Chapter I.

Treatment, rehabilitation and social reintegration for drug use disorders: essential components of drug demand reduction

A. Background

1. Concern for the health and welfare of humankind is the cornerstone of the international drug control framework. The Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol,[4] the Convention on Psychotropic Substances of 1971[5] and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988,[6] known collectively as the international drug control conventions, all refer to this concern. To ensure the health and welfare of humankind, the conventions mandate States parties to take measures for the treatment, rehabilitation and social reintegration of people affected by drug problems (article 38 of the 1961 Convention and article 20 of the 1971 Convention). The International Narcotics Control Board (INCB) emphasized this point in its annual report for 2015.[7]

2. Treatment of drug use disorders, rehabilitation and social reintegration are among the key operational objectives given in the recommendations on drug demand reduction contained in the outcome document of the thirtieth special session of the General Assembly, entitled "Our joint commitment to effectively addressing and countering the world drug problem"[8] In the outcome document, the General Assembly recognized drug dependence as a complex health disorder characterized by a chronic and relapsing nature that can be treated through evidence-based and voluntary treatment programmes, and called for enhanced international cooperation in developing and implementing treatment initiatives.

3. The use of mood-altering psychoactive substances has been part of human civilizations for millennia. For certain substances or in certain contexts it can assume a pathological pattern that needs to be addressed. Throughout the history of human civilization, societies have displayed varying levels of tolerance and permissiveness towards, and control over, the use of psychoactive substances. Some of those substances, such as tobacco and alcohol, have been regulated more or less strictly in most societies. Other substances have been judged harmful and hence have been placed under strict control. This is the case for narcotic drugs and psychotropic substances controlled under the international drug control conventions.

4. Irrespective of the level of control, regulation and societal approval or disapproval, one factor common to all psychoactive substances, referred to in this chapter as "drugs" for the sake of brevity, is their propensity to lead to drug use disorders following use, whether frequent or occasional. Drug use disorders are associated with significant levels of disease (morbidity) and disability, constitute a burden on national resources, and cause immeasurable human suffering. The World Health Organization (WHO) estimates that the global burden of disease[9] attributable to alcohol and illicit drug use amounts to 5.4 per cent of the total burden of disease.

[4] United Nations, *Treaty Series*, vol. 976, No. 14152.

[5] Ibid., vol. 1019, No. 14956.

[6] Ibid., vol. 1582, No. 27627.

[7] E/INCB/2015/1, para. 1.

[8] General Assembly resolution S-30/1, annex.

[9] WHO, Global Health Observatory (GHO) data, Resources for the prevention and treatment of substance use disorders. Available at www.who.int/gho/substance_abuse/en/.

Specifically, drug dependence accounts for 0.9 per cent of the global burden of disease from all causes, as expressed in disability-adjusted life years, with opioid dependence contributing the largest share of that burden.[10] Association of drug use with public health risks such as the spread of HIV and other blood-borne infections has added yet another dimension to the health impact. Thus, all countries and jurisdictions must have in place mechanisms and systems to provide help and succour to people suffering from drug use disorders.

B. Treatment, rehabilitation, and social reintegration as essential components of demand reduction

5. Drug demand reduction involves two overlapping but distinct approaches: preventing the onset of drug use (or primary prevention), and treatment, rehabilitation and social reintegration.

6. Demand reduction interventions often focus more on primary prevention activities. Primary prevention frequently receives more support and hence is more prominent in national drug demand reduction frameworks and programmes. Nonetheless, many primary prevention activities are thought to be based on limited evidence, have limited coverage and be of unknown quality.[11] The value of treating, rehabilitating and socially reintegrating people affected by drug use disorders (to be discussed later in this chapter) needs greater recognition. There are compelling reasons why Governments should invest in treatment and rehabilitation services:

(a) People affected by drug use disorders suffer from significant damage to their physical and mental health and well-being, in addition to the reduction in their quality of life and productivity;

(b) Some people affected by drug use disorders may resort to illegal and/or criminal acts to support their drug use, perpetuating a vicious cycle of addiction and suffering, and contributing to the increased burden of crime on society;

(c) Research indicates that peer pressure is a significant factor in the onset of drug use. Thus, providing treatment to people with drug dependence reduces the risk of other people starting to use drugs under their influence. In other words, treatment and rehabilitation services for affected individuals may serve to prevent drug use among other individuals in their network;

(d) As parties to the international drug control treaties, Governments are required to provide treatment services to people affected by addiction. Both article 38 of the 1961 Convention and article 20 of the 1971 Convention require Governments to give special attention to and take all practicable measures for the prevention, treatment, rehabilitation and social reintegration of persons affected by drug dependence, to coordinate their efforts to that end, and to promote the training of personnel in those fields;

(e) Respecting the right of people affected by drug use disorders to health and treatment services will contribute to reducing the stigma and discrimination associated with those disorders;

(f) Research consistently shows that investing in treatment saves Governments money. The financial cost of providing treatment is much lower than that occasioned by drug-related disorders and related problems, including unemployment, absenteeism, crime (including the cost of criminal justice and law enforcement), morbidity, early mortality and disability;

(g) Critical to achieving Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages) is action on target 3.5 (Strengthen the prevention and treatment of substance abuse).

7. Worldwide, there is a significant gap in the availability of resources for treatment and rehabilitation services. WHO has estimated that, globally, only 1.7 beds per 100,000 people are available for the treatment of drug and alcohol dependence, the number of beds available in higher-middle-income countries being 10 times higher than that in lower-middle-income countries (7.1 beds per 100,000 people compared to 0.7 beds).[12] The United Nations Office on Drugs and Crime (UNODC) reports that, at the global level, only 1 out of 6 people in need of drug dependence treatment has access to treatment programmes. For

[10] Louisa Degenhardt and others, "Global burden of disease attributable to illicit drug use and dependence: findings from the *Global Burden of Disease Study 2010*", *The Lancet*, vol. 382, No. 9904 (9 November 2013), pp. 1564–1574.

[11] *World Drug Report 2015* (United Nations publication, Sales No. E.15.XI.6), chap. I, sect. D ("What works in drug use prevention?").

[12] WHO, *Atlas on Substance Use (2010): Resources for the Prevention and Treatment of Substance Use Disorders* (Geneva, 2010).

Latin America, the corresponding figure is 1 out of 11 and, for Africa, it is 1 out of 18, showing that the resource gap is more pronounced in lower- and middle-income countries. While higher-income countries spend around $50 on mental health per person annually, lower- and middle-income countries spend only about $2. In addition, access to treatment and rehabilitation services tends to be unequal within countries. For example, health systems are often equipped to provide services for alcohol use disorders, but not for drug use disorders. Treatment services for drug dependence tend to be available only in the larger cities. Similarly, while drug dependence is more prevalent among men than among women, women with drug problems have disproportionately less access to treatment and rehabilitation services owing to stigma and a lack of gender-sensitive treatment services.[13] Another important facet of the treatment gap is the difference in the type of treatment available and accessible. Globally, more than a third of countries report the availability of psychosocial interventions, whereas less than a quarter report the availability of pharmacological interventions, although there is a strong evidence base showing that pharmacological interventions are effective in the treatment of many types of drug use disorders. In addition, whenever treatment services are available and accessible, their quality can be poor, and interventions may not be based on evidence or supported by international standards or guidelines.

C. Basic concepts related to drug use disorders

8. It is important to distinguish between terms such as drug use, drug abuse, harmful use of drugs, drug dependence and drug addiction, since inappropriate use of terminology can contribute to stigmatization and discrimination. From a criminal justice perspective, in some countries, even the one-time use of a psychoactive substance scheduled as a narcotic drug or psychotropic substance may incur a sanction.[14] From the perspective of addiction and behavioural sciences, however, a single instance of drug consumption may not necessarily be pathological. It is the pattern of drug use and the resulting consequences that distinguish pathological from non-pathological, though often dangerous, behaviour.

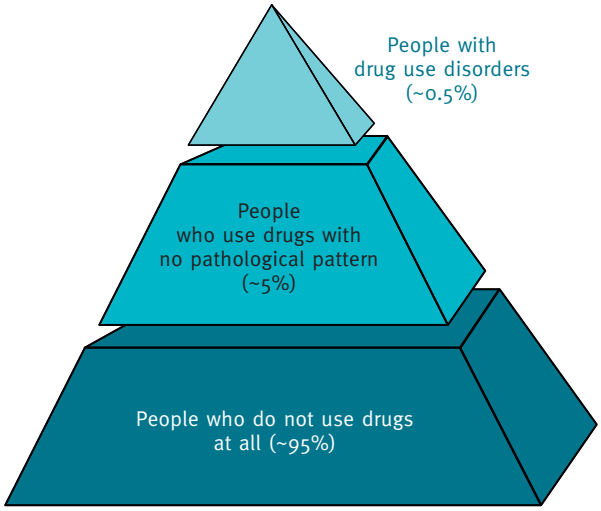
9. The tenth revision of the International Classification of Diseases (ICD-10) describes two major diagnostic entities due to drug use that are relevant to this discussion: harmful use and dependence syndrome. Harmful drug use is understood as a pattern of drug use that causes damage to the physical or mental health of the individual. Drug dependence is a condition in which drug use becomes one of the highest priorities in the user's life, and carries with it a range of associated behaviours. The older term "addiction", whose meaning is largely similar to that of "dependence", is ingrained in the scientific literature and popular parlance and continues to be used for that reason. "Drug abuse" was used as a diagnostic entity in the past, but has largely been replaced by the terms "harmful drug use" and "drug use disorders". Given that context, the terms mainly used in this chapter are "drug use" and "drug use disorder".

10. People who begin to use drugs may, as their drug use and its adverse consequences escalate, attain the stages of harmful use and, ultimately, dependence. Drug use, harmful drug use and drug dependence form a continuum of increasing severity and pattern of use. In any given society, the pattern of drug use can be represented as a pyramid. As seen in the figure below, the base of that pyramid is made up of people who do not use drugs at all. The middle layer of the pyramid represents a smaller group of people who do use drugs, but whose drug use pattern is not pathological. Lastly, the smallest section, the top of the pyramid, represents people who suffer from drug use disorders. Although they form the smallest piece of the pyramid, it is important to note that people who suffer from drug use disorders account for the largest share of harm and adverse consequences for themselves and for the largest related burden of disease on society as a whole. In the *World Drug Report 2017*, UNODC observed that, globally, 28 million years of healthy life were lost in 2015 as a result of drug use. Of that number, 17 million years of healthy life were lost owing to drug use disorders, even though only around 10 per cent of the people who used drugs suffered from drug use disorders. Unfortunately, only one out of six people with drug use disorders globally have access to treatment services. Thus, top priority should be given to making treatment and rehabilitation services available to people suffering from drug use disorders. However, people who use drugs but do not suffer from a drug use disorder may also need help to prevent further escalation of their drug use problems.

[13] United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women), "A gender perspective on the impact of drug use, the drug trade, and drug control regimes", Policy brief (July 2014).

[14] The Board has clarified on many occasions that, under the United Nations drug control treaties, parties are not obliged to apply criminal justice sanctions to people who use drugs.

Pyramid of drug use patterns (representational)



D. Factors associated with drug use disorders

11. Drug use disorders are best viewed as being bio-psycho-social in origin. There is no single factor that causes an individual to use drugs. A variety of risk factors and protective factors interact with each other and may result in drug use and subsequent dependence. Those include pre-existing personality, as well as genetic and biological factors that have their origins in the neurobiological dysfunctions in the brains of people using drugs. In addition there are environmental factors. Among those, there are a number of social, cultural, and legal factors that enhance the risk that a person will use a drug and subsequently develop drug dependence. Social and cultural permissiveness relating to the use of a drug may enhance its availability, influencing the risk of people using it. Similarly, socioeconomic deprivation has been found to be associated with the risk of drug use, and drugs may be used as a form of self-medication to cope with personal problems that sometimes stem from adverse childhood experiences such as abuse, neglect and other forms of household dysfunction. Finally, there are drug-related factors that may also determine the risk, as some drugs are more likely than others to lead to drug use disorders. Some drugs, such as opioids, are considered more addictive than others, such as cannabis. A number of factors responsible for drug dependence are beyond the control of people who use drugs. People do not determine their own genetic or biological vulnerability, they do not have the agency to influence the cultural practices in their neighbourhoods, and they have no control over their national laws and policies determining the availability of drugs. To what extent people have control over or a choice in the risk of developing drug dependence is a matter of debate.[15] Thus, people affected by drug use disorders need to be seen not as victims and sufferers, but as patients, and they should not be treated as wilfully engaging in undesirable or illegal behaviours. The ideal settings in which to help them are those of treatment and rehabilitation.

E. Course and trajectory of drug use disorders and recovery

12. Once developed, drug use disorders run their course like other chronic, non-communicable diseases such as diabetes or hypertension. The treatments for all such chronic, non-communicable diseases, share certain characteristics:

(a) Treatment reduces the symptoms, without necessarily removing the root cause of disease;

(b) Adopting changes in behaviour and lifestyle is an important part of the treatment;

(c) Relapses are common, in spite of treatment.

13. Recovery from drug use disorders is possible, but it often involves multiple attempts and long-term engagement with the treatment programmes. For most individuals, recovery from drug use disorders is a process rather than an event. The majority of people with drug use disorders typically go back to taking drugs after a treatment episode. Lapse (a single instance of drug use after achieving abstinence) and relapse (using drugs following a pattern of dependence after achieving abstinence) are seen as integral and expected stages in the process of recovery. It is not realistic to expect someone to achieve long-lasting abstinence following an episode of short-term treatment, just as it is not realistic to expect a patient with hypertension to have normal blood pressure at the end of a one-year period if the anti-hypertensive medications have been provided for only a few days and then tapered off. Thus, treatment and rehabilitation programmes should be designed as long-term interventions that include strategies for relapse prevention. Importantly, national laws and policies should not sanction users for

[15] Allison Kurti and Jesse Dallery, "Review of Heyman's addiction: a disorder of choice", *Journal of Applied Behaviour Analysis*, vol. 45, No. 1 (2012), pp. 229–240.

relapsing following treatment. It is important to note that, for drug use disorders, treatment works. In other words, modern health-care science offers effective treatment strategies for drug use disorders. The single most important predictor of a good treatment outcome is retention in the treatment for as long as required.

14. It is a widespread myth that people suffering from drug dependence do not want to quit taking drugs. Unsuccessful attempts to stop taking drugs are a hallmark and diagnostic feature of drug dependence. It is the poor availability and accessibility of appropriate and acceptable treatment services that deprives affected people of the opportunity to reduce or cease their drug-taking behaviour. In a recent survey in Punjab, India, it was reported that out of more than 232,000 estimated opioid-dependent people, more than 80 per cent had made attempts to stop taking drugs. However, only about 15 per cent had ever received any help from the organized treatment sector, indicating widespread demand for but poor availability of treatment services.[16]

15. Even after achieving abstinence, many individuals with drug use disorders find it challenging to regain their place and status in their families and societies. The stigma associated with drug use poses a serious hindrance on the path to recovery. In a study conducted on behalf of WHO in 14 countries all over the world, out of 18 health conditions, drug addiction was found to possess the highest degree of stigma or social disapproval.[17] National demand reduction programmes must address stigma and discrimination and provide assistance towards rehabilitation and social reintegration to afford people affected by drug use disorders an opportunity to reclaim their places in society as responsible and productive citizens.

16. The outcome of treatment for drug dependence should not be defined only in the binary terms of continued drug use versus complete abstinence. It has been demonstrated that even without achieving complete abstinence, some people may be able to reduce the harmful consequences of their drug use and may go on to lead relatively stable and productive lives. Improvements in personal health and social functioning (employment, family and social relationships), as well as reductions in risky behaviour or crimes are all valid and desirable outcomes of treatment for drug use disorders in addition to reduced drug use. Thus, treatment and rehabilitation services should not remain exclusively focused on the final objective of ceasing drug use, but should also consider the intervening goals of reducing drug use and its harmful consequences as part and parcel of the process towards complete rehabilitation and social reintegration.

F. Principles of treatment interventions

17. Drug use disorders are treatable health conditions for which effective treatment and rehabilitation interventions are available. They are considered complex bio-psychosocial conditions and their treatment is equally complex and multi-faceted. In order to be effective, treatment typically involves multiple components directed at various aspects of drug dependence and its consequences. WHO and UNODC have outlined nine principles for the treatment of drug dependence:[18]

Principle 1. Availability, accessibility, affordability, attractiveness and appropriateness of drug dependence treatment. People affected by drug addiction should have access to a wide range of treatment services that address a variety of needs. Factors such as affordability, geographical accessibility, timeliness and flexibility of opening hours, user-friendliness, and responsiveness to the needs of individuals contribute to the accessibility of drug dependence treatment.

Principle 2. Screening, assessment, diagnosis and treatment planning. A comprehensive diagnostic assessment process is the basis for an effective and individualized treatment approach. Components include screening (e.g., for drug use and associated risk behaviours), assessment and diagnosis (e.g., drug dependence and other comorbid psychiatric illnesses), comprehensive assessment (e.g., stage and severity of illness, temperament, personality and employment status) and an individualized treatment plan.

Principle 3. Evidence-informed drug dependence treatment. The stringent standards applied for approving treatment for other health conditions must be applied to treatment of drug dependence as well. Thus, all the treatments of drug dependence approved in a given country should be rooted in the latest evidence-informed good practices and

[16] India, Ministry of Social Justice and Empowerment, and Government of Punjab, Department of Health and Family Welfare, "Punjab opioid dependence survey: brief report". Available at http://pbhealth.gov.in/.

[17] Robin Room and others, "Cross-cultural views on stigma, valuation, parity and societal attitudes towards disability", in *Disability and Culture: Universalism and Diversity*, T. Bedirhan Üstün and others, eds. (Seattle, Hogrefe and Huber Publishers, 2001).

[18] UNODC and WHO, "Principles of drug dependence treatment", discussion paper (March 2008).

accumulated scientific knowledge, taking into account the constantly evolving nature of health science.

Principle 4. Drug dependence treatment, human rights and patient dignity. People with drug dependence should not be discriminated against because of their drug use history. The standards of ethical treatment applied to other health conditions must also be applied to the treatment of drug dependence. That includes the right to autonomy and self-determination for patients and the principles of beneficence, non-maleficence and confidentiality on the part of care providers. In that context, the Board welcomes the recent joint United Nations statement on ending discrimination in health-care settings.[19]

Principle 5. Targeting special subgroups and conditions. Population subgroups such as adolescents, women, pregnant women, people with medical and psychiatric comorbidities, sex workers, ethnic minorities and socially marginalized individuals, including migrants and refugees, may have their special needs. Their treatment for drug dependence must account for those needs.

Principle 6. Addiction treatment and the criminal justice system. Drug use is treated as a crime in itself in some jurisdictions. However, since drug use disorders are health conditions, the ideal setting for treatment is the health-care system rather than the criminal justice system. The health-care system should be the preferred environment in which to manage these problems, and treatment capacity should be developed where it is lacking. Treatment as an alternative to incarceration has the dual benefit of reducing suffering and disability as well as reducing crime. The resulting significant cost reduction contributes to the cost-effectiveness of this approach.

Principle 7. Community involvement, participation and patient orientation. A paradigm shift in the delivery of treatment is needed from a directive to a more cooperative, community-based service delivery with the involvement of people who use drugs, their families, communities and local stakeholders in the process of planning, implementing and monitoring the treatment services.

Principle 8. Clinical governance of drug dependence treatment services. Accountable and efficient systems of clinical governance could be achieved through written policies and protocols, and through mechanisms for monitoring and supervision by qualified staff. In addition, systems for accreditation, certification and quality assurance for treatment services should be in place.

Principle 9. Treatment systems: policy development, strategic planning and coordination of services. A logical, step-by-step approach is recommended that includes formulating treatment policies, assessment of the situation, building the capacity of care providers, and systems for quality assurance.

G. Treatment approaches and modalities

18. Not every activity that results in the reduction of drug use can justifiably be labelled as treatment. Treatment for drug use disorders and associated physical and mental health issues has been defined as "an activity (or activities) that directly targets people who have problems with their drug use and aims at achieving defined outcomes with regard to the alleviation and/or elimination of these problems, provided by experienced or accredited professionals, in the framework of recognized medical, psychological or social assistance practice".[20]

19. While the general principles of treatment for drug dependence may appear to be similar across drug types and populations, ideally, every patient should receive individualized and personalized treatment, the nature of which may vary depending on factors such as the type of drug used, the severity of the dependence, the level of motivation and the availability (or lack) of social support. Drug dependence being a chronic, remitting-relapsing illness, short-term, one-time treatment is usually not sufficient for most individuals and ongoing engagement of the patient with family and community support can be beneficial.

20. UNODC and WHO have jointly developed international standards for the treatment of drug use disorders to support Member States in developing effective and ethical treatment services.[21] A variety of treatment modalities and approaches have been evaluated in terms of the extent to which their effectiveness is based on evidence. Those modalities and approaches include:

[19] United Nations and WHO, "Joint United Nations statement on ending discrimination in health-care settings", 2017. Available at www.who.int/.

[20] European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), *EMCDDA Treatment Strategy*, Work programmes and strategies series (Lisbon, April 2010).

[21] UNODC and WHO, "International Standards for the Treatment of Drug Use Disorders: Draft for Field Testing" (March 2017).

(a) Community-based outreach. These activities primarily target people who use drugs but are not currently receiving treatment. The core services provided by outreach programmes include basic support, drug-related education, screening and brief interventions, referral for drug dependence treatment and needle exchange services;

(b) Screening, brief interventions, and referral to treatment. These interventions are largely aimed at people with drug use problems in non-specialized settings, such as primary care, emergency care, social services and prisons. Standard and valid screening tools as well as culturally adaptable manuals are available for brief psychosocial interventions. Such programmes are effective in reducing drug use, particularly among those who are at the early stages of their drug use trajectories;

(c) Short-term inpatient or residential treatment. This type of treatment, also known as detoxification, is largely aimed at providing relief from drug withdrawal symptoms and facilitating the stabilization of the patient's physical and emotional state in a safe, protected setting. For benzodiazepines, opioids and many other drug categories the mainstay of detoxification is the pharmacological treatment of withdrawal symptoms. In the case of opioids, there is strong evidence to suggest that withdrawal symptoms are best treated using agonist medications such as buprenorphine and methadone.[22] For sedative hypnotics such as benzodiazepines it has been recommended to use long-acting benzodiazepines in sufficient doses that taper off over the course of a few days. Very often detoxification is erroneously regarded as complete treatment in itself. However, withdrawal management is only the first step in the long-term treatment of drug dependence. The risk of relapse and overdose is high following any form of detoxification. To prevent relapse, preparations need to begin in this phase of the treatment for activities aimed at ensuring the patient's long-term and sustained engagement in the treatment process;

(d) Outpatient treatment. Outpatient treatment is largely aimed at those individuals who have sufficient social support and resources at home, but who do require long-term pharmacological and/or psychosocial interventions. The majority of people with drug use disorders do not require inpatient care and can be managed as outpatients. A strong evidence base exists for the effectiveness of a variety of pharmacological interventions offered as part of long-term treatment for drug dependence. As opioid agonist maintenance treatment WHO recommends using buprenorphine or methadone in adequate doses.[23] Another form of pharmacological outpatient treatment for opioid dependence is the opioid antagonist naltrexone, which is recommended for highly motivated patients. However, there is only modest evidence for its effectiveness.[24] For the treatment of cannabis and psychostimulant dependence (i.e. dependence on amphetamines or cocaine) there is no evidence at present that any pharmacotherapy is consistently effective. Thus, psychosocial treatment remains the primary approach for those drug categories. In addition to pharmacotherapy, a host of psychosocial interventions are effective in preventing relapse and rehabilitating patients, including contingency management,[25] motivational interviewing,[26] cognitive behavioural therapy[27] and relapse prevention therapy. Most of those produce the best outcomes when combined with pharmacotherapy;

(e) Long-term residential treatment. The most common form of long-term residential treatment is the therapeutic community, where patients are expected to stay for an extended duration of between 6 and 24 months. Traditionally, long-term residential treatment consisted of psychosocial treatment only, but modern approaches may involve the use of medication. Large-scale reviews have shown that there is little evidence that therapeutic communities offer significant benefits, except if they are operated in prison settings;[28]

(f) Recovery management. Recovery management, also known as aftercare or social support, is a long-term, recovery-oriented care model for those who have achieved abstinence through other forms of treatment. The focus is on preventing relapse by supporting change in individuals' social functioning and personal well-being, and by helping them to regain their place in their community. Relapse is an almost inevitable part of recovery. Therefore, instead of letting patients go through multiple episodes of short-term treatment, the recovery management approach offers

[22] L. Gowing, R. Ali, and J. White, "Opioid antagonists with minimal sedation for opioid withdrawal", *The Cochrane Library*, No. 2 (2002).

[23] WHO, *Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence* (Geneva, 2009).

[24] S. Minozzi and others, "Oral naltrexone maintenance treatment for opioid dependence", *Cochrane Database of Systematic Reviews*, No. 4 (2011).

[25] M. Prendergast and others, "Contingency management for treatment of substance use disorders: a meta-analysis", *Addiction*, vol. 101, No. 11 (November 2006), pp. 1546–1560.

[26] G. Smedslund and others, "Motivational interviewing for substance abuse", *The Cochrane Library* (11 May 2011).

[27] M. Magilland, L. A. Ray, "Cognitive-behavioral treatment with adult alcohol and illicit drug users: a meta-analysis of randomized controlled trials", *Journal of Studies on Alcohol and Drugs*, vol. 70, No. 4 (2009), pp. 516–527.

[28] L. A. Smith, S. Gates and D. Foxcroft, "Therapeutic communities for substance-related disorder", *Cochrane Database of Systematic Reviews*, No. 1 (2006).

support services for a longer duration but at a much lower intensity and cost, focusing on patients' autonomy and ensuring the participation of their communities;

(g) Interventions aimed at reducing the adverse consequences of drug use. Certain approaches are used for reducing the adverse consequences of drug use rather than directly reducing drug use per se. They are widely employed, in particular in the context of reducing the risk of HIV and other blood-borne viral infections spreading among people who inject drugs. WHO, UNODC and the Joint United Nations Programme on HIV/AIDS (UNAIDS) have endorsed a comprehensive package of nine interventions for the prevention, treatment and care of HIV among people who inject drugs.[29] The Board recognizes that this comprehensive package has been endorsed widely, including by the General Assembly,[30] the Economic and Social Council,[31] and the Commission on Narcotic Drugs.[32] The nine interventions in question have undergone scientific evaluation. They are most effective when delivered in combination with each other, as a package. They are: *(a)* needle and syringe programmes; *(b)* opioid substitution therapy and other drug dependence treatment; *(c)* HIV testing and counselling; *(d)* antiretroviral therapy; *(e)* the prevention, diagnosis and treatment of sexually transmitted infection; *(f)* condom distribution; *(g)* targeted information, education and communication; *(h)* prevention, vaccination, diagnosis and treatment for viral hepatitis; and *(i)* prevention, diagnosis and treatment of tuberculosis;[33]

(h) Other approaches. There has been an ongoing discussion for many years about other activities beyond the comprehensive package that are considered by some as interventions aimed at reducing the adverse consequences of drug use. Some Governments have been conducting trials with prescription heroin maintenance programmes for patients not receiving other forms of treatment, although that is not a form of first-line treatment.[34] Research indicates that prescription heroin maintenance treatment may help heroin-dependent individuals to remain in treatment, limit their use of street drugs and reduce illegal activities.[35] However, owing to the risk of adverse effects and a number of operational factors, this treatment has not been recommended by WHO or other United Nations agencies. Yet another type of intervention that often generates debate and discussion is supervised injection facilities, or drug consumption rooms. Their purpose is to provide drug users with safe injecting equipment and safe surroundings in which to inject drugs. Supervised injection facilities do not usually provide the drugs themselves. A review of their effectiveness examined 75 published studies and concluded that safe injection facilities succeeded in attracting hard-to-reach populations, promoting safer injections, reducing the risk of overdose and reducing public drug injections and dropped syringes in the community.[36] Thus, the scientific evidence for their effectiveness is rapidly evolving. In its annual report for 2016, the Board stated that the ultimate objective of such facilities must be the reduction of the adverse consequences of drug use without condoning or encouraging drug trafficking, and that referral to treatment and rehabilitation programmes must be an integral aspect of such interventions.[37]

H. Cost effectiveness of treatment of drug use disorders

21. When investing in drug dependence treatment, costs are an important consideration. Unfortunately, fewer than half of all countries globally have a budget line dedicated specifically to the treatment of drug dependence, and lower- and middle-income countries are not among them. The three most important methods for financing treatment services are tax-based funding, out-of-pocket payments and non-governmental organizations, in that order. Lower- and middle-income countries appear to rely mostly on out-of-pocket payments.[38]

22. In general, studies in different settings and countries have uniformly shown that treatment for drug dependence is highly cost-effective. Every dollar spent on drug treatment yields a return of 4 to 7 dollars because of

[29] WHO, UNODC and UNAIDS, *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* (Geneva, WHO, 2012).

[30] Political Declaration on HIV/AIDS: Intensifying our Efforts to Eliminate HIV/AIDS (General Assembly resolution 65/277, annex).

[31] Economic and Social Council resolution 2009/6.

[32] Commission on Narcotic Drugs resolution 53/9.

[33] WHO, Evidence for action series, technical papers and policy briefs on HIV/AIDS and injecting drug users. Available at www.who.int/hiv/pub/idu/idupolicybriefs/en/index.html.

[34] Ambros A. Uchtenhagen, "Heroin maintenance treatment: from idea to research to practice", *Drug Alcohol Review*, vol. 30, No. 2 (2011), pp. 130–137.

[35] M. Ferri, M. Davoli and C. A. Perucci, "Heroin maintenance for chronic heroin-dependent individuals", *Cochrane Database of Systematic Reviews*, No. 12 (2011).

[36] Chloé Potier and others, "Supervised injection services: what has been demonstrated? A systematic literature review", D*rug and Alcohol Dependence,* vol. 145, No. 1 (2014), pp. 48–68.

[37] E/INCB/2016/1, para. 720.

[38] WHO, *Atlas on Substance Use (2010): Resources for the Prevention and Treatment of Substance Use Disorders* (Geneva, 2010), chap. 2, pp. 26 and 27.

reduced crime rates and reduced costs for the criminal justice system. If savings for the health-care system are also included, total savings exceed a ratio of 12:1. A review of 11 economic evaluation studies on a variety of treatments explored economic benefits in various outcome domains (criminal activity, health service utilization, employment earnings and expenditures on illicit drugs), and concluded that the reduction in criminal activity and the utilization of health-care services were the greatest economic benefits of the treatment of drug use disorders.[39] In addition, drug dependence treatment is much less expensive than criminal justice interventions. For instance, the cost of methadone maintenance in the United States of America has been estimated at approximately $4,700 per patient per year, while incarceration is estimated at $24,000 per prisoner per year.[40] It has been estimated that by providing treatment to just 10 per cent of eligible offenders, the criminal justice system could save around $4.8 billion.[41] An extensive review of the scientific literature has concluded that in terms of cost-effectiveness, agonist maintenance treatments, such as methadone and buprenorphine, should be considered first-line treatment options for opioid dependence.[42]

I. Organization and management of treatment service delivery

23. Despite the widespread recognition that drug dependence is a health condition, in many countries drug dependence treatment remains separate from health-care delivery. This separation adversely affects the quality of care available to affected individuals and increases avoidable and unnecessary expenditure. Integration of drug dependence treatment with general health-care services is important because:

(a) Drug use is interconnected with mental illness and other medical conditions;

(b) Integration of services leads to better care coordination, ultimately improving health outcomes;

(c) Delivery of drug treatment in the general health-care system is cost-effective;

(d) Integration may reduce health disparities and waiting times at drug use treatment facilities.

24. Integration of services for drug use disorders with health-care services enables the health-care system to provide services to people with mild to moderate drug use problems, the largest proportion of people who use drugs. This lessens the need for more intensive and expensive drug treatment and prevents drug problems from escalating further. Various models along a continuum of care have been described: drug treatment and health-care services can be coordinated, which means that they remain separate but have some degree of collaboration and communication; they can be co-located, meaning that they are in close, physical proximity but continue to exist separately; and they can be integrated, which means that they collaborate closely based on the full integration or merger of services. Each of these models has its own advantages and disadvantages, but where feasible, maximum integration appears to be the most efficient manner to deliver services, particularly in settings with limited resources. Thus, whether substances are controlled or not, it is helpful to provide services for substance use disorders in the same setting, regardless of the substance type. Such services should be integrated with the general health-care system. However, the focus on drug treatment must not be lost.

J. Treatment for special populations

1. Children and adolescents

25. Adolescents have unique drug use patterns and treatment needs. Among adolescents, any use of drugs is a cause for concern, even if they are merely experimenting, as drug use exposes them to more risk behaviour and increases the risk and severity of later drug use disorders. Research has identified serious adverse consequences of drug use on the developing brains of children and adolescents.[43] Hence, treatment is beneficial for adolescents

[39] Kathryn McCollister and Michael French, "The relative contribution of outcome domains in the total economic benefit of addiction interventions: a review of first findings", *Addiction*, vol. 98, No. 12 (2003), pp. 1647–1659.

[40] United States, Department of Health and Human Services, National Institute on Drug Abuse, *Principles of Drug Addiction Treatment: A Research-based Guide*, 3rd ed., NIH Publication No. 12-4180 (2012).

[41] Gary Zarkin and others, "Lifetime benefits and costs of diverting substance-abusing offenders from State prison", *Crime & Delinquency*, vol. 61, No. 6 (2012), pp. 829–850.

[42] Chris Doran, "Economic evaluation of interventions for illicit opioid dependence: a review of evidence", background document prepared for the third meeting of the technical development group for the WHO guidelines for psychosocially assisted pharmacotherapy of opioid dependence, held in Geneva from 17 to 21 September 2007.

[43] Lindsay M. Squeglia and Kevin M. Gray, "Alcohol and drug use and the developing brain", *Current Psychiatry Reports*, vol. 18, No. 5 (May 2016).

who use drugs, even when they are not suffering from diagnosable drug use disorders. The challenges of providing effective treatment to children and adolescents include: *(a)* inadequate research on drug use issues in this population; *(b)* uncertainty about the effects of medication meant for adults on children and adolescents; and *(c)* age-appropriate psychosocial intervention for adolescents taking into account their levels of cognitive development and life experience. Family and community play an important role in adolescent drug treatment. Many adolescents who use drugs have a history of physical, emotional or sexual abuse, and those should be identified and, where applicable, addressed concurrently.[44]

2. Women

26. Worldwide, men are almost three times more likely to use illicit drugs than women, whereas women are more likely than men to use prescription opioids and tranquilizers. While drug use disorders have been more commonly observed among men, the prevalence of drug use has been increasing among women over the past two decades, especially in some high-income countries. Moreover, once the drug use begins, it escalates to dependence much faster among women than among men. Importantly, very few drug-dependent women are able to access treatment services. One in three people who use drugs are women, while only one in five people who receive treatment are women. Stigma is the most important barrier to seeking treatment. Though fewer women use drugs, the public health consequences of drug use disorders among women are substantial and need to be addressed by gender-sensitive treatment services. Specifically, issues that need to be addressed include childcare assistance, sexual, pregnancy and reproductive health, psychiatric comorbidity, violence, sexual abuse, female sex work and housing.[45] WHO has developed guidelines for the management of drug use during pregnancy.[46] INCB devoted special attention to the topic of women and drugs in chapter I of its annual report for 2016.[47]

3. People in prisons and other custodial settings

27. In spite of repeated clarification in United Nations documents that the international drug control treaties do not require States parties to apply criminal justice sanctions for the use of drugs or compel such sanctions for the possession of drugs for personal use, some national governments continue to have laws that mandate penal measures, including incarceration for people who use drugs. It needs to be reiterated that under the international drug control treaties, treatment and rehabilitation services can be provided as a full-fledged alternative to criminal justice sanctions, as stated by the Board in 2007 and in 2016.[48, 49, 50] People facing charges for drug use or possession of small quantities of drugs for personal use need to be provided the option of care outside the criminal justice system. Prison-based treatment is important for inmates who have drug use disorders. The standards and quality of treatment offered in prisons should match those of services available in the wider community, and all options for the psychological and pharmacological treatment of drug dependence available in the community must also be available in prison. Linkages with services outside prison are also essential to ensure continuity of care after an inmate is released. Among psychosocial interventions, long-term residential treatment in therapeutic communities has been found to be particularly suitable for prison settings.

4. People with co-occurring drug use and other mental health disorders (dual diagnosis)

28. It is a well-known fact that drug use and other mental health conditions frequently co-occur. This co-occurrence can manifest itself in many forms. People who use drugs may simultaneously suffer from mental health symptoms or mental health disorders. Conversely, people with mental health disorders may either use drugs in a non-pathological manner or develop drug use disorders. In terms of aetiology or temporal association, either of these conditions may predate or follow the other. Pre-existing mental health conditions may contribute to drug use problems (as in the case of self-medication, for example) or the mental health conditions may be a consequence of drug use. Drug dependence treatment services

[44] United States, National Institute of Drug Abuse, *Principles of Adolescent Substance Use Disorder Treatment: A Research-based Guide*, NIH Publication No. 14-7953 (Washington, D.C., 2014).

[45] R. Orwin, L. Francisco and T. Bernichon, "Effectiveness of women's substance abuse treatment programs: a meta-analysis", NEDS Analytic Summary No. 21 (Fairfax, Virginia, Center for Substance Abuse Treatment, 2001).

[46] WHO, *Guidelines for the Identification and Management of Substance Use and Substance Use Disorders in Pregnancy* (Geneva, 2014).

[47] E/INCB/2016/1.

[48] E/INCB/2007/1.

[49] UNODC, "From coercion to cohesion: treating drug dependence through health care, not punishment", discussion paper, 2010.

[50] E/INCB/2016/1.

should be equipped to assess patients for co-occurring mental health symptoms and to provide treatment or referral.

5. Other special population groups

29. Among other groups, migrants and ethnic minorities may face special challenges in terms of accessing treatment services. Although migration (whether forced or not) is occurring on a large scale globally, the research on drug use among migrants is limited. Migrants may be at particularly high risk of drug use disorders on account of their traumatic experiences, associated mental health problems, challenges of acculturation and socioeconomic inequality.[51] Treatment services for this group must take into account cultural factors which affect demand for and utilization of health and welfare services.[52] People engaged in sex work represent another especially vulnerable and often neglected group. The stigma associated with both drug use and sex work hinders access to treatment, and criminalization of both activities compounds the problem. Collaboration with civil society partners that work with both, people who use drugs and people who engage in sex work is recommended as an especially useful approach to reach out to those groups.[53] In addition, the development of specific targeted interventions for those groups should be a priority, since there is no firm evidence that existing interventions are effective.[54]

K. Drug dependence treatment as a human right

30. The International Covenant on Economic, Social and Cultural Rights sets out the right to health, which is described as "the right of everyone to the enjoyment of the highest attainable standard of physical and mental health". Since the treatment of drug dependence does improve the physical and mental health of affected individuals, such treatment is justifiably considered an element of the right to health.

31. In general comment 14 (2000) of the Committee on Economic, Social and Cultural Rights on the right to the highest attainable standard of health,[55] the Committee interpreted the right to health as defined in article 12.1 of the Covenant by stating that the right to health in all its forms and at all levels contains a number of interrelated and essential elements, the precise application of which will depend on the conditions prevailing in a particular State party. For treatment and rehabilitation services, those conditions include:

(a) Availability: treatment services should be available in sufficient quantity taking into consideration the expected requirements, including the adequate amounts of medicines required for the treatment of drug dependence (such as methadone and buprenorphine for the treatment of opioid use disorders and naloxone for the treatment of overdose);

(b) Accessibility: important aspects of accessibility include non-discrimination (with particular attention paid to vulnerable and marginalized populations), physical accessibility, economic accessibility (i.e., affordability) and confidentiality;

(c) Acceptability: all treatment services should be culturally appropriate for beneficiaries and must be respectful of medical ethics;

(d) Quality: adequate quality implies the provision of medically and scientifically appropriate treatment services delivered by skilled treatment providers using evidence-based methods such as the prescription of medication with scientifically proven effectiveness.

32. Thus, in the light both of the international drug control conventions and of the International Covenant on Economic, Social and Cultural Rights, States should endeavour to ensure that the provision of drug dependence treatment services meets the above standards.

33. The discussion about mandatory drug dependence treatment is particularly significant in connection with the human rights of people with drug use disorders. Many countries have provisions in their national drug control frameworks stipulating that the criminal justice system can motivate, order, and/or supervise certain forms of drug dependence treatment. In some cases, patients are made to undergo treatment without their consent. Such treatments often involve detention in prison or other custodial facilities. In some other cases, the individual may be offered a choice between incarceration and treatment

[51] Danielle Horyniak and others, "Epidemiology of substance use among forced migrants: A global systematic review", PLOS One (2016).

[52] International Centre for Migration Health and Development, *Migrants, displaced people and drug abuse: A public health challenge*, 1998.

[53] Harm Reduction International, "When sex work and drug use overlap: considerations for advocacy and practice", London, 2013.

[54] Nikki Jeal and others, "Systematic review of interventions to reduce illicit drug use in female drug-dependent street sex workers", *BMJ Open*, No. 5(11):e009238, DOI: 10.1136/bmjopen-2015-009238.

[55] HRI/GEN/1/Rev.9 (Vol. I), chap. I.

with informed consent. Only in certain rare and limited cases may short-term treatment without consent be warranted, such as the legally sanctioned, involuntary hospitalization of individuals with severe mental health problems.

34. Compulsory treatment, i.e. treatment administered without the expressed consent of the affected individual, should be discouraged for the following reasons:

(a) The evidence for their effectiveness is poor;

(b) They threaten the health of people undergoing the treatment, including through increased vulnerability to HIV and other infections;

(c) They are in direct conflict with the human rights principles as stated in the International Covenant on Economic, Social and Cultural Rights.

35. Many United Nations agencies have strongly advocated for the closure of compulsory drug detention and rehabilitation centres and for the implementation of voluntary, evidence-informed and rights-based treatment services, a position which has been reiterated by the Board.[56, 57]

36. An essential component of quality and availability of treatment services is access to the medications required to treat drug dependence. Certain medications that are demonstrated to be unequivocally effective in the treatment of drug dependence, such as methadone and buprenorphine, are internationally controlled substances. Many national drug control policy frameworks make it difficult for treatment facilities to provide treatment using such controlled medications. Many controlled substances play a critical role not only in the treatment of drug dependence but also in, for example, pain relief, anaesthesia, surgery and the treatment of mental disorders. The obligation to prevent their diversion, trafficking and abuse has received much more attention than ensuring that they are available in adequate quantities for medical and scientific purposes. Some countries explicitly prohibit the use of such medications. Elsewhere, even if the medications are available, service providers are reluctant to use them owing to cumbersome regulatory requirements. While the inappropriate prescription of controlled medications by health-care professionals must be discouraged, the Board has clearly recommended removal of legal sanctions for unintentional mistakes in handling opioids.[58] Still, in some countries, the practice of interpreting and applying the laws too stringently in relation to treatment providers continues. As an example, in India, in 2014, two psychiatrists were arrested and jailed over charges of providing buprenorphine to their patients. This led to a substantial number of doctors withholding buprenorphine treatment, leaving a large population of patients bereft of an effective treatment and forced to continue their illicit use of heroin.[59] Unfortunately, India is not alone in this respect. It has been pointed out that medications are diverted despite very low levels of consumption for medical purposes. This demonstrates that restricting access to medications for medical purposes is not enough to prevent misuse.[60]

37. It is in the spirit of the international drug control conventions to ensure access to controlled narcotic drugs and psychotropic substances for medical and scientific purposes. States should therefore take measures to remove the legal and policy barriers that prevent access to them. It is essential that national laws governing the availability of pharmaceutical products in general are in line with the drug control treaties in that they curb illicit use and facilitate access to medicines for use in treatment. It is sometimes noted that national policies and regulations make a distinction between different medical purposes, facilitating access to controlled medications for the treatment of certain health conditions, such as pain associated with terminal cancer, and yet hindering the access for the treatment of drug dependence. Controlled medications must be equally accessible for all the health conditions for which they are needed, as required by the international drug conventions and consistent with scientific evidence. Undue restrictions on providing treatment using controlled medications is a violation of the right to health.

L. Monitoring and quality assurance of treatment programmes

38. Appropriate monitoring and evaluation systems are essential to monitoring the coverage and quality of

[56] UNODC and others, "Compulsory drug detention and rehabilitation centres", joint statement, 9 March 2012. Available at www.unodc.org/.

[57] E/INCB/2016/1.

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

[59] Atul Ambekar and others, "Challenges in the scale-up of opioid substitution treatment in India", *Indian Journal of Psychiatry*, vol. 59, No. 1 (April 2017).

[60] Briony Larance and others, "The availability, diversion and injection of pharmaceutical opioids in South Asia", *Drug Alcohol Review*, vol. 30, No. 3 (2011), pp. 246–254.

treatment, rehabilitation and social reintegration services in the public and private sectors. This is a prerequisite for establishing priorities effectively and tailoring responses to assessed needs, including the need to improve the quality of care, the need to help policymakers to determine the return on investment of treatment, the need to identify gaps in treatment provision and the need to plan required treatment programmes.

39. With that purpose in mind, it is important to establish health-focused indicators, for instance the proportion of people recovering from drug use disorders, and in doing so go beyond measuring only the frequency or the type of drug used. The encouragement of operational research and sharing of good practices are important mechanisms to help to ensure that the results of treatment programmes are put to better use as part of a continuous quality improvement process.

M. Recommendations

40. The obligation of States parties, enshrined in the three drug control conventions, to provide treatment for people with drug use disorders as part of a broad spectrum of demand reduction measures is central to improving public health worldwide. In addition, strengthening the treatment of drug use disorders is a critical target in attaining Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages). One of the main objectives pursued in this chapter is to promote the treatment of drug use disorders based on the requirements of the drug control treaties, and to prevent non-evidence-based practices from being implemented in the name of the conventions. Countries should be aware of and utilize the resources and tools for drug dependency treatment and care that have been developed thanks to the collaboration between UNODC and WHO.[61] The cooperation is an effort by the United Nations system to promote an integrated and balanced approach to drug treatment by effective interaction between the public health, drug control and law enforcement sectors.

41. The Board recommends that States should:

(a) Gather data on prevalence of drug-use disorders and the accessibility and utilization of treatment. There is a need to allocate resources to improving mechanisms for effective information collection, including through comprehensive national drug use surveys applying recognized methodologies, to assess the extent and patterns of drug use and treatments;

(b) Invest in making evidence-based treatment and rehabilitation services available and accessible. Considering that drug use disorders place a significant burden on national resources and cause suffering to humankind, it is essential for States to invest in making evidence-based treatment and rehabilitation services available and accessible to people affected by drug dependence as part of the health-care system. It is difficult to prescribe the exact amount or proportion of resources that need to be allocated to cover the entire gamut of drug control activities. Drug control consists of supply reduction (e.g., regulatory control, law enforcement, interdiction and criminal justice) and demand reduction (e.g., prevention, treatment and rehabilitation, and prevention of adverse consequences). However, resource allocation should be balanced, taking into account the extent and pattern of drug problems, national priorities and the scientific evidence base;

(c) Ensure coordination among government agencies and ministries in their efforts to reduce supply and demand. The skills and expertise required for supply reduction and demand reduction are very different. Even within the demand reduction sector, the expertise required for primary prevention is markedly different from that needed for treatment and rehabilitation. Thus, while law enforcement agencies are better suited for managing various control measures, the treatment of drug dependence is best handled by the departments and ministries responsible for the health sector. At the same time, coordination among all agencies engaged in drug control must be ensured;

(d) Give due attention to drug dependence treatment among other health and welfare needs. National resources must be allocated to the treatment and rehabilitation of drug use disorders, based on local needs. Even if resources are made available as a package for a large basket of health and welfare services, a certain proportion needs to be earmarked for treatment and rehabilitation. Resources need to be prioritized for treatment approaches whose effectiveness is supported by a strong evidence base;

(e) Develop a cadre of skilled and trained human resources. To ensure the quality of drug dependence treatment programmes, States must develop mechanisms to build the capacity of a variety of treatment professionals, including university-trained specialists in addiction medicine or addiction psychiatry, general medical professionals equipped to deal with common drug-related problems and other professionals, including nurses, counsellors,

[61] UNODC and WHO, *UNODC-WHO Joint Programme on Drug Dependence Treatment and Care* (2009).

psychologists, social workers and occupational therapists. For outreach activities in the field, peer counsellors from among the community of people who use drugs have been found to be very effective in reaching out to hard-to-reach populations of drug users and motivating them to access services. In addition, it is important that other professionals who may encounter people with drug problems, including those working in general health care, education, social services or criminal justice, should receive training for early recognition, referral or intervention. All training programmes must incorporate elements of human rights and ethical treatment practices;

(f) Collaborate with civil society partners. NGOs could be very effective partners for national governments in a variety of ways, including by enhancing the reach of services by forging links between affected individuals and service providers, ensuring that the rights of people who use drugs are protected and serving as advocacy platforms to provide a voice for affected communities. National governments should foster cooperation with civil society groups that could assist in ensuring compliance with the international drug control conventions in terms of enhanced reach and coverage of treatment interventions;

(g) Follow principles of justice and equity. Treatment services should be made easily accessible to all those who need them, with particular attention paid to special population groups or marginalized, disadvantaged and vulnerable sections of society, in particular women, children and adolescents, sexual minorities, economically weaker groups and racial and ethnic minorities. It should be ensured that people affected by drug dependence are not discriminated against, including on the basis of the kind of drug they have been using (controlled versus non-controlled substances) and whether they have been in contact with the criminal justice system or not. Treatment services in prison or other custodial settings must have the same level of quality and intensity as those available in the community; it needs to be ensured that all people with drug use disorders are able to exercise the right to treatment;

(h) Provide health insurance and other benefits for the treatment of drug use disorders. People with drug dependence must have access to the same benefits and welfare services as those with other health conditions. Drug use disorders need to be listed among the conditions for which health insurance benefits are available. Similarly, disability benefits, if available, also need to be extended to people suffering from drug dependence;

(i) Improve access to controlled medications. Policies and procedures governing controlled medications (such as methadone, buprenorphine and other medications needed for treatment of drug dependence) should be streamlined to facilitate access. While procedural oversight and monitoring are essential to prevent the diversion and misuse of pharmaceutical products, rules and procedures that are too restrictive deter professionals from using them. It is necessary to create an environment that lets professionals provide standard treatment services that involve prescribing and dispensing controlled medications where needed. National laws and policies should not discriminate between various health conditions for which such medications are required. The health sector and health professionals should be entrusted with the clinical decisions regarding the choice of medications in line with the prevailing knowledge base of medical science;

(j) Institute a multi-tier structure for the delivery of treatment services. Treatment rehabilitation and social reintegration services need to be made available in a variety of settings. Overreliance on specialized settings, such as specialist rehabilitation centres, may be counterproductive in that they may stigmatize users and make services difficult to access and afford. Instead, as capacity is developed, a multi-tier structure should be instituted for the delivery of treatment services under which common and less-severe problems are addressed by general and primary health-care services, while more severe problems are addressed by specialist-level care. Such a structure would facilitate early identification and treatment for those with relatively less severe problems and prevent an escalation of their drug dependence and its consequences. Governments are encouraged to use the resource materials developed by WHO for promoting prevention and treatment of drug use disorders in general health-care systems within the framework of universal health coverage;[62]

(k) Move from a criminal justice response to a health and welfare system response. National drug policy frameworks need to be favourable to providing treatment and rehabilitation services and avoid an inadvertent tilt towards a criminal justice response to the drug problem. Some countries have instituted significant legal and policy reforms to that effect. The overall drug policy environment at the national level needs to be conducive to the provision of evidence-based treatment and rehabilitation services; it must be ensured that the human rights of persons with drug use disorders are respected at all stages and that such persons are not subjected to discrimination in any form;

[62] WHO, *mhGAP Intervention Guide for Mental, Neurological and Substance Use Disorders in Non-specialized Health Settings: Mental Health Gap Action Programme (mhGAP)* (Geneva, 2010).

(l) Extend cooperation, share best practices and build capacity. The importance of international cooperation in the area of drug control is well established and has been emphasized in numerous publications of INCB and the United Nations, as well as in the various resolutions of the Commission on Narcotic Drugs, the Economic and Social Council and the General Assembly. International cooperation is also vital to improving and broadening the coverage of treatment of drug dependence. States are urged to cooperate through the sharing of evidence and best practices and in the training of human resources for the provision of treatment and rehabilitation services;

(m) Provide financial and technical assistance to lower- and middle-income countries. Many countries would require financial and expert assistance to develop and sustain treatment programmes for drug dependence that conform to international standards. Many developed and high-income countries with established illicit markets for controlled drugs seek the cooperation of developing countries that are at the origin of or function as transit points for those controlled drugs. Thus, developed and high-income countries should reciprocate by extending financial and technical assistance to lower- and middle-income countries that are struggling to establish and maintain treatment and rehabilitation services. The low-income and middle-income countries that have been successful in gathering adequate expertise and building their capacities are encouraged to share their expertise with other countries. International donor agencies and United Nations agencies could play a vital role in assisting developing countries in this area;

(n) Ensure research into newer interventions. Scientific advances made in the past few decades have made it possible for the global community to deal with the challenges posed by drug use disorders in an efficient, effective and humane manner. However, despite major advances in the treatment of drug use disorders, a number of challenges remain. While it has been demonstrated that existing pharmacotherapy for opioid use disorders is effective, effective pharmacological treatment for cannabis and stimulant use disorders remains elusive. The advent of new psychoactive substances is yet another area for which the knowledge base regarding effects, consequences and modalities of effective treatment is still evolving. Many countries and jurisdictions have brought about substantial policy and legislative changes related to controlled drugs, in particular cannabis. It remains to be seen what the impact of those policy changes will be on drug use disorders, as well as on the subsequent demand for treatment. Relatively newer forms of intervention, such as heroin maintenance and supervised injection facilities, are being implemented in a number of countries. INCB calls for continued efforts to conduct more research in these areas to inform evidence-based treatments and interventions that are in line with the requirements of the international drug control conventions.