



## Socio-Economic Catalysts and Trafficking Trends: Mapping Drug Addiction in Pakistan

Mudasar Ali Nadeem<sup>1</sup>, Taoqeer Nawaz<sup>2</sup> & Sohail Ashraf<sup>3</sup>

<sup>1</sup>Lecturer Sociology, Government College University Faisalabad Chiniot Campus.

<sup>2</sup>Master in China Studies, Department of Modern Literature, Journalism, and Communication.

Ocean University of China

<sup>3</sup>National Defense University

### ABSTRACT

#### **Article History:**

Received:	Dec	22, 2023
Revised:	Jan	10, 2024
Accepted:	Jan	26, 2024
Available Online:	Feb	02, 2024

**Keywords:** Socio-Economic Catalysts, Trafficking Trends, Drug Addiction, Pakistan.

#### **Funding:**

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

This research article investigates the nexus between socio-economic catalysts, drug addiction, and trafficking trends in Pakistan. It explores how socio-economic factors such as poverty, unemployment, and societal pressures contribute to the rise of drug addiction in Pakistani communities. Furthermore, the study highlights the role of cultural norms and accessibility to drugs as significant contributors to addiction prevalence. By analyzing historical data, contemporary patterns, and case studies, the research elucidates the complex dynamics that fuel drug addiction and trafficking in Pakistan. It also emphasizes the need for comprehensive rehabilitation programs and international cooperation to combat the transnational nature of drug trafficking networks. The study reveals that the surge in drug users in Pakistan stems from societal challenges like poverty, unemployment, and illiteracy. Poverty acts as a primary catalyst, with a significant portion of the population below the poverty threshold. Unemployment due to limited work prospects and nepotism contribute to drug use, impacting both individual and familial identities. The consequences involve social stigma, legal complications, and financial burdens. The findings offer insights for policymakers, law enforcement agencies, and stakeholders to develop targeted interventions aimed at addressing the root causes of drug addiction while tackling the challenges posed by evolving trafficking dynamics in the country.

© 2022 The Authors, Published by CISSMP. This is an Open Access article under the Creative Common Attribution Non-Commercial 4.0

**Corresponding Author's Email:** [gasmian@icloud.com](mailto:gasmian@icloud.com)

**DOI:** 10.61503/cissmp.v3i1.96

**Citation:** Nadeem, M. A., Nawaz, T., & Ashraf, S. (2024). Socio-Economic Catalysts and Trafficking Trends: Mapping Drug Addiction in Pakistan. *Contemporary Issues of Social Sciences and Management Practices*, 3(1), 14-26.

## 1.0 Introduction

According to the Global Commission on Drug Policy, a drug is any chemical that is capable of producing psychoactive effects and may be used for a variety of objectives, including medicinal, recreational, and other uses (Prasad et al., 2023). A substance that has a negative impact on a person's mind or body is said to have a negative impact on that individual. When seen from a pharmacological perspective, caffeine, nicotine, and alcohol are all considered to be drugs, in a manner comparable to that of cocaine and heroin (Muzyka et al., 2023). Evidence from the past demonstrates that the use of drugs by human beings dates back to ancient times. The problem of addiction to drugs and other substances is a significant one that cannot be ignored by society. Taking into consideration the social, economic, political, medical, and legal implications, the repercussions are quite significant. Leaving it unattended is analogous to ignoring a time bomb that is about to explode, and the consequences might be catastrophic. This would be especially detrimental to the younger generation, who are often seen as the potential future leaders of a nation (Garfoot, 2023).

There is a strong correlation between substance abuse and mental problems, as well as psychological challenges. It is possible that it will lead to substantial health issues, difficulty in academics, restricted employment opportunities, the dissolution of families, an increase in violent occurrences, and maybe even acts of terrorism. Being addicted to drugs is one of the key factors that contributes to poverty (Motyka & Al-Imam, 2021). It is impossible for people to quit using drugs once they have developed an addiction to them, even if they are aware that the chemicals they are using might potentially do irreparable and severe damage to their own health as well as the health of their loved ones (Tetty & Levissianos, 2017). The negative and destructive effects on one's health that are a direct consequence of drug use are clear and well established. These effects include the influence on people, communities, and society as a whole. The close proximity of Pakistan to Afghanistan, which is the principal supplier of illicit opium on a worldwide scale, puts the country in a position where it is vulnerable to considerable concerns regarding drug trafficking and substance abuse (Koob et al., 2023). Social, economic, and political factors are just a few of the factors that can change the patterns of illicit drug production, distribution, and use. As a vital initial step in the process of formulating policies and conducting drug interdiction operations, these amendments highlight the need for extensive research and analysis on drug trends throughout the country and the region.

### Aims and Objectives

1. Analyzing the socio-economic factors contributing to drug addiction prevalence in Pakistan.
2. Examining the impact of cultural norms and accessibility on drug addiction prevalence in Pakistani communities
3. Identifying and assessing the emerging trends in drug trafficking routes within Pakistan.
4. Exploring the interplay between socio-economic conditions and trafficking dynamics in fueling drug addiction.

Proposing recommendations for targeted interventions and policy measures to mitigate

drug addiction and trafficking challenges in Pakistan.

## **2.0 Literature Review**

The issue of drug addiction is alarmingly expanding in Pakistan, and the nation's domestically manufactured drugs as well as those that are imported are contributing to the spread of this scenario. It is possible that a broad range of social, cultural, and economic factors are responsible for the prevalence of drug addiction throughout the country (Batool, 2023). It is vital that measures be taken to address the circumstances that contribute to drug addiction in order to prevent it from becoming an even more widespread problem in the country. This will help prevent drug addiction from becoming an even more widespread problem. As a result of the fact that pharmaceuticals have an effect on both the body and the mind, they have the ability to change a person's thoughts, emotions, and behaviors (Malik & Agrewala, 2023). There are a vast number of reasons why people take drugs, and there are also a large variety of particular methods by which people use drugs. A person is said to be addicted to something when they use it again and again to the point that they develop a need for it and finally become dependent on it (Zhu et al., 2023). The addiction to narcotics is nothing more than a trap; if you let yourself fall into it, it is very difficult to extricate yourself from it. There is a complex neurobiological disorder known as drug addiction. This sickness causes a person's brain and behavior to change in such a way that they lose the ability to resist the urge to use drugs. These addictive behaviors are the defining characteristics of this illness (Hossain et al., 2022).

The analysts believe that the primary reason for the proliferation of drug usage in Pakistan is the fact that it is both inexpensive and simple to get drugs. It is possible to get a significant quantity of drugs in our nation. Numerous children in Pakistan experience a great deal of stress as a result of family problems, which leads them to begin using drugs. Disagreements between their parents, poverty, disagreements with their siblings, and other factors all have a negative impact on their mental health. Drugs may be used as a means of escape from reality by adolescents who are dissatisfied with their families. As a result of the fact that it propels them to the skies, they experience fleeting pleasure (Sultan et al., 2023). On the other hand, as soon as they touch down on Earth, they are confronted with the harsh reality, and they have a strong desire to go back to the place where the drug brought them. This is when their dependence starts. The unwavering support from those in positions of power, wealth, and influence is the main factor causing the alarming increase in drug use in Pakistan. Pakistan now engages in both drug importation and exportation (Naz et al., 2022). Pakistan's illicit narcotics industry is estimated to generate an annual revenue of \$2 billion. "Pakistan has the highest per capita heroin addiction rate in the world," said David Browne. The phenomenon of peer pressure is really genuine. Adolescents endeavor to conform to societal norms by submitting to the authority of others (Jabeen et al., 2022). The influence of one's peers on drug use may encourage drug use and possibly cause addiction to develop. Individuals may experience pressure as a result of peer social norms. For example, even without direct influence from peers, an individual may have a sense of need to consume alcohol if they see that their friends often engage in drinking activities (Ali et al., 2022).

The fact that Pakistan shares a lengthy western border with Afghanistan and Iran, as was

mentioned before, further complicates the country's concerns over drug trafficking. Afghanistan "continued to be the world's largest cultivator of opium poppy and the world's largest producer of opium," according to a report from the United Nations Office of Drugs and Crime published in 2018. In 2017, the research claimed, the overall area under opium poppy cultivation in Afghanistan climbed by 63 percent to 328,000 hectares, as compared with the previous year; similarly, the opium output also increased by 87 percent, from 4,800 tons in 2016 to 9,000 tons in 2017. These tendencies, which have not shown any appreciable signs of abating in the years that have followed, have increased both Pakistan's susceptibility to drug trafficking and the danger of rising domestic drug use. The folks involved in the smuggling of drugs across borders also take advantage of Pakistan's strategic geographical location. The country's extensive western borders with Afghanistan and Iran are mostly permeable. These areas are now being enclosed with fences, but a significant portion of them remain far and unprotected, with challenging landscapes (Ahmed et al., 2020).

Pakistan's coastline spans a length of 990 km, extending from India to the Middle East and Iran. Despite consistent surveillance, the majority of it remains vulnerable. The transnational drug gangs take advantage of this circumstance and abuse Pakistani territory as a transit route for worldwide drug trafficking. The Federally Administered Tribal Areas (FATA) are home to most of the problematic regions in terms of poppy production, according to their geographical location.

**Table 1. Cultivation Eradication and Potential Harvest of Opium in Pakistan 2009-2013**

<b>Year</b>	<b>Cultivation</b>	<b>Eradication</b>	<b>Harvest</b>
<b>2009</b>	5702	5173	2521
<b>2010</b>	7694	5496	1465
<b>2011</b>	3145	766	2339
<b>2012</b>	1909	436	1553
<b>2013</b>	2306	698	1548

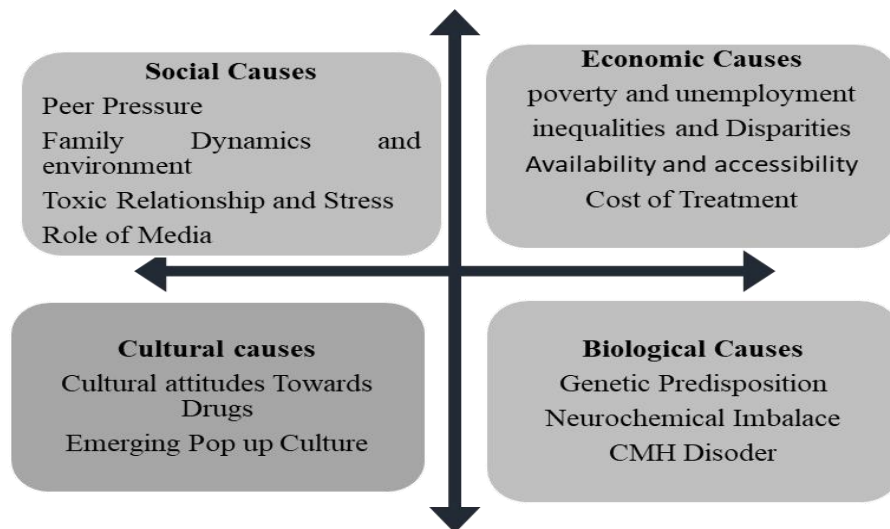
The attempts to eradicate terrorism in the Federally Administered Tribal Regions (FATA) are hampered by a number of issues, including concerns about losing community participation in counter-terrorism operations and a shortage of available security troops as a result of continuing counter-terrorism operations in the border regions between Pakistan and Afghanistan. The attempts to eradicate the disease need to be enhanced, especially in the Khyber Agency, where there is a growing tendency to cultivate the crop inside of walled complexes in order to disguise it from the official authorities.

### **2.1 Socio-economic factors contributing to drug addiction prevalence in Pakistan**

Drug addiction is prevalent in Pakistan as a result of socioeconomic concerns such as poverty, unemployment, and the trauma of war, as well as the easy availability of drugs as a

result of porous borders and weak law enforcement. These factors have contributed to the prevalence of drug addiction in Pakistan. The fact that social mores and religious interpretations play a part in defining the degree to which drug use is regarded as acceptable in each and every country is another factor that contributes to the complexity of the situation. Pakistan's position in close proximity to Afghanistan and other countries that produce large quantities of drugs is a contributing element that makes the situation much more serious than it already is. These two venues are located in close proximity to one another, which helps to maintain people's addiction to drugs and promotes the formation of trafficking networks (Zaman et al., 2022).

When it comes to the emergence of a drug addiction, there are a significant number of individuals who are of the opinion that poverty is one of the key elements that contribute to the development of the addiction. One may find a significant number of people who are of the opinion that this is the appropriate viewpoint to adopt. A considerable portion of the nation's population is now living in conditions that are considered to be below the poverty line. This segment of the population is currently a significant one. This specific segment of the population already forms a considerable share of the total population at the present time (Ali et al., 2021). There are a number of different causes that might be responsible for the substantial percentage of people who are either unemployed or underemployed. Among the most prevalent causes, two of the most common are unemployment and underemployment. The situation as a whole is improved by the contributions made by each of these individual components. A few of the issues that fall under this area of concern include a culture that is marked by discrimination, illiteracy, and a lack of economically viable solutions (Malla, 2019). These are only a few of the difficulties that fall into this category. There are further challenges, one of which is a lack of economic validity. As a result, as a consequence of this, the individuals are compelled to experience feelings of strain and aggravation, which finally leads them to participate in the utilization of drugs that are legally prohibited from being utilized (Batoool, 2023).



Another explanation is that people are not aware of the negative consequences that medicines may have on their bodies. The pupils are not provided with the required knowledge on the prevention and treatment of drug usage since our curriculum does not sufficiently educate

them on these topics. On the other hand, it is imperative that our children be aware of the negative consequences that medicines may have, as well as the methods by which our gems are increasingly being reduced to ashes on an annual basis. Having no clear understanding of what constitutes drug misuse, some individuals began taking drugs in any form with the intention of experiencing pleasure; nonetheless, over time, they developed a habit of using drugs. Especially the younger generation is more likely to become a victim of addiction due to the presence of negative company, exposure to new environments, a lack of supervision and appropriate knowledge, stress, and a lack of strength to deal with the challenges that they confront (Ashiq et al., 2020). The inability to exert control over social problems or conflicts is one of the primary factors that contribute to addiction. In a similar vein, there are occasions when individuals are presented with drugs in such a way that they are unable to resist the desire to use them. One example is the *Sheesha* lounges, which provide a convenient location for individuals to use the "Water Pipe," which may be filled with tobacco or crystal and comes in a variety of tastes. This is now considered fashionable, and regardless of age or gender, we discover a large number of individuals, particularly members of the wealthy class, openly enjoying *Sheesha*. A further reason why individuals take drugs is the expectation that they will be able to concentrate better or that they will have a sense of relaxation from their anxieties (Bano, 2021).

## 2.2 Mapping Drug Trends and Routs in Pakistan

While the problems of poppy cultivation and drug manufacture have been mostly overcome, temporarily at least, Pakistan still faces two persistent drug-related difficulties. There are two main issues with drug-related matters in Pakistan. Firstly, Pakistan is being used as a transit route by international drug traffickers. Secondly, there is a significant increase in domestic drug consumption inside the country. Meanwhile, the collaboration and interconnection of many forms of organized crime persist robustly, exacerbating the problem of drug trafficking in Pakistan. Drug traffickers, human traffickers, and conventional smugglers often engage in a collaborative effort, sharing information and intelligence.

### 4.1 Trafficking Trends in Pakistan

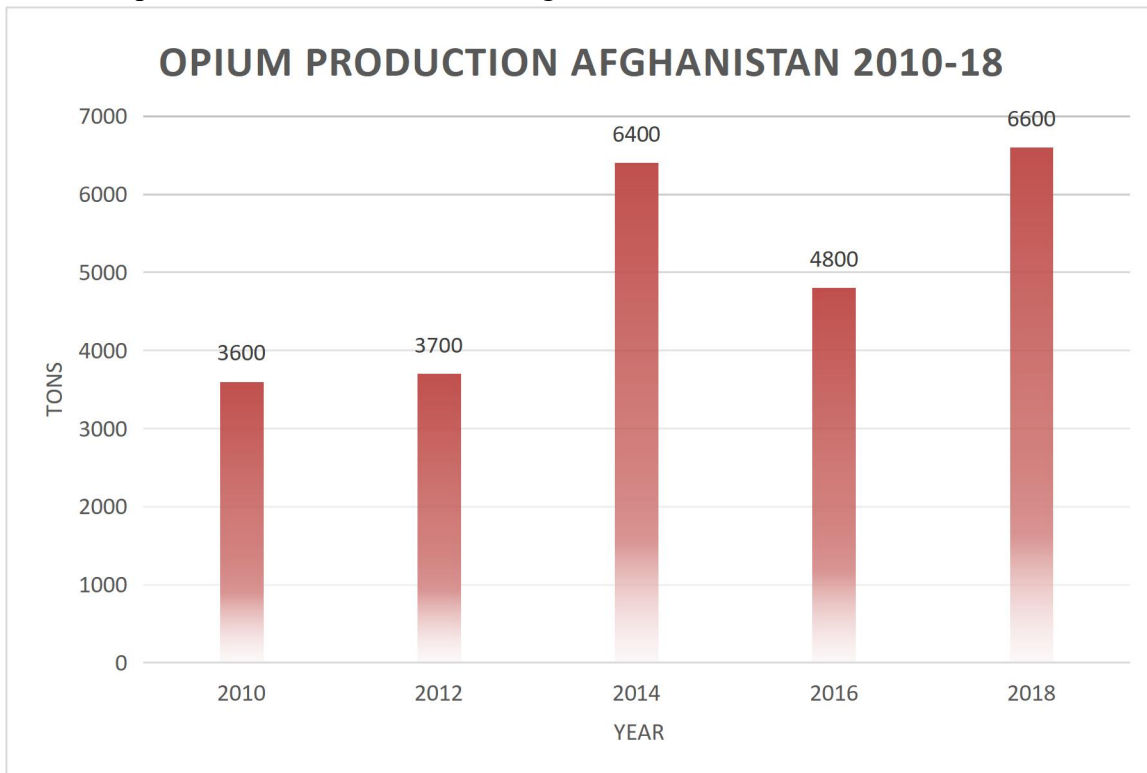
The ANF has found the following patterns in the smuggling of illegal narcotics throughout Pakistan.

Means	Modes
<b>Land</b>	<ul style="list-style-type: none"> <li>➤ Hiring of families as courier</li> <li>➤ Convening through Baluchistan</li> <li>➤ Use of satellite phone for coordination</li> </ul>
<b>Airports</b>	<ul style="list-style-type: none"> <li>➤ Concealments in baggage</li> <li>➤ Concealments by swallowing</li> <li>➤ Concealments by wrapping around bodies</li> <li>➤ Increase trafficking of psychotropic injections</li> </ul>
<b>Seaports</b>	<ul style="list-style-type: none"> <li>➤ Increased traffic using container</li> <li>➤ Increased traffic using Boats</li> </ul>

#### 4.2 Domestic Transit Route Dilemma

The growth of poppy and the production of narcotics in Afghanistan saw a surge due to the turmoil in the country. The Pakistan-Afghanistan border is about 2,400 kilometers in length. The Pakistan-Iran border is around 900 kilometers in length. Despite the continued building of walls along these borders, there are still several locations that need adequate protection, especially in proximity to the border with Iran. Drug traffickers demonstrate adeptness in adapting to and exploiting border security systems (Taylor & Hunter, 2018).

The measures adopted by the government to curb drug trafficking inadvertently provide traffickers with a rationale to inflate the price or street value of narcotics, boosting their overall profits. One facet of the transit route issue is the illicit transportation of heroin and other drugs from Afghanistan to other parts of the globe. Another facet pertains to the smuggling of precursor chemicals into Afghanistan. These elements are mutually dependent (Taylor & Hunter, 2018). The cultivation of opium poppy and cannabis in Afghanistan is the main reason why Pakistan is situated on one of the most often used drug trafficking routes globally. A recent study by the United Nations Office on Narcotics and Crime (UNODC) revealed that approximately 40% of the narcotics, such as heroin and hashish, produced in Afghanistan are transported through Pakistan. This transportation route contributes to a substantial supply of opiates that are both exported and consumed within Afghanistan.



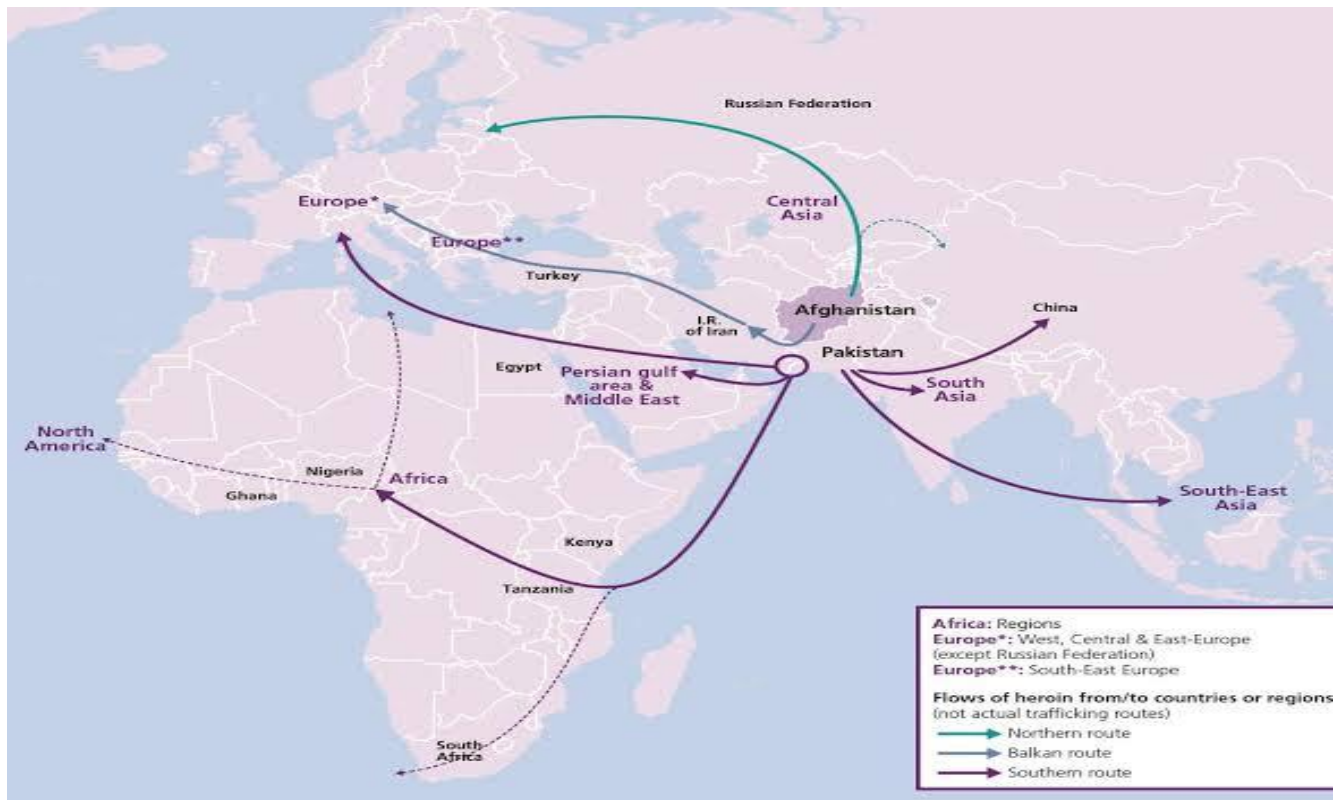
*Chart 1. Opium Production Afghanistan 2010-18*

In addition, the Afghanistan Opium Poppy Survey of 2018 brought to light the fact that a total of

263,000 hectares of opium were brought under cultivation during that particular year. The three provinces that border Pakistan, Kandahar, Uruzgan, and Nangarhar, continued to produce the most opium poppy in the country.

### 4.3 Possible Drug Trafficking Routes

In recent years, several routes have seen the emergence of new routes. Pakistan has progressively intercepted higher quantities of heroin being smuggled to China via its territory since 2004. The increased vigilance of this newly established trafficking route, originating from Afghanistan, passing via Pakistan, and ultimately leading to China, is imperative. Pakistan serves as a potential transit nation for precursors that are being sent to Afghanistan. ANF authorities posit that precursor chemicals are mostly illicitly transported via the United Arab Emirates, Central Asia, China, and India into Pakistan and then to Afghanistan. Pakistan's law enforcement agencies (LEAs) also hold the belief that mislabeled containers of acetic anhydride are included in the cargo of the Afghan transit trade.



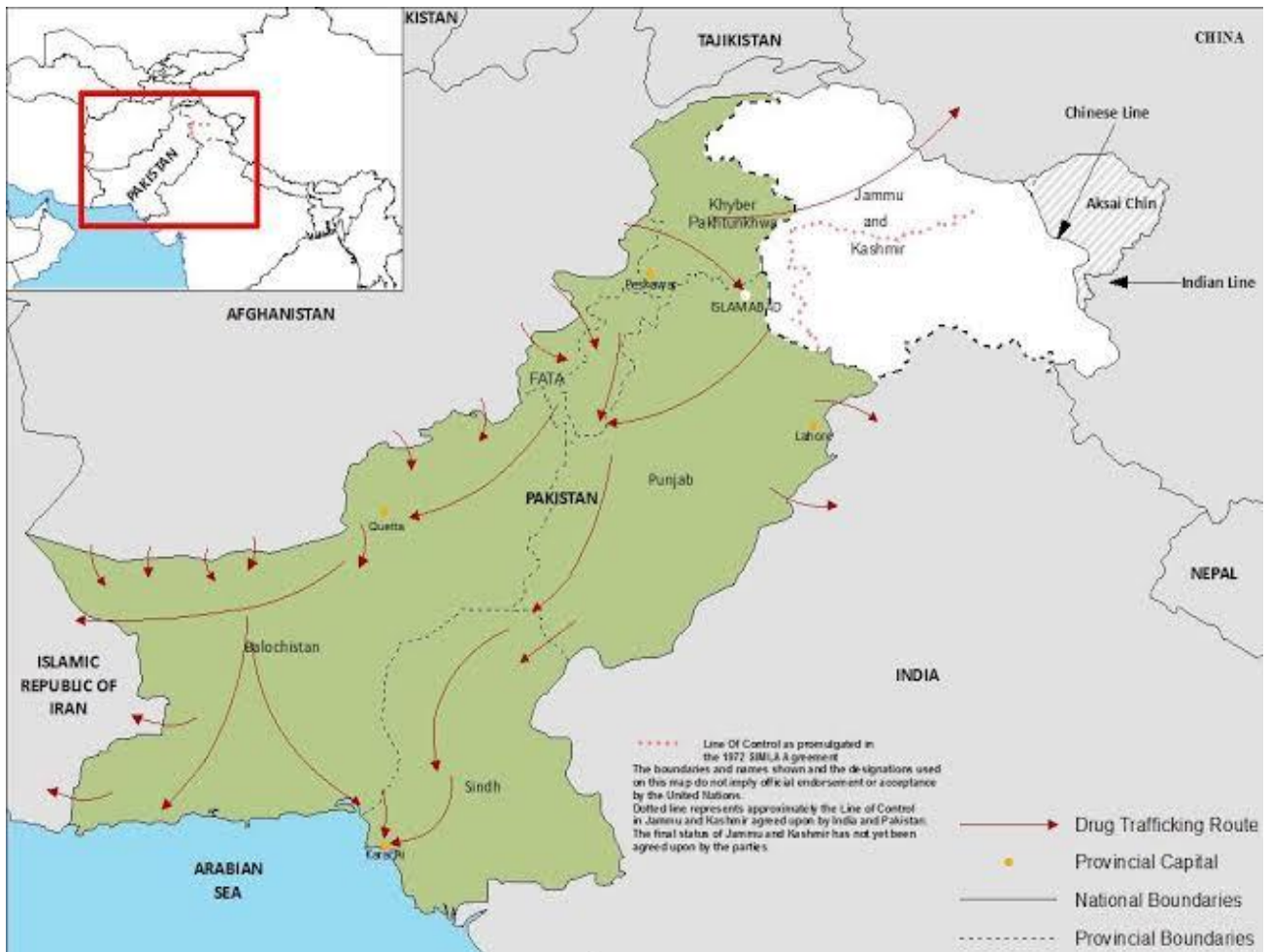
**Fig 1. Mapping Drug Routs**

It is widely thought that trafficking occurs from Afghanistan to Balochistan via passing through the Afghan provinces of Helmand and Nimroz, and then reaching the Pakistani districts of Chaghi and Nushki. The trafficking is made easier by the remote and inaccessible nature of



these sparsely inhabited areas. Although there is only one officially designated border crossing in Balochistan, located in the town of Chaman near the province capital of Quetta, the border area is poorly monitored and may be readily crossed. Upon arrival in Pakistan, opium and heroin are often stored in border villages temporarily before being transported to larger cities or exported to global markets. Stocks are often stored in residences, where family members are frequently remunerated for doing the service

The Frontier Constabulary (FC) continues to hold significant authority in Balochistan, actively engaging in several areas of operation. A minority of the narcotics illicitly transported into Pakistan are thereafter trafficked via Balochistan into Iran, before being further distributed towards the western regions. However, the majority of the shipments are also directed towards Pakistan's aviation and seaports, with the ultimate destination being China, South East Asia, Africa, and Europe. Although some of the goods destined for China are suspected to be transported overland via Pakistan's Gilgit-Baltistan region, the significant number of seizures at China's seaports suggests that the maritime route is crucial for smuggling into China's metropolitan areas and other locations



## 2. Drug Trafficking and Distribution in Pakistan

### **3.0 Methodology**

In order to investigate socio-economic factors as well as trafficking patterns and routes, the methodology that was used in the mapping of drug addiction in Pakistan included both qualitative and quantitative research design. To acquire an improved comprehension of the socio-economic factors that contribute to drug addiction and trafficking trends, the qualitative component of the study entailed doing an analysis that involved devouring periodicals, literature, and articles. A comprehensive grasp of the subject was offered by these sources, which gave vivid narratives. In the meanwhile, reports from respectable organizations such as the World Bank, the United Nations, and the national Ministry of Narcotics were employed for qualitative and quantitative aspects of the study. In these papers, statistical data, trends, and analytical insights were provided about the prevalence of drug addiction and patterns of drug trafficking. The study was able to give a thorough picture of drug addiction in Pakistan by blending qualitative insights from the literature with quantitative data from authoritative studies. This understanding included socio-economic triggers as well as trafficking routes throughout Pakistan. The integrity and confidentiality of the information that was acquired was protected by ethical concerns that remained at the forefront during the whole process of data gathering and analysis.

### **4.0 Results**

The increasing number of drug users in Pakistan may be attributed to a confluence of societal issues, including poverty, unemployment, and illiteracy. Poverty is often seen as a primary catalyst for drug addiction. A significant majority of the nation's population is below the poverty threshold. A significant proportion of individuals are experiencing unemployment or underemployment as a result of illiteracy, limited work prospects, and a prevalent culture of nepotism. This engenders a sense of uneasiness and exasperation among people, ultimately driving them into drug use. The consequences of drug addiction are multifaceted, intricate, and interconnected, with one impact being connected to another. A single individual's addiction leads to the downfall of the whole family. As an individual, he experiences a loss of both his personal identity and moral principles within society, while his family suffers a decline in their social status. The relatives of an individual struggling with addiction bear the enduring consequences of their dependency in many ways throughout the course of their life. They encounter ridicule, harassment, exclusion, and social stigma. If the addict engages in illegal behavior, their family will have to undergo legal processes and face the associated expenses. It is well-known that addicts sometimes engage in theft, robbery, or violence in order to get money.

Gaining insight into the underlying causes of drug addiction may be quite beneficial in managing this problem. To begin with, it is necessary to reduce the demand for it by offering employment possibilities, skill-oriented training programs, and organizing leisure activities for the general population. Implementing a comprehensive awareness campaign about the repercussions of drug addiction might significantly contribute to reducing the demand for drugs. Mass awareness should be conducted via many media channels, including electronic, print, and social media, in order to effectively distribute information. This material should primarily

emphasize preventative strategies, treatment modalities, and rehabilitation approaches to raise awareness that addiction is a manageable condition. This knowledge would have a beneficial impact on altering the overall public perception of addicts and would empower individuals to act responsibly by providing assistance to addicts in any feasible manner.

The crucial function of electronic media is paramount in highlighting this problem and facilitating debates about it. Dramas or films should emphasize the problems associated with drug abuse in Pakistan and its detrimental impact on our society. The actions done by the Government to restrict tobacco advertisement on television screens is appreciable but it would be more successful when it is accompanied with airing tiny adverts about the hazardous consequences of drugs.

Educational institutions, including schools, colleges, universities, and tuition centers, may serve as a significant platform to tackle this problem, since they provide lifelong learning opportunities to the younger population. In order to address this issue, the management of these institutions should provide concise presentations on drug usage to every incoming cohort. Furthermore, it is essential to include a concise section on drugs into the standard curriculum to educate students about this subject. Parents must be adequately educated about various addiction methods and particularly the signs of addiction in order to promptly and effectively address and protect their children.

### **5.0 Implications and Limitations of the Study**

The research on mapping drug addiction in Pakistan has wide-ranging and complex ramifications. The qualitative insights provide a deeper understanding of the intricate relationship between socio-economic conditions and drug addiction. This information is useful for policymakers and intervention programs as it helps them address the underlying causes of drug addiction, such as poverty, unemployment, and social marginalization. An in-depth comprehension of the dynamics of trafficking patterns and routes, obtained via quantitative research, enhances the ability of law enforcement agencies to devise effective tactics and foster international collaboration in order to fight drug trafficking networks. Moreover, the study's extensive comprehension empowers healthcare practitioners to customize preventative, treatment, and rehabilitation initiatives that are culturally attuned and adaptable to the varied requirements of impacted populations. The research combines qualitative depth and quantitative rigor to provide stakeholders with evidence-based ways to reduce the negative effects of drug addiction on people, families, and society in Pakistan. This promotes a stronger and healthier Pakistan.

A constraint of the research on mapping drug addiction in Pakistan is the possibility of inadequate representation or prejudice in the qualitative and quantitative data sources. The results may have been impacted by constraints such as sample biases or insufficient reporting, despite attempts to acquire various viewpoints and use trustworthy data sources. Moreover, the ever-changing nature of drug trafficking and addiction patterns poses difficulties in obtaining up-to-date information, potentially impacting the study's results in terms of both timeliness and applicability. Although there are limits, the study provides useful insights into the socio-economic factors and trafficking dynamics related to drug addiction in Pakistan. This study might serve as a basis for future research and policy initiatives.

**Mudasar Ali Nadeem:** Problem Identification and Theoretical Framework

**Taoqeer Nawaz:** Data Analysis, Supervision and Drafting

**Sohail Ashraf:** Literature Search, Methodology and Drafting

### **Conflict of Interests/Disclosures**

The authors declared no potential conflicts of interest in this article's research, authorship, and/or publication.

### **References**

Ahmed, B., Yousaf, F. N., Saud, M., & Ahmad, A. (2020). Youth at risk: The alarming issue of drug addiction in academic institutions in Pakistan. *Children and Youth Services Review*, 118, 105385.

Ali, B., Ali, A., & Ali, H. (2021). Sociological Analysis of Peer Group and Drug Addiction at Familial Level in Swat Khyber Pakhtunkhwa, Pakistan. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(10), 276-288.

Ali, B., Ali, A., Khan, S. A., Shakoor, A., & Mahmood, T. (2022). The Role Of Religion In The Prevention Of Drug Addiction In Swat, Khyber Pakhtunkhwa, Pakistan. *Webology*, 19(3).

Ashiq, U., Abbas, N., & Obaid, A. (2020). The prospects threats of substance use and role of social and economic factors among youth: The case of higher education institutions. *Competitive Social Science Research Journal*, 1(2), 10-18.

Bano, R. (2021). Familial And Communal Factors Spreading Drug Addiction in Suburban Slum Areas. *Propel Journal of Academic Research*, 1(2), 1-13.

Batool, S. (2023). The phenomenon of drug addiction and the role of rehabilitation centers in Balochistan, Pakistan VID Specialized University. Oslo].

Garfoot, A. P. (2023). On Drugs: Substance Rehabilitation, The 'War On Drugs' Moral Panic & The Future of International Psychoactive Policy. *European Journal of Biology and Medical Science Research*, 11(3), 9-48.

Hossain, M. K., Davidson, M., Kypreos, E., Feehan, J., Muir, J. A., Nurgali, K., & Apostolopoulos, V. (2022). Immunotherapies for the treatment of drug addiction. *Vaccines*, 10(11), 1778.

Jabeen, S., Abdullah, U., Ahmad, M. S., Zafar, M. M., Pinsonneault, J. K., Sadee, W., & Raja, G. K. (2022). Drug Abuse in Pakistan: Genetic Factors and DRD2 Enhancer Variant rs12364283. In *Handbook of Substance Misuse and Addictions: From Biology to Public Health* (pp. 2667-2688). Springer.

Koob, G. F., Kandel, D. B., Baler, R. D., & Volkow, N. D. (2023). Neurobiology of addiction. In *Tasman's Psychiatry* (pp. 1-51). Springer.

Malik, J. A., & Agrewala, J. N. (2023). Future perspectives of emerging novel drug targets

and immunotherapies to control drug addiction. *International Immunopharmacology*, 119, 110210.

Malla, M. A. (2019). Factors contributing to the problem of drug abuse among the adolescents in Kashmir Valley. *International Journal of Research and Analytical Reviews*, 6(1), 248-254.

Motyka, M. A., & Al-Imam, A. (2021). Representations of psychoactive drugs' use in mass culture and their impact on audiences. *International journal of environmental research and public health*, 18(11), 6000.

Muzyka, A., Gorokh, O., Muzyka, L., Muzyka-Stefanchuk, O., & Anishchenko, M. (2023). Modern anti-drug policy and human rights. *Oñati Socio-Legal Series*, 13(5), 1583-1614.

Naz, F. L., Afzal, A., Latif, M. A., & Usman, A. (2022). Causes of Increasing Drugs Addiction among Youth: Opinions of University Students in Pakistan. *Pakistan Journal of Social Sciences*, 42(3), 703-716.

Prasad, K. S., Raju, P. N., & Kumar, D. V. N. (2023). NATIONAL SEMINAR ON DRUG ADDICTION AND ABUSE AMONG YOUTH (DAY 2023).

Sultan, N., Noureen, S., & Saher, A. (2023). Prevalence of Co-Occurring Physical and Mental Health Problems in People with Drug Addiction in Pakistan. *Journal of Professional & Applied Psychology*, 4(3), 478-487.

Taylor, M., & Hunter, T. S. (2018). A paradox of plenty: the Australian domestic gas supply regulatory dilemma. *The Journal of World Energy Law & Business*, 11(6), 465-486.

Tetty, J. N., & Levissianos, S. (2017). The global emergence of NPS: an analysis of a new drug trend. In *Novel psychoactive substances: policy, economics and drug regulation* (pp. 1-12). Springer.

Zaman, S., Hussain, B., Irfan, S., Khattak, A. Z., & Shaheen, A. (2022). Sociodemographic characteristics and related factors of substance use in Pakistan; a retrospective study. *Journal of Substance Use*, 1-6.

Zhu, Z., Dou, B., Cao, Y., Jiang, J., Zhu, Y., Chen, D., Feng, H., Liu, J., Zhang, B., & Zhou, T. (2023). TIDAL: Topology-Inferred Drug Addiction Learning. *Journal of Chemical Information and Modeling*, 63(5), 1472-1489.