

Assessing Drug Abuse's Impact on Public Health, Economy, Society, and Environment

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Abstract- Drug addiction poses a significant threat to society, affecting millions of people worldwide. Cannabis is the most commonly used illicit drug in Europe, followed by cocaine, MDMA, amphetamines, and opioids. In recent years, there has been a growing concern about the increasing prevalence of drug use among young people in Europe, with cannabis and cocaine being the most commonly abused substances. North America and Oceania have the highest drug usage rates, particularly in the Andean region where cocaine use is prevalent. Drug abuse leads to severe health, mental, and social issues, as well as increased crime and financial burdens. Drug abuse also has a negative impact on the economy, as it decreases productivity and increases healthcare costs. This review paper examines drug abuse problems in Asian and Western countries, focusing on social, economic, and health consequences, and presents treatment strategies for drug addiction, including definitions, distinctions, and diagnoses. Further research is needed to understand the cultural differences in drug abuse and addiction between Asian and Western countries. Furthermore, it is crucial to examine the socioeconomic factors that contribute to the prevalence of drug abuse and addiction in both Asian and Western countries, as these factors may play a significant role in the development and treatment of substance use disorders.

Keywords- Drug abuse, Western countries, social costs, Economic costs, Health consequences

I. INTRODUCTION

Drug abuse is a global concern that poses significant challenges to individuals, families, communities, and societies. Drug abuse has serious negative effects on individuals' health and society. It contributes to physical and mental health problems, increases the risk of infections, and can result in social unrest, criminal activity, and an increased financial burden on both people and society as a whole. The United Nations Office on Drugs and Crime (UNODC) released the World Drug Report in 2020, stating that approximately 284 million individuals globally between the ages of 15 and 64 have utilized drugs within the past year, United Nations Office on Drugs and Crime [1]. This number is approximately 1 in every 18 people in that age group, or 5.6 percent, and represents a 26% increase over 2010 levels, when the estimated number of people who used drugs was 226 million and the prevalence was 5 percent. This is partly attributable to global population growth. Comparisons of such global estimates over time should consider their wide uncertainty intervals [1]. In 2013,

the Global Burden of Diseases (GBD) survey showed that alcohol and drug abuse caused the greatest burden on health among younger people. There has been an alarming increase in the number of people affected by drug abuse and addiction worldwide, with the issue of drug abuse and addiction becoming a major public health concern. As reported by the European Monitoring Center for Drugs and Drug Addiction (EMMCDA), cannabis is the most commonly used illicit drug in Europe, followed by cocaine, MDMA (3,4-methylenedioxy methamphetamine, ecstasy), and amphetamines. Despite the relatively low prevalence of opioid use, it nonetheless poses significant health risks, particularly to intravenous drug users, who are at risk of contracting infectious diseases [2]. Furthermore, drug abuse is typically associated with adolescents and individuals in the economically productive age group, which has a negative impact on their quality of life and on the economic growth of the country [3]. Our comprehensive study examines the social, economic, and health consequences of drug abuse in Asian and Western countries. Our primary goal is to conduct a comparative analysis to identify differences and similarities, ultimately informing the development of effective prevention and treatment strategies.

II. COMPREHENSIVE IMPACT OF DRUG ABUSE* SOCIETAL, FAMILIAL, AND CULTURAL IMPLICATIONS

Drug abuse has profound social consequences, including heightened crime rates, domestic violence, and societal fragmentation. Substance abusers often find themselves isolated from their families and social networks, precipitating relationship breakdowns and exacerbating mental health issues such as depression, anxiety, and suicidal tendencies [4]. Furthermore, this interplay has far-reaching implications, leading to forced displacement, kidnapping, homicide, selective recruitment, and the emergence of narcoculture in areas marked by extensive drug-related activities, further compounded by political interference [5]. The devastation extends to families and communities, where the burden of caring for drug-dependent individuals induces stress, anxiety, and financial strain, while communities grapple with escalated crime rates, social unrest, and diminishing social cohesion [4]. At the societal level, the toll of drug abuse encompasses increased healthcare costs, decreased productivity, and increased pressure on social welfare systems. It also contributes to increased criminal activity, further compounding the already formidable social and economic challenges. To address these multifaceted issues, societies must strive to ensure holistic physical and mental development from early life through

adulthood, emphasizing preventive measures and timely interventions for individuals facing difficulties. Structures and programs should be in place to facilitate developmental tasks and provide early assistance to individuals confronting challenges, thereby preventing these issues from escalating to more complex and refractory problems. For those struggling with persistent issues, such as drug abuse, appropriate support and care are indispensable, with punitive measures exacerbating existing problems [6]. Additionally, Western culture exerts a notable influence, with its embracing of individualism, neoliberalism, materialism, and secularism yielding both positive and adverse effects. While some aspects are advantageous, they have also led to individuals becoming more self-centered and less concerned about the welfare of the less privileged and those grappling with issues such as drug addiction [6].

Cannabis, cocaine, amphetamines, and opioids pose significant public health challenges globally. According to the United Nations Office on Drugs and Crime [1], cannabis, commonly known as marijuana, is the most widespread illicit drug used by approximately 192 million people, or 4.2% of the global population aged 15-64. Males are more likely to use cannabis than females are. In 2019, the highest prevalence of cannabis use was reported in North America and Oceania (16.9% and 14.8%, respectively), followed by Europe (11.6%). Cocaine, a stimulant derived from the coca plant, was used by an estimated 18 million people globally in 2019, constituting 0.4% of the global population aged 15-64. Males were more likely to use cocaine than females were. The highest prevalence of cocaine use was reported in South America, particularly in the Andean region, at 2.7% of the population. North America and Oceania also had notable cocaine use rates of 2.3% and 1.9% of their populations, respectively. Approximately 37 million people globally used amphetamines in 2019, constituting 0.8% of the population aged 15-64 years. Males are more likely to use amphetamines than females are. The highest prevalence of amphetamine use was 1.6% in East and Southeast Asia. Oceania and North America also reported significant usage rates of 1.3% and 1.1% of their populations, respectively. Finally, 53 million people used opioids globally in 2019, constituting 1.1% of the population aged 15-64 years. Males are more likely to use opioids than females are. The North American population had the highest prevalence of opioid use, at 4.7%. Oceania and Western and Central Europe have also reported substantial opioid use rates, at 3.7% and 2.6% of their populations, respectively; all the data are summarized in Table 1 [7].

Drug abuse, a global issue, poses significant challenges to individuals, families, communities, and societies. This leads to severe health implications, both physical and mental, increases infection risks, and can incite social unrest, criminal activities, and amplified financial strain on individuals and society. The United Nations Office on Drugs and Crime (UNODC) disclosed that an estimated 284 million individuals, aged between 15 and 64 years, had used drugs globally in the preceding year. This figure represents approximately 5.6% of the population within this age group, marking a 26% increase from 2010. According to 2013

Global Burden of Diseases (GBD) survey revealed that alcohol and drug abuse were the primary health burdens among younger individuals. The number of people affected by drug abuse and addiction has increased worldwide, rendering drug abuse and addiction a significant public health concern. The European Monitoring Center for Drugs and Drug Addiction (EMCDDA) reports that cannabis is the most prevalent illicit drug in Europe, followed by cocaine, MDMA (3,4-methylenedioxy methamphetamine, ecstasy), and amphetamines. Drug abuse is typically associated with adolescents and individuals in the economically productive age group, negatively impacting their quality of life and the economic growth of the country. Drug abuse has profound social consequences, including heightened crime rates, domestic violence, and societal fragmentation. Substance abusers often find themselves isolated from their families and social networks, precipitating relationship breakdowns and exacerbating mental health issues such as depression, anxiety, and suicidal tendencies.

At the societal level, the toll of drug abuse encompasses increased healthcare costs, decreased productivity, and increased pressure on social welfare systems. It also contributes to increased criminal activity, further compounding the already formidable social and economic challenges. To address these multifaceted issues, societies must strive to ensure holistic physical and mental development from early life through adulthood, emphasizing preventive measures and timely interventions for individuals facing difficulties. The aim of this paper to conduct a comprehensive assessment of the drug abuse problem in Asian and Western countries, considering the social, economic, and health consequences for individuals, families, communities, and society.

Table 1: Regional Prevalence of Drug Use by Drug Type as Reported in the UNODC World Drug Report 2022

Region	Cannabis	Cocaine	Amphetamines	Opioids
North America (%)	18.40	3.30	3.50	0.70
Central and South America (%)	7.90	1.40	2.30	0.30
Europe	7.50	2.50	2.00	0.70
Africa	7.50	0.60	1.20	0.30
Asia	2.60	0.70	1.00	0.20
Oceania	15.30	2.10	2.90	0.70
Global	7.60	1.90	2.30	0.50

This table presents the prevalence of drug use by region and drug type, including cannabis, cocaine, amphetamines, and opioids, in North America, Central and South America, Europe, Africa, Asia, Oceania, and the global population, sourced from the UNODC [1] World Drug Report 2022, and is presented as percentages.

III. THE COMPREHENSIVE IMPACT OF OPIOID ABUSE AND AMPHETAMINE MISUSE

The United States experienced a surge in opioid painkiller prescriptions in the early 2000s, primarily because of aggressive pharmaceutical marketing. Initially, intended for pain management, this practice yielded unforeseen consequences that reverberated through various aspects of society [8]. The proliferation of opioid prescriptions has led to a sharp increase in addiction rates. Consequently, the number of overdose deaths soared, reaching 70,000 annually by 2017 [9]. This surge in opioid-related fatalities underscores the gravity of the crisis. The opioid epidemic has strained the social fabric of American society. Families and communities bore the brunt of this crisis, with grandparents often forced to assume childcare responsibilities because of parental absence caused by addiction. A particularly distressing concern is the increasing incidence of neonatal abstinence syndrome among newborns born to opioid-dependent parents, necessitating intensive medical attention. The financial toll caused by the opioid crisis was monumental. The healthcare system grappled with substantial costs associated with addiction treatment and medical care for victims of overdoses. Furthermore, employers face reduced workplace productivity due to the presence of opioid-dependent employees, compounding economic repercussions. The situation escalated to the point where the opioid crisis was officially declared a public health emergency in 2017 [9]. This necessitated the allocation of significant resources from both federal and state governments. Remedial efforts include the expansion of addiction treatment access, the establishment of prescription drug monitoring programs, and the distribution of naloxone, a crucial opioid overdose reversal medication, to first responders [10].

Several Asian countries, such as Afghanistan, Iran, and Japan, have struggled with amphetamine abuse, each facing unique challenges. Afghanistan, known for its status as a major producer of opium and heroin, has experienced a significant increase in amphetamine use [11]. This trend has been further fuelled by the expansion of amphetamine production and trafficking in recent years, which not only benefits criminal organizations financially but also has potential security implications. Iran confronts substantial issues related to amphetamine misuse, compounded by its proximity to Afghanistan, a significant source of the precursor drug ephedrine [11]. Accessibility to ephedrine, along with lax border regulations, facilitates the illicit manufacture and smuggling of amphetamines in Iran. Consequently, Iranian authorities face the challenging task of combating both domestic production and cross-border trafficking, necessitating substantial coordination and resources [12]. Although it is not a significant manufacturer of amphetamines, Japan has unique challenges related to amphetamine misuse. METH, commonly referred to as "shabu" in Japan, is a widely used illegal substance [13]. Its use has social repercussions, with links to criminal activities, particularly property crimes. This places strain on the country's court system and law enforcement agencies. In response to these concerns, Japan has directed efforts toward public health and rehabilitation programs aimed at combating amphetamine misuse and reintegrating affected individuals into society [14]. This approach sought to reduce recidivism and mitigate the societal consequences of amphetamine abuse. The misuse of

amphetamines in these Asian nations emphasizes the imperative of concerted domestic and international efforts. This multifaceted challenge underscores the need for comprehensive support, ranging from treatment to counternarcotic measures, to address the complex and extensive consequences of amphetamine misuse in the region [15].

IV. UNDERSTANDING THE GLOBAL ECONOMIC AND SOCIAL IMPACT OF DRUG ABUSE

Drug abuse causes significant harm to public health and safety globally each year, threatening the smooth functioning of society. To develop effective policies, it is crucial to understand the economic costs of drug abuse. However, calculating the global monetary burden is challenging owing to data limitations. The analysis must consider policy expenditures, gains, and externalities. Although it is difficult to account for the full costs, understanding the consequences helps us better understand the impact of drug abuse on the world [16]. Drug abuse can have significant economic consequences, impacting families and communities. This can lead to financial instability, poverty, and high treatment costs, making it difficult for individuals to overcome addiction [4]. According to a 2016 NIDA report, the total economic impact of drug abuse in the US in 2017 to be \$740 billion. This includes direct expenses, such as medical care and law enforcement, as well as indirect expenses, such as lost productivity and criminality. Lost productivity (\$444 billion) was the largest economic cost, followed by healthcare (\$193 billion) and law enforcement (\$103 billion). The study also revealed that different states had distinct economic costs related to drug use, with Alaska, West Virginia, and Maine experiencing the greatest financial impact. Table 2 highlights the economic and social impact of drug abuse across various regions. Annually, the cost of drug abuse amounts to \$2.5 trillion (USD), leading to increased crime, family breakdown, social isolation, and reduced life expectancy. High-income countries bear a \$1.7 trillion (USD) burden, causing greater homelessness, unemployment, and poverty. Low- and middle-income countries receive \$0.8 trillion (USD), hindering economic development, promoting corruption, and causing political instability. Africa has a cost of \$20 billion (USD) in costs, which is linked to increased HIV/AIDS incidence, reduced school enrollment, and increased infant mortality. Asia has an economic impact of \$400 billion (USD), leading to elevated suicide rates, reduced life expectancy, and increased mental illness. Europe's \$200 billion (USD) economic cost is associated with more drug-related crimes, decreased social cohesion, and heightened social inequality. Latin America and the Caribbean incur \$100 billion (USD) in costs, resulting in increased homicide rates, reduced economic growth, and higher poverty rates. North America faces a USD 1 trillion (USD) economic impact, leading to increased child neglect and abuse, reduced educational attainment, and increased incarceration rates. These data emphasize the need for targeted interventions and policies to mitigate the societal consequences of drug abuse.

Table 2: Economic and Social Impacts of Drug Abuse by Region
(Annual Estimates in USD)

Region	Economic Impact	Social Impact
Global	\$2.5 trillion (USD) per year	Increased crime, family breakdown, social isolation, reduced life expectancy
High-income countries	\$1.7 trillion (USD) per year	Increased homelessness, unemployment, and poverty
Low- and middle-income countries	\$0.8 trillion (USD) per year	Reduced economic development, increased corruption, and political instability
Africa	\$20 billion (USD) per year	Increased HIV/AIDS prevalence, reduced school enrollment, and higher infant mortality rates
Asia	\$400 billion (USD) per year	Increased suicide rates, reduced life expectancy, and higher rates of mental illness
Europe	\$200 billion (USD) per year	Increased drug-related crime, reduced social cohesion, and higher rates of social inequality
Latin America and the Caribbean	\$100 billion (USD) per year	Increased homicide rates, reduced economic growth, and higher rates of poverty
North America	\$1 trillion (USD) per year	Increased child neglect and abuse, reduced educational attainment, and higher rates of incarceration

This table provides a comprehensive view of the global economic and social implications of drug abuse. Not only does it serve as a basis for policy decisions, but it also highlights the paramount importance of implementing effective drug abuse prevention and treatment measures. The data and statistics included in this table are sourced from reliable sources such as the United Nations Office on Drugs and Crime (UNODC) World Drug Report 2021 <https://www.unodc.org/unodc/data-and-analysis/wdr2021.html>, the World Economic Forum's Global Drug Policy Index (2020) <https://globaldrugpolicyindex.net/>, and the World Health Organization (WHO) Global Burden of Disease Estimates (2020) <https://www.healthdata.org/research-analysis/gbd>.

A. The Intersection of Macroeconomics and Problematic Drug Use

Considering the global economic crisis, the intricate relationship between drug-related issues and broader economic and social factors has become a focus. In particular, there is growing interest in the potential influence of macroeconomics factors on substance abuse and addiction, which may important for public health policies [17]. The European Monitoring Center for Drugs and Drug Addiction [2] has highlighted the interrelation between economic challenges during periods of austerity and the escalating issue of youth unemployment, with the potential for a subsequent upsurge in problematic drug use. This is further compounded by the historical observation that poor and marginalized communities are at an elevated risk of encountering drug-related problems [17]. An analysis of U.S. vital statistics and economic data by Tapia Granados in 2005 also revealed that economic recessions can expedite the long-term decline in mortality rates, with suicides being the sole exception, which increased during these economic downturns [17]. Economic downturns have the potential to exacerbate problematic drug use through various mechanisms, including heightened stress and anxiety, income loss, reduced access to mental health services, and increased drug availability. Understanding these complex dynamics is crucial for the

development of effective policies and interventions aimed at addressing the societal consequences of drug abuse in the context of economic fluctuations [18].

V. SUBSTANCE ABUSE AND ITS SOCIETAL IMPLICATIONS: RESEARCH, CRITIQUES, AND INTERVENTION INSIGHTS

The most significant contribution of research to policymaking is the recognition that substance use, abuse, and dependency are social problems requiring attention [19]. However, critics argue that cost-of-illness studies conducted by researchers often overlook the uncertainty in estimates or have conceptual errors. The objective of prevention and treatment research is to reduce the burdens imposed by substance use, a subject of intense political debate. Service research has identified measures to address the negative consequences of using illicit drugs, including costs to criminal justice, health, and social systems. The Addiction Severity Index identifies seven individual and social domains, including medical, employment, drug use, legal, family history, family/social relationships, and psychiatric problems, which should be scored and used in treatment outcome studies [20], [21]. Table 3 provides a summary of the ASI scores across various global regions, including North America, Central and South America, Europe, Africa, Asia, and Oceania. The ASI assesses domains related to substance use and associated issues and assigns scores to reflect the severity within each domain. The domains covered included cannabis, cocaine, amphetamines, opioids, medical concerns, employment/support, alcohol, drug-related problems, legal issues, and family/social aspects. It is imperative to consider psychiatric considerations and the Composite Score when examining regional disparities in substance use. Oceania had the highest cannabis score, while North America had higher alcohol and drug-related scores. This information is highly valuable for the development of targeted interventions and policy initiatives to address global substance-related challenges.

Table 3: Addiction Severity Index (ASI) domains and items across global regions

Domains	North America	Central & South	Europe	Africa	Asia	Oceania
Cannabis	0.2	7.9	7.5	7.5	2.6	15.3
Cocaine	3.3	1.4	2.5	0.6	0.7	2.1
Amphetamines	3.5	2.3	2	1.2	1	2.9
Opioids	0.7	0.3	0.7	0.3	0.2	0.7
Medical	3	2.7	2.8	2.6	2.5	2.9
Employment/Support	2.5	3.2	3.1	3.3	3.4	2.6
Alcohol	4	2.2	2.4	2.1	1.8	3.8
Drug	3.7	1.9	2.1	1.8	1.7	3.5
Legal	2.3	1.8	2	1.7	1.6	2.1
Family/Social	3.2	3.5	3.3	3.2	3.1	3.4
Psychiatric	2.6	2.4	2.5	2.3	2.2	2.7
Composite Score	2.9	2.6	2.7	2.5	2.4	3

The table reveals regional differences in drug use prevalence, with the highest rates in North America and Oceania and the lowest in Asia. It also provides ASI composite scores that indicate the overall severity of substance-related issues. North America had the highest composite score, followed by Oceania and Europe. Each ASI domain is evaluated on a scale of 0-9, indicating the absence or severity of problems. The composite score provides a comprehensive assessment of the overall substance-related challenges in each region.

A. The Economic Burden on Healthcare System Should be Explored

Research on drug abuse services includes cost studies across many health and social systems impacted by drug abuse disorders. Health plans, whether private or public, require cost information on covering drug abuse treatment services, especially when considering efforts to achieve parity with medical coverage. Policymakers are often concerned about the societal costs of drug abuse, and drug abuse treatment researchers study interventions to alleviate this burden. Policy research uses societal costs to develop public health strategies through cost-effectiveness studies of interventions and financial evaluation of alternatives. Many small service research studies assist in public health funding decisions by examining the costs incurred by special populations, geographical localities, healthcare settings, or specific government insurance plans [22]. Figure 1 shows the healthcare burden of different countries according to expenditure per capita. Perhaps the United States spends the most money trying to combat the bulge. It is expected that obesity will cost the American health system \$644 per capita annually from 2020 to 2050, which is 14% of total American health expenditures. Germany has \$411 per capita annual expenditure (Figure 1). Comparatively, Canada will only need to spend \$295 per year over the same period, which equates to 11% of the total amount it spends on health care during this timeframe. Italy has the fourth highest expenditure on the chart, followed by Spain, which has the fifth highest expenditure. Additionally, Australia has a higher expenditure per capita than the UK and France, whereas China has a lower expenditure per capita than India and the UK.



Figure 1: Expenditure per Capita. The data showing that the USA has higher expenditures per capita than other countries. Germany has the second largest expenditure per capita, while Canada has the third largest expenditure per capita. Italy has the fourth highest expenditure on the chart, while Spain has the fifth highest. Australia's expenditure is greater than that of the UK and France, and China's expenditure per capita is second-to-last on the chart, whereas India has the lowest expenditure per capita on the chart. Statista, <https://www.statista.com/chart/19621/annual-health-expenditure-per-capita-due-to-obesity>

B. Examine Policy Approaches

Among the global public policies on drugs, such as the control of supply and access to social and health services for users, prevention is the policy with the best cost-benefit ratio for the reduction of both abusive consumption and its consequences. According to estimates, each dollar spent on prevention programs in schools avoids an average of \$18 in social costs from drug-related problems. However, as with other policies, implementation has been based less on scientific evidence than what politicians deem important [23].

Economic and philosophical theories supporting the capabilities approach seek to promote human development by expanding the freedom and choices of individuals throughout the world to pursue the types of lives that they independently deem valuable [24]. The capabilities approach offers a way of understanding the systematic ways in which the world's poor are ignored by global economic development programs while simultaneously demonstrating how the poor can become the primary agents of future change and promotion of well-being [25].

VI. UNDERSTANDING DRUG-RELATED CHALLENGES: WHAT DRIVES GOVERNANCE IMPACT, LAW ENFORCEMENT, AND ENVIRONMENTAL DETERMINANTS?

The 2010 annual report of the board highlights the issue of corruption among public officials, which is often facilitated by individuals involved in global drug trafficking. This problem transcends continents, as the uncontrolled cultivation of cannabis, coca, and opium poppy further destabilizes government institutions and fosters corruption among public officials. Notably, these interconnections are not always straightforward, as weakened governance structures unrelated to drugs can exacerbate illicit drug crop cultivation, production, trafficking, and drug abuse, providing opportunities for criminal networks to exploit regions with weakened governance structures [26], [27].

Law enforcement agencies play a critical role in addressing substance-related challenges by enhancing intelligence networks, fostering interagency cooperation, and strengthening investigative capabilities, which are essential for disrupting drug supply chains. Additionally, the environmental determinants of drug addiction are pivotal in addressing substance-related challenges [28]. This includes continuous exposure to drug use, societal normalization of drug-related behaviors, growth in drug abuse-prone environments, and specific factors such as parental support, participation in substance-enhancing sports, peer pressure, limited access to resources, and demographic variables. Understanding these multifaceted dynamics is fundamental for comprehensively addressing the complex web of influences on drug addiction [29].

VII. REGULATORY CHALLENGES AND ENVIRONMENTAL IMPLICATIONS OF ILLICIT DRUG PRODUCTION: A GLOBAL PERSPECTIVE

The environmental impact of drug production is a complex global concern. Regulatory measures exist to address this issue; however, their enforcement is often lax, and compliance remains voluntary. For example, in the United States, guidelines from the Environmental Protection Agency (EPA) offer a framework for clandestine drug lab cleanup but are nonbinding, with enforcement left to state and local authorities [30]. In Europe, the European Monitoring Centre for Drugs and Drug Addiction [2] has developed similar guidelines emphasizing eco-friendly production methods and safe disposal of chemical waste; however, adherence to these guidelines is also voluntary, with individual countries handling enforcement. Developing countries, in particular, face substantial challenges in implementing these regulations, including limited resources for environmental protection and law enforcement, corruption that can undermine efforts, and a lack of political will. Limited international cooperation further complicates the global problem of drug production and its

environmental consequences [31]. To address these issues, coordinated global efforts involving governments, international organizations, and civil society are essential. This effort should focus on building capacity, enhancing transparency, and fostering international cooperation to promote environmental rights and mitigate the significant environmental damage caused by illicit drug production. A global perspective on illicit drug production is shown in Figure 2, which illustrates the associated regulatory challenges and environmental implications.

Environmental rights are adversely affected by two primary factors. First, high deforestation resulting from illicit crop cultivation has led to water source contamination due to the use of cocaine base paste and cocaine hydrochloride production processes. Second, the use of glyphosate for crop eradication has serious health consequences, including an increased risk of cancer (e.g., four types: lung, liver, kidney, pancreas, and lymphoma), chronic reproductive effects and fetal and neurological malformations such as Parkinson's disease [32]. In conclusion, addressing the challenges associated with the implementation of regulations concerning drug production and its environmental impact in developing countries requires a coordinated approach involving governments, international organizations, and civil society. This approach should focus on capacity building, promoting transparency and accountability, and fostering international cooperation.

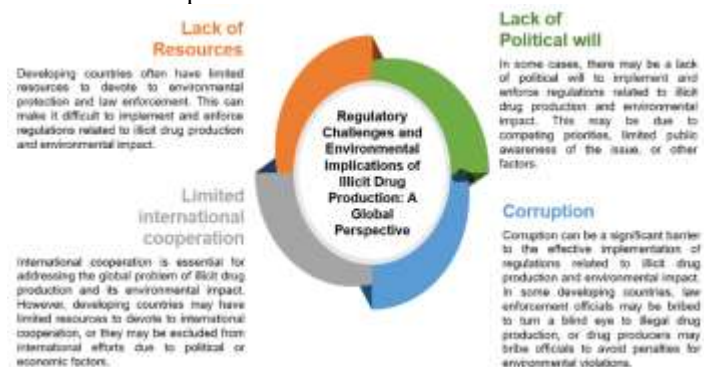


Figure 2. Regulatory Challenges and Environmental Implications of Illicit Drug Production: A Global Perspective. The above figure shows that the lack of resources in developing nations makes it difficult to implement regulations that regulate illicit drugs that have adverse impacts on the environment. The production of illicit drugs is hampered by a lack of political will. The primary responsibility of political institutions is to provide basic information about illicit drugs to the general public. To address the global problem of illicit drugs, there must be limited international cooperation. However, the resources available to developing countries to participate in international cooperation are limited, or they may be excluded for political or economic reasons. Many factors hamper the effective implementation of illicit drug regulations, but corruption is one of the most significant.

VIII. CONCLUSION

In this study, we address the pressing global issue of drug abuse and its far-reaching implications for individuals, families, communities, and society. Drug abuse is a significant public health concern, with an estimated 284 million people worldwide using drugs in 2020, leading to a range of physical and mental health problems, increased risk of infections, and social unrest, all of which impose a substantial financial burden on society. This study aimed to provide an in-depth assessment of drug abuse problems in Asia and Western countries, considering social, economic, and health consequences, and to provide a comprehensive overview of

substance addiction and personalized treatment. Cannabis is the most used illicit drug in Europe, followed by cocaine, MDMA, amphetamines, and opioids. Drug abuse is particularly prevalent among adolescents and individuals in the economically productive age group, significantly impacting the quality of life of individuals and the economic growth of the country.

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