

2.1 Understanding the extent and nature of drug use

Globally, UNODC estimates that between 155 and 250 million people, or 3.5% to 5.7% of the population aged 15-64, had used illicit substances at least once in the previous year. Cannabis users comprise the largest number of illicit drug users (129-190 million people). Amphetamine-type stimulants are the second most commonly used illicit drugs, followed by opiates and cocaine. However, in terms of harm associated with use, opiates would be ranked at the top.

A comprehensive understanding of the extent of the drug use problem requires a review of several indicators – the magnitude of drug use measured by prevalence (lifetime, annual, past 30 days) in the general population, the potential of problem drug use as measured by drug use among young people, and costs and consequences of drug use measured by treatment demand, drug-related morbidity and mortality. Additionally, to understand the dynamics of drug use in a country or region, it is important to look at the overall drug situa-

tion rather than merely the trends for individual drugs. This information helps to discern the extent to which market dynamics (availability, purity and price) have temporarily influenced the use, compared to results of long-term efforts such as comprehensive prevention programmes and other interventions to address the drug use situation.

To illustrate, long-term trends in use of different drugs and overall drug use are presented for the United States of America, the United Kingdom, Australia and Spain where trend data over a longer period of time is available. Although short-term changes and trends might be observed in the use of different drugs, long-term trends suggest that the magnitude of the core of the problem does not change considerably in a few years. Indeed, to impact the drug use situation, long-term interventions for prevention of drug use and drug dependence treatment and care, along with supply reduction efforts, are required.

Fig. 92: Illicit drug use at the global level, 2008

Source: UNODC

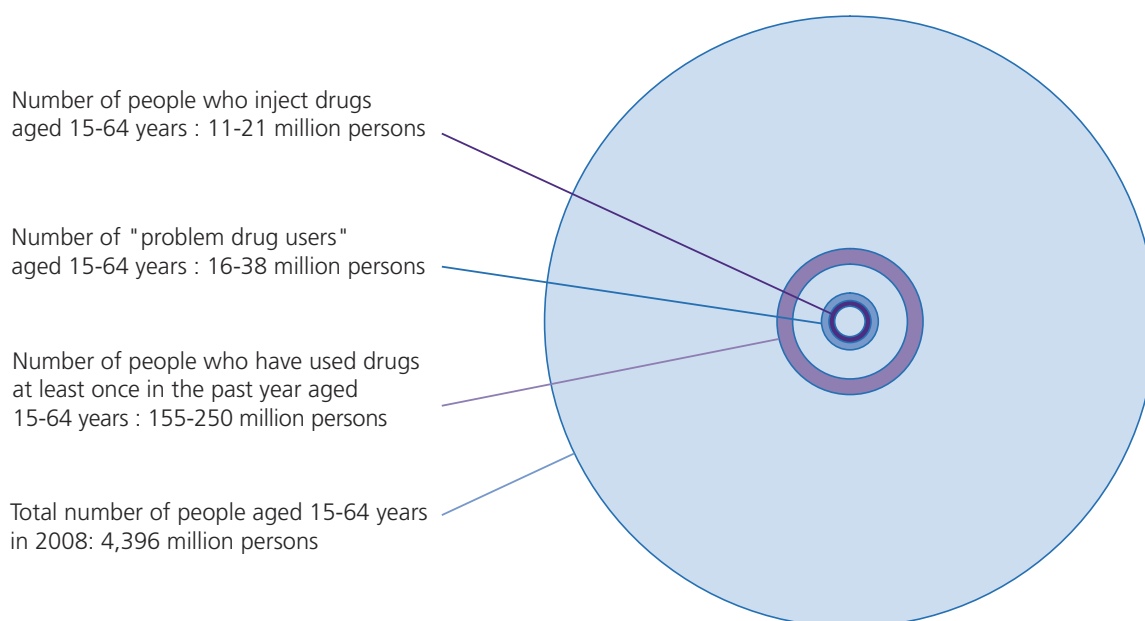


Fig. 93: United States: Dependence on or abuse of drugs in the past year among persons aged 12 or older, 2002-2008*

* The difference between the estimates was only statistically significant for opioid painkillers in 2003/2004 and 2008.

Source: Substance Abuse and Mental Health Services Administration, *Results from the 2000-2008 National Survey on Drug Use and Health: National Findings*, Office of Applied Studies, US Department of Health and Human Services

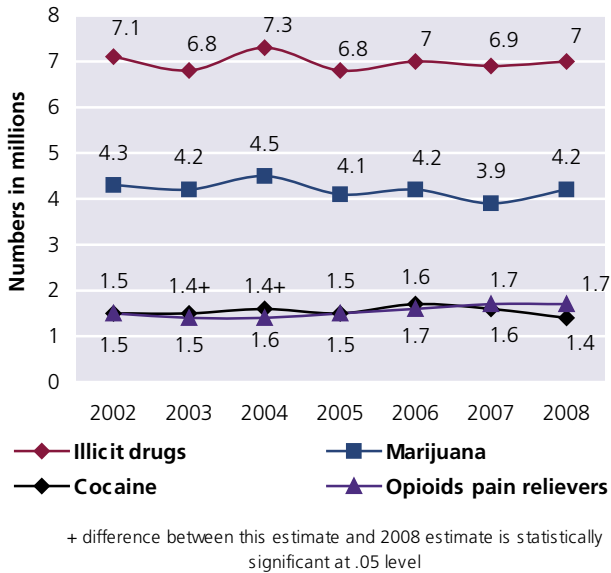


Fig. 94: US: Types of drug use in the past year among persons aged 12 and older, 2000-2008

Source: Substance Abuse and Mental Health Services Administration, *Results from the 2000-2008 National Survey on Drug Use and Health: National Findings*, Office of Applied Studies, US Department of Health and Human Services

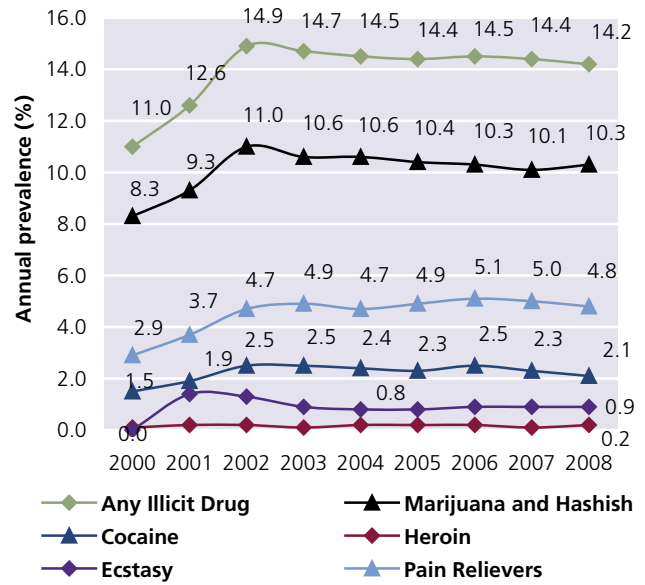


Fig. 95: UK: drug use trends among population aged 16-59, 2000-2008/2009

Source: Hoare J, Home Office Statistical Bulletin, *Drug Misuse Declared: Findings from the 2008/09 British Crime Survey, England and Wales*, Home Office, UK July 2009

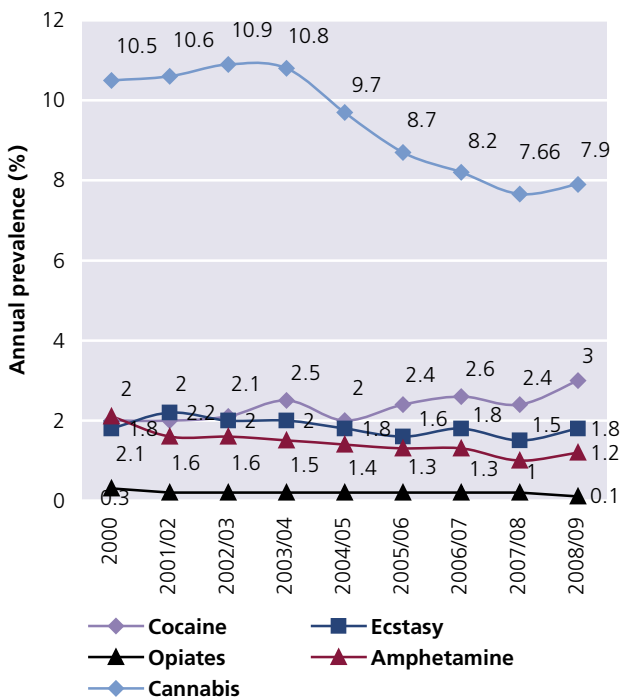


Fig. 96: Australia: drug use trends among population aged 14 and over, 1991-2007

Source: Australia, *National Campaign Against Drug Abuse Household Surveys 1991, 1993, National Drug Strategy Household Survey 1995, 1996, 2001, 2004 and 2007*

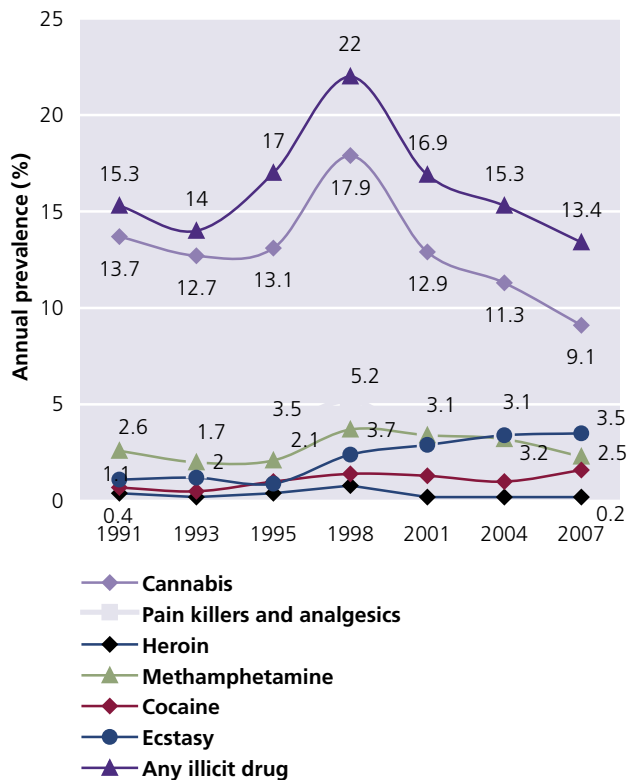
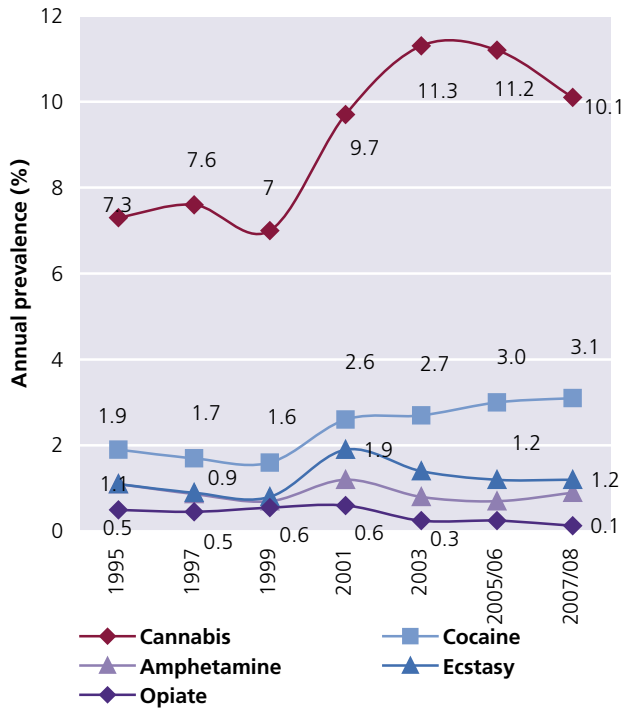


Fig. 97: Spain: drug use trends among population aged 15-64, 1995-2007/08

Source: UNODC and EMCDDA



Problem drug use

At the core of drug use lie the problem drug users; those that might be regular or frequent users of the substances, considered dependent or injecting and who would have faced social and health consequences as a result of their drug use. Information on problem drug users from a policy and programme planning perspective is important as this drives the need and nature of the services required to address the diverse needs for treatment and care of drug dependent persons.

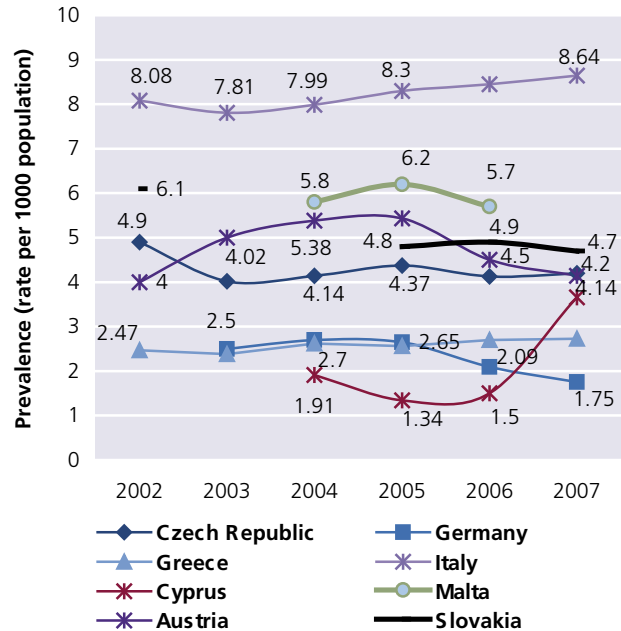
Lack of a global standard definition of a problem drug user

One of the main challenges for UNODC remains the compilation of data reported by Member States and their comparability across countries and regions. The Commission on Narcotics Drugs in its forty-third session in 2000 endorsed the paper on 'Drug information systems: principles, structures and indicators'¹ – also known as the 'Lisbon Consensus Document'. The document outlines the set of core epidemiological indicators to monitor the drug abuse situation, against which Member States could report their respective situations through the Annual Reports Questionnaire (ARQ). One of the core indicators in the paper was 'high-risk drug consumption'. The assumption was that some drug-

1 Drug information systems: principles, structures and indicators (E/CN.7/2000/CRP.3).

Fig. 98: Europe: Estimated trends in overall problem drug use in selected countries from where data was available (2002-2007), rate per 1,000 population aged 15-64

Source: EMCDDA – Statistical Bulletin 2009



taking behaviours were particularly associated with severe problems and as such merit the attention of policymakers. The document further elaborated that high-risk consumption included information on the number of drug injectors, estimates of daily users and those who are dependent. One challenge in measuring problem drug users or high-risk drug consumption is that most of these behaviours are hidden and have low prevalence. Therefore, they are poorly covered by general population estimates. Specific methods are required to gather information on such behaviours.

Out of the 110 Member States who responded to the 2008 ARQ on the extent and pattern of drug use, only 24 reported information on problem drug use. The definitions and methods of calculation differ from country to country. One country in Africa defines problem drug use as "drug users who constitute social harm and insecurity and drug users who relapse after rehabilitation."² In North America, the DSM-IV³ defines the criteria for illicit drug dependence or abuse, while one country in Asia only considers heroin injectors as problem drug users. The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), in its efforts to compile comparable information on problem drug use, defines it as "injecting drug use or long duration/regular use of

2 ARQ: Nigeria 2008.
 3 American Psychiatric Association, *Diagnostic and Statistical Manual on Mental Disorders* (see Box in cocaine market chapter).

Drug use – nature and typology

Scientific evidence indicates that the drug use is a result of a complex multifactorial interaction between repeated exposure to drugs, and biological and environmental factors. In recent years, the biopsychosocial model has recognized drug dependence as a multifaceted problem requiring the expertise of many disciplines. A health sciences multidisciplinary approach can be applied to research, prevention and treatment of drug use.

Recreational

Some forms of drug use are associated with recreational settings or specific sub-populations, for example, ecstasy use, which is found more among young people and associated with particular lifestyle and events (parties, night-clubs and dance events) seen in many affluent societies. Also among those who use drugs in recreational settings, a significant proportion could be induced to substance abuse with the purpose of coping with anxiety, poor emotional skills, poor capacity to manage stressful stimuli and difficult environmental situations, poor engagement in school and lack of vocational skills.

Society, family, life experience

Use of opiates, cocaine, amphetamine and methamphetamine, and those injecting, account for a substantial proportion of dependent or problem drug users (however defined). These drug users also tend to be more chronic users, with associated psychiatric and medical co-morbidities, and are either stigmatized or come from marginalized segments of society. Many studies have shown a strong association between poverty, social exclusion and problem drug use.

Studies also suggest the possibility that childhood experiences of neglect and poor parent-child attachment may partially contribute to a complex neurobiological derangement and dopamine system dysfunctions, playing a crucial role in susceptibility to addictive and affective disorders.¹

Different kinds of adverse childhood experiences, such as self-reported supervision neglect, physical neglect, physical assault and contact sexual abuse, have been reported in association with adolescent cigarette, alcohol, cannabis and inhalant use, as well as violent behaviour.²

Epidemiological data also show a frequent association between stress-related disorders such as post traumatic stress disorder (PTSD) and substance use disorder. Studies have examined the association between traumatic exposure, PTSD and substance use that have shown early onset of marijuana and heroin use, while alcohol dependence and opiate dependence were each associated with exposure to a traumatic event.³

Psychiatric disorders

Further studies have shown that individuals with lifetime mental disorder were three times more likely than others to be dependent on substances. Patients suffering from bipolar disorders (manic-depressive disorders) are more likely to be using psychoactive substances compared with those suffering from unipolar major depression.⁴ On the other hand, use of psycho-stimulants such as amphetamine or cocaine and cannabis can also induce psychotic-like symptoms in users.

- 1 Gerra G. et al., "Childhood neglect and parental care perception in cocaine addicts: Relation with psychiatric symptoms and biological correlates," *Neuroscience and Biobehavioral Reviews*, 33 (2009) 601-610.
- 2 Hussey J.M., Chang J.J. and Kotch J.B., "Child maltreatment in the United States: prevalence, risk factors, and adolescent health consequences", *Pediatrics*, September 2006, 118(3):933-942.
- 3 Gerra G., Somaini L., Zaimovic A., Gerra M L., Maremmanni I., Amore M. and Ciccocioppo R., *Developmental Traumatic Experiences, PTSD and Substance Abuse Vulnerability: The Neurobiological Link*, Neurobiology of Post Traumatic Stress Disorder, June 2010 ISBN: 978-1-61668-851-6.
- 4 World Health Organization *Neuroscience of psychoactive substance use and dependence*, Geneva 2004.

opiods, cocaine and/or amphetamines."⁴ The broad scope and differences in defining and understanding problem drug use in different regions signifies the need for setting common parameters, based on an already acceptable definition or criterion, for example, DSM-IV or ICD – 10 (WHO International Classification of Diseases – Revision 10), for determining, reporting and comparing the extent of harmful or high risk drug use at global level.

⁴ EMCDDA *Guidelines for Estimating the Incidence of Problem Drug Use*, February 2008.

The global number of problem drug users is stable

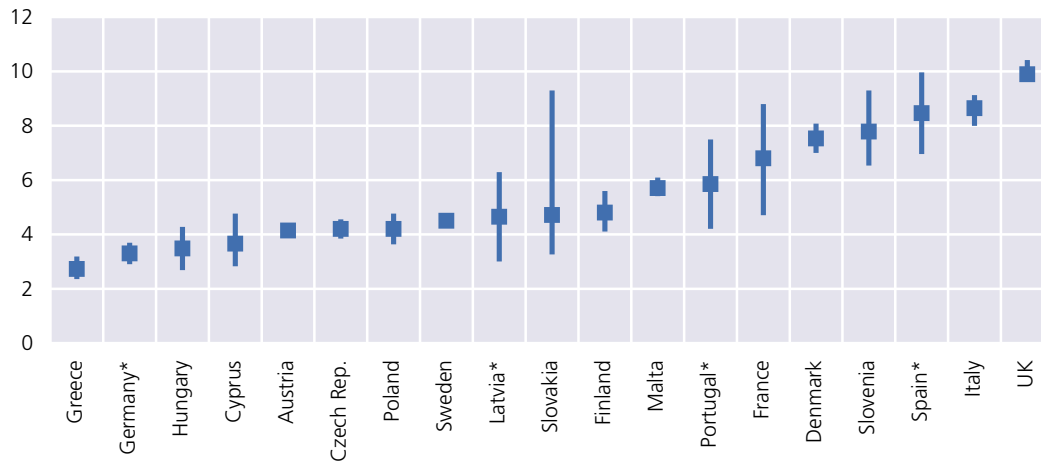
Based on the global estimates of cannabis, opiate, cocaine and amphetamine-type stimulant users, and using the relative risk coefficient,⁵ it is estimated that in 2008, there were between 16 and 38 million problem drug users (between 10%-15% of estimated drug users) in the world. The broad range of the estimate reflects the uncertainties in the available data globally.

⁵ The relative risk coefficient takes opiates as the index drug and calculates the coefficient for treatment, injecting drug use, toxicity and deaths.

Fig. 99: Europe: Estimates of problem drug use (rate per 1,000 population aged 15-64)*

* The methods for estimation of problem drug users differ between countries, but include capture/recapture, treatment multiplier, police multiplier, et cetera.

Source: EMCDDA, *Statistical bulletin 2009: Problem drug use population, 2009*



In Europe, the prevalence rate of problem drug users varies between 2.7 in Greece and 9.0 in UK as rate per 1,000 population aged 15-64. The United Kingdom, Italy and Spain are on the higher end of the range, whereas Greece, Germany and Hungary are countries with low rates of problem drug use.

In the United States, 7 million people - or 2.8% of the population aged 12 and older - were considered substance dependent, abusing illicit substances in 2008. Cannabis was the illicit substance with the highest rate of past year dependence, followed by pain relievers (opioids) and cocaine.⁶ In Canada, 2.7% of the population aged 15 and older were reported to have experienced at least one type of harm in the past year due to illicit drug use. 'Harm' in the Canadian reports is classified as harm to physical health, or in the social, employment and legal spheres.⁷

Injecting drug users (IDU)

Among the most problematic drug users are those who inject drugs. The last available estimate of the global number of IDU remains the one developed by the UNODC/UNAIDS reference group in 2008, which estimated that there are 15.9 million people who inject drugs (between 11 – 21.2 million).⁸ Of these, 3 million may be living with HIV (range 0.5-5.5 million). East

Europe (1.5%) and Australia and New Zealand (1.03%) have a high prevalence of injecting drug use. In absolute numbers, East Europe has one of the highest numbers of injecting drug users. In East Europe most of the injectors are using opiates, while in Australia and New Zealand, methamphetamine is the main substance being injected.

Gap in provision of services to problem drug users

The estimate of the global number of problem drug users provides the range of the number of people who need assistance to address their drug problems, including treatment of drug dependence and care. Comparing this with the number of people who are in treatment provides the magnitude of the unmet need for treatment of illicit drug use. Notwithstanding the gap in reporting and coverage of services, Member States reported that between 42% (in South America) and 5% (in Africa) of problem drug users were treated in the previous year. It can be estimated that globally, between 12% and 30% of problem drug users had received treatment in the past year, which means that between 11 million and 33.5 million problem drug users in the world have an unmet need for treatment interventions.

During the High-level Segment of the Commission on Narcotic Drugs in 2009, Member States adopted a Political Declaration and Plan of Action. The Plan of Action called for Member States to ensure that access to drug treatment is affordable, culturally appropriate and based on scientific evidence, and that drug dependence care services are included in the health care systems. It also called for the need to develop a comprehensive treatment system offering a wide range of integrated pharmacological (such as detoxification and opioid agonist and antagonist maintenance) and psychosocial (such as counselling, cognitive behavioural therapy and social support) interventions based on scientific evidence and

6 Substance Abuse and Mental Health Services Administration, *Results from the 2008 National Survey on Drug Use and Health: National Findings*, US Department of Health and Health Services, Office of Applied Studies.

7 Health Canada, *Canadian Alcohol and Drug Use Monitoring Survey: Summary of Results for 2008*.

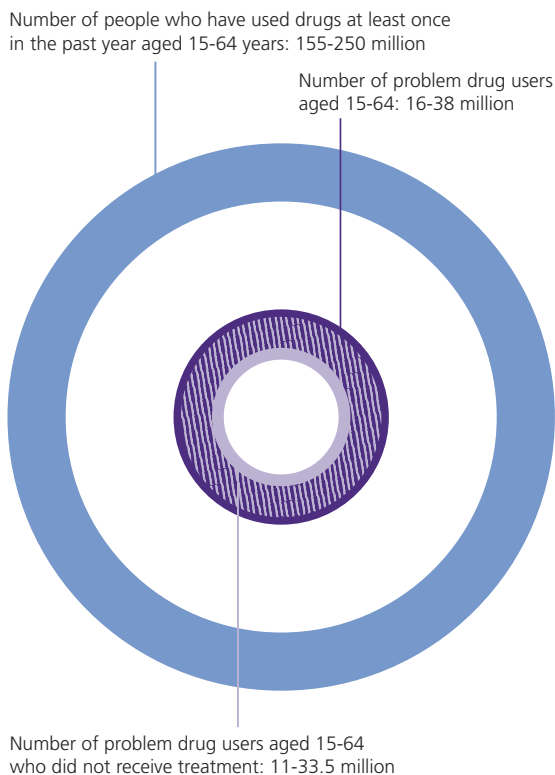
8 Mathers B.M., Degenhardt L., Ali H., Wiessing L., Hickman M., Mattick R.P., et al. "HIV prevention, treatment and care services for people who inject drugs: a systematic review of global, regional and national coverage," *The Lancet*, 2010; 375(9719):1014-28.

focused on the process of rehabilitation, recovery and social reintegration.⁹

The costs for the delivery of evidence-based treatment is seen to be much lower than the indirect costs caused by untreated drug dependence (prisons, unemployment, law enforcement and health consequences). Research indicates that spending on treatment produces savings in terms of a reduction in the number of crime victims, as well as reduced expenditures for the criminal justice system. At a minimum there was a 3:1 savings rate, and when a broader calculation of costs associated with crime, health and social productivity was taken into account, the rate of savings to investment rose to 13:1. These savings can improve disadvantaged situations where opportunities for education, employment and social welfare are undermined, and increase possibilities for families to recover battered economies, thus facilitating social and economic development.¹⁰

Fig. 100: Unmet need for treatment interventions, 2008

Source: UNODC



9 UNODC, *Political Declaration and Plan of Action on International Cooperation Towards an Integrated and Balanced Strategy to Counter the World Drug Problem*, High-level segment, Commission on Narcotic Drugs, Vienna, 11-12 March 2009

10 UNODC and WHO, *Principles of Drug Dependence Treatment: Discussion Paper*, March 2008, also see Gossop M, Marsden J and Stewart D, *The National Treatment Outcome Research Study: After 5 years – Changes in substance use, health and criminal behaviour during the five years after intake*, National Addiction Centre, London 2001.

Assessment of the services provided to injecting drug users to respond to HIV

The morbidity and mortality associated with injecting drug use (IDU) is a global public health issue. Of particular significance is the spread of HIV between people who inject drugs, through the sharing of injecting equipment, and through sexual transmission to the wider population.

Responding to IDU is an essential component of the global response to HIV. During the 2009 High-level Segment of the Commission on Narcotic Drugs and in other forums, countries and UN agencies centrally involved in the HIV response for injecting drug users - UNODC, WHO and UNAIDS - endorsed a comprehensive package of interventions that are necessary to prevent and control HIV among IDUs.¹ These include: needle and syringe programmes (NSP); opioid substitution therapy (OST) and other drug treatment modalities; HIV testing and counselling; antiretroviral therapy for HIV (ART); targeted information and education for IDUs; prevention and treatment of viral hepatitis, sexually transmitted diseases and tuberculosis; and condom distribution programmes.

NSPs provide clean injecting equipment to IDUs; a crucial way to reduce injecting risk, and a contact point for providing health information to IDUs. These exist in 82 of the 151 countries where injecting drug use is known to occur. Only 7.5% (range 5.4%-11.5%) of IDUs worldwide are estimated to have accessed an NSP in a 12-month period. Globally, 22 clean syringes are estimated to be distributed per IDU in a year, meaning most injections worldwide occur with used injecting equipment.

Long acting opioid maintenance therapy, or opioid substitution programmes (OST) have been introduced in 71 countries, but remain absent in many where the prevalence of opioid injection is high. It is estimated that globally there are only 8 (range 6-12) OST recipients for every 100 IDUs, suggesting coverage of only a small proportion of IDUs who might benefit from this treatment for drug dependence.

ART is important not only for treating IDUs who have contracted HIV, but also in preventing HIV transmission.² From the limited data available, it is estimated

1 WHO/UNODC,UNAIDS, WHO, UNODC, UNAIDS *Technical Guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users*, Geneva, 2008.

2 Degenhardt L., Mathers B.M., Vickerman P., Hickman M., Rhodes T., Latkin C., "HIV prevention for people who inject drugs: Why individual, structural, and combination approaches

that 4 (range 2-18) HIV-positive IDUs receive ART for every 100 IDUs living with HIV. Although coverage is high in many western European countries, access to ART

is limited for IDUs throughout the rest of the world, with rates of coverage lower than for other people living with HIV.³

Map 13: Availability of HIV prevention services for injecting drug users

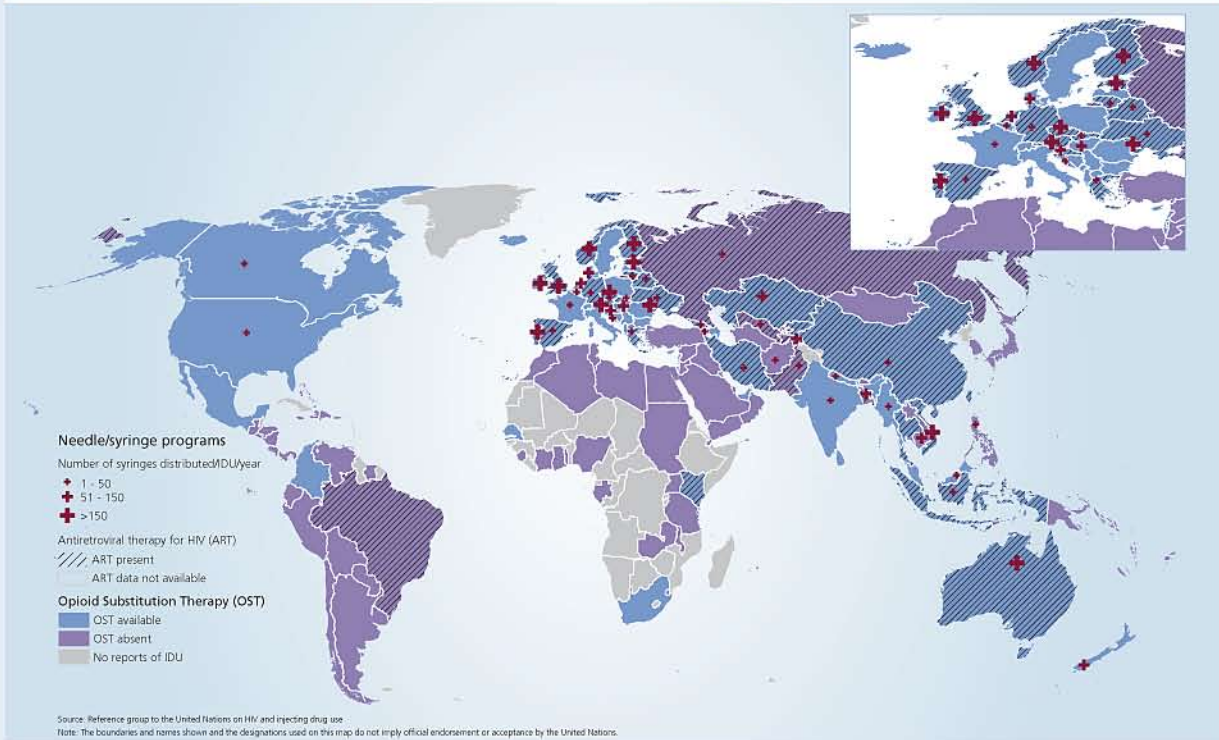


Table 13: Regional and global estimates of the coverage of NSP, OST and ART for IDUs

Note: For details of the data on which these estimates are based, please see footnote 10. The number of countries for whom data were located varies across indicators and regions. Details can be examined elsewhere (footnote 10) and country reports are available at www.IDUrefgroup.com.

Region	Needles-syringes distributed per IDU per year (range)	Number of OST recipients per 100 IDUs (range)	Number of IDUs receiving ART per 100 IDUs living with HIV (range)
East Europe	9 (7 – 14)	1 (<1 – 1)	1 (<1 – 44)
West Europe	59 (39 – 89)	61 (48 – 79)	89 (52 – XXXX)
East and South-East Asia	30 (7 – 68)	3 (3 – 5)	4 (2 – 8)
South Asia	37 (27 – 50)	19 (15 – 25)	1 (1 – 2)
Central Asia	92 (71 – 125)	<1 (<1 – <1)	2 (1 – 3)
Caribbean	–	5 (4 – 7)	–
Latin America	<1 (<1 – 1)	1 (<1 – <1)	1 (1 – 4)
Canada and United States	23 (17 – 33)	13 (9– 19)	–
Pacific Island States and Territories	<1 (<1 – <1)	0	0
Australasia	202 (148 – 334)	23 (17 – 39)	22 (10 – 89)
Middle East and North Africa	<1 (<1 – 1)	1 (<1 – 1)	–
Sub-Saharan Africa	<1 (<1 – <1)	1 (<1 – <1)	<1 (<1 – 2)
GLOBAL	22 (12 – 42)	8 (6 – 12)	4 (2 – 18)

are required," *The Lancet* 2010 (in press).

3 Wolfe D., Carrieri M.P., Shepard D., Walker D., "Treatment and Care for HIV-infected People who Inject Drugs: A Review of Barriers and Ways Forward," *The Lancet* (in press).

Effective treatment for heroin and crack dependence: UK Drug Treatment Monitoring System Outcomes Study Group

In the United Kingdom, using data from the national Drug Treatment Monitoring System, a prospective cohort study looked at treatment outcomes of 14,656 heroin and crack addicts. The effectiveness of treatment was assessed from changes in the days of heroin or crack cocaine use or both in the 28 days before the start of treatment and in the 28 days before the study review.

The study shows that the first six months of pharmacological or psychosocial treatment is associated with reduced heroin and crack cocaine use, but the effectiveness of pharmacological treatment is less pronounced for users of both drugs.

Source: Marsden J, Eastwood B, et al, *Effectiveness of community treatments for heroin and crack cocaine addiction in England: a prospective, in-treatment cohort study*

Trends in the main drugs of concern in problem drug users as indicated by treatment demand

An analysis of the number of treatment services provided in a country according to the main drug for admission can provide information on the drugs that are most problematic in terms of health and social consequences and need for intervention.

The treatment demand data presented here cover the 10-year period from the late 1990s to 2008. Data for all but 2008 were published in the *World Drug Report 2000* (for 1997/1998, labelled as the late 1990s) and WDR 2005 through 2009 (for the years 2003 to 2007, or latest year available at the time of publication).

The data show that there is generally, in each region, a clear, and over the past 10 years consistent, drug type that dominates treatment. This suggests marked regional differences in the drugs that affect problem drug users. Indeed, in the last decade, the primary drug for treatment has remained cannabis in Africa, cocaine in South America and opiates in Asia and Europe. The two notable exceptions are: 1) North America, where a dominant drug for treatment demand does not emerge, and rather, the percentage breakdown of drugs has become more uniform over time, and 2) Oceania, which has experienced over time one of the biggest changes in the primary treatment drug from opiates to cannabis.

The changes observed over the last decade in the contribution that each drug has made to treatment admissions suggest an ongoing diversification of problem drug users

in some regions. The contribution of cannabis to treatment demand is increasing in Europe, South America and Oceania, while admissions for synthetic opiates in North America sharply increased in the last few years, compensating for decreased admissions for heroin. In Europe, the admissions for stimulants (cocaine and amphetamine-type stimulants) and cannabis have also increased over time, in parallel with a decline in admissions for opiates.

Interpreting trends in treatment demand data is challenging as patterns and trends over time can reflect a mixture of factors, such as:

- the development and improved coverage of drug treatment reporting systems;
- statistical artefacts, for example, resulting from different countries reporting in a region in different time periods (notably in Africa);
- changing patterns of consumption including prevalence, frequency of drug use and the typical amounts used on each occasion;
- prevention measures and the availability, accessibility and utilization of treatment services;
- response of the criminal justice system to drug offenders, such as compulsory treatment as an alternative to imprisonment.

Opiates main problem drug by far in Europe and Asia, but declining in Oceania

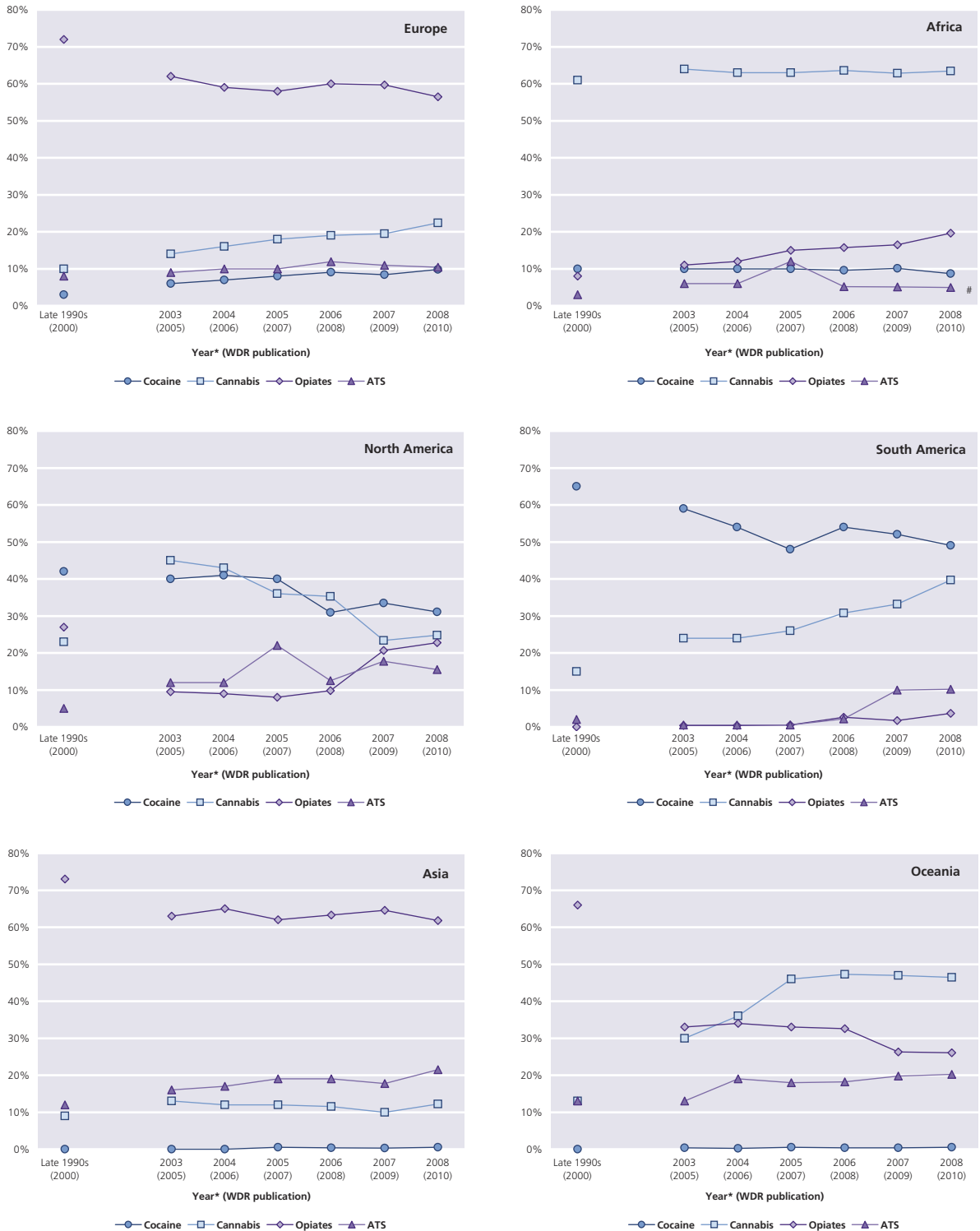
Opiates are clearly the main problem drug as indicated by treatment demand over the past 10 years in Europe (with at least 55% of demand) and Asia (consistently more than 60% of demand).

Opiates have also increased their contribution in Africa from 8% (late 1990s) to 20% (2008). While there has been an increase in opiate-related treatment in Africa over the last decade, the strong increase is, however, to some extent, a statistical artefact as previous treatment data (dating back more than 10 years) were removed and could not be replaced as no new data were forthcoming. Therefore, data from smaller island countries - such as Mauritius or the Seychelles, where the proportion of opiate treatment has historically been very high - contribute more to the treatment demand for opiates in Africa.

Opiate-related treatment has recently exhibited a large increase in North America, from 10% (2006) to 23% (2008), reflecting the rising abuse of synthetic opioids, and are possibly starting to emerge in South America. Oceania has experienced a striking decline in the contribution of opiates to treatment demand from 66% (late 1990s) to 26% (2008), in line with the severe heroin shortage of 2001 in Australia which convinced many heroin addicts to give up their habit.

Fig. 101: Regional patterns and trends in main problem drugs as reflected in treatment demand

Sources: UNODC, Annual Reports Questionnaire Data/DELTA and National Government Reports



Notes: Percentages are unweighted means of treatment demand in reporting countries. An 'Other drugs' category is not included and so totals may not add up to 100%. Alternatively, polydrug use may increase totals beyond 100%. Number of countries reporting treatment demand data: Europe (30 to 45); Africa (15 to 41); North America (3); South America (21 to 26); Asia (27 to 43); Oceania (1 or 2). * year specified or latest year available at time of WDR publication. # Treatment data dating back more than 10 years were removed from the 2008 estimates and therefore caution should be taken in comparing the data from 2008 with previous years.

Synthetic opioids are increasingly linked with problem drug use in North America

Treatment demand data from the United States of America¹¹ and Canada¹² both show an increase of problem drug users linked to the use of synthetic opioids/prescription medicine and a decline in the heroin-related problem users. In the United States, admissions where opiates were the primary drug of concern increased by 34% between 1997 and 2007 (typically representing 29-32% of demand for treatment, excluding alcohol). Heroin is still the major contributor to the treatment demand for opioids, but this has become less marked with the steady increase in demand for treatment for synthetic opioids. The contribution of heroin to opioid admissions has continually declined from 94% (1997) to 73% (2007), with the number of admissions for heroin starting to decline in 2002. In contrast, the number of admissions for other opiates/synthetic opioids has increased from 16,274 to 90,516 (more than 450%) between 1997 and 2007, from contributing just 6% of opioid admissions in 1997 to 27% in 2007. A similar situation is found in Canada. Treatment demand for prescription opioids has been greater than for heroin/opium over the past few years, and it is still increasing. Treatment demand data from Ontario show that the number of admissions for opioids increased 55% between 2004/2005 and 2008/2009, or from 14.7% to 18.5% of all drug treatment demand (excluding alcohol and tobacco). This increase is attributable to the 68% rise in admissions for prescription opioids/codeine (heroin/opium admissions actually declined 5%). The contribution of prescription opioids/codeine to all admissions (excluding alcohol and tobacco) has increased from 12.1% to 16.5%, while the heroin/opium contribution has declined from 2.6% to 2.0%.

Cannabis is an increasingly problematic drug

Although it is the world's most widely used drug, cannabis is often thought to be the least harmful and of little interest to public health, in spite of the fact that evidence in recent years has shown that the use of cannabis can create remarkable levels of harm. Data on treatment demand for cannabis and medical research have pointed to the potentially severe health consequences of cannabis use.

The most probable adverse effects of cannabis use include dependency, increased risk of motor vehicle accidents, impaired respiratory function, cardiovascular disease and adverse effects of regular use on adolescent psychosocial development and mental health.¹³ The

11 Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS).
 12 Substance Abuse Statistical Tables, DATIS Centre for Addiction & Mental Health, July 2009.
 13 Hall W., and Degenhardt, L., "Adverse health effects of non-medical cannabis use," *The Lancet*, Volume 374, Issue 9698, Pages 1383 -

Fig. 102: Treatment admissions for opiates, 1997-2007 (North America)

Note: Percent of admissions excluding alcohol.
 Source: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS)

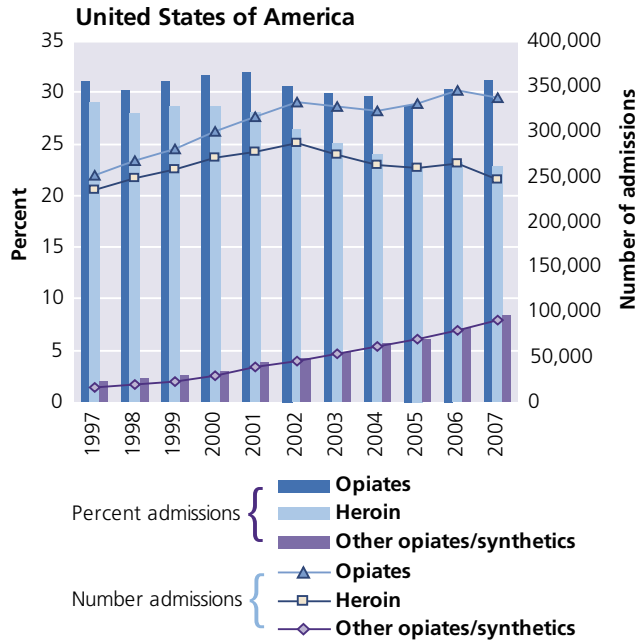
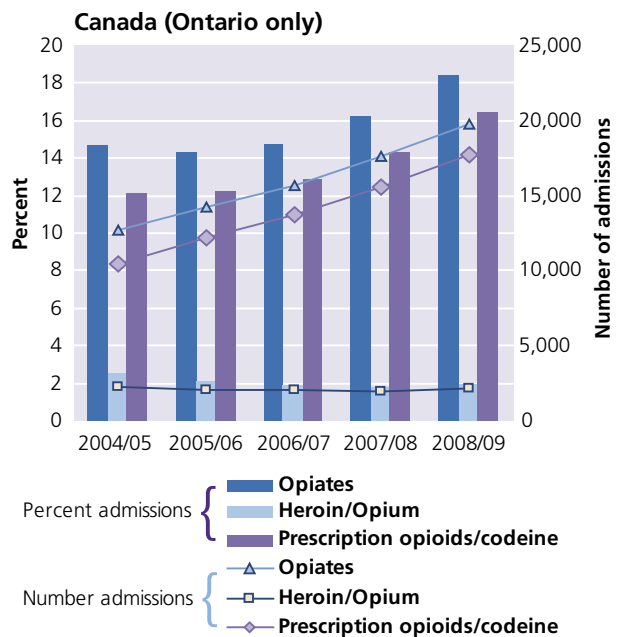


Fig. 103: Treatment admissions for opiates, 2004-2009 (North America)

Note: Percent of admissions excluding alcohol, tobacco and not specified.
 Source: Substance Abuse Statistical Tables, DATIS, Centre for Addiction & Mental Health, July 2009



1391, 17 October 2009.



rising number of cannabis-related problem drug users is often not correlated with a similar rise in the overall number of cannabis users, suggesting that the risks associated with the use of cannabis have been increasingly recognized and diagnosed in recent years. Rising levels in cannabis potency in many parts of the world (notably in industrialized countries) have also contributed to the increased risk of cannabis use.

Cannabis is clearly the dominant drug for treatment in Africa with consistently over 60% of demand. Over the past 10 years, cannabis has been making an increasing contribution to treatment demand in Europe (more than doubling from 10% to 22%), South America (more than doubling from 15% to 40%) and Oceania (more than trebling from 13% to stabilize around 47%). Only North America has seen a reduction in the contribution of cannabis to treatment demand compared to other drugs.

Harmful levels of cannabis use on the rise in Australia

Treatment episodes where cannabis was the primary drug of concern increased in Australia by 34%, from 23,826 to 31,864 between 2002 and 2008 alone,¹⁴ despite a sharp decline in cannabis use among the general population.

Possible explanations for the increasing trend in the problematic use of cannabis and cannabis-related harm include: increased consumption among older users reflecting dependence among those who have had a long history of use that was initiated at a relatively young age; and the increased availability of cheaper and possibly higher potency cannabis. Referrals from the criminal justice system do not seem to have had an influence on the increase in the numbers entering treatment in Australia.¹⁵

Contributing factors for increasing treatment demand for cannabis in Europe remain uncertain

Cannabis ranks second for treatment demand at the European level and its contribution to drug treatment demand has been steadily increasing. The EMCDDA has been documenting rising levels of demand for treatment from cannabis-related problems since 1996, but there are wide discrepancies between countries. In 2006, 21% of all European clients and 28% of new clients entered treatment with cannabis as the primary drug of concern. In Denmark, Germany, France, Hungary and Turkey the percentage of new clients seeking treatment for cannabis as the primary drug was greater than 50%.

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- 14 Australian Institute of Health and Welfare (AIHW), *Alcohol and other drug treatment services in Australia 2007–08: report on the national minimum data set*, Drug treatment series no. 9, cat. no. HSE 73, Canberra, 2009.
- 15 Roxburgh, A., Hall, W.D., Degenhardt, L., McLaren, J., Black, E., Copeland, J., and Mattick, R.P. "The epidemiology of cannabis use and cannabis-related harm in Australia 1993–2007," *Addiction*, 2010 Mar 12. Pre-publication early view.

However, reasons for the increase in demand have proved difficult to identify and EMCDDA recommends further research¹⁶ to tackle this issue.¹⁷

The effect of poly-drug use in the treatment statistics should not be disregarded. While drug treatment seekers in the past may have been registered almost automatically for heroin, they may now be more accurately registered as having cannabis as the primary problem drug while consuming other drugs as well. Moreover, the increasing complexity of drug use makes it difficult to have a simple characterization of problem drug users according to a single drug type. In the context of drug users combining the use of different drugs to get the effect they want to achieve, the use of cannabis becomes potentially more harmful because its effect combined with other drugs can be very different from when it is used alone.

Cocaine is the main problem drug in the Americas, but its contribution is declining in North America

Treatment demand for cocaine is most dominant in the Americas, where coca cultivation is concentrated. Cocaine is the main problem drug according to treatment demand for South America (with more than 50% of demand), and where once it appeared to be on the decline, over the last few years, the situation has stabilized. Although cocaine was the main drug for treatment in North America in the late 1990s, the cocaine-related treatment demand has been declining over the last decade, and was responsible for just 31% of total treatment demand in 2008. In Europe, the treatment demand, in contrast, increased from 3% to 10% over the same period. Cocaine-related treatment demand in Africa accounts for less than 10% of the total,¹⁸ and in Asia and Oceania demand is negligible (<1%).

ATS treatment demand is relatively small but not unimportant

Asia has the highest percentage of admissions for amphetamine-type stimulants (ATS), where it ranks as the second most important drug. In Oceania and North America, treatment demand for ATS has increased to some 20% since the late 1990s. Otherwise, demand for treatment has remained below approximately 10% in other regions, with a possible recent emergence in South America. It should be noted that treatment for ATS is often administered differently than for other drugs, and can be easily under-reported.

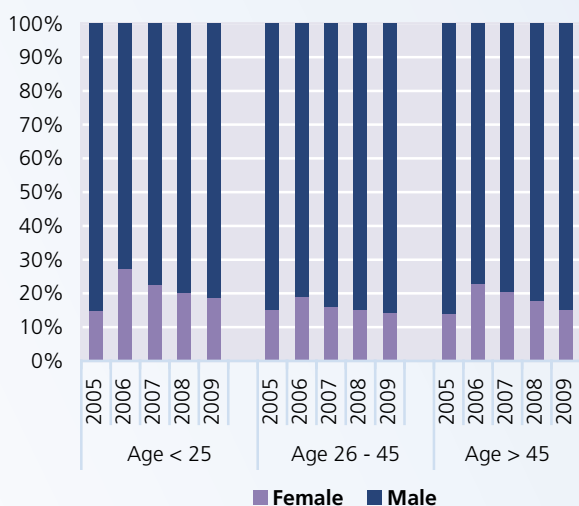
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- 16 EMCDDA, *A cannabis reader: global issues and local experiences*, Monograph series 8, Volume 2, Lisbon, 2008.
- 17 EMCDDA, *Annual report on the state of the drugs problem in the European Union and Norway. Cannabis problems in context — understanding the increase in European treatment demands*, Lisbon, 2004.
- 18 In contrast to the data shown, there are no indications of any decline in cocaine-related treatment demand in Africa over the last decade. The lower demand shown is a statistical artefact resulting from the removal of treatment data dating back more than 10 years.

Gender and the illicit drug markets

The markets for illicit drugs affect more men than women worldwide, both in terms of use and trafficking of illicit substances. Data that characterize traffickers of illicit drugs are scarce. In 2009, the Commission on Narcotic Drugs, in its resolution 52/1, stressed the importance of collecting and analysing data disaggregated by sex and age, and of conducting research on gender issues related to drug trafficking, especially the use of women and girls as drug couriers. The Commission called for improved data collection and recommended the undertaking of a gender analysis based on available data. One data source that can be used to generate a gender analysis of drug traffickers is the Individual Drug Seizures Database, where data submitted by a limited number of countries (between 30 and 50 from all regions) report the characteristics of traffickers associated with each individual seizure.¹ These data show that the great majority of drug traffickers are men. They also suggest that, irrespective of age, the percentage of female traffickers slightly decreased between 2006 and 2009, reaching between 15% and 20% of detected traffickers in 2009.

Fig. 104: Trends in gender distribution of drug traffickers, 2005-2009

Source: UNODC Individual Drug Seizures Database



The use of illicit drugs is more balanced between males and females, but it still sees a higher number of men involved. For all drugs, the gender gap between males

¹ Data on the gender composition of drug-related arrestees could also be reported by Member States in the ARQ. However, this data can hardly be utilized for a gender analysis because very few countries provide the sex-breakdown of the data on arrestees with little comparability across countries.

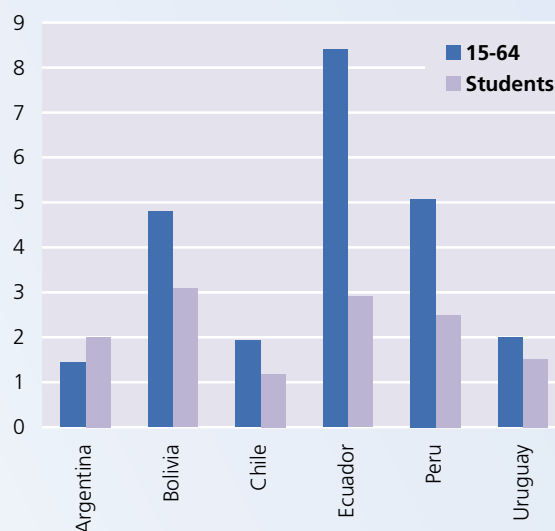
and females is lower among the young population than for the adults.

Male students outnumber females in the use of cocaine and cannabis in all European countries. In contrast, female students more frequently report tranquilizer use in virtually all countries and ecstasy use in some countries.²

A gender gap between the young and older generations is also apparent in South America. One comparative study shows, for example, that in all six analysed countries, except Argentina, the gender ratio³ of cannabis use is lower for students than the adult population, though with large variations across countries. Data from Latin America and other parts of the world suggest that the more advanced the country, the higher the proportion of females among drug users.

Fig. 105: Gender ratio in lifetime cannabis use, selected South American countries

Sources: UNODC/Organization of American States (OAS), *Informe subregional sobre uso de drogas en población escolarizada, segundo estudio conjunto, 2009*; UNODC/OAS, *Elementos orientadores para las políticas públicas sobre drogas en la subregion – primero estudio comparativo sobre consumo de drogas y factores asociados en población de 15 a 64 años, 2008*



In general, substance dependence and abuse is also higher for males than females, although in the United States an age-specific analysis reveals that in 2008, the rate of substance dependence was higher for females (8.2%) than males (7.0%) in the population aged 12 to

² EMCDDA, *A gender perspective on drug use and responding to drug problems*, Lisbon 2006.
³ Ratio of prevalence among males and females.

17, while the same rate was almost double for males (12.0%) than females (6.3%) in the population 18 years and older.⁴ There are few studies that analyse gender differences in accessibility of treatment services. In 2004 in Europe, there was a ratio of 4:1 between males and females in treatment. The high ratio (higher than the ratio between male and female drug users) can be explained by the higher risk of becoming problem drug users observed for males. At the same time, according to the EMCDDA, there are no studies that can provide definitive answers on the gender distribution of the unmet treatment needs of problem drug users.⁵ In many countries where gender roles are culturally determined and women are not empowered, gender differences can be reflected in a lack of access to treatment services which could be due to: a) higher stigma for women who use drugs than for men, and/or b) the fact that services do not cater for women (for example, they do not admit women or do not cater for the needs of safety and childcare). An illustrative example of the lack of accessibility can be found in Afghanistan, where in 2008 there were only three residential drug treatment facilities for women with adjacent child care and treatment facilities, despite the high level of heroin and opium use among the female population.⁶

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4 Substance Abuse and Mental Health Services Administration, *Results from the 2000 - 2008 National Survey on Drug Use and Health: National Findings*, Office of Applied Studies, US Department of Health and Human Services.

5 EMCDDA, *A gender perspective on drug use and responding to drug problems*, Lisbon, 2006.

6 Report to the US Congress, *Report on Progress Toward Security and Stability in Afghanistan*, April 2010.