**Costs and unintended consequences of**

**drug control policy**

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# Chapter 1 Introduction

There is broad consensus that one overall aim of drug policy is to advance the health and welfare of mankind and reduce drug use and its adverse effects (UN, 2016). Despite this general understanding, the design and content of national drug policies vary to a large extent. The variation partly reflects differences in the nature of national drug problems and the resources allocated to this policy field, but it also reflects ideological differences in how to respond to drug problems.

In line with much of the academic literature (Babor et al., 2010), this report uses the term “drug policy” as to include governmental policies on prevention, enforcement, treatment, harm reduction and social reintegration. The policies include laws and programs intended to influence drug use and its consequences for users and society. National drug control policies constitute one subset of drug policies and is based on three internationally agreed conventions, namely the 1961 Single convention on Narcotic; the 1971 Convention on Psychotropic Substances; and the 1988 United Nations Convention Against Illicit Traffic in Narcotic. National legislations may introduce stricter domestic legislation than that demanded by the Conventions but they should not bring in more lenient legislation[[1]](#endnote-1). Signing countries are obligated to make drug supply, i.e. production, sale, transport and distribution of drugs for non-medical purposes, a criminal act. The drug conventions further oblige states to ensure that possession of drugs, even in small quantities, shall be a punishable offence, but not necessarily a criminal offence. They offer alternatives to conviction or punishment, including treatment, education, aftercare, rehabilitation and social reintegration (INCB, 2015).

The overarching objective of supply reduction is a measurable reduction of the availability of illicit drugs and of associated crime. Central elements to achieve this goal include disruption of illicit drug trafficking; the dismantling of organised crime groups that are involved in drug production and trafficking; efficient use of the criminal justice system; effective intelligence‑led law enforcement and increased intelligence sharing; and international collaboration to fight large‑scale, cross‑border and organised drug‑related crime (EMCDDA, 2016). While the conventions treat the listed drugs similarly, the national drug laws and enforcement practice often distinguish between them. The use, possession, sale and production of e.g. cannabis are in most countries regulated and enforced very differently from substances like amphetamines, cocaine or heroin. The intended effects of these legal responses, e.g. sentencing a drug dealer to prison, are twofold; to punish the offender and deter the offender and others from committing similar crimes (the principles of punishment and deterrence).

Although supply reduction constitutes the dominant part of drug control policy, the enforcement towards users often gains more public attention and disapproval. The criticism has increased in recent years. More and more often, loud voices are questioning the efficiency of drug control measures and some even claim that they are counterproductive. Further, drug control efforts are criticized for striking unequally and for being disproportionate to the acts they are used in response to. The use of death penalties in some countries (e.g. Indonesia and Iran) is one extreme example of this, but also less extreme European cases have been a topic of discussion. The increased criticism is one contributing factor to the recent changes introduced in drug regulations in many countries and jurisdictions.

The decriminalisation of drugs in Portugal, the recent legalisation of cannabis in eight US states, the legalisation of cannabis in Uruguay and the foreseen depenalization of cannabis in Canada are illustrations of this liberalising trend. The call for further humanisation and revision of drug control policies must be viewed in light of the increased focus on the adverse consequences.

Drug control policy has both domestic and international dimensions. Nationally, it includes factors like[[2]](#endnote-2):

* development of judicial framework
* enforcement of anti-drug laws
* eradication of drug production and cultivation
* control of precursor chemicals
* customs' inspection of commerce and persons entering the country
* screening for drugs in prisons

Internationally, drug control policy includes

* development of judicial frameworks for international cooperation
* creation of international tools for international law enforcement cooperation
* coordinated international investigations
* control of precursors
* anti-money-laundering initiatives
* drug-crop substitution and eradication
* strengthening public institutions to avoid corruption and guarantee governability
* initiatives against drug-related corruption, terrorism and human trafficking

Drug control measures may be grouped according to whether they are targeting drug users or drug producers, traffickers and suppliers. In both cases, however, governments have obligations under international and national legal instruments to safeguard fundamental standards of human rights and the rule of law that also apply to drug offenders. These obligations are described by the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms, which guarantees[[3]](#footnote-1):

* The right to life
* The right to protection of health
* The right to non-discrimination
* The prohibition of inhuman or degrading treatment

In addition, the rights are stated in:

Article 38.1 of the UN Single Convention on Narcotic Drugs, which requires States to pay special attention to and take all measures for the prevention of abuse of drugs and for the early identification, treatment, education, after-care, rehabilitation and social reintegration of persons dependent on drugs;

Article 25 of the Universal Declaration of Human Rights (UDHR), which guarantees everyone the right to a standard of living adequate for his health and well-being, including medical care and necessary social services;

Article 12 of the UN International Covenant on Economic, Social and Cultural Rights (ICESCR), which recognizes the right of everyone to the enjoyment of the highest attainable standard of physical and mental health; and requires to assure medical service and medical attention is available equitably to all in need.

Article 11 of the CoE European Social Charter (revised), which provides for the right to protection of health and stipulates the effective exercise of the right to protection of health.

## 1.1 Public expenditure and evaluation of drug policies

Drug policy evaluation is an integral part of the approach to combating illicit drugs (Council of the European Union, 2013). Estimation of drug-related public expenditure can be seen as a first step in this direction. Public expenditure estimates aim to calculate the amount of resources spent, or needed, to implement targeted interventions in a particular policy field and may reveal to what extent policy intentions are reflected in the relevant budgets and are conditioned by the size and characteristics of the drug phenomenon. Most European countries have a national drug policy presented in a drug strategy document (EMCDDA, 2015). National drug strategies tend to reflect a balanced approach between drug demand and drug supply reduction, although the balance may not imply that the two approaches receive an equal share of resources and attention. Instead, it will depend on country specific priorities and aims for the different drug policy sectors, as well as on the relative price of implementing each activity in a cost-effective manner.

Accurate estimates of public spending will help policymakers to plan relevant interventions and make the required funds available to the authorities in charge of policy implementation. A thorough assessment of drug policy expenditures will also contribute to improved transparency and accountability of public institutions. Estimates may provide information on factors such as the relative importance of demand and supply expenditures and enable cross-country comparisons of the level and composition of spending (EMCDDA, 2008). Sound planning, improved knowledge of the resources allocated to this policy field, and cost-effective resource allocation are particularly necessary in times of economic downturn when fewer resources are available.

To optimize the resources allocation to this policy field, one ideally should conduct a full cost-benefit analysis. A cost-benefit analysis systematically compares all costs and benefits of one particular policy area or project to determine whether there is a positive net benefit (i.e. whether benefits outweigh the costs). The analysis can also compare alternative policy options and evaluate the effectiveness of separate parts of a comprehensive policy. For the drug control area, a cost-benefit analysis would explicitly have taken all costs, including unintended adverse effects of the policy, into account when evaluating whether the policy provided a net benefit to society. Unfortunately, a regular cost-benefit analysis is currently not attainable as the quantification of both benefits and costs of drug control policies are underdeveloped. Still, a better understanding of the different elements involved is possible and useful. This report will take a first step towards such a systematic analysis by examining the public expenditure and the unintended consequences of the drug control policy.

We define drug control costs to include all kinds of public expenditure on efforts aiming at reducing drug use and availability through enforcing the drug laws. Thus, drug control costs comprise governmental expending on public order and safety, such as budgetary expenses for the police, customs, judicial system and prisons. The vast majority of these resources will be spent on enforcement towards producers and dealers, but it also include legal actions toward drug users. It should be noted that the term “drug control costs” will be used interchangeably with “supply reduction costs”. This is in line with the terminology used by e.g. the European Monitoring Centre for Drug use and Drug Addiction (EMCDDA).

As will be expanded in Chapter 2, the analysis of drug-related public expenditure is hindered by limited data availability. Many countries do not have separate budgets for drug-related expenditures but embed them in broader budget categories. Often is also more than one sector involved and expenditures are found at different administration levels (central, regional, local). Chapter 2 provides suggestions for how to improve data collection and estimates.

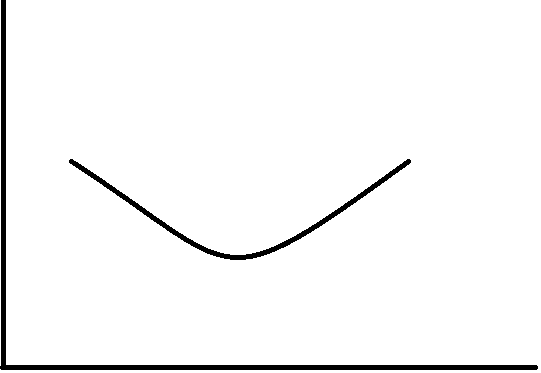
## 1.2 Unintended consequences of drug control policy

Further, to evaluate and improve drug policy, it is imperative to know and take note of *all* possible effects of the different interventions and actions. It is well known that for any purpose and policy, even with the best of intentions, there is a risk for unintended consequences. Unintended consequences can be defined as consequences that are not deliberate or intentional, i.e. they are not the targeted effects of a given action. That doesn’t imply, however, that they necessarily are unexpected – on the contrary, their occurrence may in some cases be considered as very likely. For instance, the ban on production and sale of listed substances carries a high risk of the appearance of an illegal drug market.

One important feature of drug control efforts is that they may influence *all* citizens, not only those who are personally involved on either side of the drug market. Patients in unmet need of pain medication, travellers exposed to invasive boarder control and relatives of drug offenders facing stigmatization, are all examples of non-participants suffering unintended consequences of drug control policies. Thus, regular assessments and careful considerations of whether drug control measures possibly compete or undermine other essential policy goals are needed. Identifying and considering also unintended consequences is essential when deciding on a policy and what measures to implement. Despite frequent mentioning, little has been done so far towards this end.

Unintended effects will vary substantially across national drug legislations and their *de facto* implementation. One should bear in mind, however, that all control regimes imply unintended effects, even the most liberal ones. If all drugs were freely available and no control measures were implemented at all, substantial non-intended burden on society and non-users would still apply as a consequence of the amounts used, types of drug consumed and modes of drug-taking. Further, legal but regulated drugs like alcohol and tobacco also imply control costs, both intended and unintended. Thus, the relationship between the level of regulations and unintended consequences may be illustrated by an u-shaped curve, see Figure 1, where every drug policy regime can be viewed as points on a continuum from very liberal regimes to very strict ones.

High

Low 

**Level of unintended consequences**

**Very liberal drug control regimes Very strict drug control regimes**

**Figure 2. An assumed u-shaped relationship between the level of drug control regulations and unintended consequences.**

Unintended consequences may further vary according to the social/economical context, type of substance, individual characteristics and periods of time. Some relate to drug market participants (drug users and suppliers), others to non-participants and to the society in general. Often mentioned unintended consequences affecting drug offenders are stigmatization, social exclusion, negative effects of imprisonment, reduced educational and labour market opportunities, disconnection to work life and visa problems, while non-participants suffer consequences such as limited access to essential medicines for medical and scientific purposes. Unintended societal consequences can include factors like the emergence of organized crime and human trafficking or a general risk of reduced public safety due to illegal ways of drug financing. Some producing countries like Mexico and Colombia have experienced extreme violence and thousands of deaths, while public health, security and safety have been significantly negatively affected also in many European countries (EMCDDA/Europol, 2016).

## 1.3 The aims and outline of the report

This report aims to define and identify costs and unintended effects of drug control policies, borne by individuals and society. We do this to improve the knowledge base for better enabling policy makers to make informed choices in this area. Improved knowledge, also with regard to the recourses that are allocated to this policy field, will help planning and strategic thinking, particularly needed in times of austerity. As there is no way to completely avoid unintended consequences, it is important to take them adequately into account when deciding on aims and measures for handling the drug phenomenon. Further, we suggest potential interventions to reduce the effects of the identified consequences. Irrespective of what regulatory regime that is currently implemented, there are interventions available that may reduce the adverse and unintended effects.

Figure 1 illustrates the outline of the report. Some central concepts of drug control policy are defined and discussed in Chapter 1. Chapter 2 provides guidelines for how to collect relevant cost information and proposes a common set of definitions and methods to be used for public expenditure assessment and evaluation. Further, we present compiled national information of levels and compositions of drug-related public expenditure, which show that most countries seem to spend more on supply reduction than on demand reducing efforts. Chapter 3 presents our analysis of unintended consequences. Although we, of course, acknowledge that defining and measuring intended effects is an important task for any policy evaluation, the focus of this report is the unintended ones. These unintended consequences are split into health and non-health effects and we relate them to the bearers of these consequences (participants and non-participants of the illegal market). The chapter also offers a list of potential interventions that may reduce the unintended consequences. Chapter 4 discusses our findings and suggests a way forward.

**Figure 1 Outline of the report**



# Chapter 2 Public expenditure on drug control policy

## 2.1 Introduction

The aim of this chapter is threefold. Firstly, to increase international awareness concerning the importance of estimating public expenditure on supply reduction initiatives. Secondly, to raise public awareness of the need to agree upon harmonising definitions and increasing the availability, comparability and reliability of data, as well as methods for producing sound estimates. And thirdly, to contribute to developing national and international estimation practices with a view to obtaining accurate, complete, reliable and comparable drug policy evaluations.

As mentioned in Chapter 1, the overarching objective of drug control policy is a measurable reduction in the availability and accessibility to illicit drugs. Drug control initiatives comprise the whole system of laws, regulatory measures, courses of action and funding priorities concerning illicit drugs put into effect by a government or its representatives. Estimation of drug-related public expenditure can be seen as a first step in the process of policy evaluation. A subsequent step would be to systematically compare public expenditure and other possible costs to the policy's measured outputs or results. Depending on how the results are defined and measured, a cost-benefit or cost-effectiveness analysis could be conducted (see glossary). In this case, resource inputs (the costs of labour, capital and/or equipment) are linked to intermediate outcomes (e.g. number of drug dealers arrested); final outputs (e.g. lives saved, life years gained, number of drug users, reduction in drug-related harm, percentage reduction in crimes committed); or policy goals. Irrespective of the chosen output measures, however, public expenditure will be a central cost factor, since governments constitute the main provider of drug supply reduction services in Europe.

A thorough economic evaluation can provide policymakers with the information required to make well-informed decisions. Although the data and a quantification of all the outcomes and cost elements required for conducting the most comprehensive analyses are currently not available, a somewhat less extensive analysis and an improved understanding of the individual elements involved are still possible, useful and desirable. This report takes the first step towards a systematic analysis by examining a number of representative attempts to estimate public expenditure on drug control policies. It proposes a common set of definitions to be used for public expenditure assessment and evaluation. In addition, it aims to establish a common basis for understanding this complex subject and to facilitate comparability in three main areas: time, policy and countries concerned. Although the report mainly focuses on drug control expenditures, in order to contextualise them, it also describes the proportion that total drug-related expenditure represents of gross domestic product. It further shows how spending is balanced between demand and supply reduction initiatives in a number of European countries. To facilitate and promote future empirical expenditure studies, the relevant data sources and methodologies applied in making empirical estimates are listed and discussed. Examples of sectorial models of public spending and examples of national supply reduction expenditure studies are also provided. Finally, some conclusions and recommendations are offered.

For more details on relevant data sources, please see….say something about the appendicies?

## 2.2 Defining concepts

***Public expenditure***

The term "public expenditure" refers to the value of goods and services purchased by general governments (at central, regional and local level) in order to perform its functions. For instance, it refers to resources spent on healthcare, justice, public order and safety, education, social protection and so on (Eurostat, 2011), and its quantification is a costing exercise undertaken from the government’s perspective (EMCDDA, 2008). The role of private expenditure in drug policy varies across countries, timescales and policy areas. In many countries, drug treatment is partly financed by the private sector (insurance companies, drug users or their employers, relatives, etc.). In other drug policy areas, such as supply reduction, private funding usually constitutes a negligible share of total spending (European Commission, 2012).

***Drug-related public expenditure***

Drug-related public expenditure is the sum spent by governments on goods and services with the aim of tackling the illegal drug phenomenon. Although drug policy expenditure estimates are deemed useful, most countries do not produce separate drug-related budgets as part of their ordinary budgeting exercise. Relevant analyses and estimations can be complicated since several inter-ministerial and cross-governmental sectors are involved in drug control programmes, including justice, policing and border control, prisons, social protection, education and health. Disentangling drug policy expenditure across government departments and inter-sectorial policies remains a significant challenge. Changes in legislation and the structure of public administration can further hamper comparability over time.

An additional challenge lies in the fact that drug-related programmes and activities can be found at many different levels of public administration. For instance, the funding for imprisoning drug-law offenders is usually provided by central government, while prevention of street dealing or social reintegration programmes for former drug dealers are frequently financed by local authorities. This makes it necessary to compile data at different administrative levels, which can be a demanding task.

In addition, often only a small fraction of drug-related public expenditure can be traced back directly to government documents or single budget lines; these are labelled expenditure. The required data are instead embedded in budgets for larger sectors or programmes (unlabelled expenditure), which means that modelling and calculations are needed. For instance, it is common that prisons do not have a separate budget for drug-law offenders, because they usually have one single budget for their entire activity. Therefore, the values of this embedded expenditure can only be estimated through modelling approaches (EMCDDA, 2014). This requires skills, modelling tools and techniques.

Despite the various factors which may challenge the robustness of estimation results (limited data availability, layering of assumptions, changes in definitions or regulations over time, etc.), the application of existing models can provide useful insights, as various countries' experience shows (see the examples below).

***Public expenditure on supply reduction initiatives***

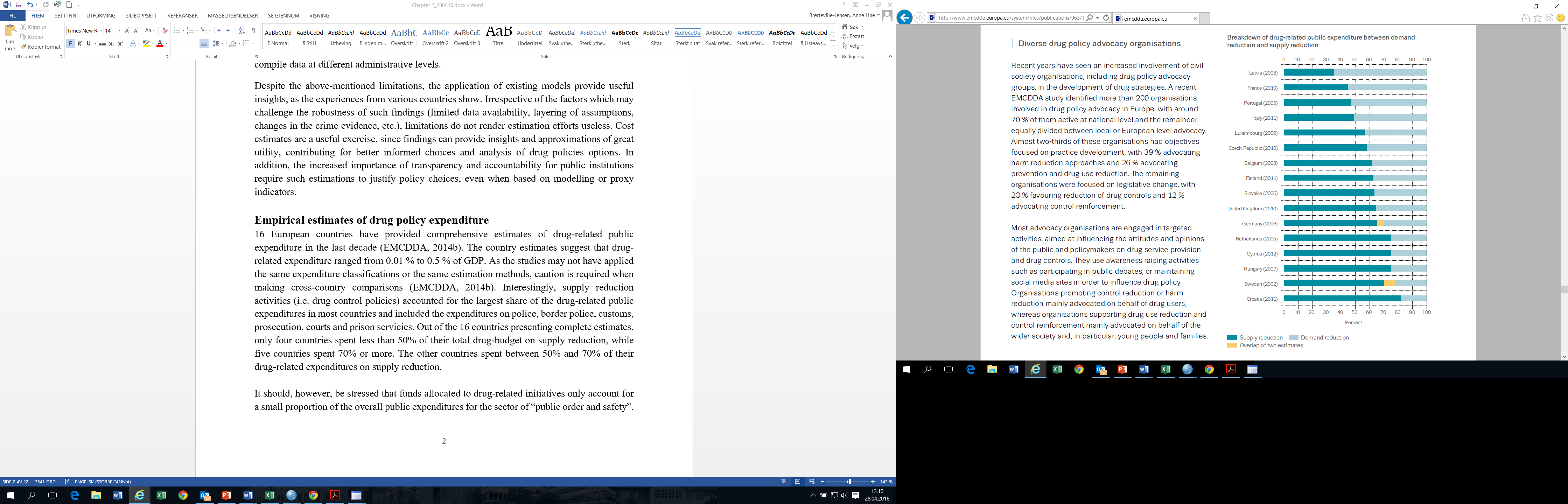
In this report, public expenditure on drug supply reduction comprises the funds spent by general government with the broad purpose of reducing the availability with the support of the police, law courts and prison services geared towards combating the illegal drug phenomenon, as defined by Eurostat (2011). In general, police services comprise, among others, the regular and auxiliary policing of ports and borders, coast guards and customs, as well as road traffic regulations and supervision. The services provided by law courts comprise the operation or support of civil and criminal law courts and judicial systems, the prosecution service, fine enforcement and probation systems. Prison services comprise the activities of prison administrations and the operation or support of prisons and other places for the detention or rehabilitation of criminals, such as prison farms, workhouses, reformatories, borstals, asylums for the criminally insane, etc. (Eurostat, 2011).

In the case of public expenditure on drug supply reduction initiatives, the vast majority of resources will be spent on enforcement targeting producers and dealers, but may also include legal action targeting users for drug possession when required by national judicial systems.

## 2.3 Empirical estimates of demand and supply policy expenditure

Over the last decade at least 16 European countries have provided comprehensive estimates of drug-related public expenditure (EMCDDA, 2014b). Country estimates suggest that drug-related expenditure ranged from 0.01% to 0.5% of gross domestic product (GDP). Since the studies may not have applied the same expenditure classifications or the same estimation methods, caution is required when making cross-country comparisons (EMCDDA, 2014b).

Interestingly, however, the information available suggests that supply reduction activities accounted for the largest share of drug-related public expenditure in most countries. Of the 16 countries which produced complete estimates in the last decade, only four countries spent less than 50% of their total drug budget on supply reduction, while five countries spent 70% or more. The other countries spent between 50% and 70% of their drug-related expenditure on supply reduction.



**Figure 1 Breakdown of drug-related expenditure between demand and supply reduction.**

Source: EMCDDA, 2014b

Analysis has also shown that funds allocated to drug-related initiatives account for only a small proportion of the overall public expenditure on the “public order and safety” sector. For instance, in 2008 (the only year this exercise was systematically conducted in European Union countries), supply reduction expenditure represented between 2% and 12% of total public expenditure in this sector. This proportion compares to the proportion of drug-related spending on the “health and social protection” sectors. The proportion of drug-related expenditure on these items accounted for less than 1% of total public spending on “health and social protection” during that period. Since most public spending on demand reduction initiatives is classified under “health and social protection”, this may further suggest that European countries give higher political priority to supply reduction initiatives, as part of public order and safety activities, than to demand reduction initiatives as part of overall public health activities (EMCDDA, 2008). Annually, EMCDDA reports the most recent estimates available for national drug-related public expenditure in percentage of the gross domestic product (GDP), in the European Union countries, Norway and Turkey. When available, EMCDDA reports also the proportion of funds spent on supply reduction initiatives (<http://www.emcdda.europa.eu/countries>).

## 2.4 Steps in cost estimation and analysis

Clarifying definitions, improving estimation methods, agreeing on best practices and finding reliable, standardised data will enhance the utility of public expenditure estimates, as analysis over time and across policy areas and countries can be improved (Single, 2009). Better quality data and further methodological developments are needed. To this end, we list below some recommended, general methodological steps in cost estimation and analysis.

***Defining the scope and objects***

Globally speaking, a first step for a viable estimate is defining the scope and type of public expenditure considered. In addition, clear indications of the geographical area and which function of public service provision the estimates cover are needed.

***Making an inventory of service providers***

Secondly, it is necessary to identify the public entity or institutions responsible for the provision of drug-related services – in the case of this report supply reduction measures and interventions. The government authorities and public institutions and services responsible for the implementation of the drug policy initiatives, on the different competency levels, have to be made an inventory.

***Mapping financing entities***

The third step is then to identify who finances these service providers. The starting point for a public expenditure analysis is accordingly the different public authorities which fund the respective aspects of the drug policy. Irrespective of the governmental structure, expenditure by all relevant national, regional or local government institutions, directly or indirectly associated with drug policy, should always be included.

Matching stakeholders responsible for providing drug policy services with their financing entities can be challenging, as the entities in charge of providing public services are not always obvious and easy to identify. For instance, when drug treatment services are provided within prisons, the entity in charge has public order and safety as its first function but health as its “real” goal. Therefore, analysts must consider whether to include the costs of these activities as supply reduction or demand reduction initiatives. Eurostat, along with most international organisations concerned with policy evaluation, includes the provision of services in the main function that the funds are used for, even where the provider is less obvious. In this case, public expenditure on drug treatment provided in prisons should be excluded from expenditure estimates for supply reduction services and accounted for as drug-related health expenditure. Sometimes, provision will be the responsibility of private entities while financing is a government responsibility.

It should be noted, however, that the same service may have multiple policy purposes and double counting should be avoided. For instance, in the case of social reintegration programmes in deprived neighbourhoods, financing may serve both the purpose of preventing drug crime (and should be added to supply reduction expenditure) and the purpose of preventing drug use (and should also be accounted for as health spending in demand reduction expenditure). For public accounting purposes the same funds should not be counted twice. Therefore, researchers will have to include this spending only once, choosing to record it under either preventive health or crime prevention. Sometimes, making a decision is difficult and the best way to deal with such situations is to guarantee that researchers document the different choices and assumptions they make.

***Data collection***

The fourth step is to determine a strategy for collecting the required data on public expenditure. In order to obtain the relevant information, analysts will have to examine policy documents and accounting data. It is also recommended that interviews be conducted with the major stakeholders in the field, as a way to obtain better information about where financial data might be available, and to search for international data sets.

***Classifying and identifying data on drug-related spending***

It is essential to classify public expenditure according to the purpose for which the expenditure is intended (Reuter et al., 2004, and Eurostat, 2011), so the next step to consider is how to group drug-related spending according to these sub-purposes. Two alternatives are commonly used:

* Taking into account the fact that drug-related expenditure on supply reduction initiatives comprises funds spent with the aim of combating the illegal drug phenomenon through the police, law courts and prison service, the classification frequently used in international comparisons is the Classification of the Functions of Government (COFOG).[[4]](#footnote-2) Under COFOG, most drug control policy expenditure is included in the “public order and safety” class of expenditure. The most directly relevant subclasses are “police services”, “law courts”, “prisons” and “R&D public order and safety” (Eurostat, 2011).
* Reuter (2006) relates public expenditure to the supply and demand sides of the market. He counts public spending on supply reduction under “enforcement programmes” and considers that these are *“programmes aimed at traffickers and producers to shift up the supply curve for drugs; other things being equal, they should raise the price of drugs and lower quantity. Programmes aimed at users and retailers raise the transaction costs of buying drugs”*. In other words, enforcement programmes will make drug producing, trafficking or dealing more expensive, because they either bring about an increase in the unitary costs of production or introduce greater risk into the business (Costa Storti and De Grauwe, 2009).

These two classification systems are substantially different. COFOG has been co-designed by the statistical office of the European Union and the European Commission, with well-defined concepts and data collection methodologies. Annual mandatory data collection has been implemented in every European Union member state since early 2000. The system covers all functions provided and financed by governments. Drug-related activities are among the overall tasks provided and financed by the public sector, but there are no specific methods specified or data collected on drug-related expenditure. Drug-related expenditure is embedded in broader items, such as public expenditure on public order and safety, security, health, education or social protection. Conversely, the Reuter’s classification was designed to organize public expenditure spent with the main aim of tackling the drug phenomenon. However, no systematic data collection has taken place.

The research community has not formally adopted any of these classification systems. However, as Eurostat publishes data annually in accordance with the COFOG classification, their system is frequently used. Eurostat publishes data on public spending with the purpose of guaranteeing public order and safety, which is split into the above-mentioned classes. Researchers still have to opt for criteria and models to disentangle drug-related spending within these overall expenditure classes.

In fact, supply reduction initiatives are often embedded in policy projects that have broader objectives and budgets. Therefore, firstly, it is important to look beyond expenditure that is exclusively used for drug policy and also include spending intended for broader policy domains that indirectly, but significantly, contribute to drug policy or impact upon it. For instance, investing in effective policing in certain problematic neighbourhoods, in order to prevent all types of crime, may also contribute to preventing drug dealing. Consequently, it is relevant to take into account overall budgets for initiatives which may have direct synergies with drug policy objectives. Secondly, modelling techniques are required in order to disentangle drug-related expenditures from overall expenditures. For instance, specific estimates and well-defined methodologies are needed to disentangle expenditure on drug-related crime from overall public spending on law courts (more details on methodologies are given below).

In the event that not all the required data are available in international data sets, national databases should be mapped. Every country has different structures for drug control services, provision and financing. National data mapping can be achieved in different ways: information from registration systems, annual reports, interviews with key experts and/or contacts working in this field (De Ruyver et al., 2007). Detailed mapping of available data can be demanding and makes intensive use of resources. However, it is a fundamental step for any estimate of public spending on drugs control.

***Extracting expenditure data from sources: labelled and unlabelled expenditure***

Some of the funds allocated by governments for drug-related expenditure are identified as such in the budget (labelled expenditure). Often, however, the majority of drug-related expenditure is not identified (unlabelled expenditure) and must be estimated using modelling approaches. Total drug-related expenditure is the sum of labelled and unlabelled drug-related expenditures (EMCDDA, 2016).

Since labelled expenditures are clearly identified in budgets, calculation methods are not required. Time series data are often available for labelled expenditure. The biggest challenge when data on labelled expenditure are compiled is to ensure complete mapping of all entities in charge of providing these services, as they can be spread across different government levels. Depending on the national structures, expenditures from all relevant national, regional or local government institutions that are directly or indirectly associated with drug policy should always be included.

For unlabelled expenditure, a modelling procedure is necessary and the modelling is based on either a top-down or a bottom-up approach. Frequently, these estimates require the use of activity data to develop estimates (for example, number of offences, offenders, criminal cases, prisoners, etc.)

*Modelling unlabelled expenditure*

The top-down modelling approach is mainly used when the data available are embedded in programmes with broader goals and the fraction attributable to drugs can be identified as the proportion of the overall budget. In order to identify this proportion, models lay down objective criteria and calculate attributable fractions.

*Unlabelled drug-related expenditure = Overall expenditure × Attributable fraction*

There is no general methodology to determine attributable fractions also known as repartition keys. In practice, the appropriaterepartition key is determined by the object of the estimate, data availability and the modelling approaches available. Repartition keys are determined in different ways on the basis of information from activity data, extracted from registration systems, annual reports and/or contacts working in this field (De Ruyver et al., 2007). When determining attributable fractions, the data used should preferably be publicly available or, even better, be stored within international databases. This can guarantee the possibility of producing comparable estimates in the years that follow and in other countries.

Appendix 3 summarizes information on the data available in the most relevant international databases that can be used to estimate unlabelled public expenditure on supply reduction. It describes the activity data reported, the reporting countries and time periods. This annex reports the data available concerning the annual statistics on national public expenditure on police, law courts and prisons reported by Eurostat. These data include not only expenditure on drug-related initiatives, but the total spent to tackle all types of crime. Therefore, to disentangle drug-related expenditure and built attributable fractions, activity data shall be required.

For instance, the number of drug-law offenders in prison may allow estimating the proportion that convicted prisoners for drug-law offences represent from total prison population, and therefore to approach the proportion that drug-related expenditure on prisons represents from total prison spending; or the proportion that drug-related cases handled by the police, by prosecutors or by drug-law courts on the total number of cases handled by these institutions may allow starting approaching their drug-related costs.

To design attributable fractions, models use the support of data on crime, police, law courts or prisons activity. Annex 3 presents information and data by groups of variables. These groups encompass total public expenditure, drug-related public expenditure, supply reduction public expenditure; drug law offences; crime reported by the police, drug-related crime, conviction statistics and prison population. Within groups, variables directly relevant are listed. For each variable, data available are listed by source, country and time period. Finally, this annex reports the number of observations available for each variable. The relevant sources include data from the Council of Europe, EMCDDA, EUROSTAT, Univeristeé de Criminoligie et de Droit Penal de Lausanne and the UNODC.

Despite that data available are still referent to a short period of time and that data are still missing in many countries/years, gathering available information shall allow developing better methods and more accurate estimates in the future.

When international sources are not available, publicly available national statistics and data from competent public bodies should be used.

Advantages of the top-down approach

* Availabilityof data: Aggregated budgetary data are often readily available which means that top-down approaches can be easily applied.
* Lowcost: the availability of aggregate cost data means that the time and costs required to estimate a top-down unit cost can be reduced.
* Versatility*:* the methodology enables an analyst to forecast how costs may change as a result of a reduction/an increase in service usage (for instance, when there are less/more drug-related crimes committed in a certain year than expected) and how these costs change over time.

There are, however, some limitations associated with a top-down approach. Firstly, it does not clearly identify the different factors that may drive the costs and therefore often masks the underlying factors that determine why unit costs vary within a single, yet heterogeneous, services group. The criteria laid down for estimating attributable fractions do not always take into account all of the characteristics that may impact the total costs, which means that cost functions are often simplified. These estimates are therefore often not very precise. Nevertheless, they are frequently used and provide valuable proxy indicators for average costs.

An alternative method of estimating drug-related expenditure is to base estimates on the cost of providing one unit of public service, known as the bottom-up modelling approach. For instance, how much does it cost to keep one drug-law offender in prison? Considering the different costs borne by the government for managing a prison facility, such as the real costs of state property, prison staff, electricity, water and gas, machinery, etc., it is possible to estimate how much each detainee costs per day. This sum can then be multiplied by the number of drug-related detainees, taking into account the different costs associated with each type of detainee, based on the different lengths of prison sentences, different security levels, etc. To obtain the total expenditure on drug control policy, all the cost elements should be identified and totalised.

The bottom-up approach is particularly appealing when relevant unit costs are readily available. If, on the other hand, every type and element of the drug policy has to be separately estimated, the approach can be demanding and challenging.

Advantages of using a bottom-up approach

* Transparency: detailed cost data allow potential errors to be investigated and their impact tested – this facilitates a quality assurance process.
* Simplicity: the calculation required to estimate unit costs is easy to understand and direct, providing a simple way to quantify the administrative and overhead costs associated with a range of public services.
* Detail: detailed cost data can highlight variations, enable analysts to explore the factors underlying variations and determine whether, for example, some service users account for a disproportionate share of the costs.
* Versatility: the methodology enables an analyst to forecast how costs may change as a result of a reduction in service usage or demand.

However, the main disadvantage associated with the bottom-up approach is that it requires detailed information concerning both the type of costs associated with the provision of each service (full knowledge of the production function of each public service) and the unit cost of each of the production factors.

A combination of the two approaches may be preferred. The advantage of this dual method is that it makes cross-verification possible; the data gathered on the basis of the top-down approach can be double-checked and supplemented with the data retrieved from project actors in the field.

***Reporting the value of estimates***

The basic format used to report the value of estimates is monetary value in nominal terms. However, to permit comparability over time, if reported in monetary units estimates should be adjusted for inflation.

Some authors, however, report the value as a percentage of GDP. This way of presenting the results considers the economic dimension of a country. It is likely that drug-related spending is higher in a country with 85 million inhabitants than in a country with 10 million inhabitants. The same holds for a higher income country (EMCDDA, 2008). For these reasons, reporting the value of estimates as a percentage of GDP is a valid choice, since it takes account of both the inflation problem and the size and level of a country’s income.

Another frequently used approach is reporting the value of spending per number of problem drug users. In this case, authors take into account the dimension of the drug problem. Reporting all these complementary measurements of drug-related public spending facilitates the validation of the data through cross-verification and increases the economic significance and utility of the estimates.

## 

## 2.5 Examples of sectorial models

In addition to collecting labelled public expenditure data, several examples exist of models applied to identify unlabelled expenditure on drug control in the national contexts. Different authors have applied different definitions, data sets and models to estimate items of drug-related expenditure. This section presents examples of models utilised to estimate unlabelled drug-related spending on various types of supply control initiatives.

***Police***

Public spending on drug-related police services is probably best identified using a top-down approach.[[5]](#footnote-3) In order to disentangle this expenditure from total public expenditure on public order and safety, as published by Eurostat, attributable fractions has been calculated with the help of activity data, such as drug-related offences in proportion to the total number of offences. The following are concrete examples of variables available in national and international data sets, which have all been used separately to estimate attributable fractions:

1. The number of drug-related crimes per 100 000 population.
2. The number of drug-related cases reported by the police out of the total number of police cases.
3. The time the police forces spend on combating the drug phenomenon in proportion to their total working time.

To estimate the share of costs attributable to spending on police action against illicit drugs, the ratio is multiplied by the total expenditure of the law enforcement agencies and reduced by any available data on labelled expenditure for drug control.

A concrete example is provided by the estimates for Italy. Genetti (2014) estimated drug-related public expenditure for police forces based on the amount of time that staff spent on drug control in 2011: possession of illicit drugs for personal use; production, trafficking and dealing in illicit drugs; and driving under the influence of drugs and alcohol. The proportion that this time represented of the total working time for the police forces was then used as an "attributable fraction" for disentangling the amount of money that was spent on drug-related police activities from the total spending on police activity. Within the funds allocated for drug control, 14% was spent on drug-police activity, while law courts and prisons absorbed the remaining 21% and 65% respectively.

Moolenaar (2009) developed a model and provided an example of how to estimate public spending on supply reduction initiatives in the Netherlands. The author applied a top-down model based on the average cost of police time spent on this work. Moolenaar calculated the average duration of each type of criminal investigation firstly by type of criminal activity (assuming that different criminal activities have different investigation costs – based on an assessment of the severity of the crime) and secondly by the number of cases registered for each criminal activity.

***Customs***

With regard to customs services, the share of customs officers who deal with drug control activities and/or the proportion of their working time compared to the total number of custom officers has been used as an attributable fraction. As input data, the number of customs officers who are involved in drug control activities forms the basis for the calculation. These estimates are then applied to the total expenses of the customs administration (minus any labelled expenditure specifically targeted towards this activity). It should, however, be noted that most customs officers do not exclusively devote their working time to drug control activities, so, ideally, the percentage, or the average, of working time devoted to drug control should be estimated.

Kopp and Fenoglio (2002) estimated the drug-related expenditure of customs services based on the proportion of customs officers allocated to combating illicit drug trafficking within the total number of customs officers. This proportion constituted the attributable fraction applied to the total customs budget. The authors concluded that, in 2000, drug-related spending on customs services represented approximately 10% of total drug-related spending in France. As these authors pointed out, omitting costs such as those of detection equipment or detection dogs may constitute a relevant limitation, since the costs of detection equipment may have a strong impact on relatively small budgets such as that for customs.

Lievens et al. (2016) estimated drug-related expenditure by customs based on the proportion that drug-law violations represented in the total number of violations registered by the ordinary customs services, investigation services and motorised brigades. They used a top-down approach based on the number of drug-law offences in proportion to the total number of offences. In 2012, customs spending represented 3.6% of the total drug-related public spending on supply reduction in Belgium.

***Court systems***

Spending on drug-related court services has been extracted from total national expenditure on law courts based on the following activity data:

1. The proportion of drug-related offences with regard to the total number of offences.
2. The proportion of drug-related convictions with regard to the total number of convictions;
3. The proportion of people imprisoned for drug-related offences with regard to the total number of prisoners.

Kopp and Fenoglio (2002) estimated the expenditure that drug-related crime represented in the French judicial system. They adopted a bottom-up approach, taking estimates of the time spent by the various types of French judges and other types of administrative staff on drug-law cases and then multiplying these estimates by their average salaries. Based on this method, the authors concluded that law courts represented about 24.4% of total drug-related public expenditure in France in 2000.

In Croatia, drug-related spending on the courts covered drug-related cases prosecuted by both the State and the courts ([Budak](http://www.eizg.hr/hr-HR/dr-sc-Jelena-Budak-59.aspx) et al., 2013). A top-down approach was used based on estimates of the number of drug-related crimes as a proportion of the total number of crimes registered by the police. The researchers recognised that these estimates were crude, but they could not obtain a better proxy for this particular component of the estimates.

In Sweden, expenditure on drug-related prosecutions and court cases (district court, court of appeal and supreme court) was estimated based on a bottom-up approach, which combined the number of cases and the average cost per case (Ramstedt, 2006). The data were obtained from a judicial system official. It should be noted that the average case cost was not recorded by type of crime, instead the average for all types of crime was used as an indicator for drug crimes. Moreover, for the court of appeal and supreme court, only the total number of criminal cases was available and the fraction of drug cases was estimated based on the situation in the district courts (9%). Regarding the range of the estimates it should be noted that the author included, as an upper limit for estimates, a specific percentage (30%) of the costs of tackling other crimes, as they may have been committed under the influence of drugs.

***Prisons***

Unlabelled costs of drug-law offenders in the prison system can be estimated using the number of convicted prisoners for drug-related offences expressed as a proportion of the number of overall convictions. For example, to estimate expenditure related to drug-law offences in prisons, two elements have been taken into account: overall prison expenditure for a given fiscal year and the attributable fraction of prisoners convicted of drug-law offences.

EMCDDA (2014) provides an example of how public expenditure on drug-law offenders in prisons can be estimated. Based on data for public expenditure on prisons provided by Eurostat and data on the number of offenders provided by the Council of Europe, the proportion of prisoners sentenced for a drug-law offence as their main offence was applied to the total public expenditure on prisons. A range of estimates was calculated, with low estimates taking into consideration only prisoners sentenced for a drug-law offence and high estimates also including pre-trial prisoners. Between 2000 and 2010, this expenditure was estimated to range, on average, between 0.03% to 0.05% of GDP in 22 European countries. On applying these percentages to the entire EU for the year 2010, the estimated expenditure was within the range of 3.7 billion euros to 5.9 billion euros.

## 2.6 Examples of national studies

Several models and data sources have been applied in different national contexts to identify labelled and unlabelled expenditure allocated to drug control initiatives. Due to national specificities, neither their external validity nor the comparability of the methods used have been tested. The extent and specificity of labelled drug-related expenditure vary substantially across countries, as do the data and methods applied for estimating unlabelled expenditure. The national estimates presented below are therefore not directly comparable. They nonetheless provide examples of useful models and estimates and illustrate some of the approaches applied.

***Croatia***

Budak et al. (2013) aimed to identify the central government’s total drug-related public expenditure and to develop a method of estimating and allocating unlabelled expenditure by type of drug policy programme (prevention, treatment, social reintegration, harm reduction and law enforcement). For labelled expenditure, governmental institutions were asked to classify budget expenditure by public function and by type of programme. Unlabelled expenditures were identified indirectly with a system of repartition keys, which were applied to the total state unit budget (minus labelled costs). The repartition keys were estimated using supply reduction activity data. Unlabelled public expenditures were estimated on the assumption that they make up the part of public expenditure remaining after labelled public expenditures for combating drug abuse have been deducted from the total expenditure of a public body.

For the period 2009-2012 the study suggested that public expenditure on law enforcement constituted about 73% of total drug-related public expenditure by central government, whereas prevention, treatment, social reintegration and harm reduction represented 12%, 13%, 0.3% and 2%, respectively. When comparing unlabelled expenditure for the different programmes in a single year (2011), unlabelled expenditure on law enforcement represented 82% of total unlabelled drug-related expenditure. On the other hand, law enforcement accounted for 4% of the total labelled expenditure. Overall, the estimates indicated that drug-related expenditure stood at 0.2 % of the GDP.

***Belgium***

The study *Drugs in Figures III* measured how much the Belgian Government spent on drug policy in 2008 (Vander Laenen, De Ruyver, Caulkins & Lievens, 2012). It further developed upon two earlier studies (De Ruyver et al. 2004, 2007) by carrying out a new and more refined estimation of public expenditure to combat illegaldrugs. The study combined a top-down and a bottom-up approach for estimating public expenditure. The vast majority (98.45%) of the expenditures were identified as a result of the top-down approach. Public expenditures identified through the bottom-up approach (1.55%) concerned organisations that depended on the government for most of their funding.

The total drug-related expenditure was broken down by programme: law enforcement, treatment, prevention, harm reduction and other. For 2008, public expenditure on law enforcement constituted 45% of the total expenditure. This was slightly less than the spending on treatment (49%) and substantially more than that on prevention (4%), harm reduction (0.8%) and other (1.2%). When estimated in the same way in 2004 and 2008, public expenditure on law enforcement showed a substantial increase, both nominally (from 186 038 337 euros to 243 000 490 euros) and in relation to the other programmes (it increased by 6 percentage points).

***Italy***

For the purpose of estimating drug-related public expenditure in Italy (Reitox Italian Focal Point, 2014), a model was developed to analyse the flow of cost information from various sources. The model consisted of four components: private or indirect costs (individual costs and costs due to loss of productive capacity) and public expenditure or direct costs (law enforcement costs, social and health costs). To determine the costs of law enforcement, the following sources of information were used: data concerning traffic control and traffic accidents; police data on people caught with drugs for personal use; data on the number of convictions for drug trafficking; and data on crimes related to drug trafficking.

For 2011, the cost of drug-related law enforcement was estimated at 1 600 435 296.60 euros, or roughly 40 euros per inhabitant aged 15-64 years. The largest cost component was prisons and alternative measures (65%), whereas trials and legal expenses, law enforcement activities and administration represented 21.3%, 13% and 0.7%, respectively.

***France***

In a French study the method relied on analysing activity records, wherever available in the agencies concerned (Kopp, 2015). The total expenditure for drug-related activities was then aggregated. The top-down approach applied in this case provided an indication of the proportion of expenditure for drug control related activities compared to the overall expenditure of all the institutions and agencies concerned. To obtain an estimate, a fraction was applied to the total staff and routine operating costs of the agency concerned. In the year 2010, for example, 10% of police activities were attributable to drug control activities, which involved 60 police units. In this example, police expenditures attributable to drug-related activities were calculated by multiplying the total expenditure of the police services by this fraction of 10%.

A bottom-up approach was also adopted, based on the working time of staff performing support functions in connection with drug-related activities or the equipment used, as recorded by the agencies concerned. For example, the time spent giving prevention talks in schools and the time spent by the police forces on alcohol tests were included in the calculations.

***Luxembourg***

Since 1999, the social costs of drugs have been estimated annually in Luxembourg. These estimates take account of the total costs to public and private agents of the consequences of drug use and trafficking. Public spending is analysed in five sectors: prevention, treatment, harm reduction, law enforcement and research. In the law enforcement field, as in other fields, the analysts face the twofold challenge of accounting for drug-related spending, as financed by different general government levels, and of developing models to extract unlabelled drug-related expenditure from broader budgets (Origer, 2002).

Law enforcement was estimated to account for 39% of total drug-related public expenditure in 1999; prevention, treatment and harm reduction expenditure amounted to 59%, whereas research and other stood at 2%. Overall, drug-related public expenditure represented 0.013% of GDP.

***Russia***

For Russia, public expenditures on law enforcement agencies and on the judicial system were estimated as part of a social study (Potapchik and Popovich, 2014). The comprehensive model encompassed private and indirect costs (the cost for the individual and the costs due to loss of production capacity) and public spending, including direct spending on supply reduction services. These were disaggregated into spending on law enforcement and on criminal justice, which included factors such as law enforcement agencies and the federal drug control service.

Public expenditure on supply reduction services was estimated using a top-down approach and various sources of information: police data on persons caught with drugs for personal use; data on the number of sentences for drug trafficking; and data on crimes related to drug trafficking. As there was no published information on the fraction attributable to drug-related crime in Russia, the fraction estimated in a study by the US Office of National Drug Control (22%) was employed with a view to estimating the law enforcement and judicial system expenditures.

***Portugal***

There are few examples of attempts to estimate the impact of changes in the legal system on drug-related public expenditure and drug-related budgets. Gonçalves et al. (2015) are an exception as they conducted a comprehensive social cost analysis of the situation before and after decriminalisation in Portugal. The authors found a significant reduction in the non-health related costs of drug policy between 2000 and 2004, in particular in the legal system (direct) costs. Although these observations highlight significant changes, prudence is still called for in concluding causal relationships with the new Portuguese National Strategy for the Fight against Drugs (NSFAD).

***Other national studies***

There are other examples of public expenditure studies additional to those mentioned above. For instance, Mostardt et al. (2010) estimated public expenditure in 2006 for Germany using data from Eurostat and the COFOG system, concluding that supply reduction represented close to 65% of the total drug-related public spending; Rigter (2006) estimated that 75% of public expenditure was spent on law enforcement in the Netherlands; Ramstedt (2006) presented public expenditure estimates for Sweden, whereas public spending on supply reduction represented between 70 to 76% of the total; and Lievens et al. (2016) published a social cost study, including estimates of public expenditure to deal with legal and illegal drugs in Belgium. There are also US (ONDCP, 1989-2015) and Australian (Moore, 2008) estimates. Despite substantial differences, the studies may all be viewed as necessary first steps in national drug policy evaluations.

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## 2.7 International databases used to model drug-related public expenditure

The only available international compilation of updated estimates of drug-related public expenditure on supply reduction is published by the EMCDDA for the EU member states[[6]](#footnote-4), reporting the available national estimates of total drug-related spending and spending separated into supply and demand reduction initiatives. The scope for cross-country comparisons is nonetheless limited because the estimates often do not use comparable definitions, data sets or methodologies.

Another database of particular relevance is Eurostat. This is partly because it is based on a consistent categorisation system and on internationally agreed definitions, which are required features for international comparison. The Classification of the Functions of Government (COFOG) is a detailed classification system for the functions or socioeconomic objectives that general government units aim to achieve through a range of outlays. Eurostat has published annual data according to the COFOG classification for European countries since the early 1990s. This data source has proved to be relevant and amenable to a wide variety of analytic applications. However, the data set does not comprise data concerning specific spending on drug-related public initiatives. In order to disentangle drug-related expenditure from the broad classes of public spending, modelling approaches are adopted according to the sector of intervention.

Appendix 1 provides a list of relevant data sources. In addition to the two data sources already mentioned, there is information on international reporting concerning supply reduction factors such as: drug related crime (EMCDDA and the European Institute for Crime Prevention and Control); prison activity and costs (the Council of Europe); crime and criminal justice systems (Eurostat and the European Institute for Crime Prevention and Control). Annex 3 makes an extensive description of data published by international institutions.

# 2.8 Conclusions

* Every European country allocates significant public resources to the drug policy field. Public expenditure studies can reveal how much public authorities are spending on drug policy and for what purposes such expenditure is incurred.
* Public expenditure estimates can be used as a tool for assessing whether policy intentions are actually reflected in action, and they constitute a necessary tool for implementing thorough policy evaluations. Public expenditure studies should mirror all relevant activities and policy approaches and may be particularly appropriate in times of austerity.
* Estimates exist for 16 EU countries, out of the 30 potential reporting countries (EMCDDA, 2014b). Estimates suggested that drug-related expenditure ranged from 0.01 % to 0.5 % of GDP. 12 out of the 16 reporting countries allocate the largest share of drug-related public expenditure supply reduction activities.
* Data availability is one of the main limitations in this field. The use of international databases is recommended, whenever possible, because these data sets employ broadly accepted concepts and definitions and provide better comparable data. Sometimes, however, national data sets can contain more detailed or reliable information.
* The total budget for supply reduction services is the sum of labelled and unlabelled expenditures. Labelled expenditures are clearly identified in public budgets, whereas a modelling procedure is required for estimating unlabelled ones. The modelling is based on either a top-down or a bottom-up approach. Using both approaches as complementary is advantageous but expensive. A list of advantages and limitations for both alternatives is provided, in addition to empirical expenditure studies for supply reduction activities in some European countries.
* While recognising the limitations imposed by the data sets currently available, this report provides examples of current practice and, in so doing, suggests areas of future focus for desired methodological development. It is hoped that the estimation of drug-related public expenditure on supply reduction initiatives and policy evaluation will move forward in Europe. For continued improvements to take place, however, it is essential that a network of experts is developed and maintained. Partnerships should be extended and maintained with the goal of developing good practices, standards and guidelines in this field.

# 2.9 Recommendations

1. Improving estimation methods with further methodological developments; agreeing on best practices and; finding reliable standardised data will enhance the utility of public expenditure estimates, as that will permit analysis over time and across policy areas and countries.
2. Improved data quality and developing relevant data sources is needed for conducting more precise estimations of spending on drug control measures and to measure the impact of drug control policies. One option is to develop guidelines for data collection and economic modelling of evaluations.
3. It is essential to classify public expenditure based on the purpose for which the expenditure is intended. It is therefore useful to use a consistent categorisation system, such as the international Classification of the Functions of Government (COFOG).
4. Cross-country comparisons are important, but they are only possible with a common methodology of public expenditure estimates. International data sets and modelling techniques need to be expanded and improved in order to increase the capacity to carry evidence based on drug policy evaluations in the drug field
5. A methodology using a set of repartition keys according to COFOG categories can be a starting point in order to estimate unlabelled drug-related expenditures. General agreement among all participating countries on definitions and methods will help improve the comparability of results between countries.
6. Public expenditure studies involve analytical work, which requires adequate human and technical capacities in all relevant stakeholder fields. This is important for obtaining the data quality needed for aggregation and comparison. To achieve this, a network of experts could be established and a working group of experts developed.
7. Developing methods to estimate public expenditure on supply reduction requires effective working partnerships between drug policymakers and specialists in the police, law courts and prisons. Collaboration with public accountancy experts and those in charge of economic modelling is required to guarantee meaningful estimates.

# Glossary

**Attributable fractions** also known as **repartition keys** are coefficients estimated to help those who estimate drug-related expenditure with the purpose of reflecting the proportion of expenditure allocated to finance drug-related initiatives. Therefore, attributable fractions are designed to accurately isolate drug-spending, when drug-related expenditure is embedded into a broader budgetary structure. There is no general methodology to determine repartition keys. It depends on the case (on the basis of the activity information and data available) (Vander Laenen et al, 2011).

**Cost analysis** provides monetary estimates of the costs of a particular intervention or set of interventions, and also information on the amount of resources (e.g. labour, facility, supplies) used in their provision. The latter information is often used to identify critical cost components of the intervention and to assess whether the costs are affected by changes in key assumptions (Bray and Zarkin, 2006). In addition to being the first step in a cost-effectiveness and cost-benefit analysis, cost studies can also be used to compare the relative costs of one intervention to another or to monetise savings from implementing a particular action (Chalk et al., 2013).

**Cost-effectiveness analysis**involves estimating the ratio of the difference in costs between two alternatives (net costs) divided by the difference in the outcomes (net effectiveness) (Gold et al., 1996). Traditionally, this measure has been used in health economics. However, this evaluation tool can be used in any framework of policy intervention, given that the outcome measures are those relevant for each type of public policy analysed. It is, essentially, the incremental price of obtaining a unit outcome effect (e.g. a 10% reduction in the number of drug-law offences in the past month) from a given police intervention (e.g. introducing drug squads in problem neighbourhoods) when compared to an alternative (e.g. regular policing). Intervention costs are estimated in monetary units, such as the euro. The effect of the intervention can be any policy-relevant outcome that is collected for all interventions under consideration.

**Cost-benefit analysis** converts all types of outcomes to a monetary equivalent, in contrast to cost-effectiveness analysis (Chalk et al., 2013 and Drummond et al., 1997). As a result, the euro value of the intervention’s benefits can be directly compared with the euro value of the intervention’s costs. Two common methods for comparing benefits and costs include calculating net benefits (costs are subtracted from benefits) and benefit-cost ratios (benefits are expressed as a percentage of programme costs). A related type of analysis is the cost-offset analysis in which future costs or cost-savings are examined. Since cost-benefit analyses combine multiple outcomes into a single measure and allow direct comparison of costs to benefits, they often provide clearer guidance than cost-effectiveness analyses on which treatment programmes should be adopted – namely those programmes whose benefits exceed their costs. Cost-effectiveness analyses can provide a ranking of competing alternatives but not information on the extrinsic value of any single intervention independent of the alternatives (Bray and Zarkin, 2006).

**General government** comprises the central government, state government (in some countries it applies to the federal level of government), local and social security funds (Eurostat, 2011).

**Government expenditure** is defined as a particular set of transactions, comprising the expending undertaken by general government sector units (Eurostat, 2011).

**Economic evaluation** is a comparative analysis of alternative actions in terms of both their costs and consequences (Drummond et al., 1997).

**Labelled drug-related expenditure** is the ex-ante planned public expenditure made by general government in the budget that reflects the public and voluntary commitment of a country in the field of drugs. In addition, it is any expenditure identified as drug-related in public accountancy documents (EMCDDA, 2008).

**Public expenditure** is the value of goods and services purchased by the general government of a state in order to perform each of its functions. The functions of governments are, among others, the provision of health care, justice, public order, education and social protection. Public expenditure studies are important because they provide information about the size and the composition of the costs of public programmes and interventions (Eurostat, 2011).

**Social costs of illegal drugs** comprise all costs carried bythe different sectors of society as a consequence of the illicit drug phenomenon. Public expenditure is only one of the cost elements here. Social cost is the sum of public expenditure, private expenditure and external costs. Private expenditure constitutes, for instance, the money spent by private citizens to purchase illicit drugs. External costs comprise the costs caused by the consequences of drug use, which can affect anyone in society, including those who do not necessarily use drugs or are involved in drug demand, supply or drug policy. For instance, external costs are the expenditure on drug-related nuisance, expenditure on tackling offences committed under the influence of drugs, losses of productivity or absenteeism associated with either drug trafficking or dealing activities, among others (Single et al., 2003).

**Total drug-related public expenditure** is the sum of the labelled and unlabelled drug-related expenditure (EMCDDA, 2008).

**Unlabelled drug-related expenditure** is the non-planned or non-publicly announced ex-post public expenditure incurred by the general government in tackling drugs that is not identified as drug-related in the budget (EMCDDA, 2008).

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# Appendix 1: Available databases and potential indicators for drug-related public expenditures

*Examples of international databases, which can be used for estimating drug-related public expenditures*

|  |  |  |
| --- | --- | --- |
| **Level of estimation** | **Examples of databases** | **Estimation data** |
| International | **EMCDDA Statistical bulletin**  **and**  **Public expenditure database** | * The EMCDDA statistical bulletin covers a broad range of areas including the most recent estimates of drug-related crime in the form of drug seizures, types of offence, price, purity and use in prison, and country responses to the drug situation in Europe. http://www.emcdda.europa.eu/data/stats2015 * The EMCDDA also publishes the most recent national data on drug-related public expenditures available in Europe. * http://www.emcdda.europa.eu/topics/drug-related-public-expenditure |
| **WHO Database** | * **Global Information System on Resources for the Prevention and Treatment of Substance Use Disorders** (includes information about: [prevalence and burden of Disease](http://apps.who.int/gho/data/node.main-euro.A1211?lang=en&showonly=RSUD), [monitoring and surveillance](http://apps.who.int/gho/data/node.main-euro.A1221?lang=en&showonly=RSUD); [policy](http://apps.who.int/gho/data/node.main-euro.A1229?lang=en&showonly=RSUD); [treatment system and services](http://apps.who.int/gho/data/node.main-euro.A1233?lang=en&showonly=RSUD); [pharmacological treatment](http://apps.who.int/gho/data/node.main-euro.A1280?lang=en&showonly=RSUD); [prevention programmes for substance use and related harm](http://apps.who.int/gho/data/node.main-euro.A1319?lang=en&showonly=RSUD); and [human resources and civil society involvement](http://apps.who.int/gho/data/node.main-euro.A1333?lang=en&showonly=RSUD)). |
| **Eurostat** | **Public expenditure according to the Classification of the Functions of Government (COFOG)**  COFOG published data according to two levels of classification (United Nations, 2008). The first classifies expenditure into 10 general functions, one of which is “Public order and safety”. The second classifies expenditure into 69 groups, in which there are three indicators of interest: police service, law courts and prisons. The definitions below are provided by the UNODC.  From the Public order and safety section:  **Police services**  - Administration of police affairs and services, including alien registration, issuing work and travel documents to immigrants, maintenance of arrest records and statistics related to police work, road traffic regulation and control, prevention of smuggling and control of offshore and ocean fishing.  - Operation of regular and auxiliary police forces, of port, border and coast guards, and of other special police forces maintained by public authorities; operation of police laboratories; operation or support of police training programmes.  **Law Courts**  - Administration, operation or support of civil and criminal law courts and the judicial system, including enforcement of fines and legal settlements imposed by the courts and operation of parole and probation systems.  - Legal representation and advice on behalf of the government or on behalf of others provided by government, in cash or in services.  **Prisons**  - Administration, operation or support of prisons and other places for the detention or rehabilitation of criminals such as prison farms, workhouses, reformatories, asylums for the criminally insane, etc. |
| **UN-CTS (Crime and Criminal Justice Statistics)** | Data produced by UNODC have multiple sources. Member States regularly submit to UNODC statistics on drugs (through the Annual Report Questionnaire) and crime and criminal justice (through the annual Surveys on Crime Trends and Operations of Criminal Justice Systems). Other data are collected through national surveys implemented by UNODC in co-operation with national governments or are compiled from scientific literature. UNODC attempts to maximise the comparability of the data and estimate regional and global statistics. |
| **SPACE** | SPACE unites two related projects: SPACE I provides data on penal institutions and the population held in custody, as well as on certain conditions of detention, while SPACE II collects information on persons serving non-custodial sanctions and alternative measures.  Data are collected every two years by means of two questionnaires sent to the equivalents of the ministries of justice, the penitentiary administrations and the probation authorities of each country in Europe. The collection and validation of these data then takes place at the University of Lausanne, where analyses and interpretations for both projects are formulated through a common methodology. This methodology aims to allow comparisons among states at European level, by proposing SPACE categories instead of each country’s own national categories, while still including questions regarding the particularities of their specific sanctions and measures. The SPACE project produces two annual reports: SPACE I – Prison Populations and SPACE II – Persons Serving Non-Custodial Sanctions and Measures, presenting the data collected and the key points of the results. |
| **European Sourcebook on Crime and Criminal Justice Statistics** | The Sourcebook contains data from 41 European countries regarding their criminal justice systems. The book is structured into six main chapters covering different stages of the judicial system: Police Statistics, Prosecution Statistics, Conviction Statistics, Prison Statistics, Probation Statistics and, for the 2014 edition, a final chapter on National Victimization Surveys. The data provided are systematically accompanied by texts and notes relating to the specificity of each country and which discuss the different challenges attributed to the comparison of the data. |
| **Social Expenditure Database** | The OECD Social Expenditure Database (SOCX) provides a unique tool for monitoring trends in aggregate social expenditure and analysing changes in its composition. The main social policy areas are as follows: old age, survivors, incapacity-related benefits, health, family, active labour market programmes, unemployment, housing, and other social policy areas. |
| **ESPAD** | Drug abuse prevalence among teenagers in European countries. |
| National | **Database of national statistics** | Expenditures of different groups, in which can be found some indicators of interest: police service, law courts, prisons, medical and social services. |
|  | **Annual report from Social Services Department** | Data on Social Services Department expenditures at regional level and the number of drug users receiving social benefits in connection with drug use. |

# Appendix 2: The international Classification of the Functions of Government (COFOG)

The COFOG classification has three structural levels. At the first level, government expenditure is broken down into 10 functions. These are then divided into 69 groups (second level of COFOG), which are themselves divided into classes at the third level – the most detailed classification level. COFOG permits an examination over time of trends in government outlays on particular functions (Eurostat, 2011).

The detailed three-level structure of COFOG includes financial flows of public finance, which are going from state and local (regional and municipal) budgets to non-profit organisations (NPOs) with drug-policy programmes. COFOG is a functional classification system used by the System of National Accounts 1993. COFOG is a useful international classification system for spatial comparison (between countries) and also for time comparison (over time). In principle, its units of classification are individual transactions. This means that each outlay (purchase or transfer) should be assigned a COFOG code according to the function that the transaction serves. This principle is valid for both capital transfers (investment) and current (non-investment) transfers. Eurostat has published annual data according to the COFOG definitions for the European Union countries since the early 2000s.

The extensive structure of COFOG contrasts with the four-category division introduced by Reuter (2006), based on the likely effects of services provided by drug policy programmes (namely prevention, treatment, enforcement and harm reduction). Reuter’s programme division is the classification of the recipients (NPOs) with drug-policy programmes.

An example of an overview of public expenditure groups, broken down according to the main public functions pursuant to the international classification of the functions of the government at the third level, is shown in the table below.

A pragmatic approach towards drug-related research and public expenditure estimates would suggest adopting a classification such as COFOG, as proposed by Eurostat. The COFOG classification system guarantees annually available data for most European countries, according to harmonised definitions and standard data collection procedures.

*Public expenditures according to the classification of public functions*

|  |  |
| --- | --- |
| **Public functions** | **Public functions at the third level of classification** |
| 01 General public services | 014 Basic research |
| 03 Public order and safety | 031 Police services |
| 033 Law courts |
| 034 Prisons |
| 07 Health | 071 Medical products, appliances and equipment |
| 072 Outpatient services |
| 073 Hospital services |
| 074 Public health services |
| 075 R&D health |
| 09 Education | 091 Pre-primary and primary education |
| 092 Secondary education |
| 094 Tertiary education |
| 095 Education non-definable by level |
| 096 Subsidiary services to education |
| 10 Social protection | 105 Unemployment |
| 106 Housing |
| 107 Social exclusion |

# Appendix 3: Summary tables: data from international databases

**Table 1 - Public expenditure**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Data and Statistics** | **Dataset** | **Type of information** | **DATABASE** | **YEARS** | **Number of observations(\*)** |
| **Public expenditure** | Expenditure of the general government | Law Courts | **Eurostat,**  **European Union**  **(EU)** | 1995-2015 | Europe (31) = **473**/651 |
| Police Services | Europe (31) = **473**/651 |
| Prisons | Europe (31) = **473**/651 |
| **Drug-related public expenditure** | Public expenditure on supply reduction | Total drug-related public expenditure | **Country Drug Profiles,**  **EMCDDA, (EU)** | Last year available | EU (30) =**20**/30 |
| Percentage spent on supply reduction |
| Percentage spent on demand reduction |

(\*) The number of observations reports the number of data records, taking into account the territory; countries and years available. The ratio compares the number of effectively reported observations with the total number of records, if no data were missing. Example: Europe (44) = 28/368: in Table 4, the conviction statistics of the European Sourcebook of crime and criminal justice statistics reports 28 data records, for the community sanctions imposed to drug offences in 2010, compared to the 368 data records that would exist if no data were missing, in the region Europe (which accounts with 44 countries).

**Table 2 - Drug law offences**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Data and Statistics** | **Dataset** | **Type of information** | | | | **DATABASE** | **YEARS** | **Number of observations(\*)** |
| **Drug law offences** | Drug Law Offences | Number of offences | | Offences | | **EMCCDA**  **(EU)** | 1995-2014 | EU (30) = **364**/600 |
| Offender | | EU (30) = **262/**600 |
| Offences by Types | | Use | | 2004-2013 | EU (30) = **230**/300 |
| Supply | | EU (30) = **238**/300 |
| Offences by drug | Cannabis | | Total | 2004-2013 | EU (30) = **203**/300 |
| Use | 2005-2013 | EU (30) = **163**/270 |
| Supply | EU (30) = **160**/270 |
| Heroin | | Total | 2004-2013 | EU (30) = **186**/300 |
| Use | 2005-2013 | EU (30) = **159**/270 |
| Supply | EU (30) = **160**/270 |
| Cocaine | | Total | 2004-2013 | EU (30) = **185/**300 |
| Use | 2005-2013 | EU (30) = **159**/270 |
| Supply | EU (30) = **176**/270 |
| Crack | | Total | 2005-2013 | EU (30) = **50**/270 |
| Use | EU (30) = **47**/270 |
| Supply | EU (30) = **37**/270 |
| Amphetamine | | Total | 2005-2013 | EU (30) = **163**/270 |
| Use | EU (30) = **74**/270 |
| Supply | EU (30) = **87**/270 |
| Methamphetamine | | Total | 2005-2013 | EU (30) = **98**/270 |
| Use | EU (30) = **74**/270 |
| Supply | EU (30) = **87**/270 |
| Ecstasy | | Total | 2005-2013 | EU (30) = **162**/270 |
| Use | EU (30) = **144**/270 |
| Supply | EU (30) = **153**/270 |
| LSD | | Total | 2005-2013 | EU (30) = **127**/270 |
| Use | EU (30) = **108**/270 |
| Supply | EU (30) = **95**/270 |

**Table 3 - Prison population**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Data and Statistics** | **Dataset** | **Type of information** | **DATABASE** | **YEARS** | **Number of observations(\*)** |
| **Prison population** | Persons held in institutions for drug users offenders outside penal institutions | Availability of institutions for drug users offenders, outside penal institutions | **Space I, Council of Europe (CoE)** | 2014 | CoE (47) =**28**/53 |
| Situation of prison population | Population on 1st January | 2009 &2014 | 2009: CoE (47) = **343**/424  2014: COE (47) = **255**/265 |
| Total number of prisoners (including pre-trial detainees) |
| Total number of detainees held in remand institutions/sections (pre-trials) |
| Total number of prisoners held in institutions serving a sentence |
| Total capacity of penal institutions |
| Surface area per prisoner (m^2) |
| Evolution of prison population | Total number of prisoners | 2000-2014 | CoE (47) = **707**/795 |
| Prison population | CoE (47) = **683**/795 |
| Legal status of prison population | Untried detainees (no court decision)” | 2009 &  2014 | 2009: CoE (47) = **274**/424  2014: CoE (47) = **315**/477 |
| Detainees found guilty but no sentence yet |
| Sentenced prisoners (appealed or can do so) |
| Detainees with no final sentence, but serving a prison sentence in advance |
| Sentenced prisoners (final sentence), of which: |
| * fine defaulters |
| * in revocation, suspension or annulment of the conditional release or probation |
| Other cases |
| Total number of prisoners (including pre-trial detainees) |
| Main offence of sentenced prisoners (Final Sentence) | Drug offences | 2009 & 2014 | CoE (47) = **88/**106 |
| Lengths of sentences imposed (final sentenced prisoners) | Length of the sentences by month, years or lifetime | 2009 | CoE (47) = **405**/583 |
| 2014 | CoE (47) = **557**/689 |
| Prison population (including pre-trial detainees): stock | Prison population  Stock – Total | **European Sourcebook of crime and criminal justice statistics,**  **Université de Lausanne** | 2003-2011 | Europe (44) = **387**/414 |
| Prison population  Pre-trial detainees | Europe (44) = **356**/414 |
| Convicted prison population by type of offence | Total criminal offences | 2006 & 2010 | Europe (44) = **88**/92 |
| Drug offences (of which %) | 2010 | Europe (44) = **38**/46 |
| Convicted prison population in 2010 Drug offences: Total | 2006 & 2010 | Europe (44) = 46/92 |
| Sentenced persons held in prisons | Drug Offences | **UNODC** | 2010-2012 | Europe (26) = **49**/81 |
| Drug Trafficking | Europe (26) =**36**/81 |

**Table 4 - Cases registered by the police, prosecutors and law courts**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Data and Statistics** | **Dataset** | **Type of information** | | **DATABASE** | **YEARS** | **Number of observations(\*)** |
| **Police statistics** | Crime Recorded by the Police | Total | | **Eurostat** | 1993-2007 | Europe (36) = **536**/585 |
| Unlawful acts involving controlled drugs or precursors | | 1993-2007 | Europe (36) = **486**/585 |
| 2008-2014 | Europe (39) = **275**/287 |
| Drug-Related Crimes at the national level, number of police-recorded offences | Total | | **UNODC** | 2003-2008 | Europe (40) = **215**/258 |
| Drug Possession | | Europe (21) = **101**/138 |
| Drug Trafficking | | Europe (37) = **175**/240 |
| Police Statistics- Offences/Offenders | Offences | Criminal Offences | **European Sourcebook of crime and criminal justice statistics** | 2003-2011 | Europe (42) = **347**/387 |
| Drug Offences | Europe (42) = **333**/387 |
| Drug Trafficking | Europe (41) = **269**/387 |
| Offenders | Criminal Offenders | Europe (42) = **263**/396 |
| Drug Offenders | Europe (42) = **245**/396 |
| Drug Trafficking | Europe (42) = **190**/396 |
| **Conviction statistics** | Criminal cases handled by the prosecuting authorities | Output cases: Total | | 2003-2011 | Europe (42) = **218**/396 |
| Percentage brought before a court of the total output of criminal cases handled by the prosecuting authorities | | Europe (42) = **198**/396 |
| Output cases by offence group | Drug Offences | 2010 | Europe (42) = **33**/88 |
| Drug Trafficking | Europe (42) = **25**/88 |
| Convictions Statistics- Persons convicted | Criminal offences | | 2003-2011 | Europe (42) = **293**/369 |
| Drug offences | | Europe (42) = **272**/369 |
| Drug trafficking | | Europe (42) = **193**/369 |
| Total persons receiving sanctions/measures | Criminal offences | | 2006 | Europe (41) = **203**/473 |
| 2010 | Europe (41) = **176**/602 |
| Drug offences | | 2006 | Europe (41) = **175**/473 |
| 2010 | Europe (41) = **158**/602 |
| Drug trafficking | | 2006 | Europe (41) = **113**/473 |
| 2010 | Europe (41) = **104**/602 |
| Community sanctions and measures imposed | Criminal offences | | 2010 | Europe (44) = **52**/368 |
| Drug offences | | Europe (44) = **28**/368 |

**Acronyms**

Council of Europe (47) = CoE(47): Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovak, Slovenia, Spain, Sweden, Switzerland, TRF-Macedonia, Turkey, Ukraine, United Kingdom

European Union (30)= EU(30): Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, United Kingdom

Europe (21): Belarus, Bulgaria, Czech Republic, Hungary, Poland, Romania, Finland, Iceland, Lithuania, Norway, Sweden, United Kingdom, Albania, Croatia, Malta, Slovenia, Belgium, France, Liechtenstein, Luxembourg, Switzerland

Europe (26): Bulgaria, Czech Republic, Poland, Romania, Russian, Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Norway, Sweden, United Kingdom, Andorra, Greece, Italy, Malta, Portugal, Serbia, Slovenia, Austria, Liechtenstein, Monaco, Netherlands, Switzerland

Europe (31): Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, United Kingdom

Europe (36): Europe (31) + Liechtenstein, Montenegro, TRF-Macedonia, Serbia, Turkey

Europe (37): Europe (21) + Republic of Moldova, Russian Federation, Slovakia, Ukraine, Denmark, Estonia, Ireland, Bosnia-Herzegovina, Italy, Montenegro, Portugal, Serbia, Spain, TRF- Macedonia, Germany, Monaco

Europa (39): Europe (36) + Albania, Bosnia-Herzegovina, Kosovo

Europa (40): Belarus, Bulgaria, Czech Republic, Hungary, Poland, Moldova, Romania, Slovakia, Ukraine, Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Norway, Sweden, United Kingdom, Albania, Bosnia-Herzegovina, Croatia, Greece, Italy, Malta, Montenegro, Portugal, Serbia, Slovenia, Spain, TRF- Macedonia, Austria, Belgium, France, Germany, Liechtenstein, Luxembourg, Monaco, Netherlands, Switzerland

Europa (41): Europa (42), except Luxembourg

Europe (42): Europa (31) + Albania, Armenia, Bosnia-Herzegovina, Georgia, Kosovo, Moldova, Russia, Serbia, TRF- Macedonia, Turkey, Ukraine

Europe (44): Europe (42) + Azerbaijan, Montenegro

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# **Chapter 3 Unintended consequences of drug control policies**

Although drug policies are aimed at reducing drug use and its harmful consequences, the policy interventions may also have some unintended consequences. Parts of these consequences are related to health outcomes through direct effects on morbidity and mortality, or indirectly, through availability, accessibility and utilization of drug-related health care. Other effects are not related to health, but rather to an array of social and economic consequences for the drug users, drug dealers/traffickers and the society as a whole. The purpose of this chapter is to identify and discuss unintended consequences of drug control policies and identify who the bearers of them are. To further improve the analysis, we also focus on possible interventions that can be implemented to reduce their extent and consequences.

Law enforcement intend to detect and respond to violation of the existing drug laws and regulations. That includes actions such as surveillance, apprehension, imposition of a fine, imprisonment etc. Breaking the drug laws will imply a risk of punishment for the offender, with the intention to penalize the individual and deter others from committing a similar crime. A sentence of imprisonment, for instance, penalize by restricting the offender’s freedom of movement for a period of time. It is, however, not meant to also impose stigmatization, reduced job opportunities or reduced access to health and health care. Likewise, a fine is meant to reduce the offender’s financial resources, not to limit his or hers educational opportunities, labour market outcomes or travel possibilities, which may be the case if accompanied with a criminal record. Here, while bearing in mind the intended consequences of supply reduction policies, the focus is on these unintended ones.

One might think that the bearers of both the intended and the unintended consequences are the drug market participants only, but that is not the case. The unintended consequences affect to a large extent also relatives of drug offenders, patients in need of pain relief and palliative care, and the society in general. As will be discussed in some detail below, billions of people suffer from reduced, or total lack of, access to pain medication; also children, spouses, parents and friends of drug users are affected by stigmatization and the drug users’ increased health risks; and the whole society is threatened by the huge financial gains from illegal drug production and sale, leading to corruption, increased risk of terror actions, economic instability etc. By focusing also on bearers other than the drug market participants, this report emphasises that drug laws and law enforcement have widespread implications that need to be taken into account when determining drug policy and its interventions.

Political opinions on optimal responses to drug use and drug problems vary substantially across and within jurisdictions. The recent legalization of recreational cannabis use in some US states is only one example that illustrates that these policy views may also change over time. This report doesn’t advocate one particular policy option or way of handling the drug situation, but aims at presenting possible interventions that can be implemented irrespective of what drug regulations and law enforcement practices that are currently in place. Given the present drug laws, the aim is to suggest interventions that can reduce the amount and effects of unintended consequences for those affected. Potential interventions include factors directed towards reducing health risks for drug users and their relatives, some relate to international cooperation in handling money laundering and terrorism, others comprise suggestions for increasing availability of pain relief medication, etc. In total, almost 50 potential interventions are listed and discussed.

In the following, the unintended consequences of supply reduction policies are subdivided into two main categories; health and non-health effects. The discussion of both categories is further divided into three sections, each with a table that presents i) the mechanism; ii) a list of unintended consequences; iii) the bearers of these effects (drug market participants and non-participants) and iv) a list of potential interventions. The tables are inspired by the taxonomy of drug related harms found in MacCoun and Reuter (2001) but deviate from them by focusing on unintended consequences and by suggesting potential intervention to reduce these effects. The accompanying text elaborates on the tables’ content.

Despite substantial efforts, every possible unintended consequences may not be listed, the bearers may be more heterogeneous than we suggest and there are probably more potential interventions that could be suggested. Still, this report may be a useful starting point for discussing the issue of unintended consequences and how to reduce the extent and impact. Beside decreasing the negative effects for those affected, a successful reduction may also increase public support for drug supply policies.

# 3.1 Health effects from restricted availability of controlled medicines

The purpose of the UN Conventions on Narcotic Drugs is dual; to prevent any misuse of controlled substances while guaranteeing their availability for scientific and medical purposes. This implies that governments also have a dual obligation; develop policies and regulations for preventing potential abuse and harms, while ensuring the adequate availability for scientific purposes and adequate availability, accessibility and affordability for those in need (the ‘principle of balance’). In practice however, many states have mainly focused on control and restriction of listed substances, severely impeding the availability of controlled medicines for medical and scientific purposes. As a result, the implementation of the conventions in national legislation and policies are often much stricter than required by the conventions at the cost of patients in need, in particular patients in need for pain relief and palliative care and treatment-seeking opioid dependent drug users.

A study conducted by the Access to Opioid Medications in Europe (ATOME) group in 12 European countries adopting the WHO Country Assessment Checklist, reported that a number of legal and regulatory barriers existed, primarily affecting the prescribing and dispensing of opioid medications (Radbruch et al., 2012). Findings indicated that a range of regulatory barriers exists in a national legislation related to prescribing, dispensing, and usage of opioid medicines; trade and distribution; manufacturing; affordability; penalties; and language. Furthermore, beyond the national legislation barriers, there were also several challenges concerning national policy strategies, such as lack of knowledge and appropriate training of the healthcare professionals and poorly‐developed health care systems (Pain & Policy Studies Group, 2013). Strict regulations and inappropriate policies were found to have negative impact on adequate access to opioid medicines and severe unintended consequences to the lives of people who were in need of these drugs.

**Table 3.1 HEALTH EFFECTS FROM RESTRICTED AVAILABILITY OF CONTROLLED MEDICINES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mechanisms** | **Unintended**  **Consequences** | **Users** | **Non-users** | **Possible interventions** |
| Strict regulations and limited access to prescription drugs, in particular morphine and other opioid analgesics | Reduced possibilities for medical improvements related to avoidable pain and other symptoms for patient in need  Limited availability of opioid substitution treatment  Restricted possibilities to conduct research on medical marihuana | x  x | x | 1. Ensure access, availability and affordability of controlled medicines to patients in need 2. Raise awareness and provide training for treatment with opioids among healthcare professionals 3. Ensure inter-agency collaboration between all relevant stakeholders, government and civil society, to promote coherent drug policy responses 4. Ensure access to appropriate substitution treatment supported by adequate psychosocial care and rehabilitation 5. Reschedule cannabis to a Schedule 2 drug |
|  | x | x |

## 3.1.1 Strict regulations and limited access to prescription drugs, in particular morphine and other opioid analgesics

Morphine is considered to be the gold standard for treatment of moderate and severe pain (Caraceni et al., 2012; Council of Europe, 2003; Inturrisi & Lipman, 2010). Since 1977, morphine has been designated by the WHO as an essential medicine, indicating that it should be available at all times and at a price individual citizens and communities can afford (World Health Organization, 1996). Still, there continues to be a global burden of unrelieved pain. The World Health Organization (WHO) estimates that more than 5 billion people live in countries with low or no access to controlled medicines and have no or insufficient access to treatment for moderate to severe pain.[[7]](#footnote-5) Further, the inequalities of morphine consumption between high-income countries and low- and middle-income countries are profound (Gilson, Maurer, Ryan, Rathouz, & Cleary, 2013). According to the International Narcotics Control Board (INCB) a small number of high‐income countries consume most of the morphine in the world, while countries inhibited by 80% of the world’s population, consume a small fraction (INCB, 2011).

Further, it is estimated that 16 million people inject drugs worldwide and that 5.8 million of these live-in Europe. Persons who inject drugs (PWID) have a 20-fold increased risk of premature mortality and substantially increased risk of severe morbidity and social exclusion (Degenhardt et al., 2011; EMCDDA, 2016). Opioid agonist maintenance treatment (also called opioid substitution treatment, OST), combined with psychosocial assistance, is assumed to be the most effective of all treatment options (EMCDDA, 2016). Still, only a minority of PWID have access to this kind of treatment. Beyond the benefits of assisting the individual to overcome withdrawal, reduce drug use and prevent relapse, opioid maintenance treatment contributes to reduced risk of overdose-related mortality, transmuting infections such as HIV, hepatitis (see for review Gowing, Farrell, Bornemann, et al., 2004), public nuisance and criminality (i.e. Mattick, Breen, Kimber, et al., 2003) Despite strong evidence for the efficacy of treatment of opioid dependence with long-acting opioid agonists such as oral methadone and buprenorphine, it is estimated that, worldwide, only 8% of injecting drug users have access to treatment for opioid dependence (WHO, 2011). For Europe, WHO stated that in 15 of the 25 European Union Member States, medical consumption of opioids was close to non-existent[[8]](#footnote-6). This treatment gap for drugs and addictive behaviours leads to loss of life and undermines societal well-being (Anderson, Braddick, Conrod et al., 2016).

Another effect is the formal and informal restrictions on research regarding the therapeutic value and efficacy of cannabis’ medicinal properties. Various bureaucratic, economic and cultural barriers in Europe and other developed countries hinder medical research on the drug (Nutt, 2015). Cannabis is currently defined as a Schedule I drug, with a "high potential for abuse and no accepted medical value". To conduct research with Schedule I drugs, scientists usually will have to gain a special approval and upgrade the security protocols in their labs, which are expensive and time-consuming hurdles. As a result, the currently available evidence stem from small-scale efficacy studies that have not followed gold standard methodologies for assessing medical practice. Thus, the effects of therapeutic interventions and essential knowledge, such as for which condition, what dosage, how it interacts with other medicines, its composition, side effects etc., remain empirically untested. This implies that the current medical use of marihuana is based on less than satisfactorily evidence and clinical standards. The anecdotal evidence supporting the THC for medical usage needs to be confirmed by meta-analysis and long term efficacy studies that follow the standardized methodologies and protocols for assessing clinical efficacy.

In sum, the too strict interpretation of the agreed drug conventions affects to a large extent non-users of illegal drugs through insufficient access to pain medication and limited research on potential beneficial effects of medical marijuana. It also severely affect users, however, through reduced access to the most promising treatment option for opioid dependence.

## Potential interventions (PI)

## PI 1: Ensure access, availability and affordability of controlled medicines to patients in need

WHO has urged all governments to “ensure that patients have pain relief in accordance with national and international treatment guidelines” (Milani & Scholten, 2011, p. 25). Potential responses may include:

* Implement recommendations in the WHO policy guideline[[9]](#footnote-7) “Ensuring Balance in National Policies on Controlled Substances, Guidance for Availability and Accessibility for Controlled Medicines”; (WHO, 2007; WHO, 2013)
* Ensure non-stigmatizing language in legal and official documents (e.g. by using the term ‘Narcotic drug’ only for referring to substances controlled under the Single Convention);
* Establish regular exchange opportunities (communication networks) between legal and governmental authorities, healthcare professionals and patients/families in order to raise awareness for practical impact and requirements of legal and policy decisions (target-performance comparison) regarding opioid availability and accessibility;
* Provide and support the implementation and development of national databases for scientific research, treatment evaluation and monitoring of national demand of essential medicines
* Raise awareness in the general public, e.g. via media campaigns or information, brochures for patients and relatives

## PI 2: Raise awareness and provide training for treatment with opioids among practicing healthcare professionals

All relevant stakeholders and agencies involved with drug control (i.e. customs officials and the police) and health care providers (doctors, nurses, health professionals) should have sufficient knowledge of the government’s health policy with regard to treatment with controlled medicines. Drug control officials should acknowledge when it is lawful for patients and health professionals to be in possession of medicines and not exert excessive control measures. Physicians should be sufficiently trained to treat pain and hence be allowed to prescribe opioid analgesics if necessary. Specialized training should be developed for treatment and use of controlled medicines in accordance with international guidelines. Treatment with opioids (knowledge, skills, attitudes) should be included in undergraduate and postgraduate education for all relevant healthcare professionals.

## PI 3: Ensure inter-agency collaboration between all relevant stakeholders, government and civil society, to promote coherent drug control policy responses

In order to formulate and implement coherent drug control policies ensuring the availability and accessibility of controlled substances for medical and scientific purposes, increased cooperation among relevant stakeholders is recommended. Such cooperation could take the form of a National Advisory Board, including representatives from government authorities, medical boards, health professionals, patients and health insurances. The board could provide suggestions on how to achieve an appropriate balance between availability and prevention, assist the needs assessment for controlled medicines and report on the degree of access. It could also advise on the promotion of rational use of controlled medicines, implementation of best practices, and development of national treatment guidelines.

## PI 4: Ensure access to appropriate substitution treatment supported by adequate psychosocial care and rehabilitation, taking into account the need to provide a wide variety of different treatment options

Given the well-documented effect of opioid substitution treatment (OST) in reducing the elevated risk for mortality, morbidity, crime and public nuisance, all countries are encourage to provide OST programmes to treatment seeking opioid dependents. OST has been found to improve treatment retention (Gruber et al., 2008; Schwartz et al., 2006), reduce illegal drug use (Yancovitz 1991; Dolan et al., 2003; Mattick2009), reduce criminal activity ( Bukten et al. 2012, Lind et al., 2005; Oliver et al., 2010) and reduce mortality risk among its patients (Mathers et al., 2013; Clausen et al., 2009; Gibson et al., 2008; Strang et al., 2010; Kimber et al., 2010; Degenhardt et al., 2012; Schwartz et al.,2013; Ledberg, 2017).

## PI 5: Improve possibilities for cannabis research

The most effective means for improving pharmacology and therapeutics research of cannabis would be to reschedule the drug from a Schedule I controlled substance to a Schedule II, as this is one of the predominant factors that prevents many institution and research organization to conduct research on this topic. This is already implemented in countries like the UK. Independently of a reschedule, however, an increase in legal access of the drug (more legal producers) and a reduction in formal and informal restrictions would be beneficial for research.

# **3.2 Health effects due to the drug prohibition**

The creation of a “black market” for illegal goods is one example of an unintended, although not unexpected, effect of the ban on drugs. The unlawfulness is likely to have consequences for the types, prices and qualities of the goods offered at the illegal market and for stigmatization and negative social effects, all of which may lead to adverse effects on users’ health.

**Table 3.2 HEALTH EFFECTS DUE TO ENFORCEMENT OF DRUG PROHIBITION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mechanisms** | **Unintended**  **Consequences** | **Users** | **Non-users** | **Possible interventions** |
| Substance displacement to more hazardous but “legal” drugs | Increased health risk due to unknown, often dangerous and potentially lethal substances | X |  | 1. Develop prevention strategies: raising awareness, providing relevant information, education and communication targeting relevant groups 2. Develop regulations for NPS that take into account unintended consequences 3. Strengthen links between government bodies and civil society actors 4. Set up system for information exchange between countries on latest developments and practiced responses |
| Elevated drug price | Increased risks of unsafe drug use (e.g. injecting),  Change to lower price substances that may cause unknown health risks,  Less disposal income for food, health care, clothing, housing etc. | X  X  X |  | **PI 6 (see above)**   1. Increase capacities and upgrade current practices of low-threshold services[[10]](#footnote-8), including interventions tailored to PWID 2. Encourage peer-to-peer work, promote peer-training in outreach work, including measures to reduce drug-related deaths, first aid and early involvement of the emergency services |
| Variation in purity | Increased risks of mortality and morbidity | X |  | **PI 6, PI 10, PI 11**   1. Ensure effective Naloxone distribution to medical and emergency services to prevent lethal overdosing |
| Stigmatization | Discourages users to seek help and support  May lead to negative attitudes of health care providers  Loss of self-esteem, impaired well-being of users and their associates. | X  X  X | X | 1. Ensure participation of drug users in commute and social life and ensure that their views are taken into account in decision-making on relevant issues 2. Implement anti-discrimination campaigns and specialized training to health care and social workers |

## 3.2.1 Substance displacement to more hazardous but “legal” drugs

One unintended consequence of the illegal status and the law enforcement of certain drugs is the *substance displacement,* where the control of one substance causes suppliers and users to move to another drug with similar effects but with fewer regulations attached (the so-called “balloon effect”). Drug suppliers, in an effort to avoid drug control and ameliorate the damages and losses related to law enforcement, design chemical compounds (“legal highs”) that mimics banned substances such as cannabis or cocaine: A small variation in the chemical structure of a banned drug can make them fall outside international drug control regulations.

The unprecedented emergence of these substances have been related to an extensive list of harmful effects including high-frequency drug injection and the associated risk of transmission of blood-borne infectious diseases such as HIV, emergency room admissions and fatalities, increased overdoses; high tolerance; and withdrawal symptoms and dependence-producing properties (WHO, 2006).

In 2015, 100 new psychoactive substances (NPS) were reported for the first time to the EU Early Warning System (EWS), bringing the total number of new substances monitored to 560 – with more than 380 (70%) of these detected in the last five years alone (WHO, 2016). These unfamiliar compounds have unknown potency and toxicity, and the dramatic rise of NPS overdoses, hospitalization, deaths and other health-related complications raises concern in the global community.

## Potential interventions

## PI 6 Develop prevention strategies: Raising awareness, providing information, education and communication targeting relevant groups

Interventions may include targeted information, education and communication (IEC) to the NPS users. IEC activities can include: i) promoting reduced risk-taking and enhance self-protection; ii) improving care and management of medical crises such as overdose; iii) shaping sub-cultural norms; and iv) informing about available health and social services and encourage people to seek treatment. Awareness raising campaigns needs to be conducted on systematic basis, be targeted and adequately resourced, expanded and promoted if they are to meet their full potential and adequately protect children and young people from the harms associated with the NPS intake.

Currently, there is limited knowledge of NPS use and user profiles. Early detection, screening and assessment strategies targeting NPS use are lacking in many countries (EMCDDA, 2011). In this regard, identification of specific subgroups of young people that are especially vulnerable for drug use, is becoming an important tool for directing or channelling policy responses and facilitating the development of effective interventions.

## PI 7 Development of regulations for NPS that take into account unintended consequences

Many governments have developed prohibitive legislation to control NPS and targeted suppliers and dealers of these substances. Following the model of the international drug control conventions, individual substances are controlled once their harm has been assessed. They are often divided into schedules/lists that classify them individually based on medical use, their relative abuse potential, and their likelihood of causing dependence when abused. However, the legislative process associated with placing new substances under drug control legislation is often lengthy, taking several months, and leaving a prolonged time lag between NPS identification and the control measures introduced. Furthermore, the limited scientific evidence on NPS unknown toxicity, abuse liability and risks associated with long term intake as well as the fact that these substances are often hard to identify, due to their diverse branding and inconsistent product composition, represent major challenges for developing effective policy responses.

One approach has been to schedule new substances into existing drug control laws or into other forms of legislation, such as consumer or health protection or trading standards legislation. However, as legislation in many countries requires strict and precise identification of every controlled drug, illegal producers aim to avoide the control by continuously introducing “new”, but very similar products. This have in some cases to have resulted in a “cat & mouse” game between producers and enforcement agencies. As a response, legislators in some jurisdictions have introduce a so-called generic legislation, in which clusters of psychotropic drugs are banned in advance. Yet, also generic legislation may have some unintended consequences and the search for an optimal response to NPS should be prioritized. New Zealand has opened for an alternative approach by requesting those seeking to profit from the sale of a psychoactive substance to establish the information required on all aspects of its use, i.e. to provide for pay for the research [[11]](#footnote-9).

## PI 8 Strengthen links between government bodies and civil society actors to exchange knowledge and existing practice and cooperation in joint action

Integrative community based system is one that develops synergies with the local Civil Society Organizations (CSOs), physicians, hospitals and demand reduction and health promoting services of the government. This integration may increase the likelihood of successful implementation, increase service efficiency and reduce public expenditures as it can provide more a comprehensive array of service responses aligned with individual needs and make use of the already available community resources and infrastructure. (Papamalis, 2013)

## PI 9 Improve the systems for information exchange between countries on latest developments and practice responses

The increasing prevalence of new psychoactive substances around the world pose serious cross-border threats to health which makes necessary to enhance monitoring, early warning and responding. Early warning systems and networks are the tools to identify potential threats, review new and existing legislation, and provide the basis for the decision making for temporary restriction measures. Improved information exchange and international forums for discussions of proposed enforcement initiatives, prevention measures and treatment strategies based on the contextualized needs, would be useful.

Some early warning systems already exist, like the Early Warning Advisory (EWA) of the UNODC and the Early Warning System (EWS) of the EU. Still, strengthened systems, which managed to reduce the time span from the emergence of a new substance to a societal response, is needed. This could further boost the exchange of information among member states, with the clear added value of alerting other states to potentially harmful substances that have emerged, to help them anticipate a potential public health threat.

## 3.2.2 Elevated drug price

Drug producers and sellers want economic compensation for the risks they are facing (risks for apprehension, violence etc.) when making an illegal commodity available to drug consumers, and the result is an elevated price level of illegal drugs. Increased prices usually lead to reduced consumption and is, as such, an intended effect of the drug control policy. The high price level, however, may also induce some drug users to change their *mode of drug administration,* for instance from smoking or snorting heroin to injecting it, as injecting is a more cost-effective way of consumption. Drug injection, however, is highly associated with increased risks for mortality, communicable diseases and a range of other health-related problems.

Higher prices may also change the *types of drugs* that users consume. As mentioned above, drug producers have design cheap synthetic drugs that mimic the desirable effects of well-known substances. This means that the high price level may cause an increase in health risks due to consumption of unknown, often dangerous and life threatening synthetic drugs.

Finally, the high price level often implies that drug users, and especially problem drug users, spend a large share of their income on supporting their habit. Beyond the association with higher rates of income generating crime that will be discussed in more detail later, the elevated price level will reduce the money available for important commodities such as hygiene articles, food, clothing, shelter, health care etc. and by that impact negatively on drug users’ health and quality of life.

## Potential interventions

## PI 6 Introduce, or expand, targeted information, education and communication (IEC) to drug users

As mentioned above, IEC activities towards drug users can include: i) promoting reduced risk-taking and enhance self-protection; ii) improving care and management of medical crises such as overdose; iii) shaping sub-cultural norms; and iv) informing about available health and social services and encourage people to seek treatment.

## PI 10 Increase capacities and upgrade current practices of low-threshold services to respond more effectively to drug users’ health and social need, including interventions tailored to PWID

* **Treatment programs,** whether it is opioid substitution or drug-free treatment, will contribute to reduce the negative consequences of elevated drug prices on drug injecting.
* **Needle and Syringe Programs (NSP)** aim at reducing the spread of infectious diseases such as HIV and hepatitis C among people who inject drugs (PWID). They often provide a range of services, however, that in addition to offer sterile injecting equipment, include health information, education on drug use reduction, referral to drug treatment, medical care and legal and social services. A review of 200 studies conducted by the World Health Organisation, concluded that there is compelling evidence that increasing the availability and utilization of sterile injecting equipment by PWID reduces HIV infection substantially, that these programmes are cost-effective and have additional and worthwhile benefits apart from reducing HIV infection (WHO, 2004). The programmes are also beneficial to non-users through reduced risk of sex-induced HIV transmission as they provide free condoms and safer-sex education.
* **Community-based outreach programmes (COP)** aim to obtain face-to-face contact with PWID, provide education on HIV risk-reduction, distribute condoms and bleach for disinfection of needles and syringes, promote referral to other health services, improve access to risk assessment and HIV testing, provide counselling and support community organising. Evidence indicated that outreach programmes are associated with reduced injecting frequency and cessation of injecting, reduced reuse of needles and syringes, needle disinfection, increased condom use and reduction in unprotected sex and increased drug treatment entry (Coyle et al., 1999).
* **Supervised Drug Consumption Facilities** **(SDCF)** provide safe and hygienic environment for drug use. They have been consistently associated with reduced public order and nuisance problems and improved health to PWID through reduced risk behaviour and their role as a gateway to other health care services (EMCDDA, 2015a). Still, SDCF are not sufficiently implemented, or are non-existent, in many EU countries.
* **Vaccination, diagnosis and treatment of HIV, viral hepatitis and tuberculosis (TB).** HIV, viral hepatitis and TB among drug users is a major health concern. Access to HIV, hepatitis and TB prevention, treatment, care and support is fundamental to realizing the universal right to health. Programs, such as the antiretroviral therapy (ART), have the potential to reduce mortality and morbidity rates among infected people, improve their quality of life, act as a post-exposure prophylaxis (WHO, 2008) and prevent further transmission of HIV infection (Granish et al 2010; Günthard et al., 2016).

## PI 11 Encourage peer-to-peer work, and promote peer-training in outreach work, including measures to reduce drug-related deaths, first aid and early involvement of the emergency services

Peer-training focusing on measures to reduce drug-related deaths, first aid and early involvement of the emergency services, should be encouraged and helped. Drug users’ involvement can be an important peer-based education component for effective outreach interventions because peers can help changing social norms through education and by demonstrating changes in their own behaviour (Hunt et al, 2003). Individuals who use drugs have valuable knowledge of drug use practices and patterns and are often able to help identify the most effective ways to reduce the spread of blood borne disease and to assist peers in other ways (Wood et al, 2008).

Acknowledging the fact that in most of the overdose cases other peer-drug users are the only witness (Liou et al., 2012), a set of peer-delivered first aid should be designed and promoted. These may include training on overdose prevention and response techniques for peers that could serve to improve peer-delivered first aid; (Tobin et al., 2012) campaigns to encourage drug users to call emergency services; training and information concerning overdose prevention and its management e.g. training in the recovery position and CPR. One particular area where peer-to-peer training is likely to be of significance is Naloxone distribution, as highlighted in a systematic review by the EMCDDA (2015). Naloxone peer-programmes should include identifying and responding to opioid overdoses and essential first aid training. Most peer-training programmes included didactic and interactive components, opioid symptom recognition, response training and contacting emergency medical service. See PI 12 below for more details on Naloxone programmes.

## 3.2.3 Variation in purity

Given the illegal production and dealing of controlled substances and the lack of standardization and quality control, there is substantial variation in drug purity and the samples are sometimes contaminated by toxic ingredients. This implies an increased risk of morbidity and premature mortality, and fatalities have arisen in connection with contaminated heroin, scopolamine poisoning, PMA within ‘ecstasy’ tablets and clostridium infections such as botulism. (see e.g. Bargagli et al., 2006; Degenhardt et al., 2011; EMCDDA, 2011, 2013).

## Potential interventions

## PI 6 Introduce, or expand, targeted information, education and communication (IEC) to drug users (see above point)

## PI 10 Increase capacities and upgrade current practices of low-threshold services to respond more effectively to drug users’ health and social need, including interventions tailored to PWID

## PI 11 Encourage peer-to-peer preventive work

## PI 12 Ensure effective Naloxone distribution to medical and emergency services to prevent lethal overdosing

The majority of drug-induced deaths are caused by the intake of opioids such as heroin and methadone (EMCDDA 2012a), and consuming these drugs by means of injection increases in particular the risk of premature mortality. Naloxone is an opioid antagonist, which blocks the actions of opioid medicines and has been long used in the emergency treatment of opioid overdose (Maxwell et al., 2006). It counteracts the depressive respiratory effects of opioids and can bring an overdose patient back to consciousness in minutes following its administration. Currently, and despite the WHO guidelines (WHO, 2014) and its recommendations for available naloxone schemes for reducing the mortality rates, the antidote is currently available in less than a third of the 28 EU Member States. (EMCDDA, 2016). Action is urgently needed to improve take-home naloxone availability.

Education and training for healthcare professionals, drug users and laymen concerning administration of naloxone are necessary. Drug workers should receive updated overdose information and training as part of their continuous professional development. Providing naloxone kits to laypersons reduces overdose deaths (Walley, Xuan and Hackman et al., 2014), is safe (Doyon, Aks and Schaeffer, 2014), and is cost-effective (Coffin & Sullivan, 2013). U.S. and international health organizations recommend providing naloxone kits to laypersons who might witness an opioid overdose; to patients in substance use treatment programs; to persons leaving prison and jail; and as a component of responsible opioid prescribing (WHO, 2104; SAMHSA, 2014).

## 3.2.4 Stigmatization

Individuals who are discriminated against because of preconceived judgments of their appearance, disabilities or lifestyles are victims of stigmatization. Drug users often experience stigmatization in terms of marginalization and social exclusion. Stigmatization harms individuals’ self-esteem and well-being. Drug users may be left out from mainstream social and economic activities and decision-making on issues that affect them, are sometimes subjected to violation of human rights and can experience reduced access to health and social services because of their drug use. Discrimination may hinder treatment seeking.

According to the WHO many people with drug use disorders do not receive effective treatment and care. Until now, drug dependence has not been recognized as a health problem in wider parts of societies and stigma and discrimination associated with drug dependence have been major barriers to appropriate treatment.[[12]](#footnote-10) Governments should as a matter of policy priority identify and provide equitable medical care and social assistance to all in need, particularly to vulnerable individuals and groups facing exclusion. This can be achieved in an effective way by adjusting or developing clearly formulated treatment guidelines.

Furthermore, stigmatizing attitudes towards people who use drugs that may also exist among staff in health-care services can be a barrier to give access to and deliver effective treatment for drug users. Several studies have identified stigma as a significant barrier to accessing health-care and treatment services for drug users, with some health-care providers holding negative beliefs about people with drug use disorders, including overuse of system resources, non-investment in their own health, abuse of the system through drug-seeking and diversion, and failure to adhere to recommended treatment and care.[[13]](#footnote-11) Studies indicate the a non-ignorable percentage of health care providers are prejudiced against drug user, stigmatizing further individuals with drug use problems or with health problems such as hepatitis and HIV infection (Churcher, 2013; Zarei et al., 2015).

Stigmatization may also affect the health of non-users in terms of marginalization and social exclusion of relatives and friend of drug users. Children, parents, partners and friends of drug users may experience health problems as a result and they could be discouraged from seeking adequate help for health care services and providers.

## Potential interventions

## PI 13 Ensure participation of drug users in commute and social life and ensure that their views are taken into account in decision-making on relevant issues

In the development and implementation of drugs policies at national and international level, active and meaningful involvement of the civil society, non-governmental organizations as well people who use drugs, are requested. Governments are encouraged to support the initiatives of people who use illegal drugs and to provide supporting mechanisms for active involvement of drug users in the decision making process, program development, implementation, and evaluation of drug-related interventions.

**PI 14 Implement anti-discrimination campaigns and specialized training to health care, justice and law enforcement**

To foster diversity and anti-discrimination policies, increase knowledge, understanding and respect of human rights, and social inclusion of individuals with drug use problems, authorities are encouraged to develop public campaigns for the general public but also targeted specialized trainings and academic curricula for specific categories working in the frontline. This may include people in health care (doctors, nurses, social workers) justice (judges, prosecutors, administrative staff) and law enforcement. In order to plan these initiatives strategically, the aims of a community based framework ‘Building inclusive societies’ (Papamalis, 2012) could be used as a guideline:

1. raise public awareness and expand knowledge base on harmful consequences of stigma and discrimination, strengthen vulnerable groups’ human rights and citizens’ active engagement
2. foster a dialog on the effects of current policies on individuals’ health, rights and safety
3. enhance inter-sectoral cooperation between justice and health sector and synergies between governmental and non-govermental sector and promote adoption of contemporary strategies according to international standards and best practices
4. build capacity and readiness of relevant stakeholders to respond more effectively to the needs of the vulnerable groups through targeted actions and innovative harm reduction initiatives

# 3.3 ADVERSE HEALTH EFFECTS RESULTING FROM ENFORCEMENT ACTIONS

Some unintended effects emerge from the legal ban of substances, some from how the drug laws are enforced. Drug control actions like arrests, border controls, ID-checks of suspected drug offenders etc. imply a direct and face-to-face contact between law enforcement agents, the general public and people involved with drugs. The balance between enforcing the law and protecting the rights and health of individuals, including that of drug users, is demanding and challenging. Law enforcement officers are constantly confronted with these challenges in their daily practice. While being an important and necessary part of the drug control, these actions may also lead to some sever, unintended health consequences.

**Table 3.3 HEALTH EFFECTS RESULTING FROM ENFORCEMENT ACTIONS (arrests, controls, ID-checks etc. of suspected drug users)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mechanisms** | **Unintended**  **Consequences** | **Users** | **Non-users** | **Possible interventions** |
| Counter-acting efforts on health and utilisation of health care and harm reduction services | Increase the risk for:   * Deterioration of health status * Spread of HIV/AIDS and other infectious diseases for drug users and their sex-partners * Users abandoning other users in need of emergency due to fear of apprehension | X  X  X | X  X | **PI 6[[14]](#footnote-12), PI 10[[15]](#footnote-13), PI 11, PI 12[[16]](#footnote-14)**   1. Include psychosocial support and preventive harm reduction practices in training curricula for prison personnel and police services 2. Implement community based policing and prevention programs 3. Develop and implement police service performance indicators based on public safety and health objectives 4. Introduce referral schemes to available treatment and low threshold services 5. Encourage witnesses to users in need to call health agencies 6. Set up centralized database for systematic monitoring specific needs of different drug user groups |
| Physical contact between law enforcement agents and suspects of drug law offenders | Risk of inappropriate use of force, violation of rights, physical, mental harms and distress | X |  | **PI 15, PI 16, PI 17**   1. Implement mechanisms for accountability law enforcement officers 2. Develop independent and transparent complaint mechanisms |
| Barriers to implement appropriate treatment and low-threshold services in detention (prison, pre-trial detention, police custody etc.) | Increased risk of health problems such as HIV/AIDS, Hepatitis C, tuberculosis and other infectious diseases | X | X | 1. Provide relevant treatment and rehabilitation services in prisons, detention and facilities for refugees and immigrants 2. Facilitate adequate vaccination programs and prophylactic measures to drug users and their associates |

## 3.3.1. Counter-acting efforts on health and utilisation of health care and harm reduction services

Over the past years, there has been significant research examining the potential impact of police presence on drug users’ access to health services. Studies suggest that a period of intensified police activity is associated reluctance of PWID and other drug users to seek medical assistance out of fear of an arrest and decreased attendance at voluntary treatment programs and needle exchange services (Aitken, Moore, Higgs, Kelsall, & Kerger, 2002; Bluthenthal, Kral, Erringer, & Edlin, 1999a; Koester, 1994; Rhodes et al., 2003). This may seriously affect drug users’ health and social wellbeing.

Police activity has also been associated with increased syringe sharing among PWID. Despite research findings which indicate that access to sterile syringes is a key factor in preventing HIV epidemic (Des Jarlais. 2000), police arrests and confiscation may in some countries prevent PWID to approach these services (Bastos & Strathdee, 2000; Bluthenthal, 1997; Diaz et al., 1999; Gleghorn, et al., 1995; Koester, 1994; Rhodes et al., 2003) or to carry safe injection and bleach kits. Further, in some cases, the police has destroyed injecting equipment or forced drug users to throw them (Maher & Dixon, 1999). There are also studies suggesting that injecting drug users are pushed to modify their injecting practices in an effort to consume the drug before the police confiscate it. Available evidence indicate that PWID are more likely to share the injection equipment due to the rush and fear of being caught by the police and are less likely to clean injection sites prior to injection or dress wounds afterward. This rush during the administration process often means skipping important steps of the preparation phase (Broadhead et al., 2002), where drugs are mixed without first being heated to kill bacteria and filtered to remove impurities (Wood, Zettel & Stewart, 2003). Rushing may also increase risk for vascular damage (Maher & Dixon, D, 2001) and overdose since the drugs are injected quickly and not first tested for strength.

In the US and in Europe displacement often generates a so-called “shooting gallery” (Des Jarlais & Friedman, 1990). Here, without sufficient access to health promoting services providing clean injecting equipment etc., the displacement increases the risk of infectious diseases and premature mortality (Battjes et al., 1994; Chaisson et al., 1987; Zolopa et al., 1994; Broadhead et al., 2002; Darke & Ross, 1998; McGregor et al., 1998).

The spread of HIV and other blood borne diseases is also a threat to non-users. Relatives, friends, sex-trade clients, health personnel and others in regular contact with PWID run a risk of being infected. Further, displacement of drug users to new neighbourhoods is sometimes part of police interventions. That may lead to an increase in public injecting, unsafe syringe disposal (Caulkins, 1992; Norris & Armstrong, 1999; Zimmer, 1990; Friedman et al., 2000) and increased risk of infectious diseases, which may in turn threaten both community cohesion and public health.

## Potential interventions

PI 6 Develop prevention strategies: raising awareness, providing relevant information, education and communication targeting relevant groups

PI 10 Increase capacities and upgrade current practices of low-threshold services to respond more effectively to drug users’ health and social needs[[17]](#footnote-15), including interventions tailored to NPS users

PI 11 Encourage peer-to-peer work, and promote peer-training in outreach work, including measures to reduce drug-related deaths, first aid and early involvement of the emergency services

PI 12 Ensure effective Naloxone distribution to medical and emergency services to prevent lethal overdosing

PI 15 Include psychosocial support and preventive harm reduction practices in training curricula for prison personnel and police services

Although traditionally police work has a fundamental role on supply reduction, there is an increasing awareness that the police also can play a major role and actively participate on the effective implementation of health promoting strategies. As gatekeepers between the criminal justice system and the broader community, police can act as a regulatory mechanism and coordinate programs that aim to reduce drug-related harms to individuals and communities[[18]](#footnote-16). Police can refer people to drug treatment agencies or other types of assistance, can act as a useful resource for drug education programs and provide a supportive environment for NSPs by not targeting the vicinity of these programs to arrest users.

In order to better equip law enforcement officials for their important role in public health and increase their awareness of the health and welfare implications of their actions, different levels of specialized harm reduction trainings are required. The training can be incorporated in the academia with a standardized curriculum for the different law enforcement fields. Best practice training manuals and guidelines for law enforcement officials should be developed based on the available evidence on health promoting interventions. This may include topics such as the impact and contribution of law enforcement on public health and human rights; referral pathways and integrative care with cross-agency collaboration and synergies with health services and CSOs; quality assurance and regular update of information.

## PI 16 Implement community based policing and prevention programs

Community Based Policing (CBP) is a strategic initiative that focuses on police building ties and synergies with members of the community. It is designed to support active collaboration between law authorities and local communities by enhancing their capacity and competency to effectively respond collaboratively to the contemporary challenges. To this end, CBP represent a collaborative model for reduction of adverse mental health, drug and crime related consequences, by using evidence-based and community-based assets that make efficacious use of available recourses to meet identified needs within a framework that promotes sustainable and place-specific interventions (Papamalis, 2014). CBP personnel adopt a dual role as a police officers to maintain public tranquillity, law and order; to protect the individual’s fundamental rights and freedoms; to prevent and detect crime; to reduce fear[[19]](#footnote-17); while as a social agent may provide assistance and services to the public, harm reduction and treatment referrals, deliver naloxone to an overdose case or participate in local health campaign, promoting healthy life style.

This mutual beneficial partnership with contextualized grassroots community resources (multidisicplinary partnerships with community organizations, including other government agencies, non-profit and SCOs, businesses, the media, and individual organizations etc.), advance the capacity to adequately respond to current challenges and strengthen community resilience.

## PI 17 Develop and implement police service performance indicators based on public safety and health objectives

The development and implementation of performance indicators for police services based on additional objectives to traditional police work like clearance rate etc. could facilitate and complement public health goals as law enforcement agents will be a supplementary component on addressing the health and social needs of vulnerable populations. This involves moving away from simplistic metrics concerned with numbers of drug related arrests, drug seizures and hectares of drug crops eradicated, towards indicators of community health and wellbeing – such as reductions in market related violence and corruption, improvements in public health and economic development, and strengthening of community institutions. Police service performance indicators should, where possible, support the broader agenda of public health.

## PI 18 Introduce referral schemes to available treatment and low threshold services

Drug Referral Schemes (DRS) are partnerships between the police and local drug services that use the arrest as an opportunity for independent drug workers to offer arrestees help and refer them to appropriate treatment services primarily as a means for reducing their drug-related offending. In addition, they may also provide a route to HIV testing and counselling services; antiretroviral therapy (ART); prevention and treatment of sexually transmitted infections (STIs); vaccination, diagnosis and treatment of viral hepatitis; and prevention, diagnosis and treatment of tuberculosis (TB). DRS allow specially trained drug workers (known as drug/arrest referral workers) to contact arrestees whilst they are held in police custody and grant them sufficient time to interview the arrestee and complete a ‘needs assessment’ form, which will be the basis of a treatment and care plan.

## PI 19 Encourage witnesses to users in need to call health agencies

Police can avoid arrests at the scene of a drug overdose and by that encouraging people to call for medical help without delay or fear of prosecution. Drug users should also be able to call ambulance and health services anonymously.

## PI 20 Set up centralized database for systematic monitoring the specific needs of different drug user groups

The risk of harmful consequences of substance use vary substantially with type of substances and patterns of use (including frequency, amount and concurrent use of several drugs). Knowledge of the quantitative and qualitative patterns of drug use is a key element for the development of drug policies tailored to high-risk subgroups, their individual needs and the contextual demands. At the European level, substance use monitoring is based on activities organized by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) for illegal drugs and by the European Medicines Agency (EMA) for prescription drugs, in the context of pharmacovigilance. In addition to information on user groups and their using patterns, an integrative system for assessing the potential for abuse of various psychoactive substances as well as the consequences of that use in terms of morbidity and mortality, is needed.

A centralized surveillance system would be helpful for developing policies tailored to individuals needs and contextual demands and to assess the impact of measures for minimizing the risk of abuse.

3.3.2 Physical contact between law enforcement agents and suspects of drug law offenders

Practical policing and physical contact between law enforcement agents and suspected drug law offenders constitutes a risk for inappropriate use of force, violation of human rights as well as physical and mental harms and distress. Each of these elements is likely to have an adverse health effects for the victimized (Cooper et al., 2004). Violence and excessive use of force against drug users have been reported in various regions, (Dixon & Maher, 2002; Kerr et al., 2004; Kirschner, 1997; Zakrison, Hamel & Hwang, 2004) as have human rights violations, including extortion against suspected drug users, forced detoxification and mandatory HIV testing (Human Rights Watch, 2003; 2004).

## Potential responses

PI 15 Include psychosocial support and preventive harm reduction practices in training curricula for prison personnel and police services

PI 16 Implement community based policing and prevention programs

PI 17 Develop and implement police service performance indicators based on public safety and health objectives

## PI 21 Implement mechanisms for police accountability and make them visible

Police and law enforcement agencies are the most visible manifestation of government authority. The United Nations has articulated a set of principles for police agencies that included applying the law equally to all citizens, guidance on the use of force, guarantees of safety and fair treatment of persons detained or arrested, allowing the community to hold law enforcement officials accountable for their actions, and protecting the rights of women, juveniles, and refugees (CHRI, 2005). Democratic policing requires that the police consider themselves accountable to the citizens, their representatives, the State and the law.

Police services should have their powers checked and controlled by the public through accountability processes, and “efficient measures to ensure the integrity and proper performance of police staff” need to be developed. Performance evaluation and accountability reports are likely to be important tools for police executives in assessing and responding to claims of racial bias, patterns of abusive behaviour, or failure to protect.

## PI 22 Develop independent and transparent civilian complaint mechanisms

The existence of a citizen oversight body with responsibilities for handling complaints against the police is a core accountability and transparency requirement and a prerequisite in a democratic environment. A standard statutory purpose, in jurisdictions where police complaints systems have been codified, is to hold law enforcement officials accountable in criminal and disciplinary proceedings on the basis of evidence obtained in the investigation of a complaint[[20]](#footnote-18).

An effective police complaints system offers fundamental protection against the development of a culture of impunity. The complaints system has always served as a means by which police, prosecutors and the courts identify acts, and omissions, of criminal behaviour, misconduct and below standard performance on the part of law enforcement officials. Cultures of impunity are liable to develop as a result of the failure of police managers, prosecutors and the courts to take appropriate action against an officer, on the one hand, or the reluctance of citizens to complain because of their lack of confidence in the complaints system, on the other hand. Oversight institutions may include the executive (policy control, financial control and horizontal oversight by government agencies), the legislature (members of parliament, parliamentary commissions of enquiry), the judiciary, as well as human rights commissions, civilian complaint review boards or independent ombudspersons. Furthermore, the media can play an important role in providing the public with information on police activities.

## 3.3.3 Barriers to implement harm reduction strategies and programs in settings like prisons

In many countries, drug-related offences represent one of the main reasons for imprisonment, and people who inject drugs constitute 5-50% of the prison population (13). Although some prisoners stop or reduce their use of drugs on prison entry, others initiate drug use or engage in more damaging behaviours when they are incarcerated.[[21]](#footnote-19) Drug use and injection often continues while imprisoned, and interventions that have reduced injection and injection-related health risks in community settings often remain unavailable in prison (Rotily et al., 2001; Thaisri et al., 2003). Access to sterile syringes are often extremely limited. Research suggests that 50% or more of drug users report injection while in prison (Carvell & Hart, 1990; Koulierakis et al., 2000; Clarke et al., 2001), and a substantial proportion of the injecting drug inmates engage in needle and syringe sharing during imprisonment. Needle and syringe sharing increases the risk for transmuting infections and health related problems such as vein injury, scarring, and bacterial and viral infections. Worldwide, the levels of HIV prevalence within the inmate populations tend to be much higher than in the general population (Seaman et al., 2000).

Prisoners have in general poorer health than the general population, with higher prevalence of blood-borne infections, such as human immunodeficiency virus (HIV) and hepatitis C virus (HCV), as well as mental illness.[[22]](#footnote-20) This is often attributed to use of high-risk substances and risky routes of administration that are prevalent in prison settings. Reported rates of self-harm and suicide among prisoners are particularly high compared to the general population. In addition, overcrowding and poor hygienic conditions may further aggravate the stress, social and health problems experienced by prisoners.[[23]](#footnote-21) The risks are increased by health services offered to prisoners, which compare poorly with those provided in the community. [[24]](#footnote-22)

Further, discontinuation of treatment due to incarceration or following incarceration entails severe health consequences for sentenced offenders. This results either from the non-availability of treatment option sin custodial settings where inmates have been in treatment prior to incarceration, or as a result of not being able to continue treatment following release. The discontinuation of treatment following release can lead to taking up street drugs again resulting in a high risk of overdosing and death. The same risks exists vice-versa when prisoners cannot continue treatment in prison. Additional risk situations incur in short-term incarceration, including police arrest and pre-trial detention, where often no adequate treatment options are provided.[[25]](#footnote-23)

A principal problem in this respect is a lack of or inadequate coordination and cooperation between prison health systems and public health systems outside the prisons. Often health care in prison settings works in complete isolation from the general health care system, hampering the quality of health care and continuum of care following release. This can lead to delays in referral into treatment and as a result the needed continuum of care is not ensured. In addition a lack of adequate healthcare services in prisons significantly hinders the social reintegration of prisoners, while leading to the spread of transmissible and life-threatening diseases in prisons and the community.[[26]](#footnote-24)

The United Nations basic principles for the treatment of prisoners recognizes that “Prisoners shall have access to the health services available in the country without discrimination on the grounds of their legal situation” (United Nations General Assembly, 1990) [[27]](#footnote-25). Still, in many EU countries, the authorities are reluctant to implement harm reduction programs in settings like prisons or detention centres. This predisposes marginalized groups to an increased risk for HIV/AIDS and other infectious diseases as they then are left out from public health interventions and services. The lack of access and availability of health care and harm reduction services in prisons raises serious ethical and moral concerns.

Further, introducing harm reduction/health promoting measures in prisons also protect the public since most inmates are in prison only for relatively short periods of time and are then released into their communities. HIV/AIDS prevention and harm-reduction measures will thus also protect the general population, while denied access will put non-users at risk for these harms.

## Potential interventions

## PI 23 Provide relevant treatment and rehabilitation services in prisons, detention and facilities for refugees and immigrants facilities

As recommended by the WHO, UNODC and UNAIDS, governments may introduce, or expand, syringe and needle exchange programs (NSP) in order to avoid and prevent the threat of HIV epidemic among prisoners who inject drugs. Prisoners should have easy, confidential access to NSP, and prisoners and staff should receive information and education about the programmes and be involved in their design and implementation. This should not undermine or impede the provision of drug dependence treatment programmes, including OST, but act as complementary intervention safeguarding drug users’ health status. Governments could introduce OST in the prison health strategy as it provides an opportunity for the prisoners to avoid needle use and syringe sharing.

## PI 24 Facilitate adequate vaccination programs and prophylactic measures to drug users and their associates

Vaccination is recommended for people where exposure to body fluids or contaminated devices can occur, including health care workers, people who inject drugs, men who have sex with men, incarcerated people, people with a history of sexually transmitted infection, and people who have unprotected sex WHO, 2010). HBV vaccinations can significantly reduce the chances of infection (WHO, 2008) and offer protection against infection for more than 90% of healthy individuals (Shepard et al., 2006). According to the International Standards for the Treatment of Drug Use Disorders by UNODC and WHO (2016) treatment services should offer hepatitis B vaccination to all opioid-dependent patient, however, in many countries, only limited efforts have been made for its practical implementation. Currently no vaccinations exist against HIV or HCV.

Safe disposal of drug use equipment is also important to prevent spread of infectious diseases. A variety of option exists, including increased number of, and easy access to, drop boxes at places frequently visited by PWID, such as low-threshold health services and community pharmacies.

## 3.4. Effect of prohibition on drug markets

The development of illegal markets as a consequence of prohibition results in a variety of consequences. Illegal drugs have been made attractive to organized crime not only because of high profit margins, but also because of the illegality of drug money, which excludes it from the flow of financial markets. This could also serve to explain links to other organized crime operations, including terrorist groups who use the illegal drug market as source of funding. The magnitude of profits generated in the global drug market has significantly increased the risk of corruption and entails large money laundering operations.

The diversion of significant sums from the legal financial flow of transactions causes economic damage to financial systems and government budgets alike. Law enforcement activities, although implemented with good intentions, may, under certain circumstances, lead to a temporary increase in drug prices. At the same time, because of successful detection and investigation efforts of drug-related crimes, black markets have moved to Internet-based platforms. This is coupled with the use of crypto-currencies, where sales and marketing strategies are difficult to detect. Increased law enforcement also leads to producers, traffickers, and dealers performing more criminal activity and taking more risks. As a consequence, there is a proliferation of different types of auxiliary crimes such as gun-violence, extortion, kidnapping, etc.

These effects have direct or indirect effects on drug users and others as set out in table 3.4. below.

**Table 3.4. Effect of prohibition on drug markets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mechanisms** | **Unintended consequences** | **Users** | **Non-users** | **Possible interventions (PI)**  ***for details see text references*** |
| Illegality of addictive substances resulting in on-going high profit margins and elevated prices | Profit margins and illegality attract organized crime  High prices for illicit substances leading to acquisitive crime  Connections with other organized crime operations, including terrorist activities  Increased risk of corruption  Increased money laundering activities  Diversion of significant funds from the legal financial flow  High level of criminal motivation and risk taking | X  X  X  X  X  X  X | X  X  X  X  X  X  X | PI 1: Securing political commitment for evidence based responses to confront trafficking, sales, and organized crime  PI 2: Strengthening international cooperation including with civil society organizations  PI 3: Focus of law enforcement interventions on production, trafficking, and organized crime  PI 4: Introducing legal instruments against money laundering and asset seizures  PI 5: Avoiding disproportionate sanctions  PI 6: Alternative sentencing options |

### 3.4.1. Unintended consequences

#### Profit margins and illegality attract organized crime

One of the key mechanisms driving the market for illicit substances is the fact that their illegality, which requires risk taking and a significant level of criminal energy to produce, traffic, and distribute, leads to high prices. As in any other market, high-risk ventures result not only in high prices but also in high profit margins. Additionally, the highly addictive nature of illicit substances ensures continuous and considerable demand, regardless of risk detection or of the consequences of criminalization.

The UNODC estimates that illegal drugs account for approximately 20 % of global crime proceeds and are equivalent to about 0.6–0.9 % of the global gross domestic product[[28]](#endnote-3). In 2013, the retail market for illicit drugs in the EU is estimated to have been worth at minimum EUR 24 billion.[[29]](#endnote-4) Furthermore, illegal profits flow outside the regular financial systems and are therefore exempt from financial control, accountability, and taxation. As a consequence, organized crime networks dominate these markets.

Drug users carry the intended consequences and unintended negative effects that result from criminalization, the resulting law enforcement, and sanctions. These can range from stigmatization to higher risks of unemployment and social exclusion, among others. These factors often also directly or indirectly affect relationships with family members of drug users and impact their other social relationships.

#### High prices for illicit substances leading to acquisitive crime

The high prices of illegal drugs do not usually act as a deterrent for users, as would be the case under normal market conditions, because many of the users are addicted and willing to purchase the desired substance regardless of cost. Drug taking frequently leads to high risk taking, not only in the willingness to accept low quality and dangerous substances, but also in the inclination to obtain the needed funds.[[30]](#endnote-5) These funds are frequently obtained through various forms of acquisitive crimes. Illegal income-generating activities create substantial harm and costs to society at large.[[31]](#endnote-6)

Other users however, who fear the harsh consequences of detected crime, and in particular the non-availability of their drug of choice in prisons, turn to alternative substances that are often more dangerous in terms of their health effects. One of the more prominent recent examples is ‘Krokodil’, a substance that emerged in CIS countries as a result of high heroin prices. [[32]](#endnote-7)

Reduced market availability and high prices also add to the complexity of obtaining drugs. This has negative repercussions on the conduct and economic behavior of many drug users. These users spend a larger share of their disposable income and time trying to obtain drugs or funds, while spending less on daily necessities such as food, clothing, housing, and other vital needs. Drug users often turn to small-scale dealing as a means of obtaining drugs as payment-in-kind. Some evidence suggests that violent property crimes such as robberies can increase as a consequence of price hikes in the illegal drug markets.[[33]](#endnote-8)

#### Connections with other organised crime

The substantial amount of drug related money passing in undetected flows around the world makes this black market of high interest to other organized crime networks, notably those engaged in money laundering, human trafficking, arms smuggling, and terrorism. Drug-related and non-drug-related crimes are connected in different ways. Terrorist groups see in the illegal drug markets an opportunity to gain funding for their activities, causing, as one example of direct damage, strained international relations.[[34]](#endnote-9) Alternatively, the large profits generated in illegal drug markets may encourage diversification into other illicit activities, while the networks and logistical infrastructure established for this purpose may also be utilized to traffic other commodities. [[35]](#endnote-10)

These connections with organized crime may lead to consequences that are borne by drug users and other individuals. For example, drug and human trafficking are linked in different ways since both activities are often conducted by the same organized crime group. In comparison with drug trafficking, the risks associated with human trafficking are low, making it a potential additional opportunity to conduct attractive business within the same network structure.[[36]](#endnote-11) Often, drug users are compelled to engage in these activities to pay off their drug consumption. As a result, users find themselves in circumstances in which they are much more exposed to the risk of being coerced into sexual exploitation and being trafficked. [[37]](#endnote-12) Furthermore, organized crime groups often force women and children into prostitution and sexual exploitation through drug use. This means that even those who have not been drug users before may be coerced into using substances in the process of recruitment and facilitation of sexual exploitation.[[38]](#endnote-13)

In terms of connections to terrorist groups, drug users run the risk of being stigmatized as supporting and financing terrorism through the purchase of illegal drugs. In some cases drug users become involved as small-scale drug dealers in distribution networks directly organized by terrorist groups.[[39]](#endnote-14) Under such circumstances, the drug user may even run the risk of criminal liability as an accessory to terrorist groups.

#### Increased risk of corruption

The corruption of government officials on all levels, and most particularly in the sphere of law enforcement agencies, judicial institutions, and the prison systems, is an important factor to ensure the smooth operation of illegal markets. This, consequentially, produces a corrosive effect on public institutions, undermining governmental authority.[[40]](#endnote-15) Criminals who are avoiding anti-money laundering regulations and who want to manage their illegal business within the licit economy also attempt to corrupt professionals.

Corruption of public officials, from low-level law enforcement officers at one end of the spectrum to high-level members of the judiciary and politicians at the other end, is a systematic feature of all illicit markets. Drug markets have been identified to be one of the two most corruptive influences in Europe, with organized crime groups targeting most commonly low-ranking police and public administration employees. [[41]](#endnote-16) The aim of corrupting law enforcement agents is normally to obtain information on investigations or operations, or to protect on-going illegal activities. Pressure from corrupt magistrates or prosecutors may, for example, obstruct police investigations of influential individuals who are members of criminal networks.

Corruption affects drug users in the sense that there is an incentive to pay bribes to law enforcement agents or to other officials to avoid consequences or sanctions for drug use and possession. This way, drug users run the risk of becoming accessories to a corruption offence. The risk is increased because, in a setting of corruption, officials encourage drug users to buy their way out of criminal investigation through payment of bribes.

#### Increased money laundering activities

The drug trade generates large sums of money that will eventually have to be transferred into legal financial markets, in order to legitimize profits from illegal drug trade. While it is difficult to estimate the extent of illicit financial flows, drug trafficking is a major part of all illicit funds. Illicit drug trade was estimated to account for ca. 20% of all crime proceeds and about 50% of all transnational organized crime proceeds in 2009.[[42]](#endnote-17) Furthermore, in Europe, the illicit drug trade constitutes a major part of illicit financial flows. It is estimated that illicit drug markets in the EU (heroin, cocaine, cannabis, amphetamines and ecstasy) account for one-quarter of the proceeds from all illicit retail markets.[[43]](#endnote-18) The EMCDDA assumes that about 44 % of retail profits are laundered from European drug markets and estimates that, based on that assumption, as much as EUR 11 billion arising from the drug retail trade in the EU might be laundered annually.[[44]](#endnote-19)

A significant proportion of money laundering activity is cash-based, low-tech, and labour intensive. The business sectors most targeted are gastronomy, the gambling and casino industry, retail trade, and especially the food, clothing, and transportation sectors.[[45]](#endnote-20) This type of ‘low level’ money laundering accounts for app. 20% of all laundered funds.[[46]](#endnote-21) While drug users rarely come into contact with big-scale or trade-based money laundering activities, they run the risk of becoming engaged in the ‘low level’ laundering activities because of their difficulties in finding regular employment. This makes them easy targets for those running ‘low skill’ laundering activities. At the same time, their use of illicit drugs makes them an easy tool for blackmail, ensuring their compliance to conceal any information about the laundering operations. Also, in these cases, drug users run a high risk of becoming accessories to others’ crimes.

#### Diversion of significant funds from the legal financial flow

The vast amounts of funds from illicit drug markets absorb resources from the legal economy.[[47]](#endnote-22) Additionally, money spent on and earned from illicit drugs is not taxed, thus denying governments from significant revenues. It can be said that drug users and their kin are indirectly affected in the sense that the legitimate tax funds of which governments are denied could be used for relevant treatment and harm reduction services. This argument becomes especially important in situations of economic austerity, in which drug policy related expenditures for demand reduction services were the first to fall victim to budgetary cuts. In some countries, there is evidence that the availability of treatment and harm reduction services, particularly the needle and syringe exchange programs, has been seriously affected by budgetary constraints. Among other factors, this has contributed to increased incidences of HIV/AIDS and other communicable diseases amongst injecting drug users.[[48]](#endnote-23)

#### High criminal energy and risk taking

Drug market violence can be the result of different factors. First, it is a result of the effects that drugs have on individual users (e.g. violence stemming from drug-induced psychosis) or as a part of an acquisitive crime, such as robbery. Additionally, the production and trafficking of illicit drugs is linked to violent crimes, including homicides (gang wars etc.). Therefore violence may be seen as systemic and as an inherent component of the illicit drug market, used to gain or maintain market share or to resolve disputes.[[49]](#endnote-24)

Existing evidence shows that gun violence and high homicide rates, which require high levels of criminal energy and risk taking, may be an inevitable consequence of drug prohibition, and that disrupting drug markets through law enforcement action can paradoxically increase violence.[[50]](#endnote-25)Contrary to the conventional wisdom that increasing drug law enforcement will reduce violence, the existing scientific evidence suggests that drug prohibition likely contributes to drug market violence and increased homicide rates. It also indicates that increasingly sophisticated methods of disrupting illicit drug distribution networks may in turn increase levels of violence. Furthermore, drug related violent crime can be a consequence of drug prohibition where different organized crime groups compete.[[51]](#endnote-26)

Drug users are affected in different ways, both direct and indirect. They may be the direct victims of violent acts or at least might be exposed to more encounters with violence. The individuals related to drug users run the risk of encountering all the negative consequences that are experienced when relatives or close acquaintances fall victim to violent acts. This entails not only trauma and sorrow but also potential economic consequences for family members, like permanent or temporary incapacity to work and provide income.

#### Increased law enforcement action may lead to elevated prices

While studies show that intensive law enforcement actions leading to reduced supply can increase violence levels, [[52]](#endnote-27) there is no systematic evidence showing that reduced drug supply as a result of law enforcement will always lead to elevated drug prices. In situations where there is a large, established, marked increase in law enforcement activity, it is not likely that prices will rise significantly. However, in developing or unstable markets, enhanced law enforcement can lead to a significant reduction of supplies, which elevates prices. [[53]](#endnote-28) The incurring costs for criminal networks to replace seized drugs elevate the street prices of illegal drugs. Since criminal networks are intended to make high profits, the costs are transferred to the user.

This can lead to different consequences. On one hand, an increased price level for drugs will reduce consumption levels. On the other hand, consumers turn to other legal and illegal substances as a replacement or increase their acquisitive crime activity (see also above: *High prices for illicit substances leading to acquisitive crime*).

### 3.4.2. Possible interventions (PI)

#### PI 1: Securing political commitment to confront trafficking, sale and organized crime

The different forms and shapes of illegal drug markets require a coordinated multi-agency supply reduction approach. Applied measures and interventions should be evidence-based. While supply reduction is a key drug policy area, which still absorbs about two-third of the funds allocated to drug policies, there are big gaps in the existing knowledge base.[[54]](#endnote-29) The on-going work by the EMCDDA on developing supply reduction indicators constitutes an important step towards more evidence-based and effective policies in this field.[[55]](#endnote-30)

#### PI 2: Strengthening international cooperation including with civil society organisations

International networking between different stakeholders and agencies on the level of professionals, such the Pompidou Group activities Airports Group, International Network on Precursor Control and South East Europe Cooperation, set examples of practical, enhanced, and flexible cooperation models.

Collaborative action between civil society and public authorities leads to more dynamic, efficient, and effective development and implementation of drug policies and action plans. Particularly in drug policy, which touches so many different fields of action and aspects of concern, crosscutting or network-based civil society actors can often overcome sectorial barriers much easier than can actors in public administration. Additionally, cooperating with civil society contributes to meeting a concern of modern democracies about the alienation of citizens from the political processes. Input from civil society creates added value to the policy planning and implementation process, enhancing the legitimacy, quality, understanding, and longer-term applicability of the policy initiative. Civil society organizations provide a wide range of contributions for policy development and implementation.[[56]](#endnote-31)

#### PI 3: Focus on law enforcement against drug production, trafficking and organized crime

In order to increase the effectiveness and efficiency of law enforcement, many governments are encouraged to focus their law enforcement activities on the production of drug supply, trafficking, and organized crime structures.[[57]](#endnote-32) Greater cooperation, information, and intelligence exchange between specialized law enforcement teams, which focus on criminal groups trafficking these different types of drugs, should be facilitated to ensure the absence of gaps in the strategic analysis and consequent law enforcement responses. [[58]](#endnote-33)

#### PI 4: Introducing legal instruments against money laundering and asset seizures

The identification, disruption, and dismantling of serious organized crime groups involved in drug trafficking, money laundering, and corruption are key elements of law enforcement activities in Europe. Different legal instruments for identification, like tracking, freezing, seizing, and confiscating assets exist on both national and international levels.[[59]](#endnote-34) Judicial cooperation in cross-border money laundering cases is paramount to making these instruments work effectively. Furthermore, it should be kept in mind that, for money laundering to be effective, enablers working in the financial and legal sectors are needed. One of the key enabling factors in these sectors is negligence or incompetence in applying anti-money laundering measures.[[60]](#endnote-35) Authorities should be attentive to this extent and must ensure appropriate over-sight procedures and mechanisms.

#### PI 5: Avoiding disproportionate sanctions

There is little systematic evidence of any disproportionate sentencing trends for drug-related offences in European judiciary systems. While there are some overviews and studies available as to sentencing practices in European countries, no systematic analysis of the proportionality of sentences has been conducted. This type of analysis would be very difficult to perform[[61]](#endnote-36). However, an indicator that there may be perceived disproportionalities in sentencing drug users is detectable because the call for proportionality continues to find its way into political statements and instruments.[[62]](#endnote-37)

The adoption of measures such as treatment, education, and training, which can be used as alternatives to or in addition to conviction or punishment for drug-related offences, constitutes an important means for the rehabilitation of drug users who are in conflict with the law. It is also important for the avoidance of adverse and often long-term consequences that arise from a criminal conviction *(see 3.5. Effects resulting from discrimination and stigmatization).*

#### PI 6: Alternative sentencing options

Governments should review their laws, sentencing guidelines, and practices for drug offences in order to evaluate their compliance with existing standards of proportionality. A better situational understanding can be obtained through proportionality assessments. A key objective of such an assessment should be the consideration of options to deal with certain drug related acts outside the usual realm of criminal law and procedure.[[63]](#endnote-38) Different examples from across Europe include:

* Defining certain drug related acts as to be dealt with by administrative law and procedure,
* Non-pursuit (but confiscation) of small quantities for personal use
* Treatment orders instead of prison sentences
* Termination of criminal procedure without judicial conviction (issuing warnings, probation schemes, community service orders etc.)
* Time limitation for inclusion of minor drug offences in criminal records (*see also below 3.6.2.6.)*

Proportionate sentencing laws and guidelines constitute important tools and include addressing institutional biases, which also may exist within judicial structures.[[64]](#endnote-39) However, above all, such alternative procedures and measures are an important contribution to more humane responses to drug problems, and constitute a significant step in fulfilling obligations under existing human rights instruments.

## 3.5. Effects resulting from discrimination and stigmatization

The perception that drug users are ‘criminals’ can often lead to discriminatory behaviour towards them. The political and societal acceptance of dependence as a health condition, no different from other chronic diseases, appears to be severely undermined by the lack of knowledge and the existence of prejudice and stigmatization on all levels of society. In this context one needs to be aware that stigma may result from the following:

* Using illegal drugs/criminal behaviour
* Having a criminal record
* Having been imprisoned

Furthermore, there is an increasing concern amongst policy makers about the social representation and stigmatization of drug dependence and subsequent discrimination of people dependent on drugs. Stigmatization of individuals dependent on drugs has been increasing in countries implementing austerity measures.[[65]](#endnote-40) In societies where resources for “legitimate” causes, such as cancer and autoimmune diseases, are scarce, drug dependence may be seen as a moral failure and resources dedicated to treating dependent people are the first target for budget cuts. As a result of such diminishing social tolerance and support, drug users are increasingly faced with social exclusion, thus aggravating their chances of making a full recovery. In such a context, policy makers are faced with increasing difficulties when advocating for humane drug policies, which support patient reintegration and recovery.

These effects have direct or indirect effects on drug users and others as set out in table 3.5. below.

**Table 3.5. Effects resulting from discrimination and stigmatization**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mechanisms** | **Unintended consequences** | **Users** | **Non-users** | **Possible interventions (PI)**  ***for details see text references*** |
| Discrimination and stigmatization resulting from a perception of drug users as criminals | Low self-esteem and reduced motivation to engage in economic activity and social life  Limited or reduced access to community life and services  Potential exacerbation of already existing forms of discrimination  Increased readiness engage to engage in low status or illegal activities  Increased risk of arrest and pre-trial detention | X  X  X  X  X | X  X  X  X  X | PI 7: Recognizing and implementing obligations under international and national legal instruments  PI 8: Raising awareness on the consequences of not respecting the rights of drug users by providing realistic data  PI 9: Developing best practice manuals and anti-discrimination training for professionals  PI 10: Setting performance indicators to prevent discrimination and stigmatization  PI 11: Offering employment opportunities and vocational training for drug users |

### 3.5.1. Unintended consequences

#### Low self-esteem and reduced motivation to engage in economic activity and social life

Stigmatization resulting from the socially visible exposure to enforcement harassment has the potential to harm a user’s reputation and self-esteem, leading to reduced motivation for achievement and participation in social life.

In addition to the many psychosocial impacts experienced by drug users, consequential of the illegality of substances, the limited ability to secure employment and income puts users and their respective families often in a position of economic difficulties. In many cases, this struggle drives users to further involvement in criminal activities.

#### Limited or reduced access to community life, employment and services

Drug use itself and its criminalization may lead to stigmatization and marginalization. In some societies, the stigma and discrimination related to drug use drives users to the margins of society. As a consequence, individuals with drug use disorders are frequently distanced from their communities and families. The stigmatization and subsequent marginalization of individuals who regularly use drugs also have a negative impact on their employment activities and social relationships. This stigma and social exclusion can lead to the loss of human capital, as people who use drugs are unable to contribute to or participate in society and community.[[66]](#endnote-41)

Marginalization can contribute to drug use, just as drug use can contribute to the marginalization of some users. Indeed, drug use can cause deterioration in living conditions, while processes of social marginalization can be a reason for initiating drug use.[[67]](#endnote-42) Several risk factors for marginalization can be attributed to drug use: unemployment, homelessness, reduced access to care services, incarceration, and sex work.[[68]](#endnote-43)

#### Potential exacerbation of already existing forms of discrimination

It is commonly acknowledged that some drug users from certain ethnic groups or minorities experience a double stigma. This is due to the prevalence of popular images that characterize visible minorities as habitual drug users, especially because many illegal drugs come from outside Europe. As the UNODC states, in the case of substance abuse, people often conveniently blame “foreigners”, “outsiders” or generic “others” for the spreading of drugs and associated social problems.[[69]](#endnote-44)

The existing available data show, however, that there is little evidence for such perceptions to hold true. Information on drug use, patterns, and consequences within minorities remains scarce. Fear of stigmatization makes the collection and dissemination of data difficult. Thus, comparisons with the general population on levels of drug use are rarely possible.

#### Increased readiness to engage in low status or illegal activities

The stigma associated with drug use can reduce a person’s employment prospects by reducing productivity and the chance of finding work. Conversely, unemployment can cause stress and anxiety, financial difficulties, dissatisfaction and disaffection, all of which are risk factors for initiation, perpetuation, intensification, or resumption of drug use.[[70]](#endnote-45) Furthermore, the discriminatory practices put in place by employers, which are related to criminal records or social stigma as drug users, often reduce the chances of finding regular employment or in some cases make it impossible, particularly in times of high general societal unemployment. Many individuals with drug use problems are acutely aware of this stigmatization as their limited skills, poor or non-existent qualifications, and gaps in their work history make finding employment extremely difficult. This often leads to the conclusion that seeking employment is utterly pointless.[[71]](#endnote-46) As a consequence, there is a high risk that the role of social outcast will be deliberately assumed. This can lead to users associating themselves with the world of criminals and criminal activity as a source of identification, belonging, and as a way of finding other opportunities to sustain a living.

#### Risk of excessive arrests and pre-trial detention

Existing practices in criminal investigations, law enforcement, and criminal procedure vary across Europe, depending on existing laws and regulations, as well as on their interpretation. There are noticeable differences with regards to the risk of arrest and pre-trial detention of suspected drug users, dealers, and traffickers. First of all, there are differences in the pursuit practices of casual drug users, problem drugs, and dealers/ traffickers. Furthermore, a more general tendency can be observed that people who are suspected of drug use or who are known users face a higher risk of arrest or pre-trial detention. This in turn leads to a higher risk of exposure to the adverse consequences of arrests and pre-trial detention: stigmatization, possible loss of employment or housing, strain on social relations, etc. These consequences affect both the drug users and their familial and social circles equally adversely.

### 3.5.2. Possible interventions (PI)

#### PI 7: Recognising obligations under international and national legal instruments

In this context, it is important to remember that governments have an obligation under international and national legal instruments to safeguard the fundamental standards of human rights and the rule of law, which also apply to drug users *(see chapter 1).*

#### PI 8: Raising awareness on the consequences of not respecting the rights of drug users

The collection of ethnicity and culture related data may be a beneficial instrument for shaping target drug policy interventions for specific target groups and may lead to an adoption of culturally sensitive drug strategies. Such data can provide baseline information on the situation of minority groups, which will then form the basis for action and later help in evaluating the effectiveness of outcomes. Collecting relevant data does not need to be stigmatizing but can help to avoid prejudice and discrimination. It also serves to assess the effectiveness of policies, so that any necessary changes and adjustments may be made.[[72]](#endnote-47)

#### PI 9: Developing best practice manuals and anti-discrimination training for professionals

European non-discrimination law, as constituted by the EU non-discrimination directives, and Article 14

of and Protocol 12 to the European Convention on Human Rights, prohibits discrimination across a range of contexts and grounds. European non-discrimination law stems from these two sources as complementary systems, drawing on them interchangeably to the extent that they overlap, while highlighting differences where they exist. A handbook, provided by the Council of Europe with an extensive body of case law developed by the European Court of Human Rights and the Court of Justice of the European Union in the field of non-discrimination, provides a highly useful accessible starting point for developing national anti-discrimination manuals. The material contained therein is intended to serve professionals, including judges, prosecutors and lawyers, as well as law-enforcement officers, and policy makers alike in the EU and Council of Europe Member States and beyond.[[73]](#endnote-48)

#### PI 10: Setting performance indicators for preventing discrimination and stigmatisation

To ensure the effective implementation of an antidiscrimination policy and strategy, performance indicators are an important and useful tool. These should be developed on different levels: (i) indicators on existing types and levels of discrimination of drug users, (ii) indicators of institutional and structural discrimination, (iii) indicators on professional practices and perceptions. [[74]](#endnote-49) Audits on the basis of these indicators should be carried out within all relevant institutions and services.[[75]](#endnote-50) In practice, this would include law enforcement agencies, social and health services, as well as other institutions coming in contact with drug users, such as housing and employment agencies and welfare offices.

#### PI 11: Offering vocational training and employment opportunities for drug users

An interdependent relationship exists between drug dependence and unemployment and poverty. This relationship between drug use and employment status is complex and characterized by reciprocal causality: drug use exacerbates the risk of unemployment, while unemployment increases the risk of drug use. To break this circle, different steps are necessary. First, the personal, health, lifestyle and other problems of drug users must be identified and addressed before they are ready for vocational training, work rehabilitation, competing in the labour market, and retaining paid employment.[[76]](#endnote-51) Following this, adequate educational offers are needed to improve poor educational records, and subsequently, professional training and qualification courses should be offered together with supported or assisted employment possibilities. This process should be accompanied by measures such as debt counseling and participation in self-help groups to support the individual stabilization process.

## 3.6. Effects resulting from drug offences in criminal records

While the intended consequences of a criminal record remain valid in all respects, the unintended effects can reduce many social life opportunities and may have a significant effect on users’ interpersonal relations, including the alienation of family and friends, and limitations in available social support. Additionally, the existence of drug-related criminal records may increase the risk for additional law enforcement investigations due to police enforcement practices, as well as disproportionate sentencing.

These effects have direct or indirect effects on drug users and others as set out in table 3.6. below.

**Table 3.6. Effects resulting from drug offences in criminal records**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mechanisms** | **Unintended consequences** | **Users** | **Non-users** | **Possible interventions (PI)**  ***for details see text references*** |
| Criminal records limit opportunities | Reduced employability  Limited access to housing  Limited educational opportunities  Restricted mobility due to travel restrictions  Increased risk of stigmatization and social exclusion  Increased risk of being subject to police surveillance and investigations  Disproportionate sentences in subsequent convictions | X  X  X  X  X  X  X | X  X  X  X | PI 6: Alternative sentencing options  PI 11: Employment opportunities and vocational training programs for drug users  PI 12: Inter-agency coordination and cooperation between law enforcement, health and social services  PI 13: Training prison staff and probation officers to assist drug users on probation in acquiring training opportunities, employment and housing  PI 14: Restriction of content of criminal records provided for the purpose of employment, housing etc. |

### 3.6.1. Unintended consequences

#### Reduced employability

Criminal records, in particular when containing drug related offences, are frequently an obstacle to obtaining employment. For several professions, a drug related offence may also constitute an exclusion criterion *per se*. *See also 3.5.1.2. Limited or reduced access to community life, employment and services*

#### Limited access to housing

As with employment, the housing market has increasingly become an obstacle, as the presentation of a criminal record must occur when seeking to rent living space. For many landlords the existence of a conviction for a drug-related offence constitutes a sole and single ground to refuse to sign the lease. *See also 3.5.1.2. Limited or reduced access to community life, employment and services*

#### Limited educational opportunities

Sometimes, educational institutions require the presentation of a criminal record, and drug-related offences constitute an exclusion criterion. In some countries, courses leading to degrees in medical or pharmaceutical studies exclude people with a criminal record on drug-related offences from entering studies or receiving licences for practice.

#### Restricted mobility

Visa-regimes and entry requirements in several countries exclude people with prior convictions for drug use from entering countries, be it for private, educational, professional or other purposes.

#### Increased risk of stigmatization and social exclusion

Recorded convictions for drug-related offences often lead to the stigma of being addicted and a criminal, with the entailing consequences of marginalization and exclusion from societies’ mainstream and community life. This in turn can lead to reduced accessibility of social and health services. *See also 3.5. Effects resulting from discrimination and stigmatization*

#### Increased risk of being subject to police surveillance and investigations

People with prior drug use convictions run the risk of increased police surveillance and of becoming suspects in investigations. This is related to the fact that offenders of drug-related crimes are routinely perceived as addicts who will continue supporting their habits irrespective of prior convictions. The fact that individuals may have addiction problems leads to the popular conclusion that they cannot generate the will to learn from prior convictions.

#### Disproportionate sanctions

*See 3.4.2.*

### 3.6.2. Possible interventions (PI)

#### PI 6: Alternative sentencing options

*See 3.4.2.*

#### PI 11: Employment opportunities and vocational training programs for drug users

*See 3.5.2.*

#### PI 12: Inter-agency coordination and cooperation

In order to ensure that interventions aimed to counteract the unintended consequences of criminal records are implemented effectively, it is important that all involved stakeholders and agencies be committed. If this is not achieved, different institutional cultures and perspectives run the risk of cancelling out anticipated effects. In this respect, joint trainings on the awareness and the application of different alternative options as listed above under 3.6.2.1. can help to ensure institutional mainstreaming and the coherent pursuit of goals. Organizing joint training activities for law enforcement, judiciary, and social and health services is one of the most effective ways to build cooperation in the achievement of cross-sectorial policy coherence.

#### PI 13: Training prison staff and probation officers

Prison staff and probation officers, assisting in acquiring training opportunities, employment, and housing, play a key role in the reintegration of offenders. Specific efforts need to be undertaken in order to provide assistance for the concerned offenders. Employment and housing are crucial factors for a successful reinsertion of offenders into society. A lack of adequate housing and employment are frequent causes for relapsing into drug use and criminal recidivism. From this perspective, the training of prison staff and probation officers gains a particular priority.

#### PI 14: Restrictions of content of criminal records provided for public purposes

There are different options to mitigate the adverse effects of criminal records. [[77]](#endnote-52)First, legislation can include statutes of limitations for criminal records:

* Certain types of (minor) drug offences will be scraped of the criminal record after a certain period of time.
* Warnings, community service orders, and treatment orders will exempt from inclusion in criminal records.
* The content provided in an excerpt from the criminal record for public use (for the purpose of obtaining housing, employment etc.) is restricted and will not include minor (drug-related) offences.
* Infringement of administrative law will not be included in the criminal record that is provided for public use.

## 3.7. Effects resulting from imprisonment for drug offences

Drug users make up a significant part of the overall prison population, many of whom have used illicit drugs at some point in their lives and many of whom have chronic and problematic drug use problems. Because of the illegality of the drug market and the high cost of drug use, which is often funded by criminal activity, the more problematic forms of drug use are accompanied by an increased risk of imprisonment.[[78]](#endnote-53)

The imprisonment of drug using offenders has significant unintended consequences, which may have major effects on the lives of and the rehabilitation opportunities for drug users. The process of arrests and imprisonment and the attitude towards users during imprisonment may increase the risk of falling victim to violence and of other acts specific to prison subculture. This is aggravated by potential further criminal involvement as a result of drug addiction and daily exposure to criminal networks in the prison setting. Imprisonment frequently results in reoffending and relapsing into drug use, which is in great part attributable to prison subculture. Being an inmate, especially one sentenced for a drug offence, increases the risk of the severe social stigma and discrimination associated with having a criminal and prison record. This creates a situation that will result in significant difficulties for social reintegration and financial independence after completion of sentence and return to the community. Often times, the negative effects of imprisonment also reflect on the families and close relatives of prisoners.

These effects have direct or indirect effects on drug users and others as set out in table 3.7. below.

**Table 3.7. Effects resulting from imprisonment for drug offences**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mechanisms** | **Unintended consequences** | **Users** | **Non-users** | **Possible interventions (PI)**  ***for details see text references*** |
| Imprisonment social confinement and severed ties with the community | Severed ties with individual social support networks  Increased risk of reoffending and relapse  Exposure to violence and health risks related to prison subculture | X  X  X | X | PI 6: Alternative sentencing options  PI 15: Provide treatment, harm reduction and continuity of care in custodial setting in custodial settings  PI 16: Provide for drug fee wards and therapeutic communities in prisons  PI 17: Strengthen links between prison authorities and local authorities |

### 3.7.1. Unintended consequences

#### Severed ties with individual social support networks

As a consequence of severed ties with familial and social networks during the period of incarceration, prisoners are exposed to a range of physical, practical, and psychosocial challenges following their release from prison and during their return to their communities. These challenges include potential social isolation, lack of finding employment and housing, etc. This increases the risk of relapsing or increasing drug use as well as engagement in criminal activity *(see also 3.5.1. Increased readiness to engage in low status or illegal activities).* Another consequence is a significantly increased mortality risk among those who revert back to street drug use.[[79]](#endnote-54)[[80]](#endnote-55)

#### Increased risk of reoffending and relapse

Severed ties with the community and social networks increase the risk of reoffending and relapsing into drug use. This is a result of the lack of continuity of care, social alienation, and reduced or lacking opportunities to reintegrate into communities, often leading to a taking on of the position of outcast *.*

#### Exposure to violence and other crime related to prison subculture

Besides the risk of vulnerability to HIV and other infectious diseases, there is a high level of exposure to violence stemming from prison subculture. Most prisoners have limited education and low socio-economic status, and poverty, violence, and crime are common features of prisoners’ biographies.[[81]](#endnote-56) This in turn increases the risk of falling victim to or becoming an accessory to violence with ensuring health and legal consequences.

### 3.7.2. Possible interventions

#### PI 6: Alternative sentencing options

*See 3.4.2. Alternative sentencing options*

#### PI 15: Provide treatment, harm reduction and continuity of care in custodial settings

The importance of offering treatment in custodial settings, including substitution therapy and harm reduction services, is increasingly acknowledged today, as is the need for a continuum of care.[[82]](#endnote-57) However, in general, services provided for prisoners tend to lag behind those provided in the community in terms of coverage, accessibility, and quality.[[83]](#endnote-58) An adjustment and harmonization of treatment guidelines in prison systems constitutes a practical step forward to ensure equal standards and better continuity of care.

#### PI 16: Provide for drug fee wards and therapeutic communities in prisons

Drug-free wards and therapeutic communities have proven to be an effective means of reducing exposure to the criminal prison subculture into which drug using inmates are frequently drawn.[[84]](#endnote-59) Prison can constitute an opportunity to enter treatment and the prison setting allows for the creation of therapeutic communities and drug-free wards. A number of pilot projects have shown the success of this approach, which on one hand refers drug-using inmates into therapy and treatment, and on the other hand provides thorough care for those who were in therapy prior to incarceration. [[85]](#endnote-60)

#### PI 17: Strengthen links between prison authorities and local authorities

Cooperation and communication links between health prison services and those outside the prisons need to be improved. Regular meetings on the regional or community level and the joint trainings of medical staff from both prison healthcare and public health services can be a very effective means in this respect*.*

# Chapter 4 Discussion

Although it is acknowledged that drug control policy is an important element of an integrated and balanced approach to combat illegal drugs, the control costs and unintended consequences are still frequently referred to as arguments for a policy change. In particular, enforcement against drug users is increasingly being debated as it may violate essential principles of democratic societies, such as human rights. Also the prohibition itself is being questioned, and the recent legalization of cannabis supply and recreational use in some US states reflects this opposition. Further, how governments allocate their resources is always a topic for dispute, in particular in times of austerity. Thus, public expenditure on drug control policy interventions is in focus – both by people wanting to change the current drug policy and by people being concerned that scarce resources are not optimally spent. This report has examined costs and unintended consequences of drug control policy.

#### Public expenditure estimates of drug control policy should be improved and to a larger extent being employed in policy making

Everyone agrees that improved knowledge of public expenditure on drug control policies would be useful and wanted. Public expenditure estimates calculate the amount of resources spent, or needed, to implement targeted interventions and can reveal to what extent policy intentions are reflected in the relevant budgets. Still, many states do not have a full summary of the resources being consumed by drug policy in general and by control policy in particular. The wide-spread lack of thorough knowledge seriously hamper sound planning and evaluation needed to improve the design and implementation of cost-effective interventions to reach stated policy goals. Systematic evaluations are needed to find out what works, what are the optimal means for reducing drug-related problems and which interventions produce the best value for money? Estimation of drug-related public expenditure is an indispensable step in such a policy evaluation. Irrespective of whether one aims for a cost-benefit analysis, a cost-utility analysis or a cost-effectiveness analysis, reliable and valid estimates of public resources consumed by the policy is required. Chapter 2 stresses the importance of obtaining such estimates and urge a standardization of definitions and methods to make the estimates comparable across time, policy areas and countries. Policy makers need to fully acknowledge the importance of cost studies as a tool for scientific based decisions and thus give them higher priority.

To improve public expenditure estimates there are some crucial issues that need to be tackled. First, one has to arrive on a common understanding of the scope of exercise. Is it meant to reflect all public expenses on drug-related crime or just the public spending on drug law enforcement? To exemplify; it has been discussed whether the costs of combating crimes committed under the influence of drugs should be included in the estimates of public expenditure of control policy. The chosen response to this and similar questions has substantial impact on the size of the estimate and on its interpretation. So far, there has been no commonly agreed definitions of what to include in public expenditure estimates in this field.

Second, relevant data needs to be improved and made known and available to analysts. A comprehensive inventory of national and international expenditure data sets would be a useful start, including a systematic compilation of international data sets with harmonized definitions and comparable data. The appendix XX of this report and the accompanying web site (), can be seen as a first systematic contribution towards this end.

Third, although some useful data sources exist, much of the required cost information is not readily available, i.e. money spent on drug control is often not labelled as such in public budget and accounts. When the required expenditure data are imbedded in broader or more general budgets, e.g. funds encompassing more comprehensive health or security goals, a common agreement on assumptions and types of models applied (to disentangle the fraction of funds attributable to drugs) is required. Chapter 2 presented two alternative methodological approaches for estimating the expenditure in these cases: the top-down and the bottom-up approach. To illustrate how these methods have been applied, Chapter 2 further offered examples of empirical studies of individual drug control sectors (public expenditures for police, court systems, customs and prisons, respectively) and of national estimates of total expenditure on drug control policy. The examples clearly showed that even within each of the two methodological approaches, large differences existed in how the same type of expenditure where estimated and what types of expenditure that were included. Therefore, the development of guidelines to improve data collection systems and to develop economic models to estimates costs is highly desirable.

The referred empirical analyses still showed some interesting and useful conclusions. Public expenditure on drug-related control policies represented 40% to 70% of the total funds spent on drug policy in Europe, depending on the country. Taking into account that resources for all elements of drug policy (prevention, law enforcement, treatment and harm reduction initiatives) amounted to an interval of 0.01% to 0.5% of the gross domestic product (GDP) of these countries, one may conclude that the volume of consumed resources for control policy is significant. To further improve knowledge and obtain more precise estimates, however, more and better data and modelling techniques are required.

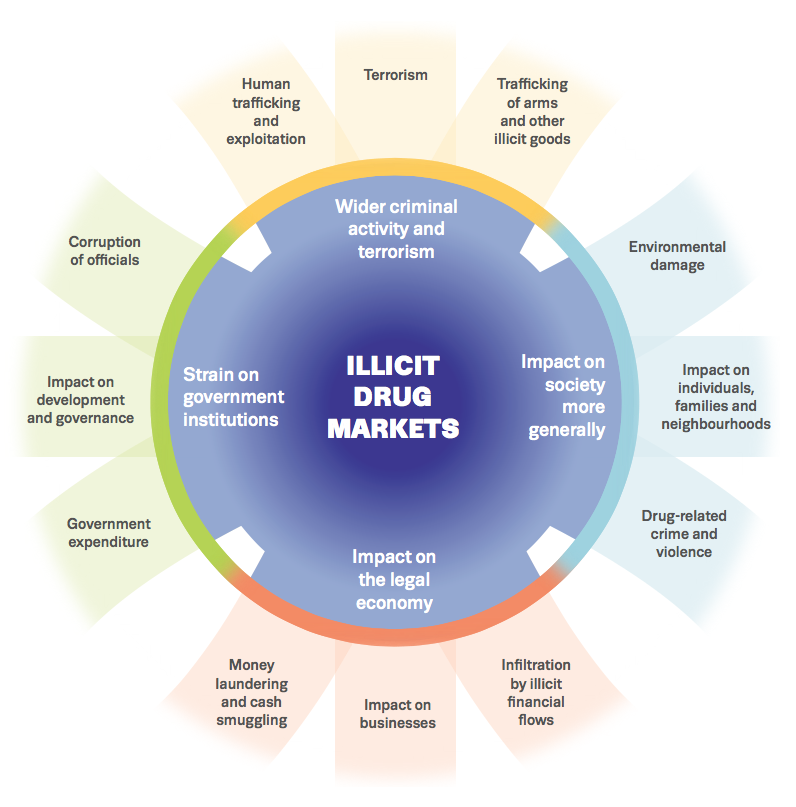
#### Unintended consequences should be fully acknowledged and taken into account when designing and evaluating drug policy

The unintended consequences discussed in Chapter 3 are of policy value for two reasons. First, they should be taken into account when policy decisions are made. Second, these unintended but predictable negative effects should be ameliorated where possible (Reuter, 2006). In order to accomplish the latter, it is important to identify the sources of those consequences as well as who is affected. In addition to discuss a range of health and non-health effects of unintended consequences, have in this report identified their bearers and listed almost 50 potential interventions that could reduce their negative effects.

As discussed in Chapter 3, the prohibition of drug manufacturing and sale have induced large profit margins at each level of the distribution chain. It is estimated that the EU retail drug market was worth at least EUR 24 billion (range EUR 21 to 31 billion) in 2013, with the cannabis market being the largest, making up about 38 % of the total, followed by the heroin (28 %) and cocaine (24 %) markets (EMCDDA/Europol, 2016). These risky but large revenues have attracted criminals and organized crime groups to the drug economy.

The illegal markets have consequences for individuals and society in a wide range of ways. This includes the participants’ involvement in other types of criminal activities and in terrorism; its impacts on legitimate businesses and the wider economy; strain on and corruption of government institutions; and impacts on wider society (EMCDDA/Europol, 2016). Figure 4.1 illustrates these implications:

**Figure 4.1 The widespread ramification of illicit drug markets**



Soure: EMCDDA.

The unintended consequences of drug prohibition absorb large amounts of human and economic resources that could have been allocated to other policy goals. Besides, there is also substantial human suffering involved. The unmet need of pain relief and palliative care due to the UN conventions being too strictly enforced, is perhaps one of the most serious consequences for non-users of illegal drugs. The estimate of 5.5 billion people having seriously reduced, or total lack of, access to essential medicines (WHO) shows the wide-ranging extent of the problem. Also the fact that many opioid dependent users are denied access to the most effective treatment – opioid substitution treatment (OST) – is of critical importance for the drug users in need of treatment and their relatives.

In addition to the law enforcement aimed at drug supply, most European countries also enforce some sort of sanctions towards users, where the intended effects are to deter drug use and prevent normalisation and spread of use. The drug conventions oblige states to ensure that possession of drugs, even in small quantities, shall be a punishable offence. They offer, however, also alternatives to conviction or punishment, including treatment, education, aftercare, rehabilitation and social reintegration (INCB, 2015). Great variation exists in how harshly countries apply drug laws and to which substances. Although some countries are known for extreme, many countries have decriminalized drug use and possession, and very few imprison offenders for drug use alone.

Despite this more lenient attitude towards drug use in some instances, drug control policy and human rights are still very often linked. The obligations of States under the Council of Europe and United Nations Conventions are to protect fundamental rights and freedoms, in particular the right to life and human dignity, the right to protection of health, the right to equitable access to quality health care services for all, the prohibition of any type of discrimination as well as the right of children to be protected from narcotic drugs an psychoactive substances (). Still, state enforcement of criminal drug laws has in some cases resulted, directly or indirectly, in serious and sometimes widespread and systematic human rights violations. When poorly developed and implemented, there are examples of drug policies having lead to police harassment and violence, arbitrary detention, disproportionate sentencing and incarceration, torture and other ill-treatment discrimination and violations of the right to health. These unintended consequences of control policy are likely to vary greatly, depending on the drug and the context in which the policy operates. They are also likely to vary according to age, gender, race and socioeconomic factors of the drug users and affect already disadvantageous groups more heavily. The violation of human rights have fuelled the call for liberalisation and humanisation of drug control polices.

As stated in Chapter 1, drug control is not a choice between total prohibition and full legalization but a choice among options on a continuum between the two extremes. The principle of proportionate response to drug crimes gains increasingly support and is apparent in important policy documents, such as the UN’s “Report of the International Narcotics Control Board for 2016” (INCB, 2016). As recently illustrated in «Penalties for drug law offences in Europe at a glance» (EMCDDA, 2016), the UN conventions are enforced very differently across Europe. In all European countries, however, alternatives to coercive sanctions have been repeatedly suggested and encouraged by many stakeholders. The most recent is perhaps EU’s action plan on drugs 2017-2020, which explicitly calls for the use of alternative sanctions for drug-using offenders (). Two topical reports; “Alternatives to punishment for drug-using offenders” (EMCDDA, 2015) and «Study on alternatives to coercive sanctions as response to drug law offences and drug-related crimes” (RAND, 2016) examine possible changes within the intention of the UN conventions. Proportionate responses and increased use of alternative sanctions are likely to ensure legitimacy and continued support for the control policy.

#### Conclusion

The cost and unintended consequences of drug control policy will remain topics of controversy and debate. This report has pointed out the need for better estimates of public expenditure as this can improve planning and evaluation of drug policy and it has listed a range of unintended consequences, their mechanisms and bearers and offered an extensive list of potential interventions to ameliorate their negative effects. It is important to note, however, that there is no public consensus on what unintended consequences matter the most; people assign different weight to the same consequence. Nor is there consensus on what measures Governments should be permitted to take in managing those harms. Still, the increased acknowledgement and focus on the many and extensive unintended consequences urge public responses. To retain political support and legitimacy, locally adjusted interventions to ameliorate the negative and unintended effects should be implemented.

We hope this report will contribute to improved public expenditure estimations and understanding of their importance. Further, we hope that unintended consequences to a larger extent will be taken into account when drug control policy is planned and implemented and that possible interventions more often are employed to reduce their negative effects.

1. C.S.J. Fazey / International Journal of Drug Policy 14 (2003) 155\_/169 [↑](#endnote-ref-1)
2. <https://www.ncjrs.gov/ondcppubs/publications/policy/99ndcs/iv-g.html>

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4. National estimates sometimes use alternative definitions. See (Lievens et al., 2016) or (Kopp, 2006) for further details. [↑](#footnote-ref-2)
5. Although it is also possible to use a bottom-up approach, since police activity is normally financed by the central government budget, a pragmatic approach frequently used is to prepare estimates based on these aggregated budgets. In this case, estimates for public spending are relatively complete, considering all relevant costs. Additionally, this method facilitates the international comparability of results, since comparable data are available for most European countries. [↑](#footnote-ref-3)
6. See http://www.emcdda.europa.eu/topics/drug-related-public-expenditure. [↑](#footnote-ref-4)
7. The countries with low or no access are defined as countries where the consumption of opioid analgesics is lower than 30% of the adequate per capita consumption. The adequate consumption is defined as the average per capita consumption in the top 20 countries in the Human Development Index [↑](#footnote-ref-5)
8. [↑](#footnote-ref-6)
9. The World Health Organization (WHO) established in 2007 the “Access to Controlled Medications Programme” (ACMP) in consultation with the International Narcotics Control Board (INCB) in response to resolutions of the World Health Assembly (WHA) and the Economic and Social Council of the United Nations (ECOSOC) (WHA58.22 and ECOSOC 2005/25)). The programme aims at promoting the availability, affordability, accessibility and rational use of controlled medicines; it addresses all aspects that act as barriers in obtaining controlled medicines for medical treatment and provides normative guidance, development and dissemination of internationally recognized standards for treatment, policy analysis, as well as training and support in drafting national action plans for improving access to opioid medicines. The ACMP, among others, collaborates with the WHO Collaborating Centre for Pain and Palliative Care, with the European Association for Palliative Care (EAPC), the International Association for Hospice and Palliative Care (IAHPC), the International Observatory on End of Life Care (IOELC), Human Rights Watch and Harm Reduction International (HRI). [↑](#footnote-ref-7)
10. Including, but not limited to, scaling up Needle and Syringe Programs (NSP); Supervised drug consumption facilities (SDCF) Community-based outreach programs (CBO); Opioid maintenance therapy (OMT) and other drug treatments; Antiretroviral therapy (ART); Vaccination, diagnosis and treatment of viral hepatitis [↑](#footnote-ref-8)
11. "Article 2 of the new Law modifies the ‘Acton State Sanitary Inspection’. Previously the state sanitary inspectors were empowered to act against any ‘failure to meet hygiene and health requirements’. As a result of the modification, they now have the specific right to withdraw from trade a ‘substitute drug’ for up to 18 months in order to assess its safety, if there is a justified suspicion that it might pose a threat to life or health. The costs of the assessment are met by the distributor in the event that the drug is harmful. If the drug is found to be harmless, the cost will be reimbursed by the state. The inspectors also have the right to close premises for up to three months". http://www.emcdda.europa.eu/publications/drugnet/ 73 [↑](#footnote-ref-9)
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14. Develop prevention strategies: raising awareness, providing relevant information, education and communication targeting relevant groups [↑](#footnote-ref-12)
15. Increase capacities and upgrade current practices of low-threshold services to respond more effectively to drug users’ health and social needs, including interventions tailored to NPS users [↑](#footnote-ref-13)
16. Ensure effective Naloxone distribution to medical and emergency services to prevent lethal overdosing [↑](#footnote-ref-14)
17. Including, but not limited to, scaling up Needle and Syringe Programs (NSP); Supervised drug consumption facilities (SDCF) Community-based outreach programs (CBO); Opioid maintenance therapy (OMT) and other drug treatments; Antiretroviral therapy (ART); Vaccination, diagnosis and treatment of viral hepatitis [↑](#footnote-ref-15)
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