students and parents

A majority of 46% of the students felt that people consume substances as it creates social bonding and connection with peers. This was followed by students considering it to be fashionable and allowing people to have fun. This was also reflected in the group discussion with stakeholders relevant with substance abuse among students.

In reality about 34% of the students have ever tried cigarette/tobacco according to this study. In terms of time of use, majority said that students in general are likely to use after school (62%) followed by weekends or holidays (51%).

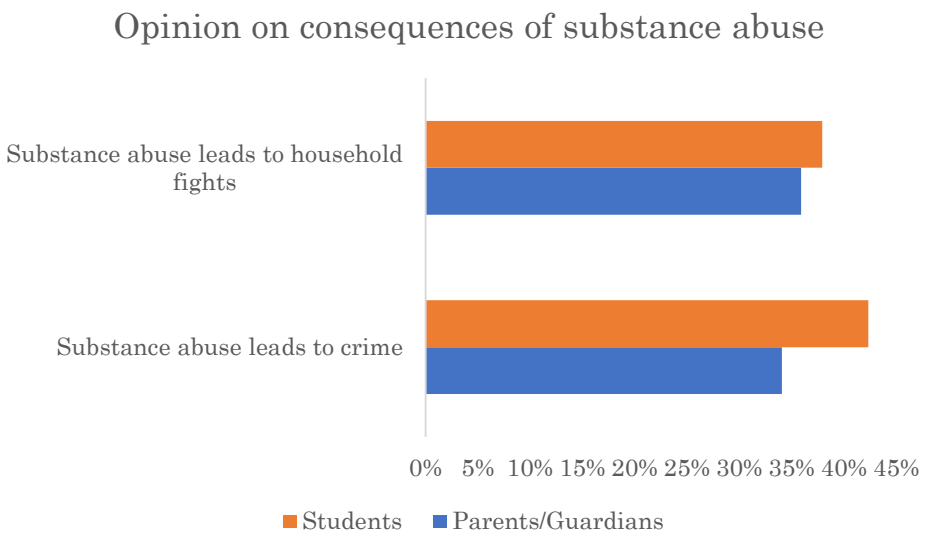
There is no discernible pattern between students engaging in sports and having tried a substance to use. Students who never engage in sports are as likely to abstain from abusing substance as those who play almost daily.

CONSEQUENCES OF SUBSTANCE USE

The consequence most often faced by students (71%) when caught abusing substances is that parents/guardians are summoned to the school. On the other hand, about 50% said students faced physical beating. There were also instances when students would be Referred to treatment and rehabilitation or referred to a guidance/counselling.

In terms of interventions at school, 'random checks for drugs and substances of abuse' and 'Awareness talks on drugs and substance abuse' have been reported by parents the highest at about 36%. This was also echoed by the stakeholders in an FGD.

Majority of the parents consult the schoolteacher when their child gets into trouble and faces a complaint. The next biggest choice of parents was to punish their children on such complaints. As parents continue to trust the schoolteachers, teachers could serve as an effective partner with the parent in addressing the issue of substance abuse.



Both the students and the guardians fully agreed that substance abuse leads to petty crime and household fights. The experts consulted in the FGD also suggested that opioids could lead to Bipolar, mood disorders, schizophrenia, impact on neurodevelopment and vulnerability increase for ADHD. With mood disorders leading to substance abuse disorders, this becomes a vicious cycle. Substance abuse in adolescents is highly detrimental as it affects neurodevelopment at a time when the brain is still in its formative stage. Habits formed at this stage hence have a deeper effect on the lives of young people even at their later stages of life. Hence this needs to be combated with all means at our disposal so that young people go on to lead full and healthy lives contributing their best potential to the society.

CHAPTER FOUR – RECOMMENDATIONS

72 percent of the students and 60 percent of the parents interviewed use the internet for leisure activities almost daily. This could be explored as a medium to spread awareness on substance abuse. As the internet is the platform where both the students and their guardians spend time everyday it makes sense to use the same to reach them. But it needs to be done in an interesting and engaging manner so that students and guardians engage themselves in substance abuse awareness in lieu of the entertainment they were accessing on the Internet.

Most of the parents (44 percent) like to consult the schoolteacher when their child gets into trouble and faces a complaint. Teachers could serve as an effective partner with the parent in addressing the issue of substance abuse. In terms of interventions at school, 'random checks for drugs and substances of abuse' and 'awareness talks on drugs and substance abuse' have been reported by parents the highest at about 36 percent. Even if the school or the teacher initiates their activities against substances, it needs active cooperation from the parents. If parents are addicts, they should seek help. An adult addict in the house of a child often means easy access to substances for the child.

Students are attracted to substances as it is considered 'cool' in the social and mainstream entertainment. Targeted messaging and positive young role models can help address this. Special attention should be given to the rising case of students abusing substances that are illegal even for adults, like *charas*, cocaine and non-traditional substances like cough syrup, solution and glue etc., As some of these are readily available like a whitener, limiting their access needs further alacrity from those in charge of law and order.

The Union Government in a parliamentary debate in December 2022 has reiterated its stance to view a substance user as a victim and not as a culprit but will act with zero tolerance on those involved in the transit and trafficking of substances. MPs had suggested the use of sports and sports complexes to engage the youth in meaningful activities. Future studies should explore the actions and their outcomes as a result of this debate.

Lastly, substance abuse also is one of the SDG indicators as part of Goal 3. At present it is not one of the composite indicators tracked by the Niti Aayog in its SDG dashboard. This study could be used as evidence to highlight the need to include SDG 3.5.2 as one of the indicators that would be monitored by the Government. This will shed light and emphasis on the issue.

CHAPTER FIVE – CONCLUSION

Delhi faces a high prevalence of substance abuse, with school-going children starting to abuse even below the age of 10. As the child's brain is still at the formative stage addictive behaviours developed so young can cause a lifetime of damage. Easy access and peer acceptance are contributory factors. Smart use of the internet, parent-teacher collaborations and continuous accountability of associated government proposals and actions on policies such as sales and distribution of substances should be explored to address this menace which is taking the shape of an epidemic. The momentum is now there fresh after the Parliamentary debate of December 2022. There was bipartisan consensus that drugs are wreaking havoc in the lives of the young people, and it needs to be addressed at a war-footing. Civil society has a dual role to play. One to hold the policymakers to account on all the promises made. And two to collaborate with the government in identifying the most effective strategies in spreading awareness, improving treatment adherence for help- seekers and facilitating a smooth rehabilitation for addicts.

BIBLIOGRAPHY

Ahmadabadi, S. (2018). Sports Activity and Smoking, Alcohol and Drug Abuse among Students. . .. . *Annals of Applied Sport Science, 6*, 47-56. doi:10.29252/aassjournal.6.1.47

Ambedkar, A., Agrawal, A., Rao, R., Mishra, A., Khandelwal, S., & Chadda, R. (2019). *Magnitude of Substance Use in India.* National Survey on Extent and Pattern of Substance Use in India (2019). New Delhi: Ministry of Social Justice and Empowerment, Government of India.

Bhadani, T., & Balamurugan, J. (2018, October). Media and Substance Abuse. *International Journal of Research in Engineering, Science and Management, 1*(10), 262-268. Retrieved from https://www.researchgate.net/publication/344607381_Media_and_Substance_Abuse

Casey, B. J., Jones, R. M., & Hare, T. A. (2008). The adolescent brain. *Annals of the New York Academy of Sciences, 1124*, 111–126. doi:https://doi.org/10.1196/annals.1440.010

Castillo-Viera, E., Gago-Valiente, F., Giménez-Fuentes-Guerra, F. J., Abad-Robles, M. T., & Moreno-Sánchez, E. (2022, Septembre 10). Physical Activity Programmes in the Treatment of Addictions: A Systematic Review. *Applied Sciences, 12*(9117). doi: https://doi.org/10.3390/app12189117

Chhabra, R., Springer, C., Sharma, N., Ghosh, S., Teitelman, N., & Sharma, S. K. (2017). The effectiveness of a community engaged prevention focused program for youth in schools of Punjab, India. *Indian Journal of Health & Wellbeing*, 822-825.

(2021). *Crime in India* . National Crime Records Bureau. Retrieved from https://ncrb.gov.in/sites/default/files/CII-2021/CII_2021Volume%201.pdf

Daniel, L. T., Krishnan, G., & Gupta, S. (2017). A study to assess the prevalence and pattern of substance use among male. *Indian Journal of Social Psychiatry*, 33:208-12.

Deccan Chronicle. (2022, August 11). *Deccan Chronicle.* Retrieved December 10, 2022, from www.deccanchronicle.com: https://www.deccanchronicle.com/nation/in-other-news/110822/over-30-lakh-students-to-campaign-against-drugs.html

Dever, B. V., Schulenberg, J. E., Dworkin, J., O'Malley, P. M., Kloska, D. D., & Bachman, J. G. (2012). Predicting risk-taking with and without substance use: the effects of parental monitoring, school bonding, and sports participation. *Prevention Science, 13*(6), 605-615. Retrieved 12 22, 2022, from https://ncbi.nlm.nih.gov/pmc/articles/pmc3632648

Dobhal, P., Kashyap, A., Dobhal, A., & Mattas, S. (2022). Substance abuse – An emerging problem among school-going adolescents of Jaipur, Rajasthan. *Asian Journal of Medical Sciences, 13(9)*, 156–163. doi:https://doi.org/10.3126/ajms.v13i9.44381

Griswold, K. S., Aronoff, H., Kernan, J. B., & Kahn, L. S. (2008). Adolescent substance use and abuse: recognition and management. *American Family Physician, 77*(3), 331-336. Retrieved 12 22, 2022, from https://ncbi.nlm.nih.gov/pubmed/18297958

Hilliard, J. (2019, July 16). The Influence Of Social Media On Teen Drug Use. Retrieved January 7, 2023, from https://www.addictioncenter.com/community/social-media-teen-drug-use/

Hindustan Times. (2022, 12 21). Harsimrat Badal targets Punjab CM Bhagwant Mann during debate in Lok Sabha on drug abuse. Retrieved 1 8, 2023, from https://www.hindustantimes.com/india-news/harsimrat-badal-targets-punjab-cm-bhagwant-mann-during-debate-in-lok-sabha-on-drug-abuse-101671561077680.html

https://nmba.dosje.gov.in/. (2020). Retrieved December 22, 2022, from Nasha Mukt Bharat Abhiyaan: https://nmba.dosje.gov.in/

https://www.cancer.gov/publications/dictionaries. (n.d.). (National Cancer Institute) Retrieved 12 23, 2022, from www.cancer.gov: https://www.cancer.gov/publications/dictionaries/cancer-terms/def/psychoactive-substance

https://www.cancer.gov/publications/dictionaries. (n.d.). (National Cancer Institute) Retrieved 12 23, 2022, from www.cancer.gov: https://www.cancer.gov/publications/dictionaries/cancer-terms/def/psychoactive-substance

Juyal, R., Bansal, R., Kishore, S., Negi, K. S., Chandra, R., & Semwal, J. (2006). Substance Use Among Intercollege Students in District Dehradun. *Indian Journal of Community Medicine, 31*(4). Retrieved from https://www.indmedica.com/journals.php?journalid=7&issueid=83&articleid=1105&action=article

Kaushik, V. (2020). Getting the Monkey Off Your Back: Teen Perceptions of Substance Abuse among their Peers in Delhi. *Journal of Psychosocial Research*, Vol. 15 Issue 2, p683-697. 15p.

Lisha, N. E., & Sussman, S. (2010). Relationship of high school and college sports participation with alcohol, tobacco, and illicit drug use: a review. *Addictive Behaviors, 35*(5), 399-407. Retrieved 12 23, 2022, from https://ncbi.nlm.nih.gov/pmc/articles/pmc3134407

Ministry of Social Justice and Empowerment, Government of India and United National Office on Drugs and Crime, Regional Office for South Asia. (2004). *The Extent, Pattern and Trends of Drug Abuse in India: National Survey*.

Moore, M. J., & Werch, C. E. (2005). Sport and physical activity participation and substance use among adolescents. *Journal of Adolescent Health, 36*(6), 486-493. Retrieved 12 23, 2022, from https://sciencedirect.com/science/article/pii/s1054139x04002605

Nadeem, A., Rubeena, B., Agarwal, V. K., & Piyush, K. (2009). Substance abuse in India. *Pravara Med Rev, 4*(4).

Ningombam, S., Hutin, Y., & Murhekar, M. V. (2011). Prevalence and pattern of substance use among the higher secondary school students of Imphal, Manipur, India. *Natl Med J India, 24:11-5.*

PTI. (2021, November 12). *Deccan Herald.* Retrieved December 10, 2022, from deccanherald.com: https://www.deccanherald.com/national/national-politics/drug-abuse-grave-issue-country-is-facing-says-virendra-singh-1050053.html

Ray, R. (2004). *https://www.unodc.org/documents/india/.* Retrieved December 11, 2022, from www.unodc.org: https://www.unodc.org/documents/india/ddch2.pdf

Sanyal, K., Singhal, N., & Sakshi. (2016). *Drug Abuse Among Street Children.* New Delhi: Vidhi Centre for Legal Policy.

Sarangi L, H. P. (2008). Substance Abuse Among Adolescents in Urban Slums of Sambalpur. *Indian Journal of Community Medicine*.

Saxena, V., Saxena, Y., Kishore, G., & Kumar, P. (2010). A Study on Substance Abuse among School Going Male Adolescents of Doiwala Block, District Dehradun. *Indian Journal of Public Health, 54*(4).

(2020). *Scheme of National Action Plan for Drug Demand Reduction* . New Delhi: Government of India, Ministry of Social Justice and Empowerment.

Smith, A., & Waddington, I. (2004). Using 'sport in the community schemes' to tackle crime and drug use among young people: Some policy issues and problems. *European Physical Education Review, 10*. doi:10.1177/1356336X04047127

Squeglia, L. M., Jacobus, J., & Tapert, S. F. (2009). The Influence of Substance Use on Adolescent Brain Development. *Clinical Eeg and Neuroscience, 40*(1), 31-38. Retrieved 12 24, 2022, from https://ncbi.nlm.nih.gov/pmc/articles/pmc2827693

Times of India. (2022, 12 21). Dirty money is weakening our economy': Home minister Amit Sh .. Retrieved 1 8, 2023, from https://timesofindia.indiatimes.com/india/dirty-money-is-spoiling-our-economy-home-minister-amit-shah-on-drug-menace/articleshow/96395073.cms

WHO. (2022, December 10). *www.who.int/data*. Retrieved December 10, 2022, from WHO: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/total-(recorded-unrecorded)-alcohol-per-capita-(15-)-consumption