

## Drug Abuse in Teenagers

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### Abstract

*Teenage drug abuse is a significant public health concerns with far-reaching consequences. This abstract provides on overview of the prevalence, contributing Factor and consequences of drug abuse among adolescents. Drug abuse remains persistence and multifaceted issue globally, affecting individual's families and society. Factors that influence the teenagers to experiment with drugs, including peer pressure, family dynamics and predisposition. The abstract also describes the various substance abused by teenagers, such as alcohol, marijuana, prescription medication and illicit drugs, highlighting their short term and long-term effect on physical and mental health. Additionally, it outlines evidence-based prevention and intervention strategies aimed at addressing teenage drugs abuse, emphasizing the importance of early identification, education and support. By understanding complexities drug abuse and implementing drug invention, communities work towards mitigating its adverse effects and promoting the wellbeing of adolescents. Pharmacy plays an important role in addressing teenagers drug abuse through education, screening, intervention and referral services. This Focus on the role of pharmacies in treatment and prevention. Pharmacist can educate adolescent and their patients about the risk of drug abuse; proper medication uses and healthy. They can also conduct screening assignment to identify at risk individuals and provide intervention and naloxone dispensing for opioid overdose prevention. Collaboration with schools, healthcare providers and community organization are essential to comprehensive prevent and treatment program targeting teenagers. This include promoting parental involvement, implementing social based prevention, offering youth friendly services and expanding access of substance abuse treatment and harm reduction services.*

**Keywords:** Teenagers, alcohol, marijuana, prescription medication and illicit drugs.

### INTRODUCTION

Abuse of drugs is defined as excessive, compulsive, and repeated drug usage. It's a chronic illness that can harm a person's physical and emotional well-being.

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Drug Abuse among teenagers is the one of the largest problems in India as many other countries. Drug abuse has been raising a social and economic problem in India. Drug abuse is a physiological disorder. Which leads to psychoactive substance obviously higher risk of Physical, emotional, mental health problems and illicit drugs [1, 2]

The years between childhood and maturity are known as adolescence. The age ranges from 10 to 14 is known as adolescence, while the range from 15 to 19 is known as late adolescence. Despite the drug misuse dated back to four hundred years ago. India began to discover drugs in the second decade of the 1900s. in the 1920s. I am unable to halt drug abuse research conducted by the National Institute of Mental Health (NIMH) and the National Institute

on Drug Abuse (NIDA). India has been a young population with 40% being below the age of 18 years every year about 55,000 Children's are taken by the abusing, India is estimated to have more than 449, millions of children below the age of 18 years and out of which 35 million children are used as abusing the drug, India has the highest proportion of adolescent's population. 22.8%. The WHO recognize the psychoactive substances those drugs self-administrated by mental and behavioral. disorder which leads to abuse, addiction and dependence. The early leads to drug abuse users include like alcohol 62.5 million users, opium 2.7 million users. Cannabis. 8.7 million users Marijuana. 8.3 million users Ganja 9.0 million users. Drug and alcohol abuse in teenagers has become a major health issue. The two major reasons for teenagers to use drug is because of pressure and curiosity and also for emotional stress and strain that leads to abuse of drug. Among 76.3 million people mental disorder have causing a suicidal death 3 million cause of premature death. Drug abuse can lead to impact not only on individuals but also in family, society and nation which are almost in 18 to 35 years age. As Estimated 208 million people internationally consume of legal and illegal. most commonly used drug as marijuana. 3.9% between the age of 15 and 24. Further increase the abuse on risk of infection like HIV, hepatitis B, C, sexual transmitting diseases and infective endocarditis [3, 4].

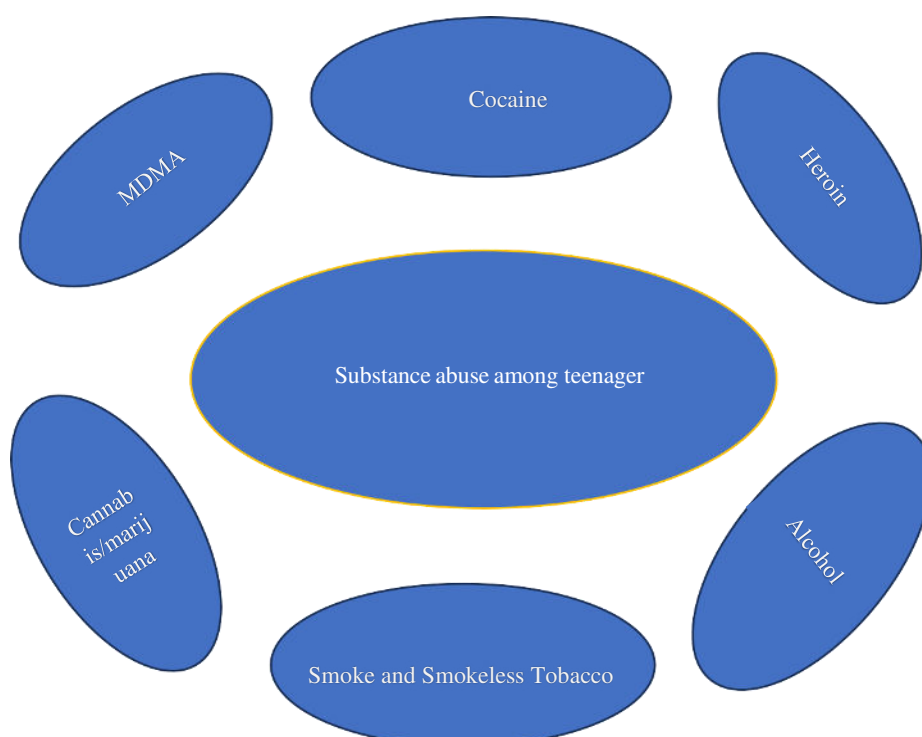
### What is Drug Abuse?

Drug Abuse is referred to maladaptive pattern use of drug. It is a non-permissive or non-therapeutic consumption use of illegal drugs or misuse certain use of drugs that may lead to physical and Psychological Dependence [5].

### Examples

Drug abuse includes the misuse of Prescription medications, such as higher dose or someone else prescription or using the medication of non-medical purpose illicit drug like cocaine, Heroin, Anabolic steroids, Inhalants, Methamphetamine, Club drugs can also be abused.

As teenagers often with a variety of activities and substance that leads to drug abuse. It is a growing problem among teens. Drug abuse often leads to serious consequence in teenagers and in adulthood. In fact, the students are too young and are too engaging in such behavior Figure 1.



**Figure 1.** Substance abuse among teenagers.

### **How does Drug abuse Influence Among Teenagers**

- This Drug abuse influence the family Process and peers with risk behavior of adolescent. The factor was influenced by the Family Activities, Parent Child Relationship and friend's influencer will influence the behavior in Adolescence. Which impact on Adolescence Smoking, Drinking and illicit drugs. Peer influence is the one of the top reasons for Adolescents. Adolescents tends to pick up the smoking and drinking from the Friends (36% to 43.3%.) And family activities and illicit drugs [6].
- Among, children's Age group (11 to 14) are taken illicit drugs of smoking. 22% to 16.1% and alcohol among young age group (19 to 35) to 44% to 31%. Use. Total 805 students. An influence from the drug abuse from secondary school by smoking 54.4%. and Drinking 89.4% are recognized on adolescents. as people in India have highest dying by age 50. Usually, 3900 death each year among people under the age of 21 years [7].
- The factor that originally influenced 95% of teens between the ages of 12 and 17 to use social media was exposure to peers who were smokers, drinkers, and users of illegal drugs like marijuana. Before they are fifteen, 90% of teenagers are first exposed to drug use on social media.
- In fact, the National Institute of Drug Abuse the latest statistic Shows that nearly 20% of higher school students are offered, sold and given drugs. Among teenagers, it was found that 43% drug as in higher schools, 58.5% of alcohol are used among 12th grade, 6 to 16% drove on roads after drinking, 16 to 10% of marijuana are using among 12th grade in higher schools, 10 to 7% of teenagers Students are misusing of drugs.
- Some researchers found differences in parental smoking among girls and boys that the girls were more influenced than boys.
- The factors influenced by the group viz Demographic factor, social cultural factor, and economic factor [8].

*Demographic factor:* It plays an important role in Implants and drug and this section is by gender by the age and education. It has the higher Propulsion in male abusing the females

*Social culture factor:* Play an important role in influencing drug and substance abuse in peer pressure, Motivational factor, release stress.

*Educational factor:* It was differentiated using jobless influencing high poverty, lead cost of opening drug, most influence factor for drug abuse.

- The analysis of the year response rate within school were 81% for 12th grade students and 84% for 10th grade students. The term of drug use was in females 51% ranges from 51–53 in 2017–2021. The increase in teenagers' nicotine vaping since 2017 and early in 2023. The increasing of the previous year at 22% in 2020, 32% in 2021, 4% in 2022.
- Among teenagers like more than 80% of the students has rapidly increasing from 92%-80% of drug vaping like tobacco, nicotine, cigarette, marijuana and alcohol. The troubling epidemic on youth vaping threatens to effect in combatting tobacco increase in teenagers vaping from 2017–2022 [9].

### **CONSEQUENCES FACTOR INFLUENCE ON TEENAGERS**

- Influence under theories of tobacco, alcohol use culture and personal
- Poor relationship between interaction with parents and smoking initiation
- Aggressive behavior and peer pressure among children and adults
- Family history of addiction
- Taking history additive drug
- Money issue
- Sexual activity

- Drug dependence
- Mental health disorder
- Change in school performance
- Impaired driving

This may have long term consequences that leads to risky changes effect on brain function behavior that influence likely to abuse the drug use among children and adolescents [10].

### **Marijuana**

Marijuana use has highly increased among adults in 2020 – 2022. Marijuana has termed as cannabis. It is most prohibited substances. In 2023 there is a decrease in young adult due to pandemic COVID-19 level from 2020–2021. The vaping of marijuana has increase from past 3 years among adults from 31.4% in 2020, in 2020 -32.6%,11.4% in 2022. Currently vaping of marijuana in young adult age 11–19 is 2.9% and adult age of 25–60 is 9.5%. Most of marijuana use in male 37% in age group of 12–17 and in females 12% and among adults has 38% of use among age group 25–35. Currently more than 20% of marijuana use in teenage Figure 2.

### **Alcohol**

In India, among young adults, alcohol is also increasingly being used as a drug of abuse. And the largest rate of alcohol consumption is among adults. Alcohol use in college student is higher than the non-college. 60% are from the college student and 56.4 from non-college [11]. Currently in India, 14.6% of population of people using alcohol in between the age of 12 to 25 years. Among young adults, has increased rate 79.3% at age group of 25 to 60 and Indian adults age group of 12 to 19 has a rate of 38% of use. Almost 40 to 43% of school children’s consuming the alcohol. In men 15.9% and in women 17.7% family consumption is the factor taking alcohol among children and adolescents Figure 3.



**Figure 2.** Marijuana.



**Figure 3.** Alcohol.

### **Cigarette**

Adults have the highest prevalence of cigarette smoking. Addiction to drugs while smoking has a 14% impact on young people, and between 30% and 40% of them have higher rates of cigarette smoking. Males who smoke consume more than females do, with younger men being the main users. Mostly 3% to 10% per day of all age group regular smokers are using cigarette smoking among teenagers. Men was more common substances peers like tobacco and nicotine, especially selective use [12]. Now in India women has higher substance use 62.1% to 58.9% among current users consumed Figure 4.

### **Opioid**

Heroin is the most often used opioid. 1.14%, with opium and prescription opioids following. the highest rate of opioid use among the general public, comparable to Sikkim and Arunachal Pradesh. as well as Mizoram, India. The states in the northwest and central west are home to a sizable population of people suffering from opioid use disorder. Opioid use among those aged 10 to 75 ranges from 0.2 to 25.2% of total intake [13]. Throughout their lives, high school students have abused prescription painkillers. Students between the ages of 1 and 7 lakhs are provided painkillers. One powerful synthetic opioid used to treat pain is called fentanyl [14]. Men who have a low socioeconomic standing are more likely than women to take an opioid overdose Figure 5.

Among the illicit drug the percentage of drug use showed that alcohol and marijuana have highest amount of use between 10th grade and 12th grade. It estimates the substance use among young youth and adults (Table 1).



**Figure 4.** Cigarette.



**Figure 5.** Opioid.

**Table 1.** Table showing substance abuse with percentage use.

Substance abuse	Percentage use
Alcohol	81.8%–66.3%
Marijuana Vaping	44.6–28.5%
Nicotine Vaping	21.8%–16.1%
Marijuana	18.7%–12.4%
Cigarette	18.6%–9.0%
Other drug	18.3%–7.5%

### DRUG ABUSE BASED ON GENDER DISCRIMINATION AMONG MEN'S AND WOMEN'S

Drug abuse based on Intoxication and addictive substance was the first important trend to speed up the substance abuse in India. The impact of drug is increasing in both male and female in India. There is growing concern among young children and adolescents' people in India are becoming increasingly susceptible to the use of higher risk of drug use in India [15].

#### Drug Use, Substance Abuse, and Addiction in Men:

- The problem of drug abuse among men has massive increasing particularly affecting in children in 10 to 18 age group. 75% of the state youth are struggling with drug abuse using narcotic and psychotropic drug abuse.
- In India, 13.1% of the population under 20 suffers from drug addiction or substance misuse. There is a drastic increase in men use of drug under the age of 18 years among youth and children's.
- Men are more likely to take drugs due to poor mental and physical health, peer pressure and social, economic problem and sexual abuse that leads to higher risk of drug and alcohol abuse.
- Men are mostly more likely to use the drug than women.
- Last two years 2018 to 2020, it shows that 14.8% of million children and adolescents are using various drug substances between the age of 10 to 25 years. 16 crore people are using alcohol 14.6% and 5.2% of alcohol dependence, 2.8% are using cannabis.
- Mostly men tend to use drug use of alcohol and e-cigarette and vaping products. The age response was 18 to 24 are consuming mostly alcohol 54.7%, cocaine 91.1%. and tobacco 62%.
- According to NIDA. That shows, the drug effect on means about 2.2% of the highest population in 2020. The variant drug abuse influence like opioids, Cannabis, Ganja. And Chara where using at the age of 10 to 45 years that about 2.8% of Indians.
- In Indian, the males due to drug abuse and addiction influence the number of suicidal death caused mostly along with teen boys attempt suicide due to depression, trauma and anxiety, because of high risk of mental health.

Occurrence of substance drug use was increased by the age in people increased. The most commonly used like drug substances may vary depending upon the society and age of adolescence [16].

#### Reasons for Causes of Drug Abuse Among Males

- Decreases interest in activities like education, sports and friends.
- Poor activity relationship with family and friends
- Impaired self-care.
- Intrusive and obsessive thought
- Mental health issues, left and anxiety and depression.
- Violence and aggressive behavior.
- Pressure and social influence.
- Taking highly addictive drugs.
- Increasing economic stress.
- Academic pressure
- Access of drugs.

### **Drug Influence Among Females, Substance Drug Abuse and Addiction**

- In India psychoactive substances use is growing among females. But 41.2% of females are very influenced to the use of psychoactive drug substance. Drug abuse has become more prevalent in adolescent girls than the teenage girls. Teenage girls are more likely to use usage of drugs and exposed to drug Addiction. Most of the adults and females are getting into addiction through self-medication and increased risk of abuse illicit drugs [17].

Whereas females are more likely than male to consume non medication means of prescription of drug. The major use of drug abuse among women are financial drain, social blame and family member and psychologically distress. People from major physical violence 45% mental stress and anxiety 55% and depression 47% Suicidal thought 35% [18].

- Between the age of 18- and 22-years girls became more addicted to drug abuse there and maturing both physical and mentally
- Across in India woman's aged 18 to 60 years are misused. Drugs result to many suicidal thoughts. Nearly 10% of women attempted suicide as the drug substances using response were female. Among alcohol 54.7%, tobacco 40.2% and cannabis, 15% are usually most commonly reported. Nearly one to five times higher in 15 to 19 years people in India 25% of girls are attempted suicide with struggling with the cause of drug abuse mental health issues.
- Woman's who inject drugs have to face a Blood borne viral infection. They are often found to be higher HIV prevalence than men. Women are more likely to use Psychoactive drug like pain reliever, sleeping pills and Tranquillizers
- Females are more likely to consume alcohol and cigarettes among adults and girls aged 15 to 20 years 71.1% and among women 75.5%. Most of the women were using heroin and the brown sugar women who miss-use of drug can responsible for higher risk of disease life gastrointestinal, urinary, liver problem, sexually transmitted infection [19].
- In India, as female using drug substances has been increasing from past year, the female addiction of drug abuse can lead to longer term of consequence. According to NIDA, woman drug abuse in India has increasing higher risk of consuming drug about 6.2 percentage below 8–20 years of age Table 2.

### **REASON FOR CAUSE OF DRUG ABUSE AMONG FEMALE'S**

#### **Depression and Mental Illness**

This may lead to conception of drug 23.6% to 14.2% and costs suicidal attempt to 11.2% to 6.2%.

#### **History of Trauma**

Trauma is commonly cause of self-medication in women. Women may use drugs and alcohol to reduce trauma symptoms 55 to 99%.

#### **Stress and Inability**

Stress and mental health issues may make people to suicidal thoughts and depression.

**Table 2.** According to national institute on drug abuse among gender discrimination.

<b>Drugs</b>	<b>Men's percentage</b>	<b>Female percentage</b>
Alcohol	42.3%	30%
Opioid	9.9%	7.1%
Cannabis	9.3%	7.0%
Cocaine	2.6%	2.5%
Marijuana	14.6%	10.9%
Heroin	0.3%	0.5%
Inhalants	1..34%	0.7%
Other sedatives	5.0%	3.3%

**Low Self-esteem**

*Financial distress can occur:* The low extreme that makes to occur substance abuse.

- *Social pressure:* behavioral changes of violence aggressive social event work family obligations and lead to addiction
- Lack of Parent child communication.

**HARMFUL EFFECT ON DRUG ABUSE**

- Short term effect
- Change in heart rate.
- Change in blood pressure.
- Heart attack.
- Psychosis.
- Change in appetite
- Stroke.

**LONG TERM EFFECT**

- Heart disease.
- Lung disease.
- Cancer.
- AIDS.
- Hepatitis.

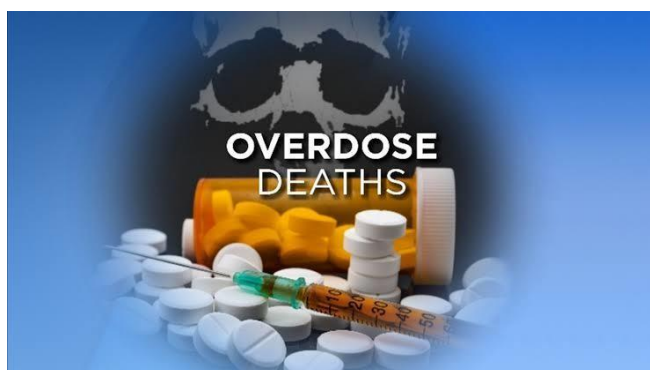
**DRUG OVERDOSE IN INDIA.**

- Significant causes of accidental death include drug overdose and drunkenness. Overdosing on one or more drugs can also result in types of suicide death. Of the 1,06,699 drug overdose deaths that could have been prevented in the last two years, 92% were. Drug overdoses rose by 58% between 2017 and 2019 and between 2021 and 23. In India, the number of drug-related deaths rose to 98,268 (78.1%). Overdosing on drugs seen as a personality disorder influenced by environmental, genetic, psychological, and evolutionary factors that control and shape human behavior [20].

Adolescent drug overdose deaths almost increased in 2019 and 2020. Male adult mortality is on the rise, and young college students are becoming more addicted to alcohol, marijuana, and other hard substances like cocaine and MDMA (methylenedioxymethamphetamine), among others Figure 6.

**LIFE NARRATIVE EXAMPLES****Hyderabad: An Engineering Student Died Due to Drug Overdose**

An engineering student in Hyderabad passed away from a heroin overdose. The young person used to go to Goa with others to do drugs, but he or she has now developed a drug addiction.



**Figure 6.** Drug overdose deaths in India.

A 23-year-old boy was apprehended and detained by law enforcement. When he was brought to the hospital of the Nizam Institute of Medical Science, he was acting strangely, and the physician was unable to determine what was wrong. Later, his pals told the physicians that he was using a combination of cannabis and LSD (lysergic acid diethylamide).

The young person's organ had ceased working properly, the doctor said, and he passed away from a drug overdose-related brain stroke [21].

### **The Youngest Drug Abuse in Malaysia is 7-years-old-boy, “Younger Kid Sniffing Glue”**

There are even younger kids sniffing glue. A seven years old boy have been drug addicts of sniffing glue. The Main cause of youngsters to consume this type of drug is most of all hunger and food insecurity. In fact, sniffing glue, is more dangerous than heroin and ganja. It stop the oxygen to your brain. It can blow off your brain and kill every single brain cells [22].

## **TREATMENT AND REHABILITATION OF DRUG**

- It is a drug-dependent person's treatment and rehabilitation approach made up of psychiatrists, psychologists, social workers, occupational therapists, and other family- and drug-related professionals. Drug misuse rehabilitation might be challenging, but there aren't many options for treatment [23].

### **Individual Therapy**

This therapy involves one to one relationship and it aim to help the patient reduce from drug abusing behavior and develop insight into his condition. This can help individual get from overdose of drug.

### **Congestive Behavioral Therapy (CBT)**

Through the process of replacing these negative thought patterns with positive ones, CBT therapists assist individuals whose negative thought patterns are linked to substance misuse.

### **Motivational Enhancement Therapy**

The therapists assist each patient in connecting with their own reasons for stopping the abuse during this therapy. Here, the goal is to heal by adhering to the treatment plan. When applied early in the process, this therapy works well.

### **Group Therapy**

In this therapy, where the individual is helping through the group process. Each number of group receives a immediate feedback from the other group member and others of behavior. which can produce positive result towards behavior modification. The knowledge that they are not alone in their challenges with rehabilitation is tremendously helpful to the individual.

### **Out-patient Program**

Out patient treatment include living at home and attending treatment activities at outpatient rehab facility during the day. Most people with serious addition will likely have better outcomes in patient treatment and rehab. They are compelled to attend therapy sessions with psychologists and psychiatrists once a week. The patient's doctor is aware of the medication and supports the outpatient course of care [24].

### **Inpatient Program**

Inpatient rehabilitation is one of the best way to prevent the relapse from alcoholism and substance of drug abuse. During the duration of therapy, inpatient drug rehab patients reside in a hospital and rehab center. The therapy is more intense than residential rehab. Removing the persons from toxic relationship and environment.

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### Long term Rehab Drug

Long term rehab is an inpatient treatment program lasting from 3–12 months. These programs are good for who have struggled with their addiction over a long period of time. Long term rehab may also be suitable for people who facing a dual diagnosis that is difficult to treat to such as addiction and bipolar disorder. Here the whole living space is structured to help individuals recover. This include people with criminal behavior and people who are homeless, adolescents and serious mental health disorder.

### Detoxification

Detoxification is a drug rehabilitation process. It is process by individual receive medication in order to rid their body harmful substances including during the abuse. Withdrawal symptoms occur, and medication aids in their management.

### CONCLUSION

In conclusion, the drug abuse is effect on destructive and pervasive, affecting not only the individual but society addressing the issue of drug requires a comprehensive approach that include prevention, treatment and struggling with addiction. By understanding the consequences of drug abuse is helpful for work towards healthier and safety. Over consumption of alcohol, marijuana, opium, cannabis and nicotine of these drug have long lasting effect on brain and body.

The epidemic drug use and associated adverse effect consequences for poor public health problems. It is highly advised that treatment programs pay closer attention to the necessity for cautious prescription, dispensation, and administration of replacement medication to adolescents under their care. Pharmacies are in a good position to serve youth with substance use disorders and to contribute to efforts aimed at prevention.

### REFERENCE

1. Sharma S, Lal R. Volatile substance misuse among street children in India: A preliminary report. *Substance use & misuse*. 2011 May 24;46(sup1):46–9.
2. Mohan D, Arora A. Prevalence and pattern of drug abuse among Delhi University College students. *Journal of the Indian Medical Association*. 1976;66(2):28–33.
3. Heil SH, Scott TL, Higgins ST. An overview of principles of effective treatment of substance use disorders and their potential application to pregnant cigarette smokers. *Drug and Alcohol Dependence*. 2009 Oct 1;104:S106–14.
4. Fatima I. Drug abuse among youth: Causes, effects, and control. *Journal of Integrated Community Health*. 2017;6(1):1–5.
5. Tongat T, Erdianti RN, Prasetyo SN, Aunuh NM, Fajrin YA, Izziyana WV. The Role of Doctors in Drug Administration and the Execution of Penal Death. *Indian Journal of Forensic Medicine & Toxicology*. 2021;15(2).
6. Borak B, Srivastava A, Saikia N. Association between social networks and substance use among male tribal adolescents in North-East India state of Tripura. *medRxiv*. 2023:2023–05.
7. Mahajan V, Chowdhury A, Kaushal U, Jariwala N, Bong SA. *Gender Equity: Challenges and Opportunities 2022*.
8. Lim SH, Daghar L, Bullen C, Faiz HM, Akbar M, Amer Nordin AS, Yee A. Tobacco use and cessation among a national online sample of men who have sex with men in Malaysia. *Asia Pacific Journal of Public Health*. 2020 Nov;32(8):414–7.
9. Akerman HD. *Build It and They Will Come: The Lack of Addiction Treatment Centers in the Orthodox Jewish Community (Doctoral dissertation, Yeshiva University) 2019*.
10. Murthy P, Manjunatha N, Subodh BN, Chand PK, Benegal V. Substance use and addiction research in India. *Indian journal of psychiatry*. 2010 Jan 1;52(Suppl1):S189–99.
11. Suri JS, Agarwal S, Chabert GL, Carriero A, Paschè A, Danna PS, Saba L, Mehmedović A, Faa G, Singh IM, Turk M. COVLIAS 1.0 Lesion vs. MedSeg: An artificial intelligence framework for

- automated lesion segmentation in COVID-19 lung computed tomography scans. *Diagnostics*. 2022 May 21;12(5):1283.
12. Nadeem A, Rubeena B, Agarwal VK, Piyush K. Substance abuse in India. *Pravara Med Rev*. 2009;1(4):4–6.
  13. Ahmad A, Khalique N, Khan Z. Analysis of substance abuse in male adolescents 2009.
  14. Renes SL, Strange AT. Factors Affecting Drug Abuse in Adolescent Females in Rural Communities. *Journal of School Counseling*. 2009;7(41):n41.
  15. Ambekar A, Agrawal A, Rao R, Mishra AK, Khandelwal SK. Magnitude of substance use in India. New Delhi: Ministry of Social Justice and Empowerment, government of India; 2019. On Behalf of the Group of Investigators for the National Survey on Extent and Pattern of Substance Use in India.
  16. Tikoo VK, Dhawan A, Pattanayak RD, Chopra A. Assessment of pattern and profile of substance use among children in India. National Commission for Protection of Child Rights (NCPCR) by National Drug Dependence Treatment Centre [NDDTC], All India Institute of Medical Sciences [AIIMS], New Delhi. 2013.
  17. Chadda R, Bennegadi R, Nicola V, Molodynski A, Basu D, Kallivayalil R, Moussaoui D. World Association of Social Psychiatry Position Statement on the Coronavirus Disease 2019 Pandemic. *World Social Psychiatry*. 2020 May 1;2(2):57-.
  18. Sahu P, Mathur A, Ganesh A, Nair S, Chand P, Murthy P. Acceptance of e-consult for substance use disorders during the COVID 19 pandemic: a study from India. *Asian journal of psychiatry*. 2020 Dec 1;54:102451.
  19. Bishop B. Faculty experiences supporting mental health needs of nursing students in a psychiatric nursing setting: an interpretive description qualitative study (Doctoral dissertation) 2023.
  20. Ahmad A, Khalique N, Khan Z. Analysis of substance abuse in male adolescents 2009.
  21. Kumar C, Prabhu GR. Prevalence of Drug Abuse Among Male Youth in Tirupati, AP. *Indian Journal of Community Medicine*. 2006 Oct 1;31(4):281.
  22. Chioma OO, Bridget IU, Ifeyinwa CN, Fidelia OE. Knowledge and indulgence in substance abuse among adolescents in Anambra state, South-East Nigeria. *African Health Sciences*. 2022 Apr 29;22(1):227–33.
  23. Baranoski J. Substance Abuse in Rural Communities. *An Intersectional Look at Men's Health*. 2022 Dec 12.
  24. Shau S, Zhou R. The Relationship Between Drug Addiction and Adolescent Cognitive Development. In 2021 International Conference on Public Art and Human Development (ICPAHD 2021) 2022 Jan 28 (pp. 1163–1168). Atlantis Press.
  25. Adger Jr H. Problems of alcohol and other drug use and abuse in adolescents. *Journal of Adolescent Health*. 1991 Dec 1;12(8):606–13.