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6 OTHER DRUG POLICY ISSUES

WORLD DRUG REPORT 2020

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PREFACE

This is a time for science and solidarity, as United Nations Secretary-General António Guterres has said, highlighting the importance of trust in science and of working together to respond to the global COVID-19 pandemic.

The same holds true for our responses to the world drug problem. To be effective, balanced solutions to drug demand and supply must be rooted in evidence and shared responsibility. This is more important than ever, as illicit drug challenges become increasingly complex, and the COVID-19 crisis and economic downturn threaten to worsen their impacts, on the poor, marginalized and vulnerable most of all.

Some 35.6 million people suffer from drug use disorders globally. While more people use drugs in developed countries than in developing countries, and wealthier segments of society have a higher prevalence of drug use, people who are socially and economically disadvantaged are more likely to develop drug use disorders.

Only one out of eight people who need drug-related treatment receive it. While one out of three drug users is a woman, only one out of five people in treatment is a woman. People in prison settings, minorities, immigrants and displaced people also face barriers to treatment due to discrimination and stigma. Of the 11 million people who inject drugs, half of them are living with hepatitis C, and 1.4 million with HIV.

Around 269 million people used drugs in 2018, up 30 per cent from 2009, with adolescents and young adults accounting for the largest share of users. More people are using drugs, and there are more drugs, and more types of drugs, than ever.

Seizures of amphetamines quadrupled between 2009 and 2018. Even as precursor control improves globally, traffickers and manufacturers are using designer chemicals, devised to circumvent international controls, to synthesize amphetamine, methamphetamine and ecstasy. Production of heroin and cocaine remain among the highest levels recorded in modern times.

The growth in global drug supply and demand poses challenges to law enforcement, compounds health risks and complicates efforts to prevent and treat drug use disorders.

At the same time, more than 80% of the world's population, mostly living in low- and middle-income countries, are deprived of access to controlled drugs for pain relief and other essential medical uses.

Governments have repeatedly pledged to work together to address the many challenges posed by the world drug problem, as part of commitments to achieve the Sustainable Development Goals, and most recently in the 2019 Ministerial Declaration adopted by the Commission on Narcotic Drugs (CND). But data indicates that development assistance to address drug control has actually fallen over time.

Balanced, comprehensive and effective responses to drugs depend on governments to live up to their promises, and provide support to leave no one behind.

Health-centred, rights-based and gender-responsive approaches to drug use and related diseases deliver better public health outcomes. We need to do more to share this learning and support implementation, most of all in developing countries, including by strengthening cooperation with civil society and youth organizations.

The international community has an agreed legal framework and the commitments outlined in the 2019 CND Ministerial Declaration. The United Nations Office on Drugs and Crime (UNODC) provides integrated support to build national capacities and strengthen international cooperation to turn pledges into effective action on the ground.

The theme for this year's International Day against Drug Abuse and Illicit Trafficking, "Better Knowledge for Better Care", highlights the importance of scientific evidence to strengthen responses to the world drug problem and support the people who need us. It also speaks to the ultimate goal of drug control, namely the health and welfare of humankind. Through learning and understanding we find compassion and seek solutions in solidarity.

It is in this spirit that I present the UNODC *World Drug Report 2020*, and I urge governments and all stakeholders to make the best use of this resource.

Ghada Waly
Executive Director
United Nations Office on Drugs and Crime

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CONTENTS

EXPLANATORY NOTES

The designations employed and the presentation of the material in the *World Drug Report* do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Countries and areas are referred to by the names that were in official use at the time the relevant data were collected.

Since there is some scientific and legal ambiguity about the distinctions between "drug use", "drug misuse" and "drug abuse", the neutral term "drug use" is used in the *World Drug Report*. The term "misuse" is used only to denote the non-medical use of prescription drugs.

All uses of the word "drug" and the term "drug use" in the *World Drug Report* refer to substances controlled under the international drug control conventions, and their non-medical use.

All analysis contained in the *World Drug Report* is based on the official data submitted by Member States to the UNODC through the annual report questionnaire unless indicated otherwise.

The data on population used in the *World Drug Report* are taken from: *World Population Prospects: The 2019 Revision* (United Nations, Department of Economic and Social Affairs, Population Division).

References to dollars ($) are to United States dollars, unless otherwise stated.

References to tons are to metric tons, unless otherwise stated.

The following abbreviations have been used in the present booklet:

AIDS acquired immunodeficiency syndrome

ATS amphetamine-type stimulants

EMCDDA European Monitoring Centre for Drugs and Drug Addiction

FARC Revolutionary Armed Forces of Colombia

ha hectares

HIV human immunodeficiency virus

INCB International Narcotics Control Board

INTERPOL International Criminal Police Organization

OECD Organisation for Economic Co-operation and Development

REDD+ UN Programme on Reducing Emissions from Deforestation and Forest Degradation

S-DDD defined daily doses for statistical purposes

UNDP United Nations Development Programme

UNODC United Nations Office on Drugs and Crime

UNESCO United Nations Educational, Scientific and Cultural Organization

WHO World Health Organization

SCOPE OF THE BOOKLET

This, the sixth booklet of the *World Drug Report 2020*, addresses a number of drug policy issues that all form part of the international debate on the drug problem and how to address it. Although comprehensive data and analysis may not be available for some of these issues, the following chapters represent a first attempt to consolidate available evidence aimed at supporting the international community in implementing several operational recommendations, including those contained in the outcome document of the special session of the General Assembly, held in 2016.

The booklet starts by considering the issue of ensuring the availability of and access to controlled substances exclusively for medical and scientific purposes while preventing their diversion. It thus reviews the latest data on and trends in the availability of controlled medicines, specifically opioids, for medical consumption at the global level and across regions. An overview is also provided of the latest survey findings on barriers to access to controlled medicines for medical purposes in Member States.

Continuing with the strengthening of international cooperation based on the principle of common and shared responsibility, the booklet presents selected data on international cooperation. The focus of this chapter is rather limited considering the potentially wide scope of the topic. It starts with an analysis of trends with respect to a selected number of interventions in the area of drug supply reduction, on which Member States are explicitly asked to report annually to UNODC through the annual report questionnaire. The chapter subsequently reviews the financial means made available by donor countries for international cooperation on drug issues, before concluding with an analysis of interceptions trends, a possible indicator of the success of international cooperation.

The booklet then provides evidence to support the implementation of operational recommendations on alternative development and other development and socioeconomic issues. This chapter presents the findings of ongoing research aimed at assessing the impact of alternative development projects in a number of countries across different regions affected by the illicit cultivation of opium poppy or coca bush. It also provides an overview of the socioeconomic drivers of illicit crop cultivation while highlighting the specific vulnerabilities of the affected communities and providing a first-ever estimate of their potential size.

The booklet continues with a discussion of the nexus between drugs and violence, starting from a conceptual standpoint, and presenting research findings that illustrate the different mechanisms at play. The booklet then concludes with a short focus on drugs and the criminal justice system, including estimates of people arrested, convicted and held in prison for drug offences, and a brief overview of the long-lasting consequences of imprisonment for women incarcerated for drug law offences.

ACCESS TO CONTROLLED MEDICINES FOR PAIN MANAGEMENT

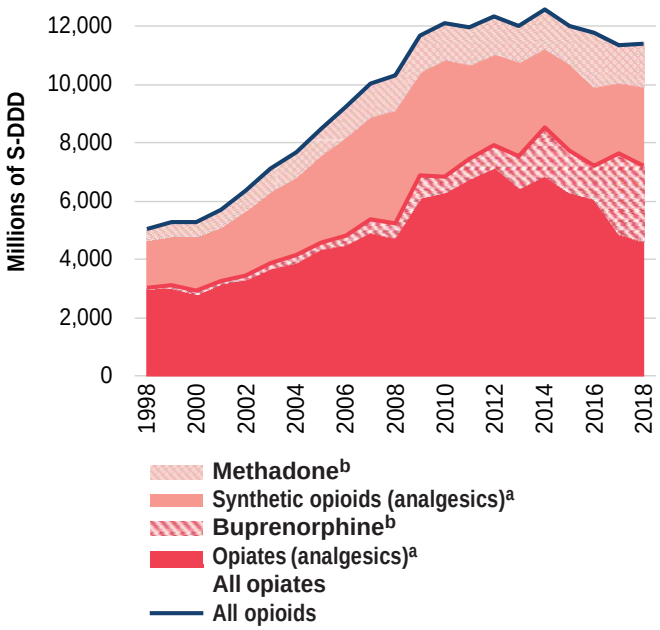
For nearly six decades, high-level declarations have been made that affirm the international community's collective goal of a balanced, integrated, comprehensive, multidisciplinary and scientific evidence-based approach to controlled medicines, especially with respect to access and availability for medical and scientific purposes. Despite recent growing global advocacy, high-level statements of intent and movements within international bodies and individual countries to address access to and availability of controlled medicines for pain management, progress has been extremely slow and significant challenges and barriers remain in improving the accessibility and availability of controlled medicines.[1, 2, 3, 4]

Global amounts of pharmaceutical opioids available for consumption

Access to and availability of controlled medicines for pain relief, i.e., opioids, are unequally distributed across the geographical regions and have had diverging trends in different regions. The amount of opioids (expressed in daily doses) available for consumption for medical purposes more than doubled globally over the period 1998–2010, followed by a period of stabilization and a decline over the period 2014–2018.

Most of the increase in the amount of pharmaceutical opioids available for medical consumption over the period 1998–2010 was of oxycodone (which experienced a tenfold growth over that period), hydromorphone (fivefold growth), hydrocodone (threefold growth) and oxymorphone (46,000-fold growth). Methadone and buprenorphine, the opioids used in medically assisted treatment of opioid use disorders, also saw marked increases in the amounts available for medical consumption at the global level. The amount of fentanyl available for medical consumption rose ninefold over the period 1998–2010.[5] Moreover, since 2000, only about 10 per cent of globally available morphine was reported to have been used for palliative care,

Fig. 1 Global amounts available for medical consumption of pharmaceutical opioids under international control, 1998–2018



Source: *Narcotic Drugs 2019: Estimated World Requirements for 2020 – Statistics for 2018* (E/INCB/2019/2).

Note: S-DDD refers to "defined daily doses for statistical purposes" as defined by INCB. S-DDDs are "technical units of measurement" for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. The statistics exclude preparations of opioids listed in Schedule III of the 1961 Convention. Details of S-DDDs used for these calculations are provided in the methodological annex of the present report.

[a] *Substances used as analgesics, i.e., excluding substances used in opioid substitution treatment.*
[b] *Substances used in opioid substitution treatment and as analgesics.*

1 James F. Cleary and Martha A. Maurer, "Pain and policy studies group: two decades of working to address regulatory barriers to improve opioid availability and accessibility around the world", *Journal of Pain Symptoms Management*, vol. 55, No. 2 (February 2018), pp. S121–S134.

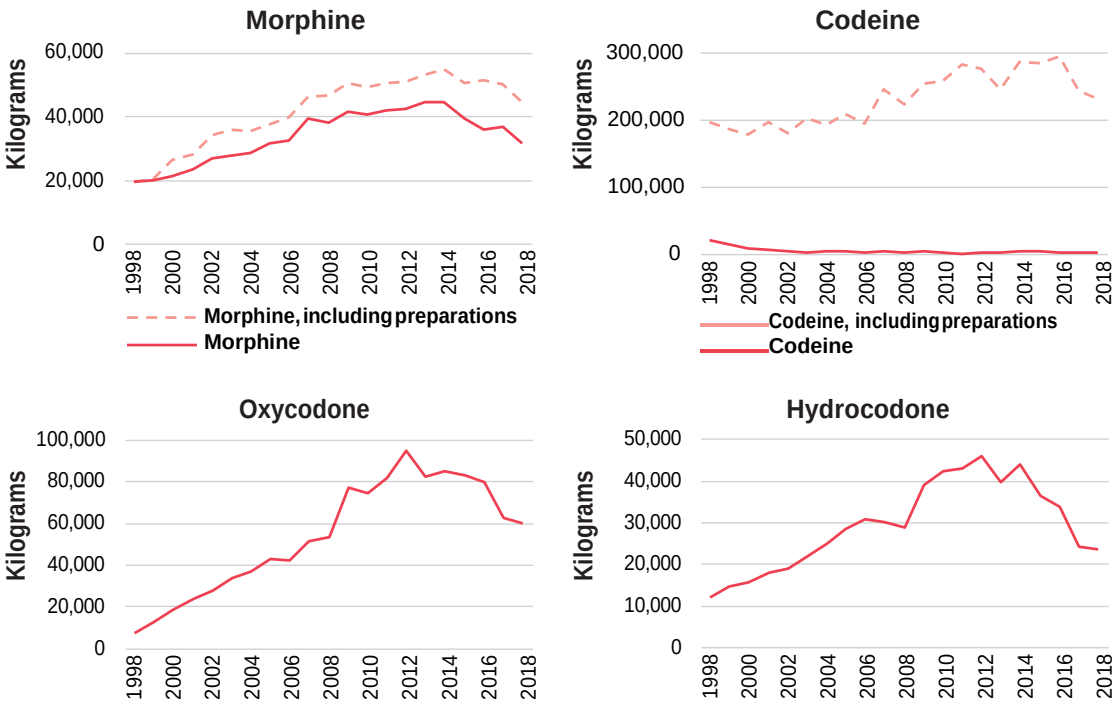
2 Lilian De Lima and Lukas Radbruch, "Palliative care in the Global Health Agenda", *Journal of Pain and Palliative Care Pharmacotherapy*, vol. 28, No. 4 (October 2014), pp. 384–389.

3 Liiz Gwyther, Frank Brennan and Richard Harding, "Advancing palliative care as a human right", *Journal of Pain Symptom Management*, vol. 38, No. 5 (September 2009), pp. 767–774.

4 Human Rights Watch, *"Please Do Not Make Us Suffer Anymore…": Access to Pain Treatment as a Human Right* (March 2009).

5 *Narcotic Drugs 2019: Estimated World Requirements for 2020 – Statistics for 2018* (E/INCB/2019/2), and previous years.

Fig. 2 Global amounts available for medical consumption of selected opioids (including preparations), 1998–2018



Source: *Narcotic Drugs 2018: Estimated World Requirements for 2019 – Statistics for 2017* (E/INCB/2018/2), and previous years.
Note: All these substances are controlled under the 1961 Convention.

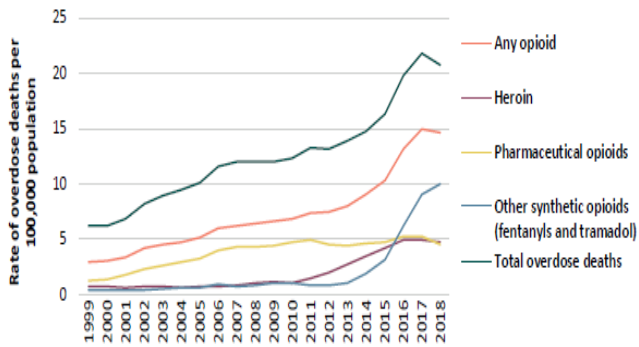
while over 88 per cent was converted into codeine, the majority of which (89 per cent) was used to manufacture cough medicines.[6]

Since 2014, the decline in the amount of opioids available for medical consumption has been particularly pronounced for oxycodone, hydrocodone and hydromorphone, following stricter rules aimed at reducing diversion in North America. Prior to that, these substances were heavily diverted to markets for non-medical use, particularly in North America. Nonetheless, in 2018 that subregion continued to account for a major share of the global amounts available for medical consumption of hydromorphone (69 per cent), oxycodone (69 per cent) and hydrocodone (99 per cent).[7]

The amounts available for medical consumption of some of the other synthetic opioids used in pain management have been declining over the past two decades. Pethidine is one example, with a 70 per cent decline over the period 1998–2018, while amounts available for medical consumption of dextropropoxyphene, which was very popular in the 1990s, have decreased by more than 99 per cent over the past two decades as the substance was banned in a number of countries owing to concerns over serious side effects.[8] The amount of fentanyl available for medical consumption increased until 2010 but remained largely stable thereafter.[9]

By contrast, the amounts of buprenorphine and methadone available for medical consumption and used in the medically assisted treatment of opioid use disorders, have increased since 2014, especially of buprenorphine, which rose by more than 50 per cent over the period 2014–2018.[10] However, as with other pharmaceutical opioids, there are large differences from one country to another in the consumption patterns of buprenorphine and methadone for medical purposes, as seen in the coverage of opioid-agonist treatment for people with opioid use disorders.[11]

Fig. 3 Distribution of amounts available for medical consumption of codeine, fentanyl, morphine, pethidine and other opioids, expressed in standard defined daily doses (S-DDD), per subregion, 2018



Source: UNODC calculations based on *Narcotic Drugs 2019: Estimated World Requirements for 2020 – Statistics for 2018* (E/INCB/2019/2).

Note: S-DDD refers to "defined daily doses for statistical purposes" as defined by INCB. S-DDDs are "technical units of measurement" for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. Details of S-DDDs used for these calculations are provided in the methodological annex of the present report.

There is a gaping chasm between countries in the availability of opioids for medical purposes. On the basis of data on the amount of opioids available for medical purposes, there is a clear disparity between high-income countries versus low- and middle-income countries[12] for all opioids combined (i.e., codeine, fentanyl, hydromorphone, morphine, oxycodone, pethidine and methadone).

Data for 2018 show that more than 90 per cent of all pharmaceutical opioids that are available for medical consumption are in high-income countries: 50 per cent in North America, around 40 per cent in Europe, mostly in Western and Central Europe, and a further 2 per cent in Oceania, mostly Australia and New Zealand. Those high-income countries

6 *Progress in Ensuring Adequate Access to Internationally Controlled Substances for Medical and Scientific Purposes* (E/INCB/2018/Supp.1).

7 Ibid.

8 E/INCB/2019/2.

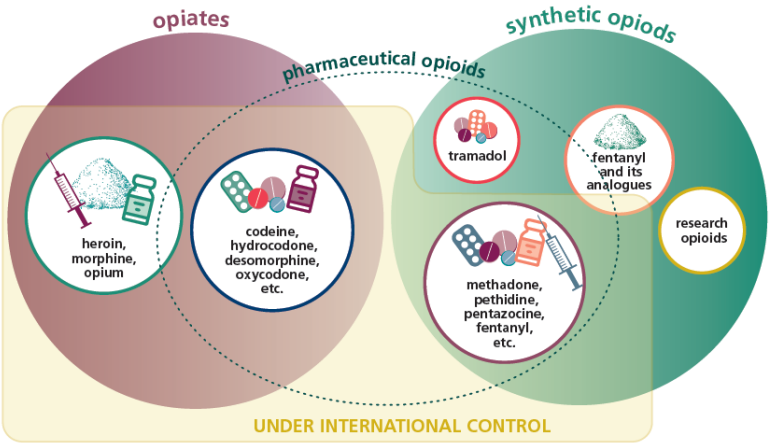
9 *Narcotic Drugs 2018: Estimated World Requirements for 2019 – Statistics for 2017* (E/INCB/2018/2), and previous years.

10 Ibid.

11 See, for example, *World Drug Report 2018* (United Nations publication, Sales No. E.18.XI.9).

12 Based on the country classification 2014 of the World Bank Country and Lending Groups.

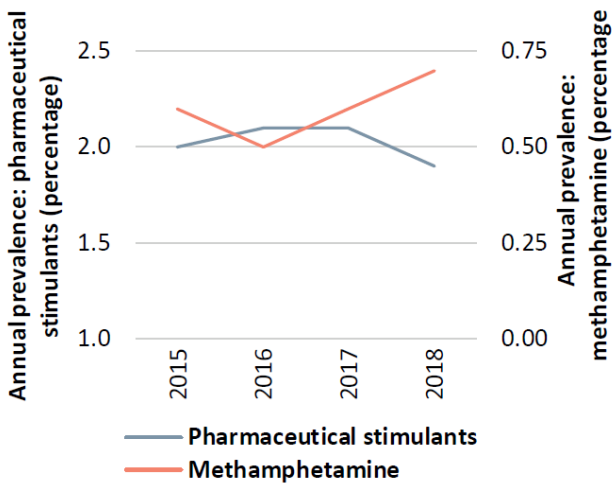
Fig. 4 Distribution of amounts available for medical consumption of codeine, fentanyl, morphine, pethidine and other opioids, per country, 2018



Source: UNODC calculations based on *Narcotic Drugs 2019: Estimated World Requirements for 2020 – Statistics for 2018* (E/INCB/2019/2).

Note: S-DDD refers to "defined daily doses for statistical purposes" as defined by INCB. S-DDDs are "technical units of measurement" for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. Details of S-DDDs used for these calculations are provided in the methodological annex of the present report.

Fig. 5 Amounts available for medical consumption of codeine, fentanyl, morphine, pethidine and other opioids in individual countries, and per capita income, average 2014–2018



Source: UNODC calculations based on *Narcotic Drugs 2019: Estimated World Requirements for 2020 – Statistics for 2018* (E/INCB/2019/2).

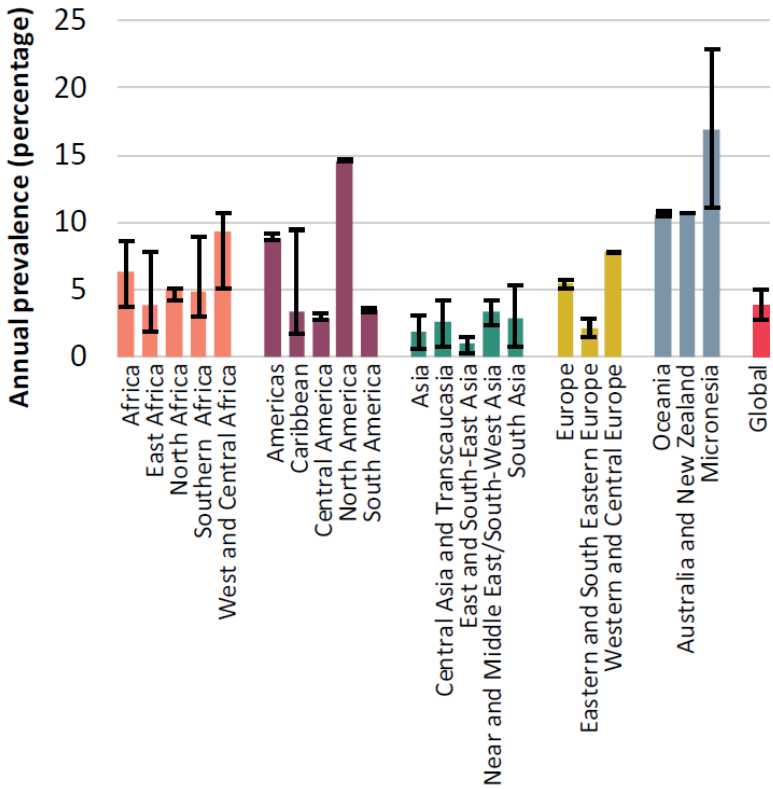
Note: S-DDD refers to "defined daily doses for statistical purposes" as defined by INCB. S-DDDs are "technical units of measurement" for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. Details of S-DDDs used for these calculations are provided in the methodological annex of the present report.

comprise around 12 per cent of the global population. Therefore, low- and middle-income countries, which are home to some 88 per cent of the global population, are estimated to consume less than 10 per cent of the global amount of opioids available for medical consumption.

Even within each region or subregion, there is a significant disparity in the consumption of opioids for medical purposes. Over the period 2014–2018, average consumption of opioids in countries in North America ranged from some 100 defined daily doses for statistical purposes (S-DDD) per million inhabitants in Mexico to 32,700 S-DDD per million inhabitants in the United States of America. Similarly, in Western and Central Europe, estimates ranged from close to 500 S-DDD per million inhabitants in Malta to 25,800 S-DDD per million inhabitants in Germany. In Oceania, estimates ranged from, on average, 15 S-DDD per million inhabitants in Vanuatu to close to 11,600 S-DDD per million inhabitants in Australia, and in Asia, from 0.1 S-DDD per million inhabitants in Yemen to close to 11,300 S-DDD per million inhabitants in Israel.

Data show that there is a generally positive correlation between gross national income and the

Fig. 6 Amounts available for medical consumption of codeine, fentanyl, morphine, pethidine and other opioids, by region and subregion,[a] 2018



Source: UNODC calculations based on *Narcotic Drugs 2019: Estimated World Requirements for 2020 – Statistics for 2018* (E/INCB/2019/2).

Note: S-DDD refers to "defined daily doses for statistical purposes" as defined by INCB. S-DDDs are "technical units of measurement" for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. Details of S-DDDs used for these calculations are provided in the methodological annex of the present report

[a] *The regions and subregions are those designated by UNODC in the World Drug Report; they may partly differ from those used by INCB in its publications.*

availability of pharmaceutical opioids for medical purposes (R=0.67 over the period 2014–2018), although a number of Asian countries and territories with high gross national income per capita (such as Macao, China, Hong Kong, China, Qatar, Singapore, Japan and Kuwait) have very low levels of opioid availability for medical purposes. This suggests that the level of national income is not the only factor that explains unequal availability across countries. A number of barriers to access to opioids for pain management are related to legislation, culture, health systems and prescribing practices.

Data also show discrepancies in the kind of pharmaceutical opioids available on the medical market. While data for North America show that hydroco- done is the most widely available pharmaceutical opioid (in terms of daily doses per inhabitant), fen- tanyl is the most widely available opioid in Western and Central Europe and in Australia and New Zea- land. The availability for medical consumption of oxycodone is also relatively high in Australia and New Zealand and in North America. By contrast,

the availability of codeine for medical consumption appears to be quite limited, although this may be a statistical artefact as most codeine is sold in the form of preparations, the sale of which – falling under Schedule III of the 1961 Single Convention – is internationally less strictly controlled and thus less well documented than the sale of other pharmaceu- tical opioids.

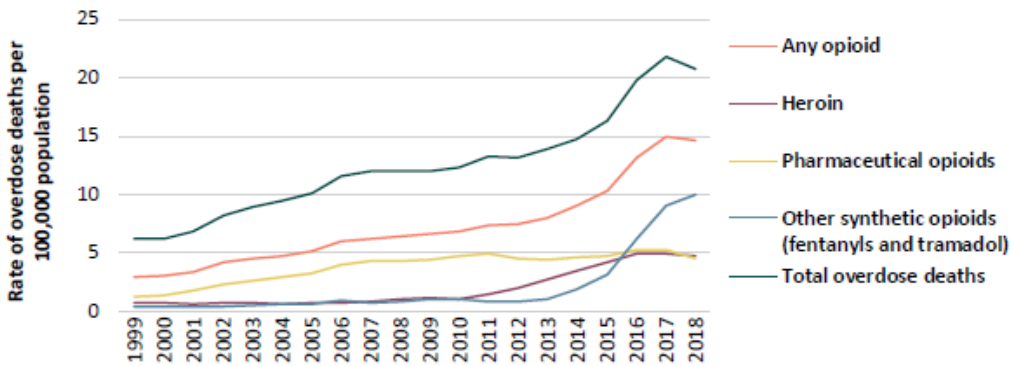
There have been concerted international and coun- try-level efforts to address the inequity in the consumption of pharmaceutical opioids,[13] particu- larly in the case of morphine, which has been on the WHO Model List of Essential Medicines for management of pain due to cancer, HIV/AIDS and other serious illnesses, and due to traumatic injuries, burns and surgery, for nearly two decades.[14, 15] Despite this, morphine has not been accessible in

13 Cleary and Maurer, "Pain and policy studies group".

14 De Lima and Radbruch, "Palliative care in the Global Health Agenda".

15 WHO, *World Health Organization Model List of Essential Medicines: 21th List* (Geneva, 2019).

Fig. 7 Trends in availability of opioid analgesics for medical consumption, by region/subregion,[a] 1998–2018



Source: UNODC calculations based on *Narcotic Drugs 2019: Estimated World Requirements for 2020 – Statistics for 2018* (E/INCB/2019/2) and previous years.

Note: S-DDD refers to "defined daily doses for statistical purposes" as defined by INCB. S-DDDs are "technical units of measurement" for the purposes of statistical analysis and are not recommended daily prescription doses; actual doses may differ based on treatments required and medical practices. Details of S-DDDs used for these calculations are provided in the methodological annex of the present report.

[a] *Subregions and regions according to the classification used by UNODC in the World Drug Report; subregions and regions as defined partly differ from those used by INCB in its publications; extrapolation techniques have been used in case of missing data.*

[b] *Includes subregions above the global average, i.e., North America, Western and Central Europe, Australia and New Zealand.*

[c] *Includes regions and or subregions below the global average, i.e., Africa, Asia, Eastern Europe, South-Eastern Europe, the Caribbean, Central America and South America, as well as Melanesia, Micronesia and Polynesia, i.e., all regions and subregions except those of North America, Western and Central Europe, and Australia and New Zealand.*

adequate amounts, in the appropriate dosage forms, with assured quality and adequate information and at a price that an individual and the community can afford.[16, 17]

In 2018, 87 per cent of the global amount of mor- phine available for medical consumption was estimated to have been consumed in high-income countries, which are home to 12 per cent of the global population. While the relative importance of

16 WHO, *Integrating Palliative Care and Symptom Relief into Primary Health Care: A WHO Guide for Planners, Imple- menters and Managers* (Geneva, 2018).

17 Felicia Marie Knaul and others, "Alleviating the access abyss in palliative care and pain relief: an imperative of universal health coverage – the *Lancet* Commission report", *Lancet*, vol. 391, No. 10128 (April 2018).

the amounts of morphine available for medical consumption in low- and middle-income countries has increased slightly since 2014 (from 9.5 to 13 per cent in 2018) the amount of morphine available per person per country is still infinitesimally small to non-existent in many developing countries, particularly in South Asia and in Africa.[18, 19] Even though countries may have morphine available for medical use, many people still have limited access to it.[20, 21] WHO estimates that globally, each year 5.5 million

18 E/INCB/2018/Supp.1.

19 E/INCB/2019/2.

20 See section below on barriers to access to and availability of controlled medicines for pain management and palliative care.

21 E/INCB/2019/2.

The role of complementary and alternative medicine in the management of chronic non-cancer pain

The use of strong opioids, especially morphine, is generally considered the principal treatment for the management of pain in palliative care for cancer patients.[a] The treatment of chronic non-cancer pain, which is among the most prevalent health conditions in many countries, is often considered more difficult to manage, and its treatment is sometimes more controversial.[b] Chronic non-cancer pain is defined in scientific literature as pain lasting for more than three months that stems from injuries or illnesses other than cancer.[c] It is also considered that chronic pain results from a combination of biological, psychological and social factors, and thus requires a multifactorial approach to pain assessment, patient monitoring and evaluation and long-term management. Some of the common conditions that cause chronic pain include neuropathic pain, fibromyalgia that may be caused by damage to the peripheral or central nervous system, low back pain and osteoarthritis. While opioids are used extensively in the management of non-cancer chronic pain in some countries and settings, in others, other drugs, as well as complementary and alternative medicines, are used effectively in the management of chronic pain whether related to cancer or not.[d, e]

Other than opioids, non-steroidal anti-inflammatory drugs are used in patients with osteoarthritis and rheumatoid arthritis and low back pain. The efficacy of antidepressant drugs has been reported for the management of neuropathic pain, fibromyalgia, low back pain and headaches. Anti-convulsant drugs such as gabapentin, pregabalin and carbamazepine have proved effective in the treatment of chronic non-cancer pain.[f]

As part of complementary and alternative medicine, spinal manipulation is the most commonly used therapy for low back pain.[g] Massage is another modality commonly used as a supplemental treatment for patients with chronic non-cancer pain. Similarly, evidence supports the effectiveness of acupuncture for the treatment of chronic low back pain, while results on the effectiveness of acupuncture in the reduction of pain associated with fibromyalgia and neck pain are promising.[h]

Psychological interventions such as cognitive behavioural therapy, relaxation training and hypnosis are the most commonly used techniques in the management of chronic pain.[i] The aim of such interventions is to help the patient cope with the symptoms of pain, learn skills for adaptation and self-management, and reduce disability associated with symptoms, rather than eliminate physical causes of pain per se.[j]

a WHO, *Ensuring Balance in National Policies on Controlled Substances: Guidance on Availability and Accessibility of Controlled Medicines* (Geneva, 2011).

b Nora D. Volkow and A. Thomas McLellan, "Opioid abuse in chronic pain: misconceptions and mitigation strategies", *New England Journal of Medicine*, vol. 374, No. 13 (March 2016), pp. 1253–1263.

c Dennis C. Turk, Hilary D. Wilson and Alex Cahana, "Treatment of chronic non-cancer pain", *Lancet*, vol. 377, No. 9784 (June 2011), pp. 2226–2235.

d Ibid.

e Priyanka Singh and Aditi Chaturvedi, "Complementary and alternative medicine in cancer pain management: a systematic review", *Indian Journal of Palliative Care*, vol. 21, No. 1 (2015), pp. 105–115 (2015).

f Turk, Wilson and Cahana, "Treatment of chronic non-cancer pain".

g Ibid.

h Ibid.

i Singh and Chaturvedi, "Complementary and alternative medicine in cancer pain management".

j Turk, Wilson and Cahana, "Treatment of chronic non-cancer pain".

terminal cancer patients and 1 million end-stage HIV/AIDS patients do not have adequate treatment for moderate to severe pain.[22]

In recent years the huge disparity between countries in the accessibility of opioids for medical purposes has been reduced slightly: declines in opioids available for medical consumption are reported in North America, while overall increases are reported in several other subregions, most notably South America and the Near and Middle East/South-West Asia, where availability has been low. This suggests an overall increase in the availability of opioids in developing countries, although that availability was starting from, and remains at, a low level. Daily per capita availability of pharmaceutical opioids more

22 WHO, *Integrating Palliative Care and Symptom Relief into Primary Health Care.*

than doubled in the regions and subregions where availability was below the global average (i.e., Africa, Asia, South America, Central America, the Caribbean, Eastern and South-Eastern Europe, Melanesia, Micronesia and Polynesia); taken together, availability in these regions and subregions increased from an average of 70 S-DDD per million inhabitants in 2010 to 180 S-DDD in 2018 (7 per cent of the global per capita average).[23]

By contrast, the availability of pharmaceutical opioids for medical purposes declined by almost 50 per cent in North America, from 32,550 S-DDD per day per million inhabitants in 2010 to 16,910 S-DDD in 2018, thus approaching the levels reported in Western and Central Europe (12,660 S-DDD) and in Australia and New Zealand (10,530 S-DDD) in 2018. Nevertheless, per capita availability of pharmaceutical opioids for medical purposes in North America remains comparatively high (almost eight times the global average), in particular when compared with the extremely low levels in Africa and South Asia, as well as in Central Asia and Transcaucasia, where there are no signs of increases.[24]

INCB notes that the increase in the use of expensive synthetic opioids over the past two decades, which has contributed to overconsumption and an "overdose epidemic" in some developed countries, has not been matched by an increase in the use of affordable morphine, especially in low- and middle-income countries.[25]

Barriers to access to and availability of controlled medicines for pain management and palliative care

The reasons for inequities in access to and availability of opioids for pain management are extraordinarily complex and include historical vestiges across multiple systems, i.e., government, health care and society, as well as modern-day challenges, including the concerns arising out of the opioid overdose crisis.

There are several challenges and barriers to access to controlled medicines for pain management, all of which are complex, multitiered and interrelated. These include, but are not limited to, trade systems, education, justice, foreign affairs, workforce and development, but perhaps the most recognized and salient among them are legislation and regulatory systems, national supply management systems and health systems. Each of these directly and indirectly influences the barriers to both access to and availability of controlled medicines for pain management and palliative care.[26] These challenges and barriers, including the progress that has been made globally to address them, are discussed below.

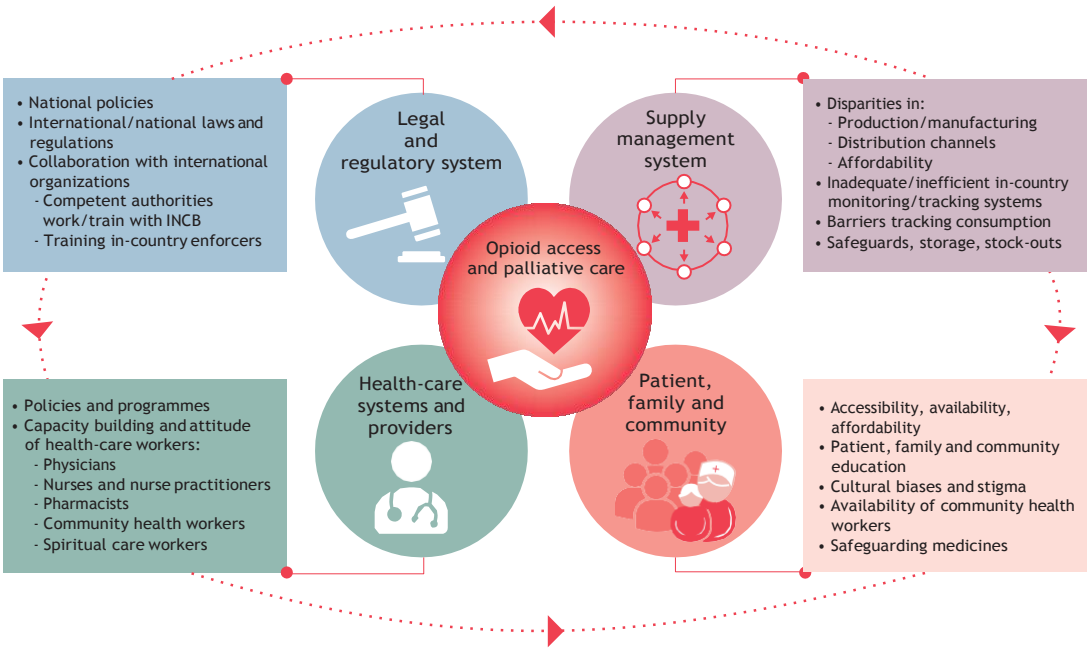
Legislation and regulatory systems

In 2018, INCB conducted a survey[27] of competent national authorities in order to assess the barriers and evaluate progress made at the national level in improving access to and availability of controlled substances for pain management since the previous surveys in 1995, 2010 and 2014. Of the 130 countries (representing 78 per cent of the global population) that responded, 40 per cent indicated that over the previous five years, legislation and/or regulatory systems had been reviewed or changed to affect the availability of controlled medicines. Some countries reported unspecified "general changes," others indicated that changes were made to the status of controlled substances, while some introduced electronic measures to facilitate prescriptions and/or procurement.

Although regulations that have limited the availability of controlled medicine have been reduced in many countries since 1995, challenges remain. In 2018, 26 per cent of the countries that responded to the survey mentioned the existence of legal sanctions for unintentional errors in handling opioid analgesics. The legal threat was reported to be a major factor in the decisions of some doctors not to procure, stock or prescribe opioids, thus limiting their access. Similar challenges affect the number of pharmacies that are willing to dispense opioids.[28] In 2018, the three major impediments to the

23 E/INCB/2019/2.
24 Ibid.
25 E/INCB/2018/Supp. 1.
26 E/INCB/2018/Supp.1.
27 Ibid.
28 Ibid.

Systems and influences affecting access to and availability of controlled medicines



availability of opioids, as reported by the countries responding to the survey, were lack of training and awareness of health-care professionals, fear of addiction, and problems in sourcing opioid medications.[29]

Some evidence of progress in improving access to and availability of controlled medicines for pain management is suggested in a small proportion (16 per cent) of countries that reported that legislation and regulations had been modified to broaden the range of health-care professionals who are allowed to prescribe controlled substances. Overall, 123 countries reported that they allow medical specialists to prescribe controlled substances for pain management and palliative care, while 98 countries also allow general practitioners. Challenges continue to limit the range of health-care providers who can prescribe opioid analgesics, as only nine countries surveyed reported that their legislation allowed nurses, including nurse practitioners, to prescribe those drugs.[30] This legislative and regulatory limitations on who can prescribe controlled substances perpetuates a barrier to access, particularly in low- and middle-income countries without decentralized health-care services and/or where the number of physicians or doctors is limited.

In 2018, INCB also surveyed civil society organizations and received responses from 30 organizations based in 23 countries in Asia, Africa, Europe and the Americas.[31] More than half of the organizations that responded to the questionnaire reported changes to, or reviews of, legislation or regulations aimed at simplifying and streamlining processes and removing unduly restrictive regulations in order to ensure accessibility of controlled substances and maintain adequate control systems in their respective countries. Although this is a limited sample of civil society organizations, it demonstrates a relatively positive perception of some of the actions that countries have taken to change or streamline the laws and regulations that limit access to and availability of controlled medicines.

National supply management systems

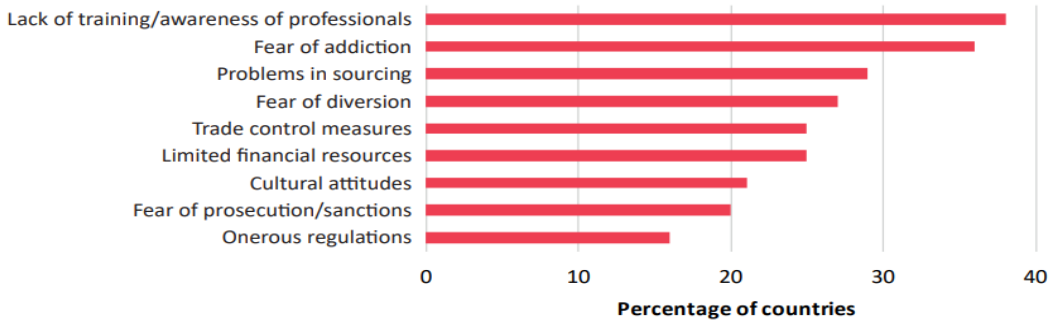
Functional, effective and efficient national supply chain management systems that are guided by the international drug control conventions are critically important to achieving the balance between preventing diversion and ensuring adequate access to and

29 Ibid.

30 Ibid.

31 Ibid.

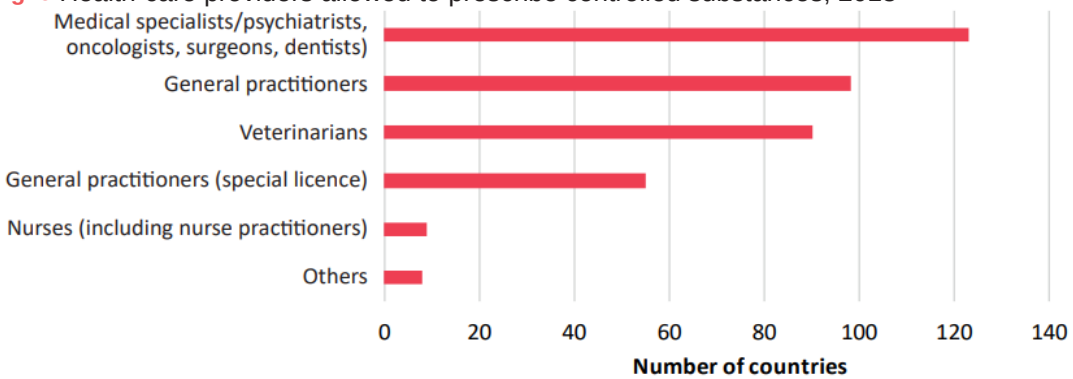
Fig. 8 Reported impediments to the availability of controlled medicines for pain management, 2018



Source: *Progress in Ensuring Adequate Access to Internationally Controlled Substances for Medical and Scientific Purposes* (E/INCB/2018/Supp.1).

Note: The percentage represents the proportion of responding countries that mentioned each of the factors as an impediment to the availability of pain medications. Multiple responses were possible.

Fig. 9 Health-care providers allowed to prescribe controlled substances, 2018



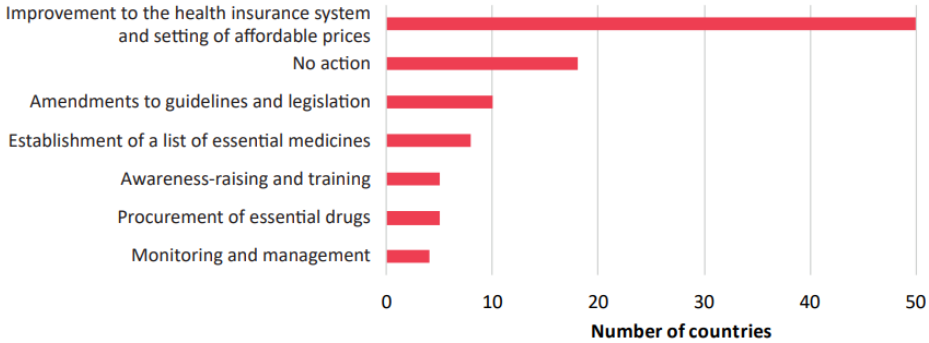
Source: *Progress in Ensuring Adequate Access to Internationally Controlled Substances for Medical and Scientific Purposes* (E/INCB/2018/Supp.1).

Note: The data represent the number of countries who responded to the survey and indicated the kind of health-care providers who can prescribe controlled substances, including opioids for pain management and palliative care. Multiple responses were possible.

availability of controlled medicines for pain management and palliative care. Within national supply chains and management systems, diverse domains affect export, import, procurement and monitoring of access to and availability of controlled medicines, to name but a few. Within this chain, primary areas that affect the accessibility of controlled substances in a country are: (1) processes to produce national estimates of controlled medicines for pain management and palliative care; (2) assessment of the availability of controlled substances; and (3) developing benchmarks (compared to thresholds for high and low use of controlled substances).

Countries report that import and export control measures or restrictions are among the main

Fig. 10 Steps taken by countries to improve the accessibility of controlled substances, 2018



Source: *Progress in Ensuring Adequate Access to Internationally Controlled Substances for Medical and Scientific Purposes* (E/INCB/2018/Supp.1).

Note: The data represent the number of countries that responded to the survey and indicated the steps taken to improve the accessibility of controlled substances, including opioids for pain management and palliative care. Multiple responses were possible.

for estimating the national requirements of controlled substances have also been made available in recent years.[33] Nevertheless, many countries, for a myriad of reasons, continue to report to INCB that they are unable to properly estimate or to monitor consumption of controlled substances and continue to inadequately or insufficiently estimate opioid requirements.

Health systems

Improving the accessibility and availability of controlled substances, including opioids for pain management and palliative care, also requires improving health systems to ensure controlled substances are prescribed and administered in a rational and efficient manner.[34] Overall, the major steps taken by countries that responded to the INCB survey in 2018 included improvements to the health insurance system and the setting of affordable prices to improve the accessibility and availability of controlled substances, including opioids for pain management and palliative care.

Training and capacity-building

The training and capacity-building of health-care professionals in all domains is key to ensuring access to and availability of opioids for pain management. In this regard, 71 countries (or 62 per cent of those that responded to the INCB survey) reported that palliative care was included in the educational curricula in medical schools. Similarly, 76 countries reported that continuing education, training and information on palliative care, including on the rational use and the importance of reducing the misuse of prescription drugs, was provided to health-care professionals. However, 11 countries reported that education on palliative care was provided for only a limited number of medical specialities, such as oncology, and a further 43 countries reported that palliative care was not included as a discipline in their medical education programme. While nine countries reported that they did not have a medical school, four countries noted that they would build palliative care into the medical curriculum from the onset. This demonstrates an awareness, and a concerted effort, on the part of the medical profession of the importance of palliative care training across the life course of wider medical training.

In addition, 41 countries noted that national competent authorities did not have training programmes on the rational use of controlled substances and that this was either due to a lack of resources or because it was "not a priority" for the Government.

Regarding other fields of specialty with interaction with patients and which are an important resource in health-care delivery, especially in low- and middle-income countries where the availability of doctors is limited, the nursing profession has made significant strides in incorporating palliative care and end-of-life care training, not only in the curriculum for

32 INCB and WHO, *Guide on Estimating Requirements for Substances under International Control* (Vienna, 2012).

34 E/INCB/2018/Supp. 1.

nurses but also for them to train other health-care providers within the larger health-care community.[35, 36, 37] For example, many non-governmental organizations in Africa have initiated programmes for training community health-care workers in palliative care, who do not necessarily require licensure and do not undergo extensive formal training in medicine, pharmacy or nursing.[38] In resource-constrained settings, community health-care workers are considered quite instrumental in providing care outside urban areas, in villages and other community settings with limited access to formal health-care services and facilities.[39]

Pharmacy training is gaining attention given the frontline role of pharmacies in making opioids accessible for patients. Palliative care training is not mandatory but many programmes, including by non-governmental organizations and other advocacy organizations, are targeting pharmacy professionals.[40]

Education and awareness-raising

Lack of awareness and "fear of addiction", i.e., the concern that patients who are prescribed strong opioids are likely to develop dependence or iatrogenic addiction,[41] were reported to be among the top impediments to access to controlled substances reported by 130 countries.[42] Fear of addiction seems to be related to a lack of awareness and training, and to cultural attitudes.[43] These barriers influence all systems and the people in them, including national and international policymakers, regulators, health-care professionals, community advocates, patients and the public at large.

Moreover, at the global level, concerns over the non-medical use of pharmaceutical opioids, triggered by the opioid crisis in North America, North Africa, and West and Central Africa has created a challenge for increasing the availability of opioids for pain management and palliative care due to the concomitance of the two opposing needs. As a result, low- and middle-income countries, not only in Africa but also in other regions, some of which have extremely limited access to opioids, are now facing diminished access and have to counter increased fear of addiction – that may result from a lack of knowledge about substance use disorders and the science of prevention and treatment – among policymakers, national authorities, health-care providers and even among the public.[44, 45, 46, 47]

Countries that reported to the 2018 INCB survey mentioned specific initiatives undertaken by national competent authorities to enhance the understanding of, awareness of and education about, and address cultural resistance to and the stigma associated with, the use of opioids and other controlled substances: education for representatives of the pharmaceutical community, professionals and consumer groups; and the promotion of ethical attitudes among medical doctors and pharmaceutical companies, in particular to reduce the excessive marketing of opioids.[48]

35 A leading programme is the End-of-Life Nursing Education Consortium, which is based on a train-the-trainer model and has been implemented in over 100 countries worldwide.

36 Betty Ferrel, Pam Malloy and Rose Virani, "The end of life nursing education nursing consortium project", *Annals of Palliative Medicine*, vol. 4, No. 2 (April 2015), pp. 61–69.

37 Henry Ddungu, "Palliative care: what approaches are suitable in developing countries?", *British Journal of Haematology"*, vol. 154, No. 6 (September 2011), pp. 728–735.

38 The African Palliative Care Association is one leading organization working in this area. See, for instance, *Annual Report: Building Bridges 2017-18* (Kampala, 2019).

39 Katherine Pettus and others, "Ensuring and restoring balance on access to controlled substances for medical and scientific purposes: joint statement from palliative care organizations", *Journal of Pain Palliative Care and Pharmacotherapy*, vol. 32, No. 2–3 (September 2018), pp. 124–128.

40 African Palliative Care Association, *Annual Report: Building Bridges 2017-18*.

41 A structured review of 67 studies found that 3 per cent of chronic non-cancer patients regularly taking opioids developed opioid use disorders. See David A. Fishbain and others, "What percentage of chronic non-malignant pain patients exposed to chronic opioid analgesic therapy develop abuse/addiction and/or aberrant drug related behaviours? A structured evidence-based review", *Pain Medicine*, vol. 9, No. 4 (May 2008), pp. 444-459.

42 E/INCB/2018/Supp.1.

43 *Availability of Internationally Controlled Drugs: Ensuring Adequate Access for Medical and Scientific Purposes – Indispensable, Adequately Available and not Unduly Restricted* (E/INCB/2015/1/Supp.1).

44 Knaul and others, "Alleviating the access abyss in palliative care and pain relief".

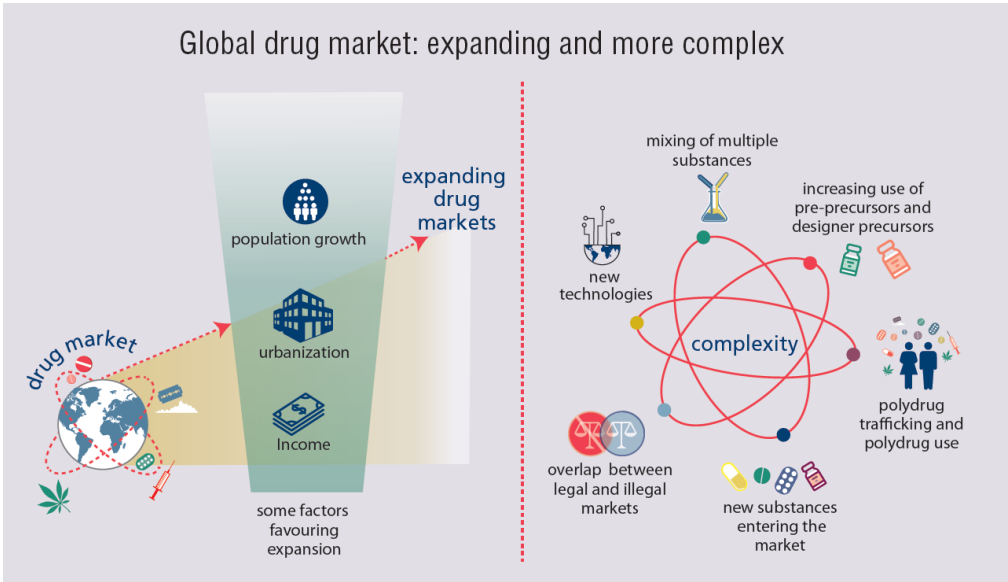
45 African Palliative Care Association, *Guidelines for Ensuring Patient Access to, and Safe Management of, Controlled Medicines* (Kampala, 2013).

46 De Lima and Radbruch, "Palliative care in the Global Health Agenda".

47 Pettus and others, "Ensuring and restoring balance on access to controlled substances for medical and scientific purposes".

48 E/INCB/2018/Supp.1.

Fig. 11 Global Drug Market



Source: *Progress in Ensuring Adequate Access to Internationally Controlled Substances for Medical and Scientific Purposes* (E/INCB/2018/Supp.1).

Note: The data represent the number of countries that responded to the survey and indicated the initiatives taken by the competent national authorities for education and awareness to improve the accessibility of controlled substances, including opioids for pain management and palliative care. Multiple responses were possible.

Affordability

The availability of pain medications is determined by factors that include their physical availability and practical accessibility. These in turn depend on the extent to which pain medications are procured and the existence of an appropriate and viable health system. Furthermore, the affordability of those medications is central to all of the elements, especially in the context of universal health coverage. Affordability is addressed, among other ways, by ensuring funding for the purchase of opioid medications as well as developing and improving health insurance and reimbursement schemes that guarantee access to pain medication.[49] In 2018, 50 countries reported to INCB that steps had been taken towards improving their health insurance systems and setting affordable prices for essential medicines, including opioids. However, limited resources can impair even a well-intended Government from procurement or preclude it from providing or subsidizing controlled medicines for pain management. Other issues that may affect the affordability of pain medications include licensing, taxation, poor or inefficient distribution systems, lack of reimbursement and lack of availability of inexpensive formulations. Even in the case of Governments that are strongly commit- ted to addressing challenges and barriers to access, financial resources may not be available to make systemic changes. Moreover, because of the high cost of pain medications, in many high-income countries

49 Ibid.

and in most low- and middle-income countries, where a large number of people are not covered by either health insurance or a national health-care system, many people can encounter difficulties in accessing the pain medications that they need.[50]

International cooperation and coordination

For many years, Governments, academic institutions and non-governmental organizations have worked across and within systems nationally and internationally on the central principle of balance between access to controlled substances for medical and sci- entific purposes and prevention of their diversion. Over the past 20 years, demonstrable progress has been made in over 30 countries in this regard.[51] Similarly, collaboration between international stake- holders that aim to improve the legislative framework, build capacity of health-care professionals, and work with patients, families and the public in order to improve access to and availability of controlled substances has shown the importance of working across these major domains. Each of them could act as an impediment or serve to enable access to opioids for pain management and palliative care at the country level.

50 Ibid.

51 Cleary and Maurer, “Pain and policy studies group”.

INTERNATIONAL COOPERATION

It is generally acknowledged that the drug problem is not restricted to just one country, but that it affects most countries in an intertwined manner. Responses to the drug problem at the national level are necessary, but they are not sufficient to cope with the global drug problem unless they are also well coordinated across countries. For example, interventions in one country, leading to a reduction in the drug supply, may prompt a replacement effect, with supply increasingly originating in other countries. Similarly, successful demand reduction efforts in just one country may prompt organized crime groups to devise strategies for targeting other countries and trigger increasing demand for drugs at the regional or global level. In short, global drug markets tend to be extremely resilient to attempts to solve the drug problem exclusively at the national level.

One of the key approaches to addressing the transnational nature of the drug problem has been the strengthening of international cooperation, both with a view to improving coordination of policies and interventions and assisting countries with limited resources and capacities in undertaking the necessary interventions. International cooperation can take many forms, including intergovernmental cooperation frameworks and mechanisms, the development of standards and guidelines that promote best practices in the fields of drug demand reduction[52] or drug supply reduction, and capacity-building initiatives that strengthen the ability of countries to counter the drug problem.

A comprehensive analysis of international cooperation on drug-related issues, which may be implemented at different levels, whether geographically or thematically, involving a plurality of mechanisms and actors – even if only done conceptually – would go far beyond the scope of this edition of the *World Drug Report*. Nonetheless, this broad range of international cooperation activities should be kept in mind, even though it is not discussed further in this chapter.

The purpose of this chapter is to present and examine the information that countries have regularly submitted to UNODC on the topic of international cooperation. Its scope is relatively limited and it does not pretend to cover the complex nature of factors that influence the implementation of international cooperation measures and their outcomes.

Extent of implementation of international cooperation is mainly quantified in terms of specific supply-side measures taken by law enforcement

Reporting on the implementation of international cooperation globally is challenging because international cooperation can take different forms, which are difficult to measure. For example, the sharing of intelligence information, probably the most common form of cooperation to address drug-related matters, happens in day-to-day work within and across law enforcement agencies; and it is hardly recorded in any systematic way at the national level in most countries. Records exist of some forms of intelligence-sharing at the international level, but information on such sharing is not necessarily reported by individual countries.

On an annual basis, countries report to UNODC on key activities related to international cooperation in the field of drug supply, including on joint operations with other countries, controlled deliveries, exchanges of liaison officers and the exchange of information. The reporting includes information on whether such activities took place during the reference year. In most countries and at the international level, no information is collected to assess the actual quality or the effectiveness of such cooperation activities.

While the proportion of countries that at least partially complete the section on international cooperation in their annual data submissions is quite high (close to 100 per cent of all countries reporting information to UNODC), a significant number of countries do not submit any information on international cooperation to UNODC; for example, out

52 See, for example, UNODC and WHO, *International Standards on Drug Use Prevention*, second updated edition (Vienna, 2018); UNESCO, UNODC and WHO, *Good Policy and Practice in Health Education: Booklet 10 – Education Sector Responses to the Use of Alcohol, Tobacco and Drugs* (Paris, 2017).

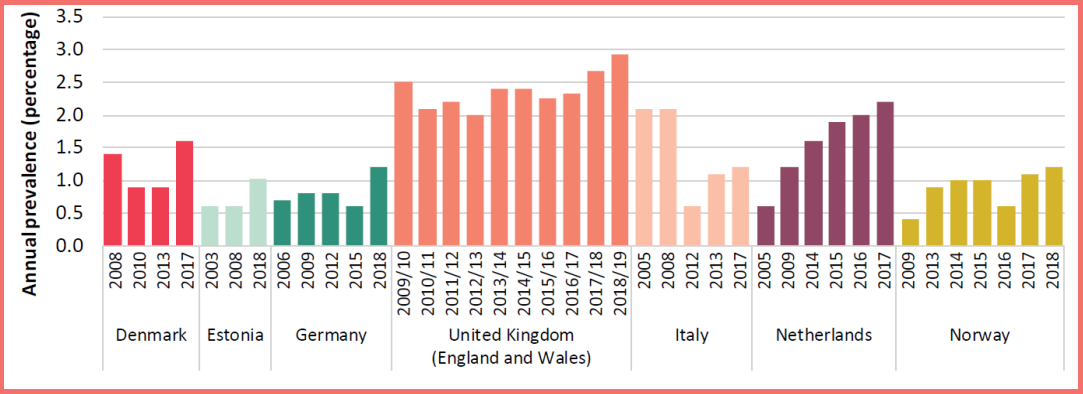
Interpreting reported data on international cooperation by Member States

Member States report to UNODC on international cooperation through the annual report questionnaire. However, replies to the questions on international cooperation were only received by around 40 per cent of the countries that were invited to complete the annual report questionnaire over the period 2017–2018. European countries, which usually report high levels of cross-border cooperation, are overrepresented in this sample (61 per cent of all European countries reported on international cooperation), while other regions (notably Africa and Oceania) are underrepresented. This limits the interpretation of the global data received, as they may be skewed by a reporting bias towards regions with a high capacity to engage in international cooperation.

The main unknown is whether and to what extent non-reporting countries, if they had reported, would have provided similar answers to questions on international cooperation as those reporting. While this cannot be known unless a specific study of non-respondents is carried out, it is most likely that the actual proportion of countries involved in cross-border cooperation falls within a range between (a) the number of countries reporting specific cross-border cooperation activities, expressed as the proportion of all countries that received the annual report questionnaire (constituting the absolute minimum); and (b) the number of countries reporting specific cross-border cooperation activities, expressed as the proportion of the countries responding either affirmatively or negatively to questions on whether or not they had carried out such specific cross-border operation activities. The latter is based on the hypothesis that non-reporting countries would show similar patterns of international cooperation as those reporting, which probably constitutes the maximum. In fact, it seems highly unlikely that non-reporting countries would, on average, be more involved in international cooperation than reporting countries, as the latter are more often located in regions, such as Europe, where the capacity to engage in international cooperation is likely bigger and the framework for such cooperation is more institutionalized.

For these reasons, the analyses of responses to the annual report questionnaire in this chapter are presented in ranges based on proportion (a) and proportion (b) mentioned above. While these ranges may sometimes be wide, one should refrain from calculating mid-points, as they would be misleading, in particular because in most cases it is likely that the actual proportions would still be closer to proportion (b) than to the absolute minimum, proportion (a).

Number of countries providing data on international cooperation in the annual report questionnaire and their proportion among countries that received the annual report questionnaire, by region, 2017–2018



Source: UNODC, responses to the annual report questionnaire.

Note: For the purposes of these calculations, a country was considered to have reported on international cooperation if it had provided information on whether it had engaged or not engaged in at least one of the following activities: joint operations, controlled deliveries, the exchange of liaison officers, the exchange of information or the extradition of drug traffickers, in either 2017 or 2018.

International cooperation has been at the heart of international drug control for more than a century

The strengthening of international cooperation has been at the heart of international drug control since the convening of the Shanghai Opium Commission in 1909. That was followed by the first International Opium Convention, signed at the Hague in 1912, the three drug conventions of the League of Nations (1925, 1931, 1936) and the three drug conventions adopted by the United Nations (1961, 1971 and 1988).

International cooperation continued to play a key role in more recent policy documents. The Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem, adopted during the high-level segment of the fifty-second session of the Commission on Narcotic Drugs, in 2009,[a] makes multiple mentions, 32 in all, of the need for more and better international cooperation, putting it on par with other strategies referred to in the Political Declaration, such as demand and supply reduction.[b]

Similarly, in the outcome document of the special session of the General Assembly held in 2016, entitled "Our joint commitment to effectively addressing and countering the world drug problem", the need to enhance and increase cooperation to face the various challenges linked to the drug problem, including the need to increase and strengthen international cooperation, is explicitly mentioned multiple times.[c]

Lastly, the 2019 Ministerial Declaration on "Strengthening Our Actions at the National, Regional and International Levels to Accelerate the Implementation of Our Joint Commitments to Address and Counter the World Drug Problem" committed to further strengthening cooperation and coordination among national authorities, particularly in the health, education, social, justice and law enforcement sectors, and between governmental agencies and other relevant stakeholders, including the private sector, at all levels, including through technical assistance; as well as to strengthening bilateral, regional and international cooperation and promoting information-sharing.

a See, for example, paragraph 1 of the Political Declaration: "We, the States Members of the United Nations … 1. *Reaffirm* our unwavering commitment to ensure that all aspects of demand reduction, supply reduction and international cooperation are addressed…" (E/2009/28, chap. I, sect. C (Political Declaration, para. 1)).

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

c General Assembly resolution S-30/1, annex.

of an average of 196 annual report questionnaires sent out every year, 72 countries provided replies on the issue in 2018, while 124 countries and territories did not. This reporting rate limits interpretation of the information reported to UNODC for any specific year, and also limits the ability to make comparisons over time, since the countries that provide replies change from year to year.

Joint cross-border drug operations

Data show that an average of 67 countries, i.e., 35 per cent of all countries to which the questionnaires were sent (196 countries), or 90 per cent of countries that actually reported, were involved in joint cross-border drug operations over the period 2010–2018. This is quite a broad range, leaving the door wide open to interpretations as to the importance of joint operations between law enforcement across countries.

In 2018, seven countries, mostly located in Africa and, to a lesser extent, in South and Central America, reported no joint operations, while 59 countries, mostly located in Europe (24 countries), followed by Asia (15), the Americas (10), Africa (8) and Oceania (2), were involved in joint cross-border operations.

The involvement of law enforcement in joint operations among countries providing such information throughout the period 2010–2018 appears to have declined slightly in recent years, falling – if only

FIG. 12 International cross-border cooperation, 2010–2018

Note: This analysis is based on 196 countries to which the annual report questionnaire is sent every year and on information provided by 75 countries that reported throughout the period 2010–2018 (by either providing an answer to each question or leaving the answer blank). The percentages represent the proportion of countries reporting their involvement in each activity for each biennium out of all countries providing such information (i.e. countries reporting either "yes" or "no" to the respective question asked).

Source: UNODC, responses to the annual report questionnaire.

countries reporting throughout the period 2010–2018 are considered – from 68 countries in the period 2010–2011 to 57 in the period 2017–2018.

The reasons for this downward trend in joint operations in recent years are unknown. It can be speculated that among the multiple causes, the budgetary problems following the 2008 financial crisis may have played a role. Moreover, over the years, Member States have reported that they have faced a number of challenges in joint operations, which may also have contributed to the decrease. These challenges include "slow formal procedures"

Controlled deliveries

Article 1 of the 1988 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances defines controlled delivery as a "technique of allowing illicit or suspect consignments of narcotic drugs, psychotropic substances, substances in Table I and Table II annexed to this Convention, or substances substituted for them, to pass out of, through or into the territory of one or more countries, with the knowledge and under the supervision of their competent authorities, with a view to identifying persons involved in the commission of offences established in accordance with article 3, paragraph 1, of the Convention". Article 11 is then fully dedicated to this technique, asking all parties to the Convention to take all the necessary measures "to allow for the appropriate use of controlled delivery at the international level". The technique of controlled delivery was also advocated in subsequent international drug policy instruments, including the 2009 Political Declaration and Plan of Action.

(37 countries over the period 2017–2018), "lack of agreements enabling operational cooperation" (15 countries), "inability to identify appropriate counterparts" (14 countries) and problems related to the "lack of a common language" practiced and understood by law enforcement officials from different countries (11 countries). Paradoxically, however, reported data also suggest that such obstacles to successful international cooperation decreased slightly in importance between the periods 2010–2011 and 2017–2018.[53]

Controlled deliveries of drugs

The active participation of national law enforcement agencies in controlled deliveries of drugs is another important area of international cooperation. Such measures typically target complex and long-lasting operations and are aimed at dismantling transnational drug trafficking networks operating across countries. They do not focus on couriers who handle small quantities of drugs and the seizing of small quantities of drugs, but rather attempt to dismantle whole networks operating across countries.

On average, 69 countries per year acknowledged their involvement in controlled deliveries of drug shipments over the period 2010–2018, representing 36 per cent of all countries receiving the annual report questionnaire and 86 per cent of all countries providing a reply to the question on controlled delivery over the period 2010–2018. Some fluctuations but no clear trend in the number of countries reporting controlled deliveries can be identified over the period 2010–2018. In 2018, a total of 64 countries reported having been involved in at least one controlled delivery, including 26 countries located in Europe (mostly in Western and Central Europe), 16 in Asia, 11 in the Americas (mostly in Latin America and the Caribbean), 9 in Africa and 2 in Oceania. The five countries reporting no participation in controlled deliveries were all located outside Europe: three in Africa and one each in the Caribbean and South-East Asia.

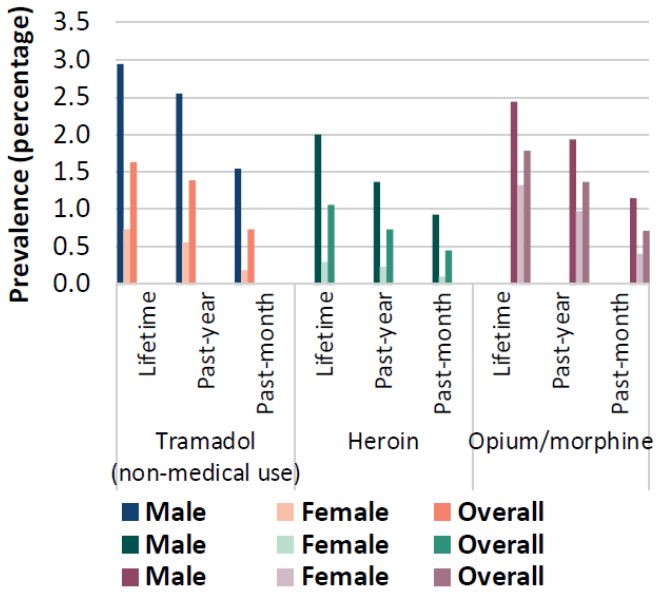
While few law enforcement specialists would be likely to question the inherent merits of controlled deliveries of drugs, information provided by countries to UNODC suggests that they do not necessarily form part of the tasks expected of law enforcement authorities in several countries. Controlled deliveries require long-lasting partnerships among national agencies, connections that can easily be activated when cooperation on ongoing operations is needed quickly. They can also be resource-intensive; and where they are not included among the success indicators of national law enforcement agencies, the incentive for national agencies to engage in controlled delivery operations may be limited.

Exchange of liaison officers

Another example of cross-border cooperation is the exchange of liaison officers, which facilitates the informal exchange of information between

53 Report of the Executive Director on action taken by Member States to implement the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem (E/CN.7/2020/6).

Fig. 13 Opioid use among students aged15–17, 2016



Source: UNODC, responses to the annual report questionnaire.

countries and thus creates an environment of more timely and effective cooperation. There are cases in which liaison officers, with the help of their net- works, were able to prevent drug shipments from leaving the countries where they were stationed, instead of having to wait until the drugs arrived in the countries of final destination, which could increase the risk of some of the drugs being diverted to other destinations before being seized in the countries of final destination.

However, it remains difficult to evaluate to what extent improved international cooperation, includ- ing the exchange of liaison officers, may have contributed to the increase in the last two decades of the quantities of drugs intercepted in source and transit countries.[54]

No clear trend in the number of countries reporting the exchange of liaison officers can be identified over the period 2010–2018, when an average of 57 countries reported the exchange of liaison officers. It is likely that the proportion of countries exchang- ing liaison officers falls within a broad range of between 29 per cent of all countries to which the questionnaire was sent and 74 per cent of all report- ing countries over the period 2010–2018.

In 2018, 52 countries reported the exchange of liai- son officers, most of which were located in Europe (20), followed by Asia (12), the Americas (9), Africa (9) and Oceania (2). By comparison, 14 countries, located across all regions, reported having had no exchange of liaison officers in 2018.

However, the number of countries reporting on an "information exchange via liaison officers" was actu- ally larger (62 countries over the period 2010–2018, or 66 countries in 2018), suggesting that not all countries where foreign liaison officers were actually stationed reported having been involved in the exchange of liaison officers. Combining the responses to the two questions on involvement in the exchange of liaison officers and information exchange with liaison officers actually reveals that a total of 68 coun- tries (35 per cent of all the countries to which the annual report questionnaire was sent) appear to have had links with liaison officers in 2018. This includes 27 countries in Europe, 16 in Asia, 13 in the Ameri- cas, 10 in Africa and 2 in Oceania.

Exchange of information

All reporting countries seem to engage in the exchange of information with appropriate counter- parts in other countries and/or with international organizations. On average, 82 countries reported having exchanged information on drug-related issues with other countries over the period 2010–2018 (42 per cent of all countries to which the questionnaires were sent, or more than 99 per cent of all reporting countries).55 In 2018, only two countries reported no information exchange (one in sub-Saharan Africa and one in Latin America), while 70 countries reported having exchanged information on drug-related issues, most notably countries in Europe (26), followed by countries in Asia (17), Africa (13), the Americas (12) and Oceania (2).56 The exchange of information was mostly undertaken in the context of international meetings (64 countries on average over the period 2010–2018), direct communication (64 countries) and information exchange through INTERPOL (64 countries), followed by information exchange through liaison officers (62 countries), information exchange through regional organizations (58 countries), diplomatic channels (52 countries) and information exchange through the World Customs Organization (48 countries).57

GLOSSARY

amphetamine-type stimulants — a group of substances composed of synthetic stimulants controlled under the Convention on Psychotropic Substances of 1971 and from the group of substances called amphetamines, which includes amphetamine, methamphetamine, methcathinone and the "ecstasy"-group substances (3,4-methylenedioxymethamphetamine (MDMA) and its analogues).

amphetamines — a group of amphetamine-type stimulants that includes amphetamine and methamphetamine.

annual prevalence — the total number of people of a given age range who have used a given drug at least once in the past year, divided by the number of people of the given age range, and expressed as a percentage.

coca paste (or coca base) — an extract of the leaves of the coca bush. Purification of coca paste yields cocaine (base and hydrochloride).

"crack" cocaine — cocaine base obtained from cocaine hydrochloride through conversion processes to make it suitable for smoking.

cocaine salt — cocaine hydrochloride.

drug use — use of controlled psychoactive substances for non-medical and non-scientific purposes, unless otherwise specified.

fentanyls - fentanyl and its analogues.

new psychoactive substances — substances of abuse, either in a pure form or a preparation, that are not controlled under the Single Convention on Narcotic Drugs of 1961 or the 1971 Convention, but that may pose a public health threat. In this context, the term "new" does not necessarily refer to new inventions but to substances that have recently become available.

opiates — a subset of opioids comprising the various products derived from the opium poppy plant, including opium, morphine and heroin.

opioids — a generic term that refers both to opiates and their synthetic analogues (mainly prescription or pharmaceutical opioids) and compounds synthesized in the body.

problem drug users — people who engage in the high-risk consumption of drugs. For example, people who inject drugs, people who use drugs on a daily basis and/or people diagnosed with drug use disorders (harmful use or drug dependence), based on clinical criteria as contained in the *Diagnostic and Statistical Manual of Mental Disorders* (fifth edition) of the American Psychiatric Association, or the *International Classification of Diseases and Related Health Problems* (tenth revision) of WHO.

people who suffer from drug use disorders/people with drug use disorders — a subset of people who use drugs. Harmful use of substances and dependence are features of drug use disorders. People with drug use disorders need treatment, health and social care and rehabilitation.

harmful use of substances — defined in the *International Statistical Classification of Diseases and Related Health Problems* (tenth revision) as a pattern of use that causes damage to physical or mental health.

dependence — defined in the *International Statistical Classification of Diseases and Related Health Problems* (tenth revision) as a cluster of physiological, behavioural and cognitive phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state.

substance or drug use disorders — referred to in the *Diagnostic and Statistical Manual of Mental Disorders* (fifth edition) as patterns of symptoms resulting from the repeated use of a substance despite experiencing problems or impairment in daily life as a result of using substances. Depending on the number of symptoms identified, substance use disorder may be mild, moderate or severe.

prevention of drug use and treatment of drug use disorders — the aim of "prevention of drug use" is to prevent or delay the initiation of drug use, as well as the transition to drug use disorders. Once a person develops a drug use disorder, treatment, care and rehabilitation are needed.

REGIONAL GROUPINGS

The *World Drug Report* uses a number of regional and subregional designations. These are not official designations, and are defined as follows:

- East Africa: Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, South Sudan, Uganda, United Republic of Tanzania and Mayotte
- North Africa: Algeria, Egypt, Libya, Morocco, Sudan and Tunisia
- Southern Africa: Angola, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe and Reunion
- West and Central Africa: Benin, Burkina Faso, Cabo Verde, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, Togo and Saint Helena
- Caribbean: Antigua and Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, Anguilla, Aruba, Bonaire, Netherlands, British Virgin Islands, Cayman Islands, Curaçao, Guadeloupe, Martinique, Montserrat, Puerto Rico, Saba, Netherlands, Sint Eustatius, Netherlands, Sint Maarten, Turks and Caicos Islands and United States Virgin Islands
- Central America: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama
- North America: Canada, Mexico and United States of America, Bermuda, Greenland and Saint-Pierre and Miquelon
- South America: Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela (Bolivarian Republic of), Falkland Islands (Malvinas) and French Guiana
- Central Asia and Transcaucasia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
- East and South-East Asia: Brunei Darussalam, Cambodia, China, Democratic People's Republic of Korea, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Singapore, Thailand, Timor-Leste, Viet Nam, Hong Kong, China, Macao, China, and Taiwan Province of China
- South-West Asia: Afghanistan, Iran (Islamic Republic of) and Pakistan
- Near and Middle East: Bahrain, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, United Arab Emirates and Yemen
- South Asia: Bangladesh, Bhutan, India, Maldives, Nepal and Sri Lanka
- Eastern Europe: Belarus, Republic of Moldova, Russian Federation and Ukraine
- South-Eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, North Macedonia, Romania, Serbia, Turkey and Kosovo[148]
- Western and Central Europe: Andorra, Austria, Belgium, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, Faroe Islands, Gibraltar and Holy See

Oceania (comprised of four sub-regions):

- Australia and New Zealand: Australia and New Zealand
- Polynesia: Cook Islands, Niue, Samoa, Tonga, Tuvalu, French Polynesia, Tokelau and Wallis and Futuna Islands
- Melanesia: Fiji, Papua New Guinea, Solomon Islands, Vanuatu and New Caledonia
- Micronesia: Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Palau, Guam and Northern Mariana Islands

90 All references to Kosovo in the *World Drug Report* should be understood to be in compliance with Security Council resolution 1244 (1999).

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Presented in six separate booklets, the *World Drug Report 2020* provides a wealth of information and analysis to support the international community in implementing operational recommendations on a number of commitments made by Member States, including the recommendations contained in the outcome document of the special session of the General Assembly on the world drug problem, held in 2016.

Booklet 1 provides a summary of the five subsequent booklets by reviewing their key findings and highlighting their policy implications. Booklet 2 focuses on drug demand and contains a global overview of the extent of and trends in drug use, including drug use disorders, and its health consequences. Booklet 3 deals with drug supply and presents the latest estimates and trends regarding the production of and trafficking in opiates, cocaine, amphetamine-type stimulants and cannabis. Booklet 4 addresses a number of cross-cutting issues, including the macrodynamics that are driving the expansion and increasing complexity of the drug markets, and describes some of the rapidly evolving drug-related concerns: the latest, multifaceted global opioid crisis; rapid market changes; the market for new psychoactive substances; the use of the darknet for supplying drugs; and developments in jurisdictions that have measures allowing the non-medical use of cannabis. Booklet 5 looks at the association between socioeconomic characteristics and drug use disorders, including at the macro-, community and individual levels, with a special focus on population subgroups that may be impacted differently by drug use and drug use disorders. Finally, booklet 6 addresses a number of other drug policy issues that all form part of the international debate on the drug problem but on which in-depth evidence is scarce, including access to controlled medicines, international cooperation on drug matters, alternative development in drug cultivation areas, and the nexus between drugs and crime.

As in previous years, the *World Drug Report 2020* is aimed at improving the understanding of the world drug problem and contributing to fostering greater international cooperation in order to counter its impact on health, governance and security.

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