

# Chapter I.

## Economic consequences of drug abuse

1. Drug abuse inflicts immeasurable harm on public health and safety around the world each year, and threatens the peaceful development and smooth functioning of many societies. An understanding of the economic costs of drug abuse is necessary to develop policies that reduce such costs. Attempts to calculate the global monetary burden of drug abuse, however, are mired in data limitations in the many areas that must be taken into account to arrive at even a rough estimate of the total global cost of drug abuse. Analysis of the economic consequences of drug abuse must account for expenditure associated with policy choices and take into consideration any gains and externalities. Although accounting for the full, real dollar costs of drug abuse worldwide is challenging, analysing its consequences and understanding the domains it affects helps us to gain a clearer picture of the ways in which drug abuse affects the world.

2. The present discussion analyses the consequences of drug abuse in five primary domains—health, public safety, crime, productivity and governance—using the available evidence. The effects of drug abuse on those domains depend upon a host of interconnections within and outside these fields, including other factors such as those discussed in chapter I of the annual report of the Board for 2011,<sup>7</sup> e.g., social structures, cultural values and government policies. The present chapter focuses on the drugs that are under international control and does not delve into the consequences of abuse of specific drugs (especially given the prevalence of polydrug abuse). It is also important to keep in mind that costs and consequences vary widely across geographic regions. Costs are discussed in the context of the different

regions, although data limitations meant that this was not always possible.

3. A brief discussion of the costs of alternative policies and the disproportionate economic impact of drug abuse on specific populations, including women, children, families and the poor, are presented. The chapter concludes with a number of conclusions, recommendations and best practices, rooted in evidence, to lower the global economic costs of drug abuse and improve the well-being of society.

### A. Impact on health

4. A person's health is greatly affected by drug abuse. Economically, this manifests itself in prevention and treatment costs, health-care and hospital costs, increased morbidity and mortality.

#### *Costs of drug prevention and treatment*

5. The phenomenon of drug abuse requires societies to dedicate resources to evidence-based prevention, education and interventions, including treatment and rehabilitation. Although such activities can be resource-intensive, studies have shown that for every \$1 spent, good prevention programmes can save Governments up to \$10 in subsequent costs.

6. Heroin, cannabis and cocaine are the drugs most frequently reported by people entering treatment worldwide. It is estimated that only one in six problem drug users

<sup>7</sup>E/INCB/2011/1.

worldwide, some 4.5 million people, receives the required treatment, at a global cost of about \$35 billion annually. There is a wide variation from region to region. For example, in Africa only 1 in 18 problem drug users receives treatment. In Latin America, the Caribbean and Eastern and South-Eastern Europe, approximately 1 in 11 problem drug users receives treatment, while in North America an estimated one in three problem drug users receives treatment interventions. If all dependent drug users had received treatment in 2010, the cost of such treatment would have been an estimated \$200 billion-\$250 billion, or 0.3-0.4 per cent of the global gross domestic product (GDP). Research findings clearly show that investment in treatment is cost-effective compared with the cost of untreated and continuing abuse. Research conducted in the United States of America reveals that every \$1 invested in treatment yields a return of between \$4 and \$12 in reduced crime and health-care costs.

### *Health care and hospitals*

7. Visits to hospitals in connection with drug abuse are costly to society. Such visits occur as a result of overdoses, adverse reactions, psychotic episodes and symptoms of infectious diseases that can be transmitted through, inter alia, injecting drug use, such as hepatitis B and C, HIV/AIDS, tuberculosis, and other illnesses related to drug use. Additionally, hospitals often need to treat victims of drug-related crimes and accidents.

### *Morbidity and mortality*

8. Globally, it is estimated that drug-related deaths account for between 0.5 and 1.3 per cent of all-cause mortality for people aged 15-64 years. It is estimated that there are 211,000 drug-related deaths annually, with younger people facing a particularly high risk. In Europe, the average age of death from drug use is in the mid-30s. It is important to note that little information regarding drug-related mortality is available for Asia and Africa. In addition to drug-related mortality, estimates indicate that of the 14 million injecting drug users worldwide, 1.6 million are living with HIV, 7.2 million are living with hepatitis C, and 1.2 million are living with hepatitis B. A global scientific study estimated that the burden of disease attributable to drug use was substantial, rising in 2010 relative to 1990. Out of 43 risk factors, drug use was nineteenth in the ranking of the top global killers (alcohol was third and tobacco was second). For people aged 15-49 years, drug use was the sixth most common reason for death.

## **B. Impact on public safety**

9. Beyond health costs, people under the influence of drugs pose major safety risks and costs to people around them and the environment. For example, drug-affected driving accidents have emerged as a major global threat in recent years. Additionally, a greater awareness of the impacts on the environment of illicit drug cultivation, production and manufacture has emerged.

### *Drug-affected driving*

10. The abuse of drugs affects perception, attention, cognition, coordination and reaction time, among other neurological functions, which affect safe driving. Cannabis is the most prevalent illicit drug detected in drivers in Canada and the United States and Europe and Oceania. Research has found that habitual cannabis use is linked to a 9.5-fold greater risk of driving accidents, cocaine and benzodiazepines increase the risk 2-10 times, amphetamines or multiple drug use increase the risk 5-30 times, and alcohol in combination with drugs increases the risk of getting seriously injured or killed while driving by a factor of 20-200. That increased risk also has consequences for passengers and others on the road, who may become victims of drug-affected driving.

### *Impact on the environment*

11. The illicit manufacture and disposal of drugs and pharmaceuticals cause significant environmental contamination, owing to the precursor chemicals required for manufacture, the manufacturing process itself and the active ingredient or substance. Disposal introduces those substances into the environment in sewage, from where they can enter sediment, surface and ground water and the tissues of vegetation and aquatic organisms. As a result, wildlife and humans can be chronically exposed to very low doses of drugs and the chemicals used in their illicit manufacture. That results in costs to individuals and to Governments, as they are responsible for ensuring public health.

12. Illicit cultivation of both coca bush and opium poppy has often resulted in the clearance of forests—in the case of illicit cultivation of coca bush, primarily in Bolivia (Plurinational State of), Colombia and Peru. Some devastating effects of illicit cultivation of cannabis plant, coca bush and opium poppy on biodiversity are the loss, degradation and fragmentation of the forests, and the loss of areas where food could be grown. In addition to the deforestation caused by illicit crop cultivation,

chemicals used for the processing of illicit drugs can be harmful to biodiversity, both in the immediate area and downstream, as a result of chemical run-off. There can also be negative effects associated with the aerial spraying of crops.

13. Finally, the emergence of illicit drug cultivation and manufacture in residential areas brings with it concern about reduced quality of life for residents, neighbourhood decay and property damage resulting from child endangerment, criminal activity and explosions.

### C. Relationship with crime

14. A generation of research has defined three major links between drugs and crime. The first drugs/crime nexus relates to the violence that can be associated with the use of drugs themselves: psychopharmacological crime.

15. Crime committed under the influence of drugs is a major problem worldwide. For example, in a study in Dominica, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines, as many as 55 per cent of convicted offenders reported that they were under the influence of drugs at the time of the offence, with 19 per cent of the same set of offenders saying that they would still have committed the crime even if they had not been under the influence of drugs.

16. The second drugs/crime link is economic-compulsive crime. This is the result of drug users engaging in crime to support their drug consumption and addiction. In the United States, for example, 17 per cent of state prisoners and 18 per cent of federal inmates said they had committed the offence for which they were currently serving a sentence to obtain money for drugs. In the United Kingdom of Great Britain and Northern Ireland, it is estimated that economic-compulsive crime costs approximately \$20 billion a year, the vast majority of those costs resulting from burglary, fraud and robbery.

17. The third link is systemic crime: the violence that occurs, for example, as a result of disputes over “drug turf” or fighting among users and sellers over deals gone awry. This has been seen, starkly, in Latin America over the past 10 years, especially in countries such as Guatemala and Mexico, but it is also seen in the streets of every continent throughout the world.

18. Studies show that overall, drug-related crime is costly but varies from region to region. A study in Australia

indicated costs of \$3 billion a year, and in the United States it is estimated that drug-related crime costs \$61 billion annually.

19. All those costs are related to burdens placed on law enforcement agencies and the judiciary, in addition to the increased incarceration rates resulting from behaviour related to drug use, which in the past few decades have grown substantially in many countries.

### D. Impact on productivity

20. A further cost of drug abuse that is often cited is the loss in productivity that can occur when drug users are under the influence of drugs or are experiencing the consequences of their drug use (e.g., while in treatment, incarceration or hospital). Studies have put the costs of lost productivity borne by employers at tens of billions of dollars.

#### *Costs from labour non-participation*

21. 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 per cent of GDP) in 2011, amounting to 62 per cent of all drug-related costs. Similar studies in Australia and Canada identified losses of 0.3 per cent of GDP and 0.4 per cent 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.

#### *Costs from treatment participation, hospitalization, incarceration and premature mortality*

22. While in treatment or when incarcerated, drug users may be unable to participate in work, education or training, adding to the economic loss, in addition to the cost of treatment or incarceration. It should be noted that these productivity costs will be lower if job opportunities are already scarce as a whole. In Europe in 2010, 56 per cent of patients entering drug treatment

programmes were unemployed, and that percentage has increased over the past five years.

## E. Impact on governance

23. As discussed in chapter I of the Board's annual report for 2010,<sup>8</sup> drug traffickers in countries all over the world corrupt officials at all levels of law enforcement and government in order to continue with their criminal activities unimpeded. As a result, citizens in affected areas often live with compromised law enforcement institutions. Today, this is seen in different continents, where illicit cultivation of cannabis plant, coca bush and opium poppy continue unbridled, resulting in less stable government institutions and the corruption of government officials.

24. It is important to note that these connections may not be straightforward, as weak governance (resulting also from issues not related to drugs) can also lead to more illicit drug crop cultivation, illicit drug production, manufacturing and trafficking and more drug abuse. Traffickers establish new transit routes by exploiting weak governing institutions, financing corruption and terrorism with the gains made by engaging in illicit activity.

## F. Impact on specific populations

### *Children*

25. Prenatal exposure to drugs can result in an array of emotional, psychological and physical disorders. Children exposed to illicit drugs after birth may suffer significant problems that require additional care, resulting in both personal expenses and costs to society. Children exposed to drugs are at a significantly higher risk of both physical and sexual abuse as well as neglect and often have higher rates of anxiety, depression, delinquency and educational and attention problems.

26. Parents who abuse drugs are more likely to live in homes in which relatives, friends, and strangers also use drugs, exposing children to possible emotional and physical harm. Additionally, children that have to be removed from such environments are more likely to engage in crime, drug use and delinquency.

27. Drug abuse is of particular concern among street children throughout the world. Studies indicate that street children who use drugs were more likely to have been abused by their parents, have a history of arrests and engage in sex work, exposing them to sexually transmitted diseases.

28. Drug abuse also affects children in conflict areas. In some regions, drugs are used as an instrument to engage and retain children and young people as child soldiers in civil wars, armed conflicts and regional conflicts and in terrorist activities. These children and young people can become subject to physical and sexual abuse, psychological problems, addiction and other harmful consequences.

### *Women*

29. Gender differences have been identified as heavy determinants in the onset of addictive behaviours, including drug abuse. Women are acutely affected by particular consequences of drug abuse, such as sexually transmitted diseases and the consequences of domestic violence, in addition to being more likely to be affected by drug-facilitated crime.

### *Low-income populations*

30. Drug abuse and poverty are often linked in multiple ways. Drug abuse may occur to relieve the stress associated with poverty, chronic social strain and other difficult events. In poorer neighbourhoods, there is often less access to support systems, health care and community organizations.

31. Additionally, the relationship between drugs and poverty can also work in the inverse direction: drug abuse can deplete users' income, leading to a lack of care for family and loved ones and other responsibilities.

## G. Alternative policies

32. Some have argued that alternatives to the present control system would result in lower costs. They argue that enforcement costs resulting from the current international drug control regime, not drugs themselves, are the source of most costs.

<sup>8</sup>E/INCB/2010/1.

33. It is unclear, however, that costs related to enforcement would necessarily decrease under policies that are not based on the current international drug control treaties. In addition, it has been shown that government revenue from the legal sale of alcohol and tobacco is less than the economic and health costs of their abuse.

34. Additionally, there might be increased law enforcement costs due to higher crime rates occurring under more permissive laws and control regimes. In many countries, alcohol, not drugs under international control, is responsible for far more arrests (for example, in the United States, in 2012 there were over 2 million alcohol-related arrests—more than the 1.6 million arrests related to all illegal drugs combined). One reason for those higher alcohol-related costs is that in many countries alcohol abuse is far more prevalent than the abuse of substances under international control.

35. It is sometimes argued that criminal organizations might be deprived of revenues if drugs were legalized, as alcohol is. However, those criminal organizations obtain their resources not just from illicit drug sales, and such organizations may enter the licit market while remaining in the illicit market.

36. Legalizing drugs would not ensure that underground markets dealing in them would cease. In fact, today there is a thriving black market for cigarettes in many countries, such as Canada and the United States and in Europe and other regions of the world. For example, it has been shown that from 9 to 20 per cent of the United Kingdom's domestic cigarette market now consists of smuggled cigarettes. In Canada, smuggled cigarettes represent about 33 per cent of all domestic cigarette consumption, although that proportion varies from province to province. In the United States, three quarters of the cigarettes observed in a Chicago neighbourhood as part of a research study had no tax stamp, indicating that they came from black or grey market sources.

37. Emerging data from the State of Colorado of the United States suggest that since the introduction of a widely commercialized “medical” cannabis programme (poorly implemented and not in conformity with the 1961 Convention), car accidents involving drivers testing positive for cannabis, adolescent cannabis-related treatment admissions and drug tests revealing cannabis use have all increased.

38. One can also imagine states having to bear regulation costs of such alternative drug regimes. Costs of regulation include, among other things, monitoring and controlling cultivation, production, manufacturing and

distribution, as well as monitoring use, and its impact. This has been seen in state-run medical cannabis programmes in the United States, where states have been unable to manage those new bureaucracies, according to independent audits.

39. If currently controlled substances were regulated as alcohol is in many countries, more people would use them and become addicted, resulting in more adverse consequences.

## H. Conclusions, recommendations and best practices to reduce the economic consequences of drug abuse

40. Since drug abuse places such a costly burden upon society in so many domains, it is important to discuss ways in which these costs can be reduced. What can society do to reduce the overall cost of drug abuse? A brief overview of some proven measures follows:

(a) Drug prevention is cost-effective. Generalized universal prevention programmes aim at building strong communities and families, mostly seeking to provide young people with the skills to make healthy choices and decisions. Specific and targeted prevention must also be an aim of Governments. Engaging the broader community in prevention has shown to be successful in preventing drug abuse and reducing its adverse consequences. Community-based approaches have been tried in the Americas and other regions, and early studies indicate they are effective;<sup>9</sup>

(b) For those who have initiated drug abuse but have yet to succumb to dependence, screening and brief interventions and referral to treatment mechanisms may be appropriate. Such services include an initial assessment by general primary care physicians or counsellors to identify at-risk persons, brief advice and, if necessary, referral to treatment;

(c) For individuals with addiction, drug treatment, with behavioural and/or medical interventions, has proven to be effective. While there is a need to protect privacy, treatment should be given in the context of rehabilitation and social reintegration (e.g. therapeutic

<sup>9</sup>United Nations Office on Drugs and Crime, “International standards on drug use prevention”, available from [www.unodc.org](http://www.unodc.org).

communities) and complemented by measures aiming at the reduction of the adverse consequences of drug abuse;

(d) Recovery from drug addiction requires support from family and the community. It should also include education and job training, housing, childcare, transportation to and from treatment and work, case management and spiritual support, as well as relapse prevention, family education, peer-to-peer services and coaching, self-help and support group services. **The Board urges wider application of such strategies recently implemented in various regions;**

(e) A more efficient justice system can deter drug abuse and offer alternatives to incarceration. The principle of proportionality, as the Board discussed extensively in its annual report for 2007,<sup>10</sup> should be respected. Drug treatment courts rely on swift and modest sanctions coupled with treatment and drug testing to promote abstinence from drugs, reduce crime and increase social reintegration. This may require a major reorientation of national drug control and justice policies and may also require significant investments. Such measures have had success among repeat criminal offenders with long drug abuse histories in some regions of the world;

(f) A wide variety of social programmes not directly related to drug abuse have the potential to reduce the economic consequences of drug abuse. For example, vocational training programmes can be targeted so as to reach young people particularly at risk of becoming drug sellers, and interventions can target those vulnerable to homelessness, social deprivation, unemployment and exclusion from educational opportunities. Public housing projects should be designed so as to avoid physical niches that protect retail drug trafficking. While such measures and initiatives require significant investment, they are likely to reap benefits in the long term, not just by

<sup>10</sup>E/INCB/2007/1.

reducing the economic consequences of drug abuse but by also yielding benefits in many other domains;

(g) Policies and initiatives against drug trafficking must be integrated into development programmes in all countries, keeping in mind the key goal of strengthening institutions and shared responsibility at all levels of government. As recently highlighted in a major recommendation by the Organization of American States Inter-American Drug Abuse Control Commission in its review of its Hemispheric Drug Strategy, strengthening government institutions is a key strategy for reducing the consequences and costs of drug abuse in all countries;

(h) The Single Convention on Narcotic Drugs of 1961,<sup>11</sup> the Convention on Psychotropic Substances of 1971<sup>12</sup> and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988,<sup>13</sup> as well as the Political Declaration adopted by the General Assembly at its twentieth special session,<sup>14</sup> held in 1998, and the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem<sup>15</sup> of 2009 provide a well-established framework to implement the policies mentioned above and, in turn, reduce the economic consequences of drug abuse worldwide. States are urged to scale up their implementation of these evidence-based interventions and strategies with the aim of reducing drug abuse and its consequences. **The Board recommends, to that end, that Governments increase their collaboration, as well as partnerships with relevant international organizations, such as the United Nations Children's Fund.**

<sup>11</sup>United Nations, *Treaty Series*, vol. 520, No. 7515.

<sup>12</sup>*Ibid.*, vol. 1019, No. 14956.

<sup>13</sup>*Ibid.*, vol. 1582, No. 27627.

<sup>14</sup>General Assembly resolution S-20/2, annex.

<sup>15</sup>See *Official Records of the Economic and Social Council, 2009, Supplement No. 8 (E/2009/28)*, chap. I, sect. C.