

# DRUGS, POLITICS AND CULTURE

HM 216 – SCIENCE TECHNOLOGY AND SOCIETY



## **GROUP 7**

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## **ACKNOWLEDGEMENT**

We, the students of Group-7 would like to express our special thanks and gratitude to **Prof. Madhumita Mazumdar** for giving us an opportunity to do this wonderful project on the topic of 'Drugs, Politics and Culture' which was a completely new and interesting experience for us. We would also like to thank her for giving this project work in groups which polished our coordinating and leadership skills also helped us in improving our time management skills. This project unlike the other technical projects, taught us the things that other subjects or projects could not have taught us. We are confident that the qualities and skills that we developed while working on this project will surely benefit us in future. We are also immensely grateful to the teaching assistants Mr. Rohit Chaku and Mr. Aaklit Taneja for providing their constant support to us. We have tried our level best to keep the report error free and if any error is found we feel sorry for it.

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## **INTRODUCTION**

Drugs, politics, and culture are closely related. We will look at how drug culture is linked with technology, terrorism, capitalism, poverty and many other aspects including the GDP of a country for various timelines on a cross-cultural perspective along with their recreational and medicinal uses and how these mind-altering chemical compounds have destroyed communities.

Starting from the oldest drug opium drug culture started becoming mainstream and even the acceptance criteria for peer communities. In India however, this issue is not much talked about even at the political level, unlike many other countries and we hope that our project will give the audience new insights on the issue of drug culture and agree with the possible solutions that we will try to provide. For this, we need to start from history and look at some case studies one of which is based on India.

## **DRUGS AND ECONOMICS(GDP)**

How drugs affect society(economic):

### 1. “Benefits”

While the apparent "benefits" of consumption for drug abusers tend to be transient and are quickly superseded by considerable health and financial burden on society, there are doubtless considerable profits for suppliers and traffickers of illicit drugs. This is clearly revealed by the readiness of suppliers and traffickers to operate in the illicit markets. Producer and trafficking countries, however, tend to pay a high social and political price for short-term economic gains.

- The bulk of the income generated from drug sales remains in the consumer countries, i.e. most profits are made, and re-invested in the industrialized countries. More than 90 percent of the value-added (gross profit) of cocaine and heroin is generated at the distribution stage of the illicit drug industry. [1]
- Now, as the above point states clearly, the bulk of income generated remains in the consumer countries.
- This profit does not affect the GDP directly but indirectly it does leave a huge impact on the economy. The income generated is somehow legalized by reinvesting it in most industrialized countries and the profits are gained. It positively affects GDP.

This is how the GDP is benefitted indirectly but positively.

Further, there are fewer chances that the drug trade can directly play a part in the GDP of a nation because drug abuse is illegal. However, it can affect the GDP and economy of a nation indirectly. Here are a few other ways that are direct consequences of drug abuse and drug consumption which further indirectly affect the economy and the GDP of a nation.

The most vicious cycle is created:

Most people who are most likely to consume drugs or do consume drugs are in the age group that is the working-age group or the one that is now to enter the corporate/working sector.

Consumption of drugs prevents one from entering the workspace or rather from staying in the workspace. Also, the frustration due to failure and depression favours drug consumption leading to a vicious cycle.

The other more significant consequence of large consumption of drugs is that it clearly destroys the productivity of the working sector. This results in the <sup>1</sup> degradation of the workspace overall and hence causes unemployment and low productivity problems.

Drug abusers in the workforce impose significant extra costs on the business sector, thus reducing its competitiveness. Irrespective of the current level of development, societies will find it difficult to advance if they have to rely on a workforce that is impaired by large-scale drug abuse. [2]

Productivity losses are calculated as work that would be reasonably expected to have been done if not for drug use (a loss of potential income and output and therefore GDP) as a result of a reduction in the supply or effectiveness of the workforce. Lost productivity in the United States as a result of labour non-participation is significant: \$120 billion (or 0.9 percent of GDP) in 2011, amounting to 62 percent of all drug-related costs. Similar studies in Australia and Canada identified losses of 0.3 percent of GDP and 0.4 percent of GDP, respectively. In those two countries, the cost of lost productivity was estimated to be 8 and 3 times higher, respectively, than health-related costs due to morbidity, ambulatory care, physician visits, and other related consequences. [3]

## 2. Inflation:

Inflation is a consequence of high drug consumption to a certain extent.

The increasing demands of drugs result in more and more cultivation of drugs instead of edible pulses and cereals. This results in the increase in the prices of foodstuffs and hence inflation.

So as mentioned above the drug abuse results in indirect consequences on the GDP. There are quite a few chances that they affect it positively rather it is usually seen degrading

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<sup>1</sup>[shorturl.at/HLU27](http://shorturl.at/HLU27)

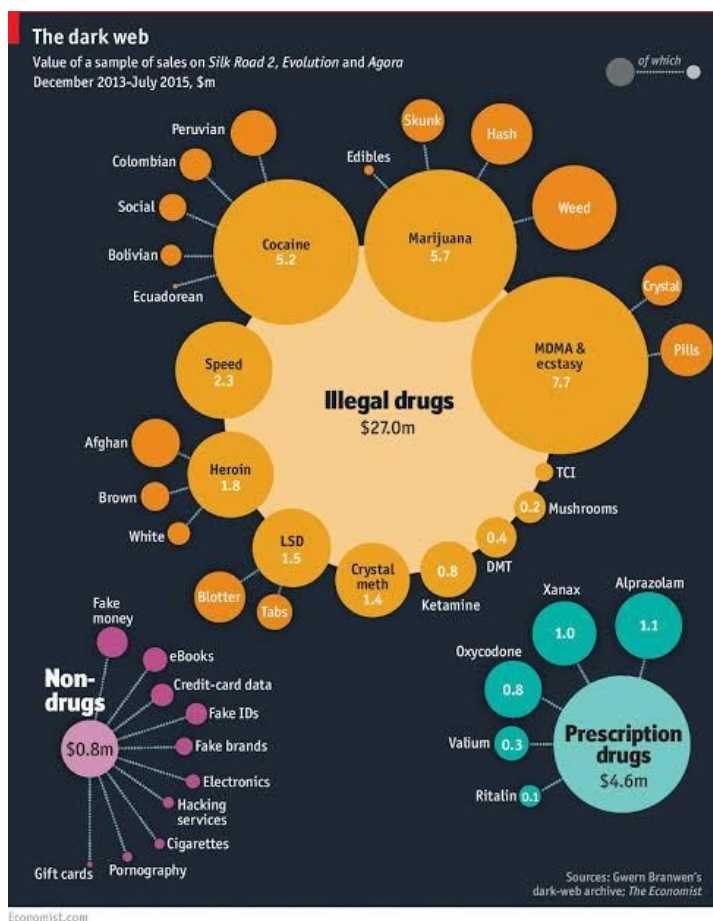
[2,3] Reference: Economic and social consequences of drug abuse and illicit trafficking

[3] Reference: Economic and social consequences of drug abuse and illicit trafficking

## Dark Web and Drugs

**Technology** itself does not pose a danger to society, in fact, technology shapes humans and society, rather it's the *misuse* of technology or how we shape the technology to our benefit that can threaten society as rightly pointed out by the professor in the lecture.

The same is for the case of drugs. The dark web has content which is not accessible via the usual search engines and needs to be accessed only using specific authorizations so that the identity at both ends stays anonymous. The dark net has marketplaces and websites that are exploited by criminals to buy and sell drugs.



This is a great example of the argument we started this section because such technology was originally developed by the US government to protect intelligence information and for sites that conduct business in Bitcoin, the cryptocurrency that allows for anonymous online payments. This includes content such as medical records, legal documents, financial records, and government resources.

However, humans have shaped this technology in a way that also resulted in the sudden growth of online drug marketplaces. Silk Road, founded by Ross Ulbricht was the first such website, however, it was taken down and the creator was jailed but by that time it had managed to become a big drug bazaar.

Shopping on the dark web is easy. However, the dark web does not make transactions safer since there is a major risk at the intersection of this virtual world with the physical world, which is the delivery, through which maximum profits come.

*These marketplaces look remarkably like their counterparts on the “clearnet”, or regular internet. Users leave detailed reviews on the quality of a vendor’s product, speed of delivery, and how secure the shipping method was. There’s information on where vendors are located and where they’ll ship to. Some even post their refund and exchange policies. The websites are clean, well-organized, and easy to navigate; there are icons for online support, shopping carts, and order status. The bitcoin/dollar/euro exchange rate is often featured on a banner, much like a price sticker on a finance website<sup>[1]</sup>.*

- One important aspect of such marketplaces is their escrow function. This means that the money of the person buying the product which is usually cryptocurrency is kept on hold until the delivery of the product and only after that, the funds are transferred to the seller. This is possible as there is no legal protection for illegal purchases which exposes the seller to exchange-rate risk because bitcoin is an extremely volatile currency. This is the biggest risk the vendors must take; the marketplace may shut down and its operators might steal the money sitting in escrow.
- Anonymity is one other aspect as we need not deal with potentially dangerous vendors or clients as our identity is anonymous. This is achieved through another technology, which is dark web employ technology which hides the location and IP address and uses VPN to send data securely. Communication is also done via some encryption. Bitcoin as discussed also plays a role here. All this is possible because of special web browsers.
- This market is highly inefficient. *The root cause of this market inefficiency is information asymmetry. You don’t know how good an illegal drug is until you consume it, and you can’t turn to the law to enforce agreements, return a substandard product, or complain to your dealer if he tries to rob you. That prevents price discovery and risk compensation, key features of a well-functioning market<sup>[2]</sup>.* However, this online market is cheaper than its physical rival, except for pharmaceuticals.
- Furthermore, we can’t easily predict the state of dark web and drugs in the future. *The dark web’s present size reflects the current state of technology. Innovation normally catches on with more affluent and sophisticated users first, then trickles down as it becomes more user-friendly<sup>[2]</sup>*

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<sup>1</sup>1. <http://old.ramspas.ru/blog/axzt7d.php?viva=clearnet-vendors>

2. <https://qz.com/481037/dark-web/>



## Mexican Drug War

### History:

The **Mexican Drug War** (also known as the **Mexican War on Drugs** is an ongoing asymmetric low-intensity conflict) between the Mexican government and several Drug trafficking groups. Mexican government is trying to stop this Drug trafficking since 1982 and they have also done several missions to expose Main leader of Groups.

Till the date Mexican Government have listed 37 names which are most wanted people across worldwide and has reward on their name.(El Chapo was the main Drug dealer and Money Launderer in Mexico) During the 1970s and early 1980s, Pablo Escobar(Colombia) was the main exporter of cocaine and dealt with organized criminal networks all over the world. El Chapo also developed one of the most effective ways to clean large amounts of cash is through what is known as "trade-based money laundering".

Mexican drug war also involved USA due to its location. Mexico has long been used as a staging and transshipment point for narcotics and contraband between Latin America and US markets. Today also tons of drugs are transported to US border and police also trying to stop them.



Congressional Research Service (CRS)

Cocaine was the main drug which was transported to the USA through US-Mexican border. In the above picture there are some places with DOTS which are main links of trafficking. Though Drug trafficking is still an international problem between US-Mexican border.

## TECHNOLOGY THEY USED:

- 1) According to a US Foreign Military Studies Office report<sup>1</sup>, 80% of the drugs smuggled into the US from Mexico were done via a maritime route, 30% of which coming on Narco Submarines. Submarines have been caught carrying as much as 7.5 tons of cocaine. These are real pictures of submarines which are caught with 7.5 tons of Drugs.
- 2) They also used remote controlled drones to deliver drugs. These drones Proved worship to them because they carry drugs invisibly and they don't have fear to be caught. They created its encrypted cellular network that uses antennas and repeaters installed all over Mexico. The equipment is hidden in remote locations and is connected to solar power, while radio-receiving cell phones and Nextel devices are used for talking.
- 3) The main thing is communication in this business. so they arranged Radio towers of short frequency and encrypted them for private communication. they hid radio antennas and signal relay stations in hard-to-reach terrain and connected them to solar panels, The facilities were then linked to radio-receiving cell-phones and Nextel devices. They actually kidnapped engineers to get the job done.
- 4) Narco Ambulances:  
Criminal groups in several countries in the region have used ambulances to transport cocaine, taking advantage of the low probability that authorities will detain emergency vehicles, even in border areas.
- 5) Chemical Masking:  
Using chemical processes to change the appearance of cocaine has been one of the most commonly used techniques for trafficking the drug since the days of Pablo Escobar.

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<sup>1</sup>1) <https://www.businessinsider.in/small-business/tech/heres-all-the-high-tech-gear-cartels-use-to-sneak-drugs-into-the-us/articleshow/53310026.cms>

2) [https://en.wikipedia.org/wiki/Mexican\\_Drug\\_War](https://en.wikipedia.org/wiki/Mexican_Drug_War)

3) <https://bgr.com/2016/07/21/drug-cartels-high-tech-gear/>

4) War on Mexican Cartels book

## **CHITTA ECONOMY**

### **INTRODUCTION:**

A recent example of drug menace happened in 2018 is a viral video on YouTube in which married woman is taking drugs particularly Chitta-Punjab's synthetic drug made up of heroin and other substances. This was the example where it was observed that the Punjab drug problem is not restricted to just unemployed youth, but is widespread among unemployed rural youth, spoilt college girls, bored housewives, and even cops. Captain Amarinder Singh who got power at that time tried to crackdown the drugs. At that time many peddlers and drug addicts were arrested but there was no end to the problem. Punjab's economy and business were facing a downfall but on the other side, the drug trade flourished. Chitta became a source of business in Punjab.

### **THE GATE PRICE:**

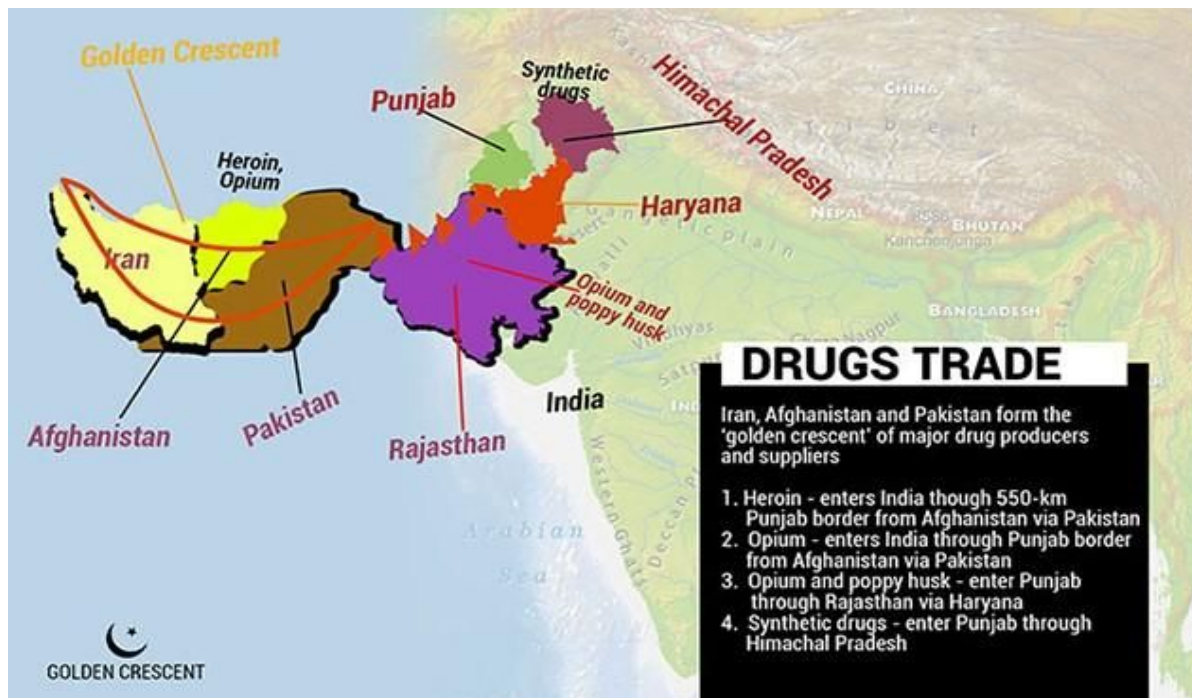
According to Commandant R K Arora, a serving officer with the Border Security Force (BSF) and a professor at the Sardar Patel University of Police, Security, and Criminal Justice, the origin of the drugs lies in Afghanistan which is the world's largest producer of heroin. From Afghanistan, it reaches to Pakistan via Indo Pak Border. A kilogram of drug smuggled from borders costs Rs 5 crores in the International market. "The price in Afghanistan is pretty less. When it enters Pakistan, it costs somewhere between Rs 1.5 lakh and Rs 5 lakhs. Once the drug enters India, the cost shoots up 10 to 15 times to around 20 – 25 lakhs," he says.<sup>1</sup>

### **THE DISTRIBUTION NETWORK:**

According to sources, Chitta costs drug addicts more than 2000 Rs per day which becomes an expensive habit for him. If the drug addict is unable to buy his fix after stealing, borrowing or begging then the dealer has a deal for him he could sell 10 and get one for free. This strategy helps the dealer to retain this type of customers and add new ones like them. Some policemen are a part of this network. Even influential politicians are included in it.

Nirvikar Singh, who teaches economics at the University of California, Santa Cruz in the U. S writes on the Punjab affairs that many people in Punjab with no

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economic opportunities become a drug dealer.

"Many people have a stake in the drug trade since it generates high profits and may also serve political interests. It is plausible that entities in Pakistan facilitate the movement of drugs into Indian Punjab as a part of a political strategy. Some domestic sections of the law enforcement become active participants as well as for monetary reasons," says Nirvikar Singh.<sup>1</sup>

#### THE MARKETING MACHINE:

The Punjabi music industry has become the marketing machine in Punjab. The movie *Udta Punjab* demonstrated how Punjabi songs has become a vast advertisement for drugs. Due to this, the Punjab Government was forced to form a panel, 'culture commission' to have a watch on the songs that spread the drug nuisance in Punjab.

#### THE CONSUMER BASE:

The consumer base includes housewives, professionals, bored youth, businessmen. According to Punjab Opioid Dependence Survey conducted in 2015, the opioid-dependent population was 2,32,856. The most common opioid drug used by them is chitta or heroin. The Ministry of Social Justice and Empowerment in collaboration with National drug dependence Treatment Centre, AIIMS to provide exact numbers of drug consumers.

<sup>1</sup>-<https://economictimes.indiatimes.com/news/et-explains/the-chitta-economy-how-the-business-of-drugs-works-in-punjab/articleshow/65634397.cms>

## **Government's Survey in Punjab:<sup>1</sup>**

In 2015, a study was conducted by the Ministry of Social Justice and Empowerment(MOSJE), Government of India, to find out the number of opioid/drug consumers in Punjab.

This survey was conducted by the Society Promotion of Youth & Masses (SPYM) and a team of researchers from the National Drug Dependence Treatment Centre (NDDTC), AIIMS, New Delhi, in association with the Department of Health and Family Welfare, Government of Punjab. This survey covered ten districts: Bathinda, Ferozepur, Jalandhar, Kapurthala, Gurdaspur, Hoshiarpur, Patiala, Sangria, Mogo and Tarn Taran.

### **Facts revealed in the survey:<sup>1</sup>**

1. There were a total of 2,32,856 drug users in Punjab.
2. 89% of the total drug addicts were educated and literate.
3. 83% of the total drug addicts had jobs.
4. 99% of the total drug addicts in Punjab were male.
5. 56% of the drug addicts were from villages.
6. Heroin(Chitta) was the most consumed drug. 53% of the total drug consumers consume this drug.
7. On average Rs. 1400 were spent on heroin by drug addicts every day in Punjab. Rs. 3400 were spent by opium users and Rs.265 by the pharmaceutical opioid users per day.

**Factors causing drug problem in Punjab:<sup>1</sup>**

1. Farming crisis caused by an over-reliance on cash crops.
2. Lack of job opportunities.
3. Easy availability of narcotic substances.
4. Ties between drug associations, organized criminal gangs, politicians and crook elements of the law enforcement agencies.
5. Street children, also revealed that they took drugs due to peer pressure or curiosity to experience the aftereffects of drugs.

**Government efforts to tackle drug problem:<sup>1</sup>**

Chief Minister Captain Amarinder Singh decided to take strong action against the drug problem. He mainly focused on the following areas:

- Target the drug in the state to reduce the drug supply.
- Introduce “Outpatient Opioid Assisted Treatment” to improve the current conditions of the deaddiction centres
- Build mass awareness on drug abuse to reduce the demand.

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1. <https://www.mapsofindia.com/my-india/government/drug-problem-the-governments-survey-in-punjab-and-delhi>

## **History of Opium in China**

### **Introduction of opium as a drug:**

The earliest growth of opium dates back to 3400 BC when it was cultivated in the lower Mesopotamia Region. As the people came to know the power of opium, the demand for opium increased. Opium was known to be a pain reliever by Greeks and Roman physicians. The pleasurable effects of opium were noted. Opium was also used as an analgesic in certain surgical procedures. Morphine, codeine, oxycodone, and heroin are some of the derivatives of opium.

### **The spread of opium:**

Opium is mainly grown by poor farmers on small plots in remote regions of the world. Opium was one of the products that were traded along *the Silk Road* (The Silk Road is the 18th-century term for a series of interconnected routes that ran from Europe to China.). Opium dens have been established as sites for the buying and selling of opium. Dens have been commonly found in China, Southeast Asia, the United States, and parts of Europe.

(†) The Chinese history would have been far different in the nineteenth and twentieth centuries without opium. Opium went from medicine to mass drug-food, patterns of consumption altered, demand increased, and the understanding of opium use changed. At the start of the nineteenth century, opium had been a foreign import consumed mostly by men in the southern coastal region. In the second half of the nineteenth century, conditions changed. Opium was more often grown than imported and it was consumed among all strata of society, including the middle, usually as a homosocial recreation.

### **Uses and misuses of opium:**

*Use: -*

(§) Until now more than 40 different alkaloids have been known in this species. Alkaloids are affected with genetic characteristics and environmental conditions. Poppy seeds are an important food item and the source of poppy seed oil, healthy edible oil that has many uses. The most important property of them is the analgesic properties (As discussed above in the introduction). Use of poppy as a medicinal plant has been described in the ancient literature of Indian system of medicine (Ayurveda).

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(†) *Opium Regimes: China, Britain, and Japan, 1839-1952* by Timothy Brook, Bob Tadashi Wakabayashi



*Misuse: -*

(†) An increased risk for opioid misuse among adults who receive legitimate prescriptions has long been acknowledged as a possible consequence of opioid prescribing. Weighing and addressing this risk of iatrogenic opioid misuse is a key concern for medical professionals, and the risk figures prominently in opioid position articles published by professional medical organizations. One such position article recently revealed that the risk of future opioid misuse is so substantial that it outweighs the benefits of opioids for certain conditions, such as chronic back pain.

### **Opioid Crisis:**

*The scenario in China: -*

Initially the opium epidemic or “The Opioid Crisis” occurred in the 18th century, when the Britishers of the *East India Company(EIC)* started smuggling opium from India to China against the Chinese laws, and also became the major suppliers by 1773. The Chinese Emperor passed many bills making opium trade illegal but the efforts were in vain as the British paid the smugglers high price causing the Chinese population more and more addicted which in turn let tons of opium in China’s market which played a key role in the *Opium Wars*.

(§) Opium epidemic or “Opioid Crisis” is a serious problem in China reappeared in the late 1980s. At that time, most drug abusers used opium only, with heroin accounting for a very small proportion and its use being limited to border areas in the southwest and rural areas in the northwest. Beginning in the early 1990s, drug abuse spread quickly. The number of registered drug addicts increased from 70,000 in 1990 to one million by the end of 2002. Besides opioids, some “new” kinds of drugs including amphetamines and ketamine have penetrated the country through various channels since 1997. Drug abuse has caused severe problems for both the abusers and society.

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(§)*Scientific basis of therapeutic uses of opium poppy(papaver somniferum)in ayurveda* by D. Mani, S.S.Dhawan

(†) *Prescription opioids in adolescence and future opioid misuse* by Richard Miech, Lloyd Johnston, Patrick M. O’Malley, Katherine M. Keyes and Kennon Heard

(§) *Drug Abuse in China* by Zhao Chengzheng, Liu Zhimin, Zhao Dong, Liu Yanhong, Liang Jianhui, Tang Yilang, Liu Zeyuan, Zheng Jiwang



## **Drug Policy in India**

### **Introduction**

India has a history of use of Opium and Cannabis from a long time ago which is referenced extensively in Drug Policy Analysis. Being a large country, it has a great demand for drugs in the consumer market. Its large chemical and pharmaceutical industry draw the country into consideration on the illegal manufacture of drugs and precursor control as well as the non-medical use of prescribed drugs.

India's harsh drug control laws conform strictly to prohibition, its regulated opium cultivation industry provides insights for countries that are experimenting with alternatives to prohibition.

The British attempted to regulate drugs (opium) it through laws that licenced cultivation and imposed taxes on their sale. Then the Opium acts happened of 1857 and 1878. As the nationalist movement grew the Britishers and Indian leaders made an act to prevent the consumption of drugs.

In 1947 narcotism was highly regulated as medicinal products as well as subject to exercise tax. With the adoption of the Indian Constitution, all laws became subordinate to the provisions, in particular, fundamental rights.

### **NDPS(Narcotic Drugs And Psychotropic Substances Act,1985)**

The NDPS act was enacted to provide adequate penalties for drug trafficking, strengthen enforcement powers, implement international conventions to which India was a party and enforce controls over psychotropic substances. The NDPS cultivation, production, possession, sale, purchase, trade, import, export, use and consumption of narcotic drugs.

Narcotic drugs include opium, cannabis, coca and psychotropic drugs includes Amphetamines, Methamphetamines, LSD, MDMA.

NDPS was founded in 1985. It improved in 1989 and then again in 2001 and finally in 2014.

### **The Aspects of NDPC Act**

The scale of sentencing and fine varies significantly depending on the substance and quantity found. The NDPS Act does not guide ascertaining quantity, some

courts began to rely on the statutory definition of drugs. This resulted in inconsistent interpretations and conflicting decisions not just between different classes of drugs but even for the same drug.

The Supreme Court held that the actual content of the narcotic drug is relevant for determining whether it constitutes a small or commercial quantity. A year later, the government declared that in calculating the quantity, the total weight of the seized product must be considered and not the pure drug content. This change is not in favour of people who use drugs and other low-level offenders who risk being sentenced for intermediate or commercial quantity offences since street drugs are rarely ever seized in pure forms.

The Punishment may vary from 1 year of rigorous imprisonment / Fine up to 10000 Rs or 10 to 20 years of imprisonment / Fine of 1 to 2 lakh Rs depending upon the number of drugs caught.

Also, there have been death penalties in the past by NDPC to show their harshness. Introduced as a mandatory punishment in 1989, the range of offences punishable with death was narrowed in 2001. Internationally, drug offences are not considered to be the 'most serious crimes' for which capital punishment may be invoked.

Consumption of drugs is illegal and results in a jail term of up to six months or one year and/or a fine, depending on the substance consumed. The consumption of heroin and cocaine will lead to a lengthier sentence of imprisonment while cannabis will lead to a less severe sentence.

### Harm Reduction

1. Rates of Hepatitis b and c infection are believed to be high but no official surveillance has been carried out among people who inject drugs.
2. Harm reduction services expanded under the third phase of National AIDS Control Program (2007-2012) incorporated as Targeted Intervention.
3. Many organizations were formed like NAC, UNODC, NDDTC, etc. for harm reduction services.
4. Civil society, recognized the problem of non-availability of cancer drugs and thus the Bill, inter-alia was passed in parliament so that people can buy such drugs through amendments.
5. In 2002, the NACP of the ministry of health and family welfare supported 'harm minimization' to prevent HIV and also to reduce the use of drugs.

6. Laws were made on drugs but no assessment of such laws took place.
7. People stopped using drugs for prevention because of the fear of being caught and harassed by police. This shows harm reduction policy of govt. narrowed.
8. Drugs prevention organization failed to stop the use of drugs mainly due to the absence of data.
9. The first and only survey estimating the extent of drug use was conducted in 2001-2002.
10. Punishment given to drug users in India is not proportionate, these are even more strict than the UN.

### **Capitalism and drugs\*:**

1. European countries expanded the market for drugs in development of capitalism and slavery.
2. Drug war facilitates profit making by moving farmers from land to use to extract oil or minerals.
3. Capitalism created burden among people including overwork, pain from industrial accidents, trying to work for long hours etc.
4. To cope with these symptoms and to do what they needed to do, people started using psychoactive substances.
5. Capitalism always faced a problem of dealing with the demands and anger of workers and thus they use divide and rule strategy in drug wars.
6. Politicians and rich people on one side out of desire make the use or sale of drugs illegal and at the same time they also organize campaigns that attack the dignity of those who use such substances and define them as “drug-users”.
7. We can see how some politicians use drug wars to increase racism and sexism to increase drug wars.

## **Narco-terrorism**

The term ‘narco-terrorism’ gives us an idea that the two phenomena of narcotics trafficking and terrorism are interconnected and there should be coordination in dealing with both the threats. The term narco-terrorism gained attention after the 9/11 attack; after this attack, many countries gave up in financing terrorism and thus there arose the need for financial resources for terrorism. Also, in the 9/11 attack, there is evidence that the Taliban was funded by drugs.

Initially, the term narco-terrorism was used to describe illegal campaigns and terrorist activities held by drug traffickers such as car bombing, assassinations, and bombing in Colombia and Peru. One of the aspects of narco-terrorism can be seen as the narco-traffickers doing terrorist activities against the laws of the state. For example, Pablo Escobar formed Medellin Cartel, one of the most powerful cocaine cartels in the world and using his power; he had done many illegal activities against the state such as smuggling and assassinations. The other aspect focuses on the terrorism part of the term narco-terrorism.

The United States Drug Enforcement Agency (DEA) has covered this aspect is a part of their definition of narco-terrorism which states “narco-terrorism may be characterized by the participation of groups or associated individuals in taxing, providing security for, or otherwise aiding or abetting drug trafficking endeavors in an effort to further, or fund, terrorist activities”<sup>[1]</sup>. An example of this can be given by the fact that Pakistan funded the terror organization by the use of drugs and narcotics money in J&K and Punjab.

The concept of narco-terrorism can be better understood by the crime-terror continuum model developed by Tamara Makarenko. This model presents to us that organized crime and terror exist in continuum and the interaction between the two has increased since 1990. Also, the most common crime in which terrorists take part in drug trafficking. It also depicts that the organization may be changing their motivation and it’s fluid rather than fixed. For example, Juma Namangani, the leader of the Islamic Movement of Uzbekistan (IMU) is assumed to have been killed at Konduz following an airstrike in November 2001. He used violence due to his ideological reasons but after his death, the organization changed the goal to financial benefits and thus engaging in organized crime.

The structure of narcotics and terror organizations is the same as they both emphasize secrecy and need non-exposure by the authorities. Thus, cooperation between the two becomes easy. Cooperation can also be based on the principle of mutual gain. In some cases, the cooperation does not exist as the gain compensates for the collaboration while in other cases, one requires the other for its survival. Also, for both organizations, they are often dependent on the same suppliers, the same means of transportation, infrastructure, and source of income which lead to competition and sometimes not feasible for cooperation.

Coming to India, narco-terrorism is also one of the threats on Indian security. As per the surveys, the amount of money that is generated by illegal trade of drugs by Pakistan, almost the same amount is used for funding terrorist activities in India. It disturbs the local market and also the Indian economy.<sup>[2]</sup> The drug traffickers and terrorists arrested from Pakistan confirm that Pakistan government has been using them to achieve their foreign policy goals.<sup>[3]</sup> Also, many a times there are cases of involvement of banks in transactions of drug money while other black money generated due to drug trafficking is used in foreign investment or used in hotels, for entertainment or business to show it legal. Thus, steps should be taken to stop the illegal trafficking of drugs and terrorism amongst which, one may be to strengthen Narcotics Control Bureau.

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[1] **Narco-Terrorism: The Merger of the War on Drugs and the War on Terror** by Emma Björne

[2] <http://www.idsa-india.org/an-jan-6-01html.html>

[3] <http://www.nairjc.com/setup/social-science-humanities/ssh336.pdf>

1. **Narco-Terrorism: The Merger of the War on Drugs and the War on Terror** by Emma Björne
2. **Narco-Terrorism: Could the Legislative and Prosecutorial Responses Threaten Our Civil Liberties?** by John E. Thomas, Jr.
3. **The Connection Between Terrorism and Organized Crime: Narcoterrorism and the Other Hybrids** by Stanojoska Angelina

## Medicines And Drugs

### □ History of Vedic Medicine:

Charaka and “Father of Plastic Surgery” Sushruta are the two main people who contributed to the Indian medicine in the period of 1000 BCE to 800 BCE. With their knowledge in the medical plants they are able to cure many diseases at that time.

### □ Modern Medicine:

In the 19th century with the technology like microscope, X-Ray, computer scientists are able to develop vaccines for many infectious diseases. Due to advanced in medicines, U.K and U.S countries had some benefits compared to other countries in World War 2. After WW2 World Health Organisation is formed by the United Nations to take care of lives in the world.

#### □ Most Common Drugs Used By People

##### 1. Adrenaline(Epinephrine):

Uses: It's mostly used in emergency situations to improve breathing, reduce swelling, increase blood pressure, maintain heart beat.

Precautions: You shouldn't use this if you are allergic. Must be inject on thighs not on any other part. And immediately contact the doctor.

Side Effects: These are effects are not long lasting. If adrenaline you took over doses then you may feel headache, stress, chest pain etc.

##### 2. Digoxin:

Uses: It's used to treat heart failure, atrial fibrillation(a heart rhythm disorder of the atria the upper chambers of the heart that allow blood to flow into the heart)<sup>1</sup>.it makes the heart beat stronger with regular rhythm.

Precautions: You shouldn't use this if you are allergic or if you have ventricular fibrillation or if you are pregnant women, feeding to a baby. And immediately contact the doctor.

Side Effects: Swelling, difficulty in breathing, diarrhea, unstable heart beat, weight loss and growth delay(in children).

##### 3. Paracetamol(acetaminophen):

Uses: It's used to treat many conditions like body pains, to reduce fever, head ache.

Precautions: You shouldn't use this if you are allergic, if you are a pregnant women or feeding to a baby, if you have liver disease, alcoholic. Overdose may cause severe harm. Not advisable to take more than 4gm per day for an adult.

Side Effects: Stomach pain, weakness, vomiting, dark urine, yellowing of skin etc.

#### 4. Hydrocortisone

Uses: It's used to treat immune system disorders, allergies, breathing problems. It decreases your immune system response to reduce symptoms such as pain, swelling.

Precautions: Don't use it without doctor's prescription. Don't take Alcohol, It may cause stomach bleeding.

Side Effects: May slow down child growth, menstrual period changes, blood sugar rise, unusual weight gain, vision problems, breathing problem.

#### 5. Antidepressant Drug

Why do people get Depressed?

Due to mental or physical torture in childhood, stress of education etc... In adults the work pressure, health, life events, friends, family and social environments etc.... In some cases, the research shows that it runs in families means some people get it through Genes.

Major signs for Depression:

Suicide thoughts, Low sexual desire, Feeling of worthlessness, Deep feeling of sadness, Negative thoughts.

Anti-Depressants: The drugs which we use to get out of Depression, it's called Anti-Depressants.

The Anti-Depressant were started developing from 1950s. People use it widely from last 20 years. The aim of the drugs is to balance neurotransmitters in the brain that are believed to be responsible for change in moods and behaviour.

There are five types of Anti-Depressants present now. They are:

SNRI: SNRI is used treatment of major depression and mood disorders. But it is not in common use.

SSRI: SSRI is most commonly prescribed and effective drugs.

TCAs: TCAs is used for the treatment of fibromyalgia and help to control chronic pain.

MAOIs: MAOIs are most commonly used before the introduction of SSRI.

NASSAs.: NASSAs are mostly used to cure personality disorders and anxiety disorders.

### Some names of Anti-Depressants:

Fluoxetine hydrochloride (Prozac)

Citalopram hydrobromide (Celexa)

Sertraline hydrochloride (Zoloft)

### Prozac:

This is SSRI type of Anti-Depressant. It is widely used in U.S 1 out of 10 people take this in U.S and 1 out of 4 women. In 1988 it first time appears in U.S after that it became most common prescribed Anti-Depressant in all over the country. It is suitable for adults but it is good to use it for age over 10 years.

### Precautions:

It is safe and effective for depression, Obsessive compulsive disorder (OCD) and Anxiety if and only if it takes alone. The manufacture writes a warning on it that “It should not be taken with other drugs.” because if there are some drug-drug interaction which is harmful for the health and cause other problems.

Women have to avoid it during pregnancy. Because it causes problems in feeding and breathing, hypoglycemia or low sugar in blood. Breastfeeding is also not advisable because Prozac can pass through milk.

### Side effects:

It may increase the risk of suicide in people younger than 25.”. It can lead to suicide thought or worst than that in children and young adults. Anxiety and nervousness, abnormal dreams sweating, skin rash.



## 6. Multivitamins:

Uses: It's taken to provide vitamins that are not taken through our diet. When we are lack of vitamins due to pregnancy, digestive disorders etc.

Precautions: We shouldn't take too much vitamins A, D, K, E can cause serious or life threatening side effects. You shouldn't use this without doctor prescription if you are allergic or pregnant.

Side Effects: Stomach ache, headache.

## 7. Cymbalta:

Uses: It's SNRI type of drugs. It is used to treat depression but it is also used to relieve nerve pain, chronic pain and fibromyalgia. The other thing are improving energy level reducing nervousness, improving mood. It also works by balancing the natural substance in the brain.

Precautions:

It affects your vision so don't drive or machines work which need clear vision. Avoid drinking alcohol while taking this medicine. Don't use if you have diabetics.

Side Effects: Vision problems, body pains.

<https://medicforyou.in/common-emergency-drugs-medicines-india>

<https://www.webmd.com/drugs/2/drug-76758/epinephrine-injection/details>

<https://www.drugs.com>

<https://www.webmd.com/drugs/2/drug-6731/hydrocortisone-oral/details>

<https://www.webmd.com>

<https://www.medicalnewstoday.com>

## **Computer aided drug discovery**

### **Introduction<sup>1</sup>:**

Discovery of a new drug is considered very complex process and requires a lot of time and resources. Due to which computer-aided drug design approaches are widely used which increases the efficiency of drug discovery. There are mainly two approaches in computer-aided drug design :

#### **1.Structure-based drug design(SBDD)<sup>1</sup>**

In SBDD, structure of the target is known and interaction or bio-affinity for all tested compounds calculate after the process of docking to design a new drug molecule that interacts better with target protein. This approach runs through various cycles before the optimized product comes to clinical trials.

#### **2.Ligand based drug design(LBDD)<sup>1</sup>**

In LBDD, structure of protein is not known but the ligand which binds to the target protein is known. These ligand can be used to develop a pharmacophore model which possesses all necessary structural features to bind to the active site.

### **Advantages of computer-aided drug design<sup>1</sup>:**

- It can reduce the synthetic and biological testing efforts.
- It can save both time and money.
- By this, we could understand the whole action of the drug on target.
- It reduces the chances of failure in the final stage.

### **Conclusion<sup>1</sup>:**

Computer-aided drug design very efficient tool in the area of drug discovery. CADD is cost-efficient and is very much useful to discover drugs in less time. CADD has impressed the scientist in the past and has a promising future to aid drug discovery.<sup>[1]</sup>

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<sup>[1]</sup> Surabhi, Singh BK, Computer Aided Drug Design: An Overview, Journal of Drug Delivery and Therapeutics. 2018; 8(5):504-509  
DOI: <http://dx.doi.org/10.22270/jddt.v8i5.1894>

## **Drug culture<sup>4</sup>:**

- Cannabis culture: Cannabis, also known by the name marijuana (weed), is a psychoactive drug from the *Cannabis* plant which is used for medical or hallucination purposes. Over time the culture became more and more international and a general "cannabis culture" was formed. Cannabis culture has been responsible for various genres of films, also known as stoner films which has spread worldwide and has come to be accepted as a mainstream cinema movement.
- Witchcraft and drugs: The drugs used in witchcraft are highly dissimilar and it depends on the culture in which it is being practised. The usage of Drugs in witchcraft had played a crucial role in Hippie movement.
- Hippie culture and drugs: Hippie word was taken from 'Hipster', 'hippie' was coined to describe beatniks who found their technicolour heart in the Haight-Ashbury district of San Francisco; children of the road who believed they should make love, not war.<sup>5</sup> Hippies somewhat promoted the use of hallucinogenic drugs, specifically weed, LSD and heroin too, in so-called head trips, justifying the practice as a way of expanding consciousness<sup>6</sup>. Hippie culture was something different than anyone had ever seen before. This new counterculture had their own ideology about social values.
- Hippie culture in Goa<sup>7</sup>: Hippie culture was also followed in Goa . The meetings and the parties arranged by the growing mass of arriving hippies began to attract young audience from all over the world. In the 80th instead of a simple fire, there were huge full moon parties, instead of psychedelic rock along with electronic music, and instead of hashish — opium and heroin . With the rise of hippie culture the following problems were faced: People got addicted to drugs and fatal cases from overdose began to increase .

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<sup>4</sup> [https://en.m.wikipedia.org/wiki/Drug\\_culture](https://en.m.wikipedia.org/wiki/Drug_culture)

<sup>5</sup> <https://allthatsinteresting.com/a-brief-history-of-hippies>

<sup>6</sup> <https://www.britannica.com/topic/hippie>

<sup>7</sup> <https://www.thegoavilla.com/goa/info/hippies-in-go.html>

## **Drug Abuse and Society**

Drug abuse can be defined as the habitual taking of illegal drugs in an amount which can be harmful to the individual. Drug abuse can progress to addiction, these drugs raise the level of dopamine in brain circuits that control reward and pleasure making drug abuse pleasurable.

A better understanding of the motives behind drug-using behaviour is important for aiding the development of effective prevention and intervention policies and programs, We will be looking specifically on the topic of drug abuse among adolescents, as most of the drug addicts start taking drugs at during that age.

Kastner and Silbereisen[1] found a link between developmental pressure and drug abuse. And they gave six reasons behind adolescents taking drugs which are related to developmental pressure:

1. Violation of social norms deliberately.
2. Testing whether adolescents are behaving similar to adults or not.
3. Excessive and ritualized behaviour in the sense of testing one's limits.
4. A lack of control on the self.
5. For peer-group integration, age-related lifestyle.
6. An emergency reaction to age-related everyday stress, thus a developmentally relevant coping strategy.

Almost all cultures in the world have used drugs to facilitate social interaction. Our society's increased drug use simply represents the amount of technical knowledge, wealth, individual choice. Social and cultural factors play a very important role in the initiation, maintenance and therapeutic intervention of drug-abuse. Social laws of a certain community which specify what is appropriate or inappropriate plays a very important role, all of the above reason makes it clear that society can make a lot of influence on a person. Due to social structure or style of worshipping certain cultures are more prone to drug abuse than the other, for example, "hippy" culture in the USA increased drug abuse among youth during the 1960s.

In India, we have seen an exponential rise in the number of drug addicts. In 1961, 1971 and 1988 UN reported on Narcotic Drugs Use, it is estimated that, in India, about 50% of the student who reaches ninth grade have taken at least one entry-level drug. Cannabis products, such as charas, bhang, or ganja, are abused throughout the country because of the association of these drugs to Hindu deity. The disappearance of old family structure(joint family), absence of parents love and care due to working parents and decline in morals and ethics have encouraged the adolescent to take a drug to escape from the realities of life

## **Social and Cultural Factors Associated with Drug Abuse in Adolescents-**

1. Parental Influence-Parents have a tremendous influence on their children and the children of smoker parents are twice as likely to become smokers[2]. Parental disapproval of smoking makes an adolescent less likely to initiate smoking[3]. The children are also more likely to smoke whose elder siblings are smokers[4].

2-Family Structure-Higher level of education and higher social status of parents make the probability of adolescents taking drugs lower[5]. Generally, individuals whose parents belong to the lower section of society have a higher chance of taking inhalants.

3-Peer Influence-Friends have the greatest influence. The initiation of drug abuse most likely occur in the presence of peer[6]. Female adolescents who have a friend who smokes have 9 times more chances of smoking. Smoking is a shared activity with important socializing functions for female youth[7].

4-Role Model, Advertising and Promotions-Film and TV stars can play a huge role in encouraging/discouraging smoking[8]. Advertising is an effective weapon to influence the decision of young to initiate smoking. Advertising bans are very effective in reducing cigarette smoking prevalence in youth[9].

From the above points, we can conclude that society and surrounding plays a huge role in drug abuse. Societies can encourage/discourage individuals to take a drug. Drug abuse affects society and society influence drug abuse, hence there is a cyclic relationship between both. In India, we can also see a strong relationship between religion and drug abuse, as drugs like Charas is consumed because of its association with Hindi deity.

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## **\*PRECAUTIONS AND LAW RECOMMENDATION FOR DRUG ADDICTION\***

### **\*PRECAUTIONS TO CONTROL DRUG ADDICTION\***

- Generally, people use drugs because of mental illness (anxiety, depression, etc.), influence from friends and surroundings, dealing with life pressure i.e., workload at office
- Spending time with families and friends and say your problem with them. The guidance and support provided by the family makes it easier for a person to deal with life pressures and tensions
- Educate yourself about the pros and cons of drugs and its effects in real life using online education or by some related apps or by consulting a doctor
- Parents shouldn't do smoking and drinking alcohol In Front of their children by which they can get influenced
- Avoid friendship with people who uses drugs (including smoking and alcohol) and asks you to take drugs
- Instead of using drugs to remove work pressure better to relax sometime by sleeping, reading a book, create or do something which feel you relaxed
- Try to take every situation properly and choose better solutions for every situation
- Take the help of doctor or trained professional for treatment before it leads to addiction or to cure addiction
- Think about the about the things that are important to you such as parents, children, family, life partner, your career, your health, etc.
- Set some measurable goals such as start date, limit on your drug usage, etc.
- Try to go to drug rehabilitation centres where they understand your problems and gives you the necessary solutions
- Don't take heavy dosage of any medicine which causes health problems
- Eating a balanced diet and exercising regularly is another way of preventing drug addiction. Being healthy and active makes it easier for people to deal with life stresses and workloads.

- Treatment options for drug addiction varies from type of the drug. it includes

**1) Detoxification** (the first step is to purge your body of drugs and manage withdrawal symptoms)

**2) Medication** (may be used to manage withdrawal symptoms, prevent relapse, or treat any co-occurring mental health condition such as depression or anxiety).

### **\*LAW RECOMMENDATIONS FOR DRUG ADDICTION\***

- Government should take their laws seriously by adding special officers who works to stop drug selling and transportation i.e., import and export from one place to another by using technology using

**1) Electronic ferrets** (scanning cargo holds to find good hidden deep within shipping containers)

**2) Mini sub-chasers** (covering areas where underwater drug-smuggling crafts)

**3) Drug-sniffing robots** (detecting drugs in sewers, allowing cities to map drug-related places)

And we can use advanced technologies for the treatment for drug addiction in rehabilitation centres

- Government should do proper checking in airports and dockyard where there is a high chance in importing and exporting of drugs happens
- Government should bring awareness to people about the pros and cons of drugs and its usage by keeping awareness camps in universities, schools, high crowded areas
- They should add some more rehabilitation centers so that it should be easy for people to reach the centers
- They should add new ideas and technologies in these rehabilitation centers

Which should help people from drug addiction

- They should increase their punishments for producing, selling and using drugs

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- <https://www.helpguide.org/articles/addictions/overcoming-drug-addiction.htm><https://www.treatmentsolutions.com/blog/top-5-ways-to-prevent-substance-abuse/>
  - <https://www.cellebrite.com/en/blog/3-ways-robotics-can-help-combat-drug-trafficking/>

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