

**Commission on Narcotic Drugs****Sixty-seventh session**

Vienna, 14–22 March 2024

Item 6 of the provisional agenda\*

**Follow-up to the implementation at the national,  
regional and international levels of all commitments,  
as reflected in the Ministerial Declaration of 2019, to  
address and counter the world drug problem****World situation with regard to drug abuse****Report of the Secretariat***Summary*

The present report contains a summary of the most recent information available to the United Nations Office on Drugs and Crime (UNODC) on the extent of drug use and its health consequences. In 2021, an estimated 296 million people had used a controlled substance in the preceding year. It has been estimated that more than one in seven people who use drugs (39.5 million people) suffer from drug use disorders. According to the joint 2021 estimates of UNODC, the World Health Organization, the Joint United Nations Programme on HIV/AIDS and the World Bank, 13.2 million people injected drugs and approximately one in eight people who inject drugs was living with HIV. Globally, drug use remains multifaceted, characterized by the concurrent and sequential use of multiple substances, including conventional plant-based drugs, synthetic stimulants, opioids, pharmaceutical drugs and new psychoactive drugs. Opioids continue to have a severe impact on the health of people who use them non-medically. The epidemics involving the non-medical use of opioids – fentanyl and its analogues in North America and tramadol in North and West Africa, the Middle East and South-West Asia – continue to pose severe health risks. Globally, nearly half a million deaths in 2019 were attributable to drug use. The lack of reliable information on most epidemiological indicators of drug use continues to hinder both the monitoring of emerging trends and the implementation and evaluation of evidence-based responses to drug use and its health consequences.

\* [E/CN.7/2024/1](#).

## I. Introduction

### A. Emerging and continuing global trends

1. According to the information available to the United Nations Office on Drugs and Crime (UNODC), recent trends in drug use observed around the world include the following:

(a) Opioid use, including the use of heroin and the misuse of pharmaceutical opioids and new psychoactive substances with opioid effects, continues to be a major concern in many countries because of its serious health consequences;

(b) Cannabis remains the most used drug worldwide. Since 2020, there has been a new trend in some regions of the synthesis of cannabinoids from substances occurring in the cannabis plant in addition to tetrahydrocannabinol (THC) and cannabidiol (CBD). The most common among these are *delta*-8-tetrahydrocannabinol (*delta*-8-THC) and hexahydrocannabinol (HHC). Early data suggest that their availability is growing fast; they are becoming popular in some locations in the United States of America (especially *delta*-8-THC) and in Western Europe (especially HHC). Adverse effects attributed to their use have been reported in hospital emergency rooms;

(c) North America and Europe remain the two main consumer markets for cocaine. The long-term trend of increasing cocaine use that came to a halt in 2020 during the initial stages of the coronavirus disease (COVID-19) pandemic appears to have rebounded in 2021 and 2022 in Western and Central Europe. Africa and Asia also appear to be emerging markets for cocaine use, although a lack of data prevents a clear understanding of the level of use in these two regions;

(d) The use of amphetamines, especially methamphetamine, is increasing in many parts of the world. The methamphetamine market is expanding in North America alongside an increase in methamphetamine use-related harm. Methamphetamine is also the main drug of concern in East and South-East Asia. Methamphetamine use has risen in South-West Asia in recent years, while accounts suggest that use of methamphetamine and “captagon” tablets is rising in countries in the Gulf region, although no recent estimates are available;

(e) The number of distinct new psychoactive substances found on global drug markets has now stabilized at approximately 618. However, the emergence of new non-fentanyl opioids, such as the nitazene group of substances, and xylazine, a sedative, is a matter of concern due to their unprecedented health effects;

(f) The non-medical use of ketamine has also recently increased in countries in subregions such as Western Europe, the Middle East, South Asia, North Africa and Oceania. The non-medical use of ketamine is well established in East and South-East Asia;

(g) In an attempt to mitigate the negative impact of the COVID-19 pandemic, there is evidence that numerous service providers and policymakers have actively and creatively sought ways to continue to provide services for people with drug use disorders during the emergency situation created by the pandemic. A number of different strategies have been implemented across the globe to ensure continuity in service provision for people who use drugs and suffer from drug use disorders. Such strategies have been broadly categorized as the introduction or scaling-up of the use of telehealth approaches, the provision of uninterrupted access to medication or sterile injecting equipment. The initial results and outcomes of these strategies are considered to be promising.

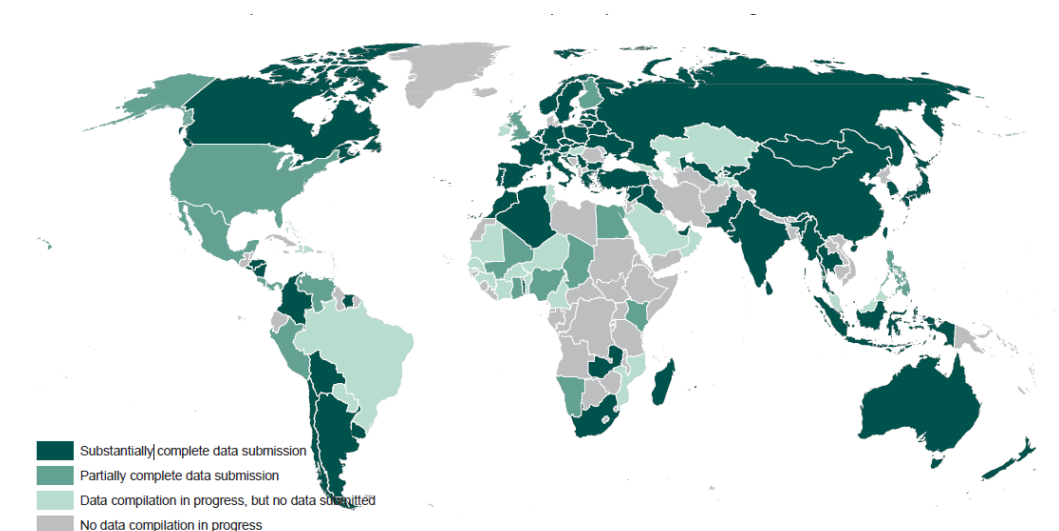
## B. Reports from Member States on the extent and patterns of and trends in drug use

2. Member States' responses to the annual report questionnaire form the basis on which the global extent of and trends in drug use are reported each year. As at 8 December 2023, 88 out of 202 States and territories had submitted responses to the six modules of the revised online annual report questionnaire on the extent and patterns of and trends in drug use and related health consequences in 2022 (see map 1). In addition, 30 Member States were still in the process of data compilation and submission at that date. While the rate of completion of individual modules by Member States varied, overall, 78 per cent of those submitted were substantially completed, meaning that States had provided information on more than half of the indicators of drug use and its health consequences in those modules.

3. Unless otherwise specified, the data and information included in this report are based on data reported in the annual report questionnaire.

Map 1

**Member States that completed data submission of annual report questionnaire for drug demand data as at 8 December 2022**



*Note:* The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations.

## II. Global overview

### A. Extent of drug use

4. In 2021, an estimated 296 million people worldwide aged 15–64, the majority of whom were men, had used at least one drug in the past 12 months (see figures I and II). In other words, approximately 1 in every 17 people in that age group, or 5.8 per cent of that population, reported having used a drug in the past year. The estimated number of people using drugs has grown from 240 million in 2011 to 296 million in 2021. This is a 23 per cent increase, partly owing to worldwide population growth. However, any comparisons of such global estimates over time should be interpreted with caution owing to their wide uncertainty intervals.

Figure I  
Global prevalence of drug use and drug use disorders, 2011, 2016 and 2021

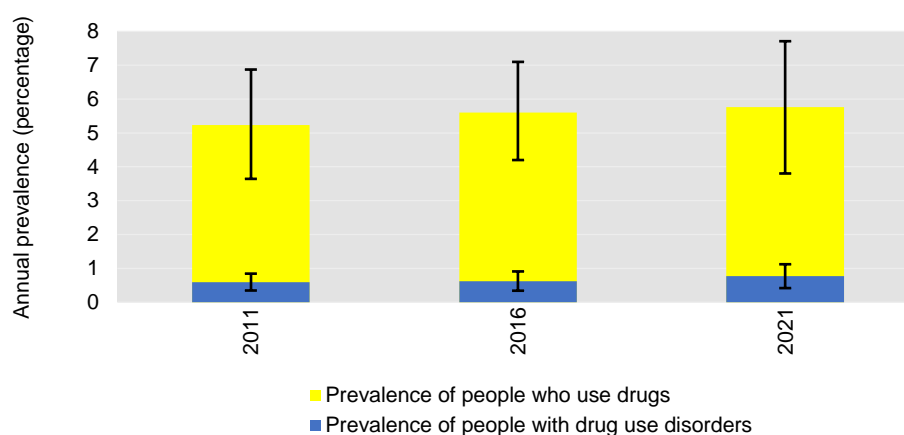
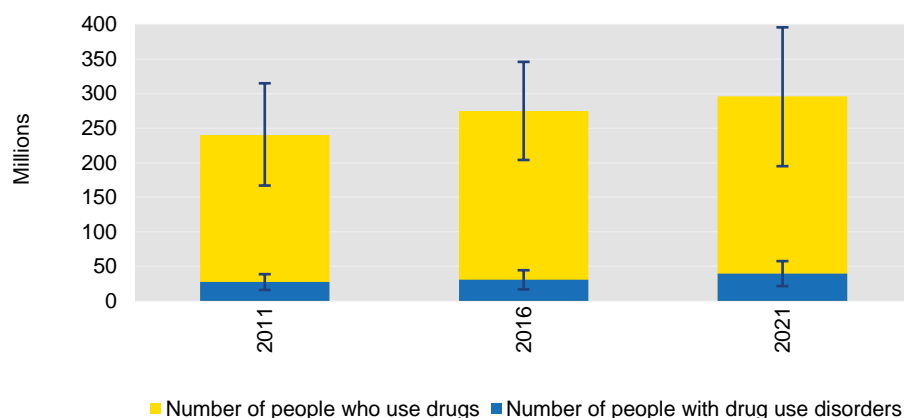


Figure II  
Global number of people who use drugs and people with drug use disorders, 2011, 2016 and 2021



Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

5. While overall drug use remains lower among women than among men, differences between the sexes vary substantially by region and, to some extent, by drug type (see figure III). For example, according to the most recent data available from household surveys, less than a third of those who use cannabis or cocaine worldwide are women. However, with regard to the non-medical use of pharmaceutical drugs (in particular opioids, sedatives and tranquillizers) and amphetamines, women exhibit prevalence levels similar to those reported for men. Gender-related differences in drug use vary substantially by region and are likely to be associated with opportunities for women to use drugs, with culturally defined roles and with other social factors.<sup>1,2</sup>

6. Women who use drugs face gender-specific vulnerabilities, for example, women who use drugs report suffering gender-based violence, including intimate partner violence, two to five times more frequently than women who do not use drugs<sup>3</sup> and

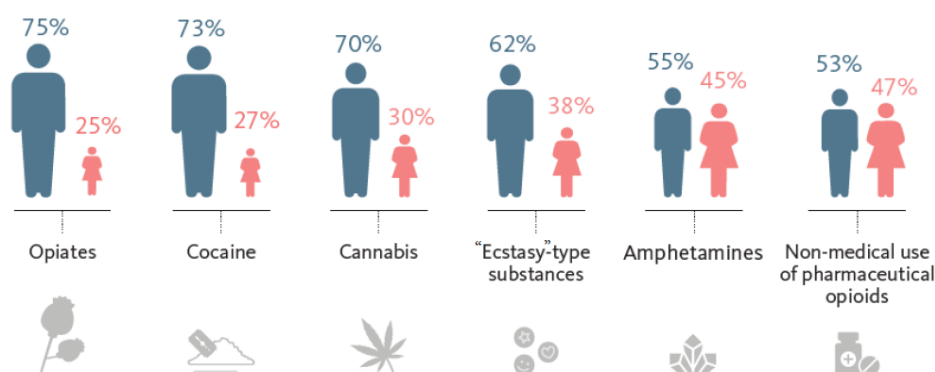
<sup>1</sup> R. Kathryn McHugh and others, "Sex and gender differences in substance use disorders", *Clinical Psychology Review*, vol. 66 (2018), pp.12–23.

<sup>2</sup> United States, National Institute on Drug Abuse, "Sex and gender differences in substance use", 13 April 2021. Available at: <https://nida.nih.gov/>.

<sup>3</sup> Louisa Gilbert and others, "Targeting the SAVA (Substance Abuse, Violence, and AIDS) Syndemic among Women and Girls: a global review of epidemiology and integrated interventions", *Journal of Acquired Immune Deficiency Syndromes*, vol. 69, Suppl. No. 2 (June 2015), pp. S118–S127.

may also face additional social and health issues if they use drugs while pregnant or breastfeeding.<sup>4</sup>

Figure III  
Users of selected drug groups, by sex



Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

Note: These estimates are based on annual prevalence of use estimates from household or general population surveys conducted in 13 to 64 countries, depending on the drug.

7. The market for drugs is diversifying and, although new psychoactive substances continue to appear, new drug combinations, mostly mixtures of controlled drugs, which can also contain prescription medicines, veterinary medicines, alcohol, soft drinks, food colorants and aromas, or even substances (such as volatiles, poisons or fuel) which are meant for industrial use, are increasingly being reported on the drug market in all regions. Although some of these mixtures have long traditions (such as nyaope in South Africa), others are relatively new, such as “tuci”, which seems to be spreading fast in South America and seems to have reached North American and European drug markets in the past few years. Similarly, “happy water” and “k-powdered milk” are new mixtures that have recently appeared in East and South-East Asia.<sup>5</sup>

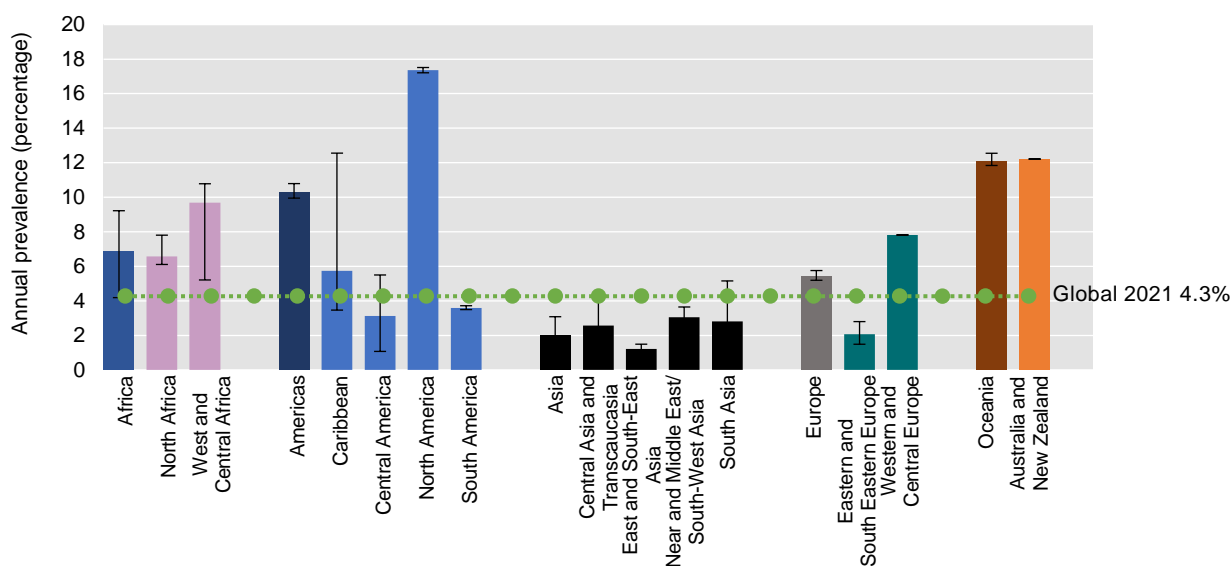
8. It is estimated that more than one in seven people who use drugs (i.e. 39.5 million people) suffer from drug use disorders. This corresponds to a prevalence of drug use disorders of 0.77 per cent among the global population aged 15–64. Different drugs pose different burdens on health and health-care systems. Nevertheless, most drug use disorders are related to cannabis and opioids, which are also the drugs that lead most people to seek drug treatment.

9. Cannabis remains by far the world’s most commonly used drug. An estimated 219 million people used cannabis in 2021, representing 4.3 per cent of the global adult population. The percentage of cannabis users who are women varies by region and subregion, ranging from 9 per cent of users in Asia to 42 per cent in North America (2021). The number of people who use cannabis has increased by 21 per cent over the past decade. Cannabis use remains the highest in North America, where 17.4 per cent of the population aged 15–64 used the drug in 2021 (see figure IV). The use of cannabis in the subregion of Australia and New Zealand is also significantly higher than the global average, with prevalence of use exceeding 10 per cent. In Africa, cannabis remains the main drug of concern for the majority of people in treatment for cannabis use disorders.

<sup>4</sup> United States, National Institute on Drug Abuse, Substance Use in Women Research Report, “Summary”, 13 April 2020. Available at <https://nida.nih.gov/>.

<sup>5</sup> World Drug Report 2023, booklet 1, Executive Summary, (United Nations publication, 2023).

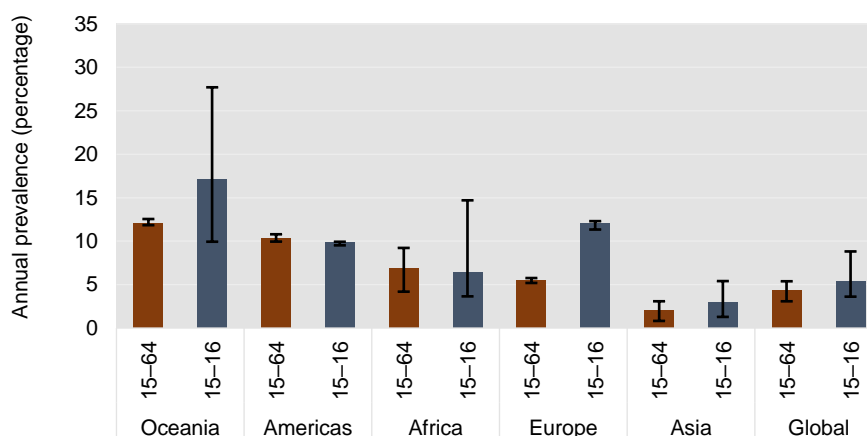
Figure IV  
Use of cannabis, by region and subregion, 2021



Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

10. Cannabis is also the most widely used drug among young people. In 2021, 5.3 per cent of 15–16-year-olds worldwide (13.5 million individuals) had used cannabis in the past year. The annual prevalence of cannabis use in that age group is reported as being higher than the prevalence among the general population at the global level and in most regions (see figure V). The brain of an adolescent is still developing, and thus the regular use of a drug can have long-term negative effects on adolescents. In addition, initiation of substance use in early adolescence increases the risk of developing substance use disorders in adulthood as well as developing other vulnerabilities and problems.<sup>6,7,8</sup>

Figure V  
Global and regional use of cannabis among people aged 15–16, and among the general population aged 15–64, 2021 (or most recent year for which data are available)



Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

<sup>6</sup> Monica Luciana and Sarah W. Feldstein Ewing, “Substance use and the adolescent brain: developmental impacts, interventions, and longitudinal outcomes”, *Developmental Cognitive Neuroscience*, vol. 16 (2015), pp. 1–4.

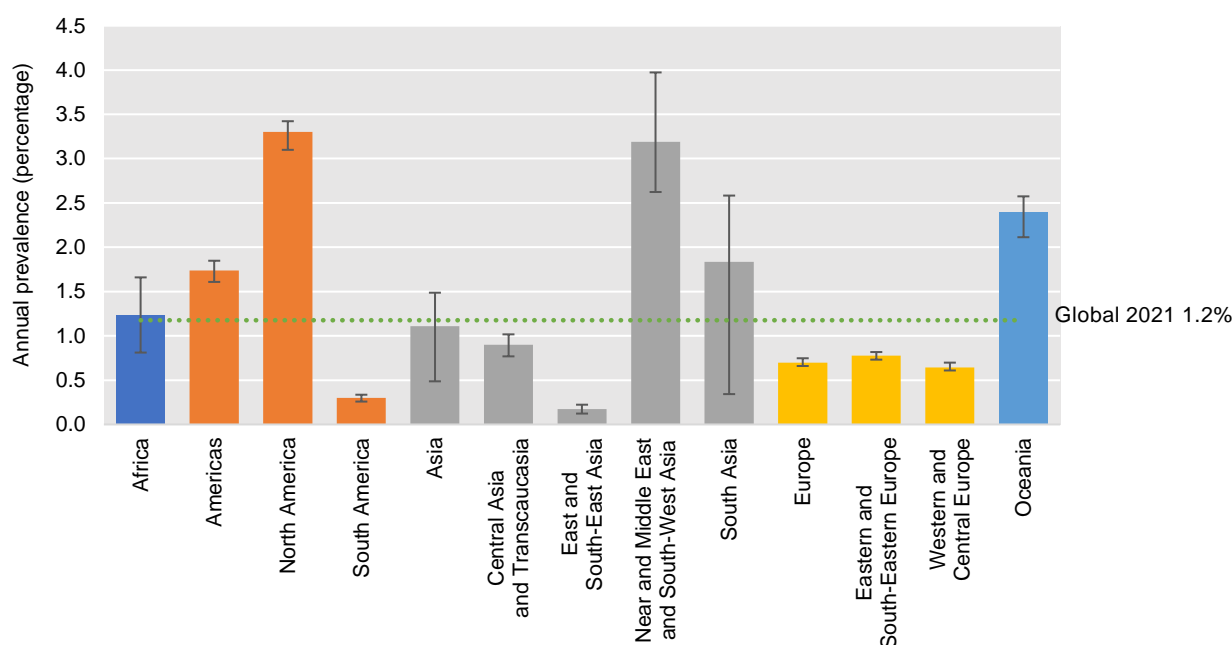
<sup>7</sup> Shahnaza Hamidullah and others, “Adolescent substance use and the brain: behavioral, cognitive and neuroimaging correlates”, *Frontiers in Human Neuroscience*, vol. 14, art. No. 298 (August 2020).

<sup>8</sup> Ken C. Winters and Amelia Arria, “Adolescent brain development and drugs”, *Prevention Researcher*, vol. 18, No. 2 (2011), pp. 21–24.

11. Over the last few years, but mainly since 2020, there has been a new trend of the synthesis of cannabinoids, mainly from a non-psychoactive substance occurring in the cannabis plant, namely cannabidiol (CBD). These cannabinoids, possibly developed to evade drug laws, have been sold in various forms (mainly edibles, vaping cartridges and sprayed-on low-tetrahydrocannabinol (THC) cannabis) for non-medical use. The most common are *delta*-8-THC and hexahydrocannabinol (HHC). Early data suggest that their availability is growing fast; they are becoming popular in some locations in the United States (especially *delta*-8-THC) and in Western Europe (especially HHC). There have been cases when the use of *delta*-8-THC has led to adverse effects requiring medical attention.

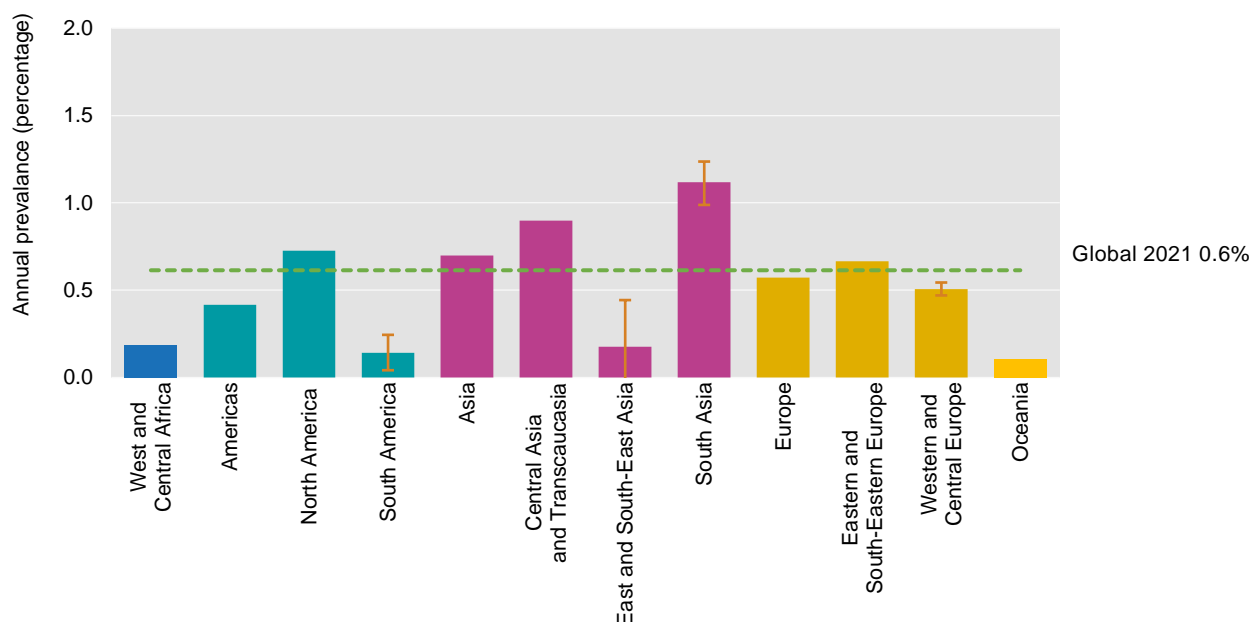
12. An estimated 60 million people used opioids in 2021, representing 1.2 per cent of the global adult population. Half of all people worldwide who had used opioids in the past year were in South Asia or South-West Asia (see figure VI). Of those using opioids in 2021, an estimated 31.5 million people used opiates, mainly heroin (see figure VII). The global level of opioid use remained stable in 2021, having increased slightly between 2017 and 2019, mainly owing to the availability of new and robust prevalence estimates from India and Nigeria. About 38 per cent of all people in drug treatment in 2021 cited opioids as their primary drug of use. Opioids remain the most lethal group of drugs, accounting for two-thirds of deaths related directly to drugs (mostly overdoses). The share of women among people who misuse pharmacological opioids in 2021, compared with most other drugs, is notably high (47 per cent), whereas the overall percentage of women among all opiate users is lower (25 per cent).

Figure VI  
Opioid use, by region and subregion, 2021



Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

Figure VII  
Opiate use, by region and subregion, 2021



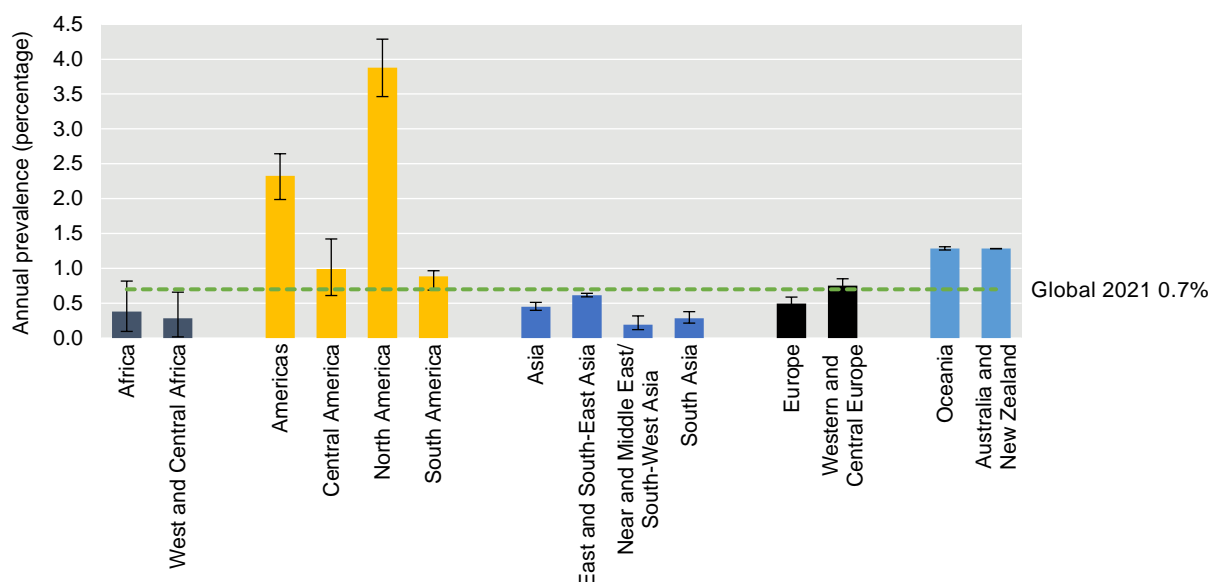
Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

13. In North America, the opioid crisis is driven by overdose deaths, mainly attributed to fentanyl, which are mostly illicitly manufactured. While there is a high prevalence of people using opioids for non-medical purposes in the subregion, the opioid crisis has not been associated with a sizeable increase in the number of people using opioids. The other opioid crisis, that of non-medical use of tramadol, is affecting many countries, mainly in North, West and Central Africa, although other countries in the Near and Middle East and in South-West Asia have also reported evidence of the non-medical use of the drug. The gender gap in the non-medical use of tramadol may be narrower than for other drugs in those subregions. The problematic non-medical use of tramadol can be seen from the high proportion of people entering drug treatment for tramadol use disorders in the countries that have reported misuse of tramadol.

14. An estimated 36 million people aged 15–64 used amphetamines in 2021, representing 0.7 per cent of the global population. Qualitative assessments suggest an increase in the use of amphetamines in 2021 and over the last decade. The prevalence of use and the number of users of amphetamines are highest in North America, with the second largest number of users being in East and South-East Asia (see figure VIII). The methamphetamine market is expanding in North America, accompanied by an increase in methamphetamine-related harms, which is reflected in hospitalizations, drug treatment and overdose deaths. Methamphetamine is also the main drug of concern in East and South-East Asia. In Western and Central Europe, amphetamine is the second most used stimulant after cocaine, and recent trends point to an increase in methamphetamine use in the region. In recent years, methamphetamine use has also increased in South-West Asia and countries in the Gulf region. The increasing and record high level of “captagon” tablet seizures in the Near and Middle East in 2021 also point to the expanding market for that drug in the subregion.



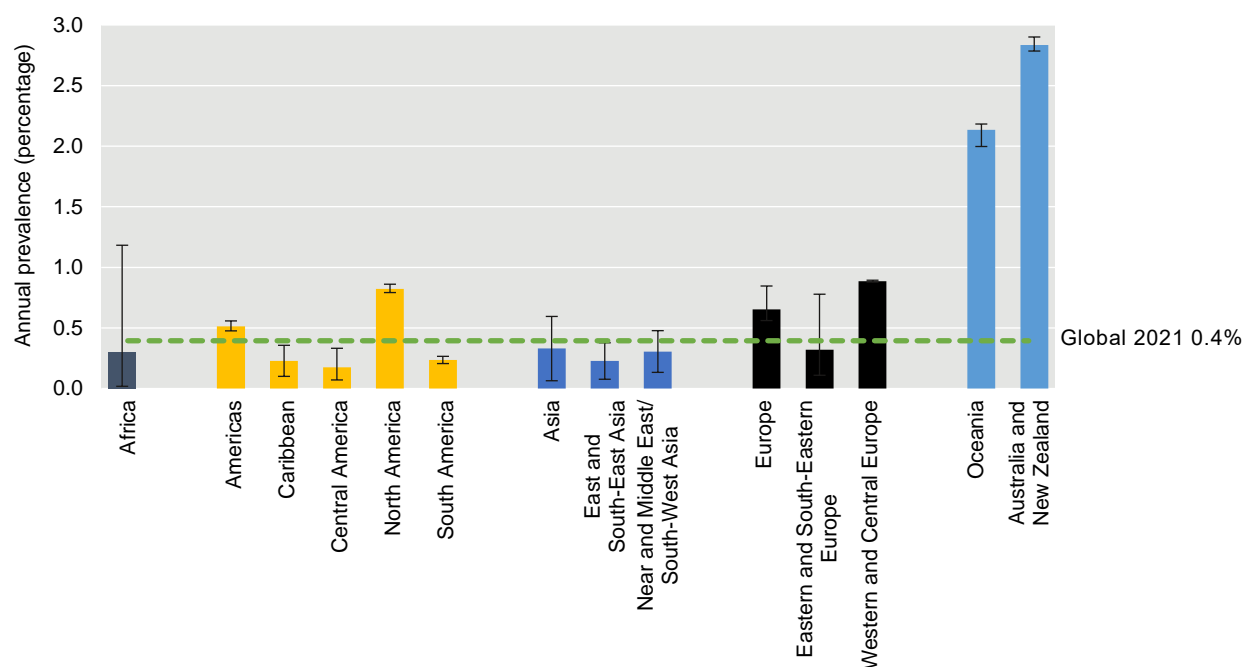
Figure VIII  
Use of amphetamines, by region and in selected subregions, 2021



Source: World Drug Report 2023 (data based on responses to the annual report questionnaire).

15. An estimated 20 million people used “ecstasy”-type substances in 2021, representing 0.4 per cent of the global adult population. Based on the limited existing data, the largest markets for “ecstasy”-type substances continue to be Western and Central Europe and North America (see figure IX), while the highest prevalence of use can be found in Australia and New Zealand. Wastewater analysis suggests that the use of “ecstasy”-type substances in South-Eastern Europe could be higher than the level of use indicated in population survey data.<sup>9</sup>

Figure IX  
Use of “ecstasy”-type substances, by region and in selected subregions, 2021

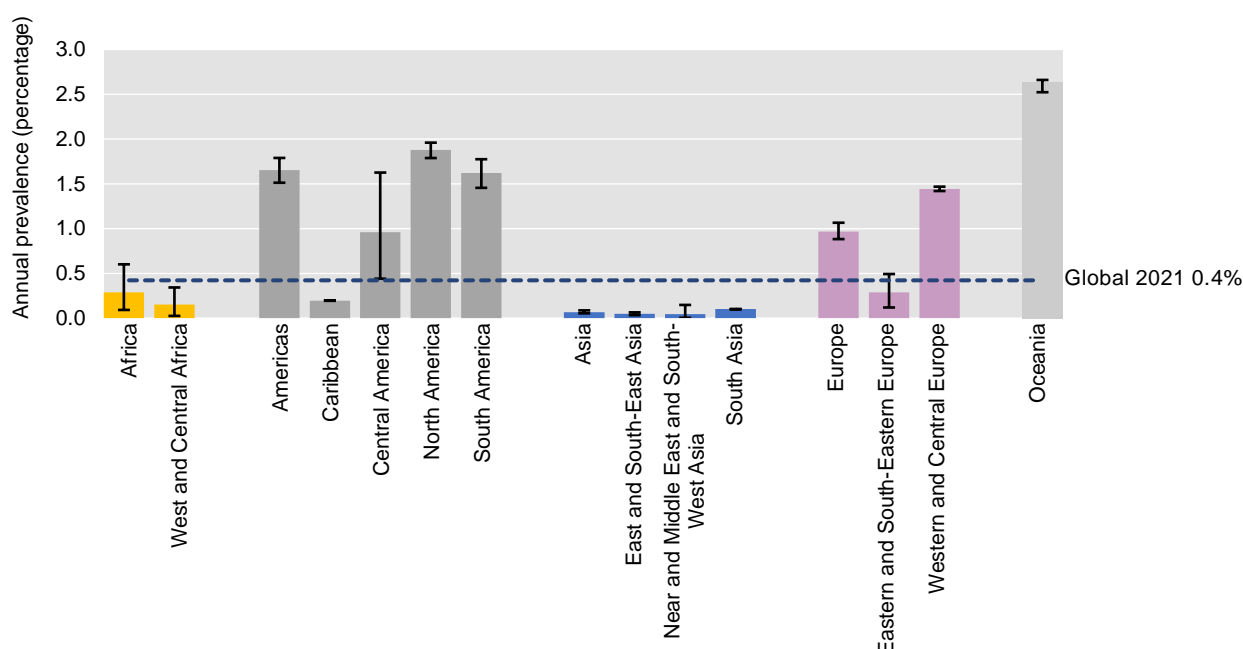


Source: World Drug Report 2023 (data based on responses to the annual report questionnaire).

<sup>9</sup> World Drug Report 2023, online segment.

16. In 2021, an estimated 22 million people used cocaine, representing 0.4 per cent of the global adult population. More people use cocaine in the Americas than in any other region (see figure X). The prevalence of cocaine use is highest in Oceania, followed by North America and Western and Central Europe. Cocaine use has been increasing over the past decade in the main countries of consumption, along with an increase in trafficking and record high levels of manufacture and seizures of cocaine. After a halt during the COVID-19 pandemic, the global market for cocaine has continued to expand. The demand for cocaine in Africa and Asia has also risen over the past two decades, but the level of demand for cocaine may vary in the countries of those regions as a lack of data prevents a clear understanding of the level of use in those two regions.

Figure X  
Use of cocaine, by region and in selected subregions, 2021



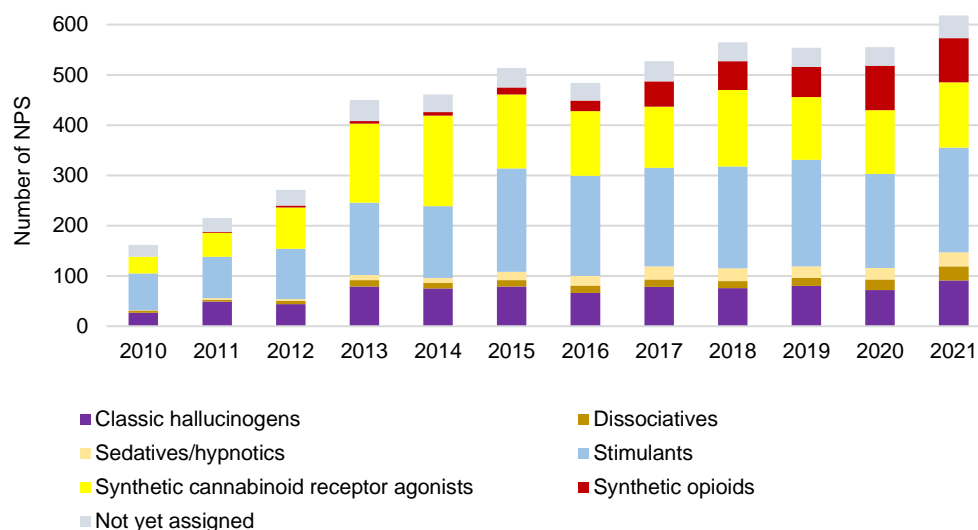
Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

17. The number of different new psychoactive substances identified on the market increased from a total of 555 new psychoactive substances identified in 2020 to 618 in 2021, of which 87 were identified for the first time (see figure XI). The increases were reported in almost all categories other than new psychoactive substances that are opioids, while the number of fentanyl analogues on the market decreased slightly in 2021. The limited data available, mainly from high-income countries, suggest that the most commonly used new psychoactive substances are synthetic cannabinoid receptor agonists (“synthetic cannabinoids”) and ketamine. The use of new psychoactive substances may be decreasing in North America and Europe, but Eastern Europe, Asia and, possibly, Africa are likely experiencing mid-term increases in the use of new psychoactive substances. Many people who use new psychoactive substances use them unknowingly, consuming the substances as adulterants or in place of other drugs, sometimes with fatal consequences. In this context, the emergence of new non-fentanyl opioids, such as the nitazene group of substances and xylazine, a sedative, which are often used as adulterants, is a matter of concern due to their unprecedented health effects.<sup>10,11</sup>

<sup>10</sup> Jolanta B. Zawilska and others, “Non-fentanyl new synthetic opioids”, *Forensic Science International*, vol. 349, art. No. 111775 (August 2023).

<sup>11</sup> Joseph Friedman and others, “Xylazine spreads across the US: a growing component of the increasingly synthetic and polysubstance overdose crisis”, *Drug and Alcohol Dependence*, vol. 233, art No. 109380 (April 2022).

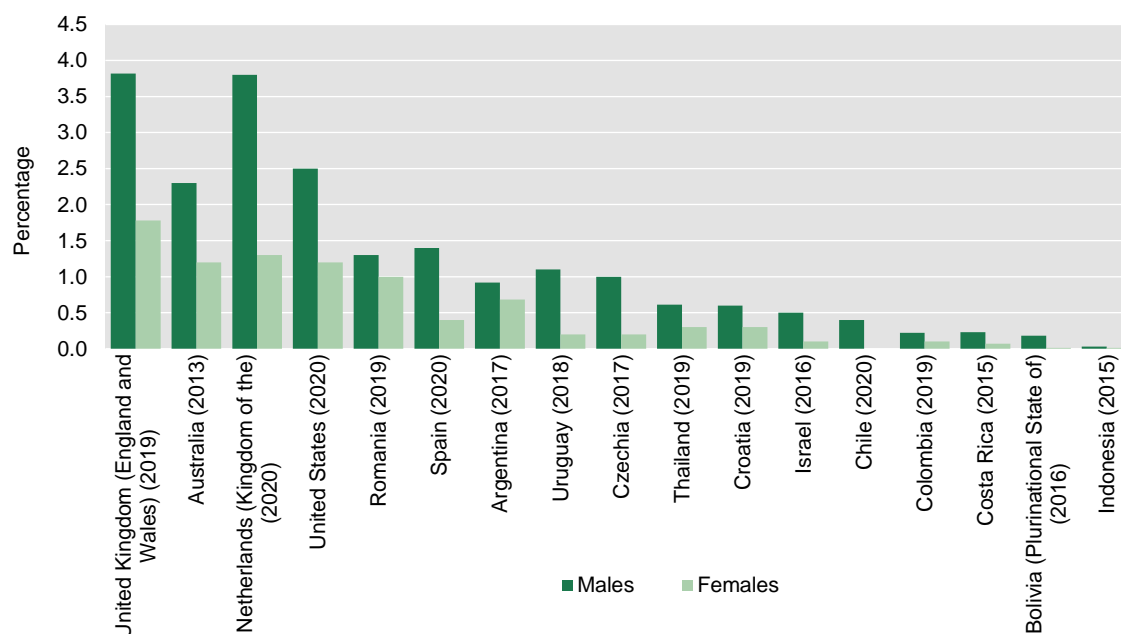
Figure XI  
New psychoactive substances identified in Member States, by effect group,  
2010–2021 (cumulative total)



Source: *World Drug Report 2023* (data based on UNODC early warning advisory on new psychoactive substances).

18. The non-medical use of ketamine (a dissociative anaesthetic not under international control but used in medicine) is not new and, at one point, it was one of the most used drugs in some countries in East and South-East Asia. Regulatory changes have contributed to decreases in non-medical use in the region, although East and South-East Asia remains the subregion most affected by the non-medical use of the drug. The non-medical use of the drug has also recently increased in parts of the world beyond the subregion to Western Europe, the Middle East and a few other countries in South Asia, North Africa and Oceania (see figure XII).

Figure XII  
Lifetime use of ketamine, most recent data from population surveys, by sex,  
2013–2020



Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

## B. Consequences of drug use

19. The adverse health consequences of drug use may include a range of outcomes, such as drug use disorders, mental health disorders, HIV infection, liver cancer and cirrhosis associated with hepatitis, overdose and premature death. Different drugs place different demands on health-care systems. The greatest harms to health are those associated with opioid use disorders and with injecting drugs because of the risk of non-fatal and fatal overdose, and of acquiring HIV or hepatitis C through unsafe injecting practices. While cannabis is rarely associated with drug-related mortality, people who use cannabis account for a substantial share of those in treatment for drug use disorders.<sup>12</sup>

20. In recent decades, recognition of co-occurring mental health disorders among people with substance use disorders has been growing. Although substance use disorders commonly occur together with other mental health disorders, it is often unclear whether one is a cause of the other or if common underlying risk factors have contributed to both disorders.<sup>13</sup> Moreover, an estimated one in eight people globally are living with a diagnosed mental health condition.<sup>14,15</sup> The comorbidity of substance use and mental health disorders presents the additional difficulty of managing them, particularly given the lack of integration of drug treatment and mental health services in many countries.<sup>16</sup>

### 1. People with drug use disorders in drug treatment

21. There is overwhelming evidence that the cost of providing evidence-based treatment for drug use disorders is much lower than the cost of untreated drug dependence.<sup>17</sup> Scientific evidence-based treatment of drug use disorders not only helps to reduce drug-related harm but also improves the health, well-being and recovery of people with drug use disorders while reducing drug-related crime and increasing public safety and positive community outcomes, for example, by reducing homelessness, demand for social services and unemployment.<sup>18</sup>

22. The demand for treating drug-related disorders remains largely unmet and disparities in access persist. Globally, about one in five people with drug use disorders received treatment in 2021, with large disparities across regions and in the type and quality of treatment received. Not all forms of treatment respect human rights or are evidence-based.<sup>19,20</sup> Moreover, women in particular face social and structural barriers in accessing drug treatment services: for example, in 2021, 45 per cent of those who used amphetamine-type stimulants in the past year were women, but only 27 per cent of those in treatment were women. Overall, the lowest proportions of women in drug-related treatment are in Asia and Africa and the highest proportions are in the subregions of Australia and New Zealand, as well as in North America.

23. There is clear regional variation with respect to the most common primary drug reported by people entering drug treatment. For example, in some African countries, cannabis is predominant, while in Eastern and South-Eastern Europe and in Asia, people are primarily in treatment for opioid use disorders. South and Central America

<sup>12</sup> *World Drug Report 2022*, booklet 2, *Global Overview: Drug Demand and Supply* (United Nations publication, 2022).

<sup>13</sup> World Health Organization (WHO) and United Nations Office on Drugs and Crime (UNODC), *International Standards for the Treatment of Drug Use Disorders: Revised Edition Incorporating Results of Field-Testing* (Geneva, 2020).

<sup>14</sup> WHO, Health topics, Fact sheets, “Mental disorders”, 8 June 2022.

<sup>15</sup> “Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019”, *The Lancet Psychiatry*, vol. 9, No. 2 (February 2022), pp. 137–50.

<sup>16</sup> *Ibid.*

<sup>17</sup> WHO and UNODC, *International Standards for the Treatment of Drug Use Disorders*.

<sup>18</sup> *Ibid.*

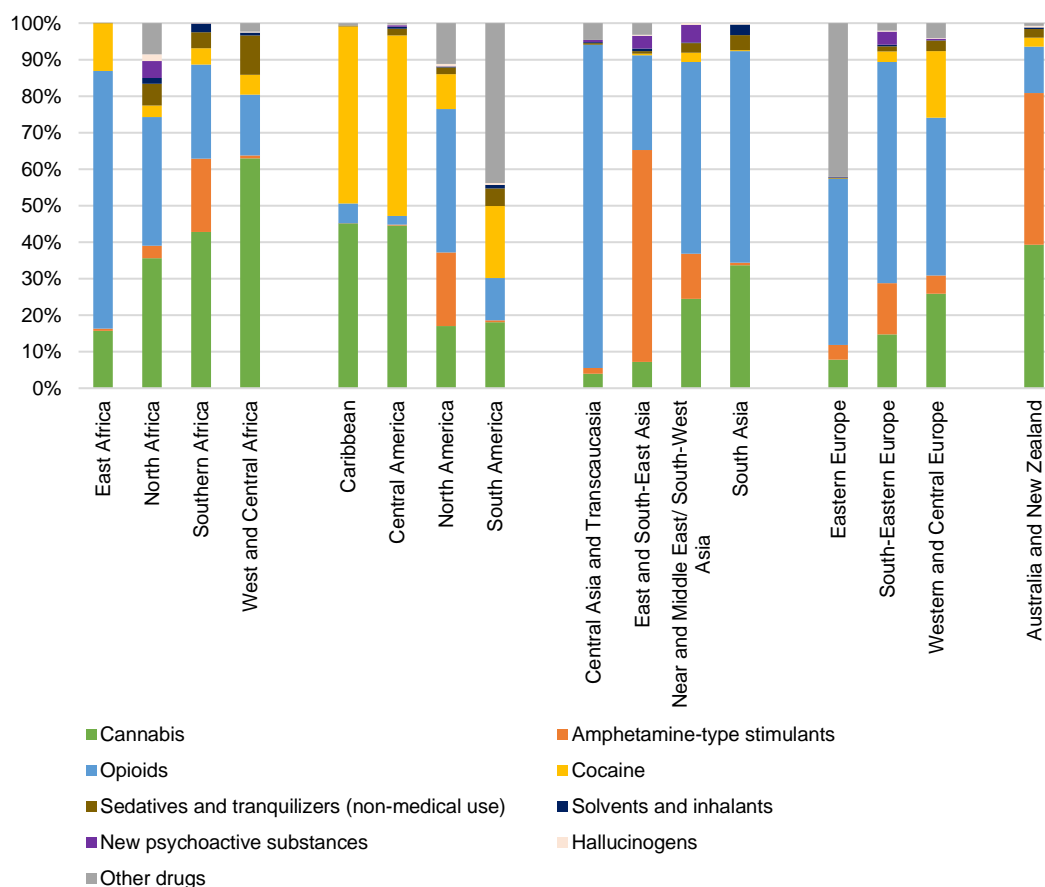
<sup>19</sup> *Ibid.*

<sup>20</sup> UNODC, “Special points of interest”, *World Drug Report 2023* (June 2023).

and the Caribbean have the highest proportions of people in treatment for the use of cocaine-type substances. East and South-East Asia and Australia and New Zealand report the highest proportion of users of amphetamine-type stimulants in drug treatment, particularly people who use methamphetamine (see figure XIII).

Figure XIII

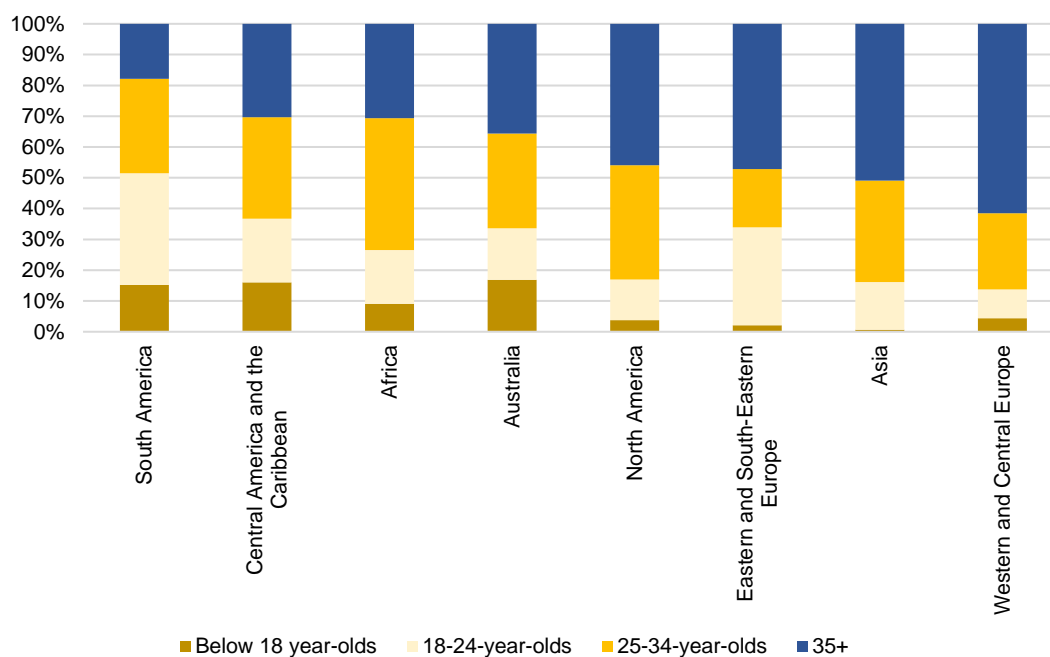
**Global overview of the proportions of people in drug-related treatment according to the primary drug of concern, by subregion, 2021 or the most recent year for which data are available**



Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

24. Although older people who use drugs account for a larger proportion of those in drug-related treatment in some subregions, the same is true of younger people who use drugs in others. Some regions may be faced with an ageing population of people in drug treatment, for instance in Western and Central Europe and Asia where the highest proportion of those in drug treatment were above 35 years of age. On the other hand, Africa, Latin America and the Caribbean have the largest proportion of young people in drug treatment (see figure XIV).

Figure XIV  
**Proportion of people under 35 years of age in drug-related treatment, by region, selected subregions and Australia, 2019–2021**



Source: *World Drug Report 2023* (data based on responses to the annual report questionnaire).

## 2. People who inject drugs

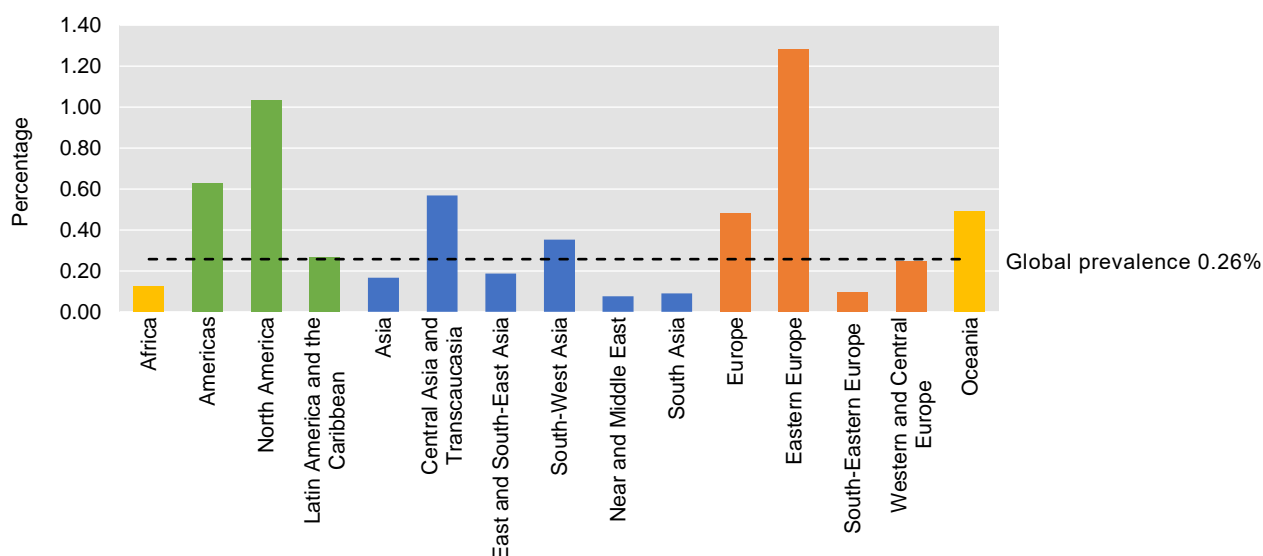
25. People who inject drugs are a particularly vulnerable population that may experience multiple adverse health consequences as a result of injecting drug use. They are at increased risk of acquiring infectious diseases, such as HIV and hepatitis C, through the sharing of contaminated needles and syringes, and are also at high risk of non-fatal and fatal overdose.<sup>21,22</sup>

26. An estimated 13.2 million people (0.26 per cent of the population aged 15–64) were injecting drugs in 2021. This estimate is 18 per cent higher than in 2020 (11.2 million) and is due to newly available estimates for the United States and in some other countries. Eastern Europe (where 1.3 per cent of the adult population inject drugs) and North America (1.0 per cent) remain the two subregions with the highest estimated prevalence of people who inject drugs, and, in absolute terms, North America now has the highest number of individuals that report injecting drugs, ahead of East and South-East Asia (see figure XV).

<sup>21</sup> Bradley M. Mathers and others, “Mortality among people who inject drugs: a systematic review and meta-analysis”, *Bulletin of the World Health Organization*, vol. 91, No. 2 (February 2013), pp. 102–123.

<sup>22</sup> Samantha Colledge and others, “The prevalence of non-fatal overdose among people who inject drugs: a multi-stage systematic review and meta-analysis”, *International Journal of Drug Policy*, vol. 73 (2019), pp. 172–184.

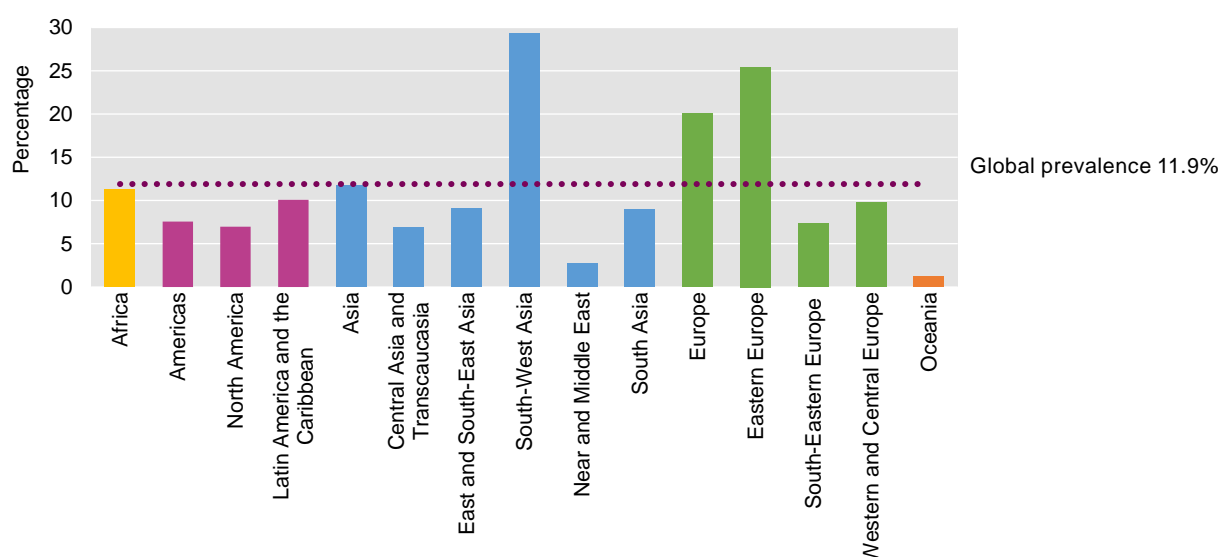
Figure XV  
Prevalence of people who inject drugs, by region and subregion, 2021



Source: *World Drug Report 2023* (UNODC, responses to the annual report questionnaire and UNAIDS Global AIDS Monitoring (several years and published peer-reviewed articles and government reports)).

27. The risk of acquiring HIV is 35 times higher for those who inject drugs than for those who do not inject drugs.<sup>23</sup> The joint UNODC, WHO, UNAIDS and World Bank global estimate for people who inject drugs living with HIV is nearly 12 per cent, which would mean that 1.6 million people (1 in every 8 people) injecting drugs is living with HIV. South-West Asia (29.3 per cent) and Eastern Europe (25.4 per cent) are the two subregions with the highest prevalence of HIV among people who inject drugs (see figure XVI).

Figure XVI  
Prevalence of HIV among people who inject drugs, by region and subregion, 2021



Sources: *World Drug Report 2023* (UNODC, responses to the annual report questionnaire and UNAIDS *Global AIDS Monitoring* (several years and published peer-reviewed articles and government reports)).

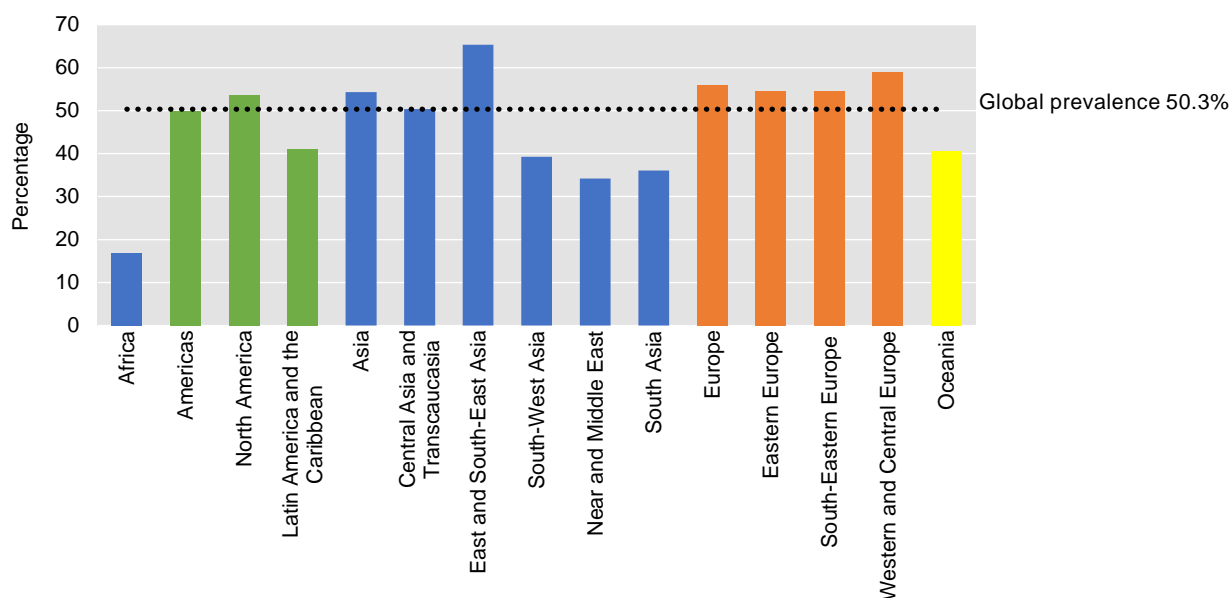
28. Injecting drug use continues to be an important driver of the global epidemic of hepatitis C, with WHO estimating that between 23 and 39 per cent of new hepatitis C

<sup>23</sup> UNAIDS, *Global AIDS Update 2022: In Danger* (Geneva, 2022).

infections occur among people who inject drugs.<sup>24</sup> Based on the joint UNODC, WHO, UNAIDS and World Bank global estimates, every second person injecting drugs is living with hepatitis C (an estimated 6.6 million people) (see figure XVII). For people who inject drugs living with both HIV and hepatitis C, the presence of hepatitis C may complicate HIV treatment, and people living with HIV experience more rapid hepatitis C disease progression. Co-infection among people who inject drugs is very high, as an estimated 82 per cent of people who inject drugs living with HIV are also living with hepatitis C. This equates to approximately 10 per cent of people who inject drugs worldwide, or 1.2 million people.

Figure XVII

**Prevalence of hepatitis C among people who inject drugs, by region and subregion, 2021**



Source: *World Drug Report 2023* (UNODC, responses to the annual report questionnaire and UNAIDS *Global AIDS Monitoring* (several years and published peer-reviewed articles and government reports).

29. Like hepatitis C, hepatitis B is a potentially life-threatening infection. However, unlike hepatitis C, hepatitis B can be prevented by vaccines that are safe and effective. In 2021, the prevalence of hepatitis B among people who inject drugs was estimated as 7.5 per cent, meaning an estimated 1.0 million people who inject drugs worldwide were living with active hepatitis B infection.

30. As is the case with the use of drugs, there are more men than women injecting drugs. Men are 5 times more likely than women to inject drugs (based on limited data from 18 countries), whereas women who inject drugs are 1.2 times more likely than men to be living with HIV (based on data from 58 countries). Women who inject drugs are likely to have a male intimate partner who initiated them into drug use; they are also likely to ask their male partner to inject them. As a result, women who inject drugs are more likely to be exposed to higher risks of transmission of infections, including the risk of exposure through sexual coercion, extradyadic relationships and sex work, in addition to their increased vulnerability to abuse from law enforcement officers and intimate partners. They are also more likely to be victims of physical assault or rape.<sup>25</sup>

<sup>24</sup> WHO, ‘People Who Inject Drugs’, accessed 14 December 2023, [www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/populations/people-who-inject-drugs](http://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/populations/people-who-inject-drugs).

<sup>25</sup> Nabila El-Bassel and others, ‘Intimate partner violence and HIV among drug-involved women: contexts linking these two epidemics — challenges and implications for prevention and treatment’, *Substance Use and Misuse*, vol. 46, Nos. 2 and 3 (January 2011), pp. 295–306.



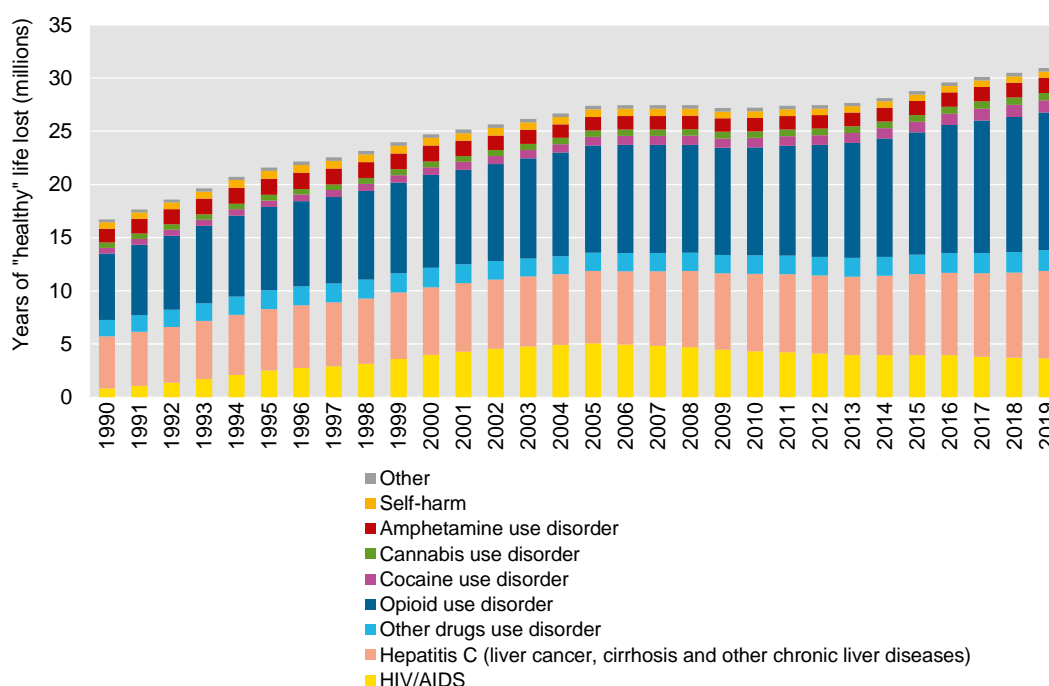
#### 4. Disability-adjusted life years and drug-related deaths

31. In 2019, the Global Burden of Disease Study estimated that 30.9 million healthy years of life were lost due to disability and premature death attributed to the use of drugs. This is an increase of 14 per cent since 2010 (see figure XVIII). More than half of the healthy years of life lost were attributed to drug use disorders.<sup>26</sup>

32. Within the total number of deaths attributed to drug use, there is an important distinction: deaths directly related to drug use disorders, mainly overdoses, and deaths indirectly related to drug use, for example, those attributed to liver cancer or cirrhosis due to hepatitis or HIV, or those attributed to self-harm associated with drug use. In 2019, approximately 500,000 deaths were attributed to drug use globally; more than half of those deaths were attributable to liver cancer, cirrhosis or other chronic liver diseases among people who use or inject drugs, while one quarter were attributable to drug use disorders (128,000 deaths), 69 per cent of which were attributable to opioid use disorders (88,300 deaths) (see figure XIX). Deaths attributed to drug use disorders that are essentially overdose deaths have increased by 45 per cent since 2010.<sup>27</sup>

Figure XVIII

#### Disability-adjusted life years attributable to drug use, 1999–2019

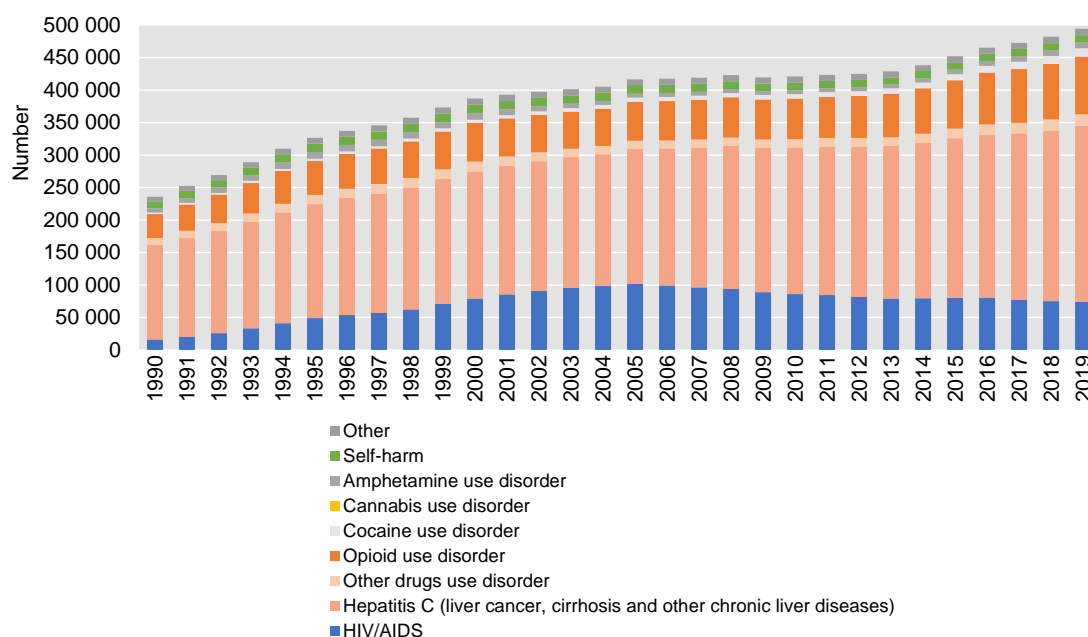


Source: *World Drug Report 2023* (UNODC elaboration based on data from the Institute for Health Metrics and Evaluation, Global Health Data Exchange, IHME Data, “Global Burden of Disease Study 2019 (GBD 2019) Data Resources: GBD Results”).

<sup>26</sup> Institute for Health Metrics and Evaluation, Global Health Data Exchange, IHME Data, “Global Burden of Disease Study 2019 (GBD 2019) Data Resources: GBD Results”.

<sup>27</sup> Ibid.

Figure XIX  
Deaths attributed to the use of drugs, 1999–2019



Source: *World Drug Report 2023* (UNODC elaboration based on data from the Institute for Health Metrics and Evaluation, Global Health Data Exchange, IHME Data, “Global Burden of Disease Study 2019 (GBD 2019) Data Resources: GBD Results”).

### III. Innovations for services for drug use disorders during COVID-19 pandemic

33. In response to the COVID-19 pandemic, most countries in the world introduced measures to curb the spread of the virus in the form of movement restrictions and stay-at-home orders.<sup>28</sup> Such restrictions, together with the overburdening of health-care systems due to COVID-19 infections,<sup>29</sup> compromised access to services aimed at preventing and treating drug use and its consequences.<sup>30</sup> Drug-related treatment data that can be used to compare the pre-pandemic situation with the situation during the pandemic have been reported to UNODC by only 46 countries (see map 2).<sup>31</sup> The majority of these countries reported a decline in the number of people in drug treatment between the periods 2018–2019 and 2020–2021, with further declines from 2020 to 2021 in 18 of the 21 countries that provided data for both years.

34. In an attempt to mitigate this negative impact, there is evidence that numerous service providers and policymakers have actively and creatively sought ways to continue to provide services for people with drug use disorders during the emergency situation created by the COVID-19 pandemic. This is especially relevant in the case of opioid use disorders, which often require a daily intake of internationally controlled medicines.

35. A number of different strategies have been implemented across the globe to ensure continuity in service provision for people who use drugs and suffer from drug use disorders. Such strategies have been broadly categorized as the introduction or scaling up of the use of telehealth approaches, the provision of uninterrupted access

<sup>28</sup> World Health Organization, WHO COVID-19 dashboard. Available at <https://data.who.int/dashboards/covid19/cases> (accessed on 22 March 2023).

<sup>29</sup> Sean M. Murphy and others, “Healthcare utilization patterns among persons who use drugs during the COVID-19 Pandemic”, *Journal of Substance Abuse Treatment*, vol. 121, art. No. 108177 (February 2021).

<sup>30</sup> *World Drug Report 2022* (United Nations publication, 2022).

<sup>31</sup> UNODC, responses to the annual report questionnaire.

to medication or sterile injecting equipment, and other similar approaches. The use of telemedicine approaches has thrived worldwide during the COVID-19 pandemic, although notable gaps in its utilization and challenges remain.<sup>32,33,34</sup> In some countries, telehealth has been implemented for the first time during this period,<sup>35</sup> the most commonly used approaches being telephone calls, followed by free video services.<sup>36</sup> Studies have shown their feasibility and acceptability and increased patient satisfaction, as well as a positive perception by clinicians. Favourable clinical outcomes, including higher patient compliance, improved or unchanged treatment retention and improved abstinence rates, were reported.<sup>37</sup> Telehealth has proved to help not only in overcoming the challenges of the COVID-19 pandemic, but also in addressing traditional barriers to treatment such as childcare or work commitments, transportation challenges and even stigma.<sup>38</sup>

36. Research findings suggest that new or expanded access to take-home dosages was successful in ensuring the continuity of treatment for drug use disorders and has led to increased interest in opioid agonist therapy, and even the successful initiation of treatment in new patients in many countries.<sup>39</sup> Studies have shown that a decrease in the quality of treatment or patient outcomes was not recorded,<sup>40</sup> while patient satisfaction increased,<sup>41</sup> alongside improved quality of life and a sense of accomplishment and self-confidence among patients (i.e. perceived autonomy with increased self-esteem). Savings in resources, including clinicians' working hours, were also often reported.<sup>42</sup>

<sup>32</sup> Milla Rosenlund, Ulla-Mari Kinnunen, and Kaija Saranto, "The use of digital health services among patients and citizens living at home: scoping review", *Journal of Medical Internet Research*, vol. 25 (2023).

<sup>33</sup> Stefano Omboni and others, "The worldwide impact of telemedicine during COVID-19: current evidence and recommendations for the future," *Connected Health and Telemedicine*, vol. 1, No. 1 (2022).

<sup>34</sup> Alaneir de Fátima dos Santos and others, "Telehealth actions to address COVID-19 in Latin American countries", *Telemedicine and e-Health*, vol. 29, No. 11 (November 2023).

<sup>35</sup> Muhammed Elhadi and others, "Utilization of telehealth services in Libya in response to the COVID-19 pandemic: cross-sectional analysis", *JMIR Medical Informatics*, vol. 9, No. 2 (February 2021).

<sup>36</sup> Omboni and others, "The Worldwide impact of telemedicine during COVID-19".

<sup>37</sup> Hossam Mahmoud and others, "Telehealth-based delivery of medication-assisted treatment for opioid use disorder: a critical review of recent developments", *Current Psychiatry Reports*, vol. 24, No. 9 (September 2022), pp. 375–386.

<sup>38</sup> Ibid.

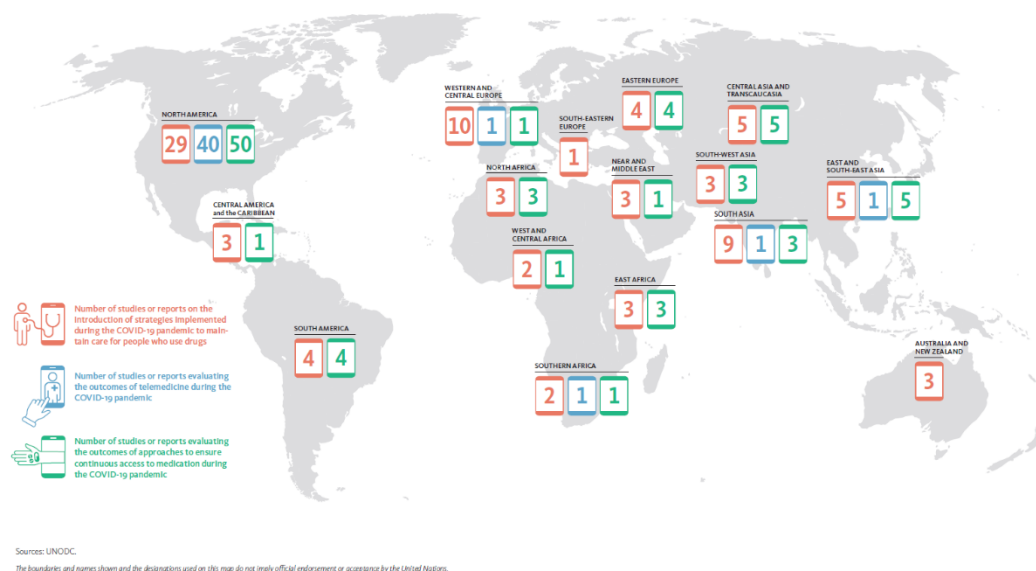
<sup>39</sup> Balasingam Vicknasingam and others, "COVID-19 impact on healthcare and supportive services for people who use drugs (PWUDs) in Malaysia", *Frontiers in Psychiatry*, vol. 12, art. No. 630730 (March 2021).

<sup>40</sup> Wes Williams, "Innovations in methadone medication for opioid use disorder: a scoping review" (Washington D.C., National Academies of Sciences, Engineering and Medicine, 2022).

<sup>41</sup> Noa Krawczyk and others, "Early innovations in opioid use disorder treatment and harm reduction during the COVID-19 Pandemic: a scoping review", *Addiction Science and Clinical Practice*, vol. 16 (2021).

<sup>42</sup> Anna Meteliuk and others, "Rapid transitional response to the COVID-19 pandemic by opioid agonist treatment programs in Ukraine", *Journal of Substance Abuse Treatment*, vol. 121, art. No. 108164 (February 2021).

Map 2  
**Drug treatment services during the COVID-19 pandemic: number of data collections or studies (including as part of reviews) by subregion**



Source: World Drug Report 2023.

37. With regard to take-home dosages, one of the main concerns for clinicians has long been the potential for diversion and overdose, which could have a fatal outcome. Early studies, however, did not show an increase in the number of overdose deaths among opioid agonist therapy patients, while the number of incidents of diversion to the illicit market was rarely reported.<sup>43,44,45</sup>

38. A few challenges related to the expanded provision of take-home dosages have been highlighted in a number of studies, including more frequent dropouts,<sup>46</sup> the lower access of disadvantaged groups to support through telehealth interventions,<sup>47</sup> and the perception of disruption to routines and treatment stability by some patients.<sup>48</sup>

39. Although innovations in the provision of services that started during the pandemic appear to have resulted in early benefits, challenges remain owing to the digital divide, especially in certain geographical areas and in certain marginalized populations that are hard to reach, including the homeless and injecting drug users. Other marginalized groups, such as those with a history of incarceration, people displaced by humanitarian emergencies and sex workers, face other barriers in accessing services.

<sup>43</sup> UNODC, Continuation of Opioid Agonist Therapy and Needle and Syringe Programmes during the COVID-19 Pandemic in UNODC High-Priority Countries for Drug Use and HIV: Situation Report during the First Half of 2020 (Vienna, 2022).

<sup>44</sup> Lauren J. Tanz and others, 'Trends and characteristics of buprenorphine-involved overdose deaths prior to and during the COVID-19 pandemic', JAMA Network Open, vol. 6, No. 1 (January 2023).

<sup>45</sup> Noa Krawczyk and others, 'Synthesising evidence of the effects of COVID-19 regulatory changes on methadone treatment for opioid use disorder: implications for policy', The Lancet Public Health, vol. 8, No. 3 (March 2023, pp. 238–246).

<sup>46</sup> Didier Jutras-Aswad and others, 'Flexible buprenorphine/naloxone model of care for reducing opioid use in individuals with prescription-type opioid use disorder: an open-label, pragmatic, noninferiority randomized controlled trial', American Journal of Psychiatry, vol. 179, No. 10 (October 2022), pp. 726–739.

<sup>47</sup> Williams, 'Innovations in Methadone Medication for Opioid Use Disorder'.

<sup>48</sup> Krawczyk and others, 'Synthesising evidence of the effects of COVID-19 regulatory changes on methadone treatment for opioid use disorder'.

#### **IV. Substance use disorders in humanitarian settings**

40. Humanitarian emergencies lead to large numbers of people being forced to leave their home or country and becoming displaced, either temporarily or for a protracted period. The number of people worldwide who were forcibly displaced in 2022 exceeded 100 million, which was more than double the nearly 43 million who had been forcibly displaced a decade earlier, in 2012.

41. People who are forcibly displaced are among marginalized groups who suffer acute physical and psychological trauma, and elevated levels of socioeconomic vulnerability. As a result, they are likely to suffer elevated levels of social and mental health problems and have an increased vulnerability to substance use disorders. Anxiety, depression and post-traumatic stress disorder are common among displaced people.

42. Among displaced populations, the initiation of or transition to the harmful use of substances is complex. The extent and pattern of substance use is not necessarily dissimilar from that of the general population, but it often needs to be addressed in the context of limited health infrastructures and constrained social and economic resources.

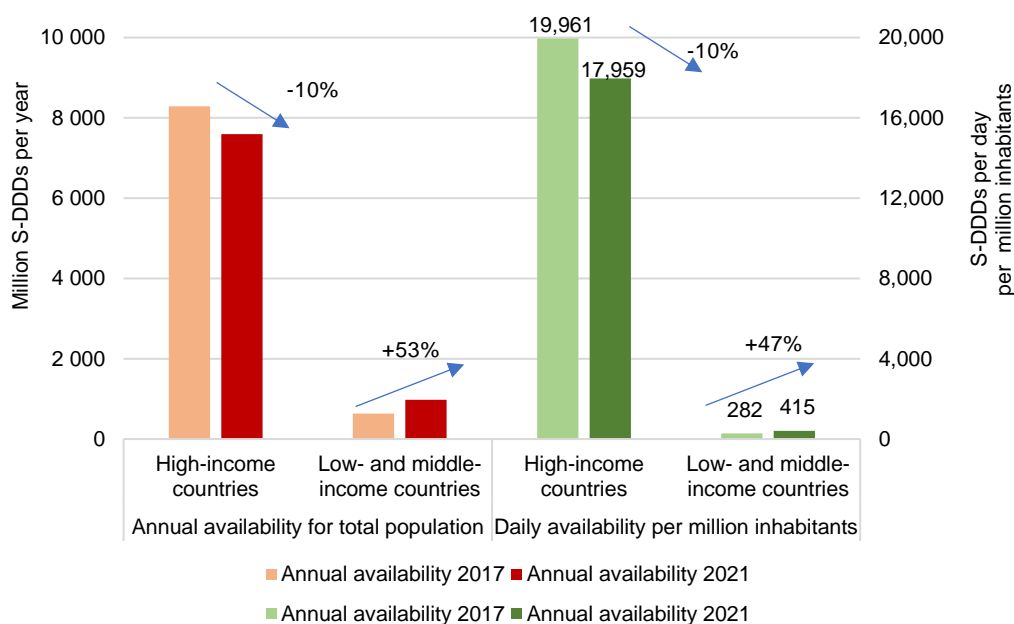
43. The availability and accessibility of mental health services, including drug treatment services, remain a challenge for displaced people, who may face stigma and discrimination when accessing local health services.

#### **V. Access to and availability of internationally controlled opioids for medical use**

44. Large inequalities remain in the availability of internationally controlled opioids for pain management and palliative care. Overall, there is a fortyfold difference in the availability of opioids per capita for pain management and palliative care between high-income and low- and middle-income countries (see figure XX). Some 86 per cent of the world's population live without adequate access to pharmaceutical opioids for pain relief and care.

45. Nevertheless, some progress has been made in recent years, showing some increases in availability in low- and middle-income countries. Overall progress was also made with regard to the availability of methadone and buprenorphine over the last two decades, two opioids which are used not only as analgesics but also as opioid agonist medication in the treatment of opioid use disorders.

Figure XX  
**Amount of opioids under international control (excluding preparations) available for medical consumption, by country income level group, 2017 and 2021**



Source: *World Drug Report 2023* (UNODC calculations based on the World Bank classification of countries by income levels and the INCB reports E/INCB/2022/2 and E/INCB/2022/3).

46. Despite the positive developments, there remains an extremely wide diversity in the availability of opioids for medical purposes worldwide. Although a number of countries in North America, Oceania and Western Europe continue to have high levels of availability, most other countries, in particular countries of Africa and Asia, have extremely low levels of availability of opioids for medical purposes.

## VI. Recommendations

47. It is essential to increase the availability, accessibility, coverage and quality of interventions for the prevention of drug use and the treatment of drug use disorders in line with the second updated edition of the *UNODC/WHO International Standards on Drug Use Prevention* and the *International Standards for the Treatment of Drug Use Disorders*.

48. Furthermore, it is recommended to strengthen services and interventions aimed at minimizing the adverse public health consequences of drug use based on the *WHO, UNODC, UNAIDS Technical Guide for Countries to Set Targets for Universal Access to HIV Prevention, Treatment and Care for Injecting Drug Users: 2012 Revision*, as well as to strengthen prevention, harm reduction and treatment interventions for people in contact with the criminal justice system and in prison settings.

49. Special attention needs to be given to the availability and accessibility of gender-responsive interventions and services, including for women who are pregnant, as well as for people in vulnerable circumstances such as adolescents and youth, people in humanitarian settings, and those who come into contact with the criminal justice system and in prisons.

50. Given the disproportionate levels of harm and the large gap in accessing services experienced by certain populations who use drugs and with drug use disorders, it is suggested to put additional effort into the design and implementation of policies and programmes addressing the specific needs of populations such as individuals experiencing homelessness, sex workers, those suffering from trauma and people with additional mental health comorbidities.

51. To prevent opioid overdose deaths, it is key to promote opioid agonist therapy, and interventions for the management of overdose, including the community-based provision of naloxone, which allows for the safe, on-the-spot management of opioid overdoses.

52. In order to facilitate access to controlled medicines, including for the management of pain and palliative care, for those who need them, while at the same time preventing their diversion and misuse, countries may consider reviewing legislation, regulation and policies; strengthening the education of health workers with regard to the safe and rational prescription of controlled medicines, including for pain management; reviewing the supply chain management to address the bottlenecks in making available and accessible controlled medicines; and educating patients, their families and the wider community.

53. The evidence base for policies and programmes at the national, regional and international levels requires reliable and valid data, disaggregated by age and sex, on the drug situation and responses. That makes it necessary to improve the evidence base through support in the implementation of drug monitoring systems on the basis of epidemiological indicators of drug use, including by building the capacity of experts in high-priority countries and regions, and developing innovative methods and the use of new technology, such as the use of social media and big data, in order to understand the patterns and trends of drug use and associations relating to people's behaviour and to predict health outcomes.

54. The strengthening and expansion of the global base of scientific evidence also requires investing in the monitoring and evaluation of the process, outcome and impact of drug prevention and treatment strategies and measures aimed at minimizing the adverse public health consequences of drug use to ensure their effectiveness and minimize the risk of negative outcomes.

55. Some indicators for monitoring the drug situation require particular attention and would benefit from the development and implementation of innovative and cost-effective methods for estimating the extent of drug use, disaggregated by sex, among the general population and high-risk drug users, including those who inject drugs, in resource-constrained countries; drug-related mortality; the number of people with drug use disorders; and the number of people in treatment for drug use disorders. The latter two are the key components of the monitoring and reporting of Sustainable Development Goal indicator 3.5.1, on coverage of treatment interventions for substance use disorders.

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