

conditions to be determined by a regulation, for the purpose of non-medical use.

258. The Board wishes to point out that such an initiative, if it were to be implemented, would be contrary to the provisions of the international drug control conventions. The 1961 Convention and the 1988 Convention require all States parties to limit the use of narcotic drugs, including cannabis, exclusively to medical and scientific purposes. Non-compliance by any party with the provisions of the international drug control treaties could have far-reaching negative consequences for the functioning of the entire international drug control system.

259. The Governments of those States, which are parties to the international drug control treaties, have demonstrated over many years their commitment to the aims and object of the international drug control conventions, extending their valuable cooperation to the Board in the implementation of the treaties. The Board stands ready, in line with its mandate, to continue a dialogue with all Governments in order to promote universal compliance with the provisions of the international drug control treaties.

E. Special topics

1. Global drug policy debate

256. The Board takes note of recent calls by some Governments for a review, by States Members of the United Nations, of the approach to the global drug problem hitherto adopted by the international community, with the aim of adopting a balanced approach in enhancing the effectiveness of the strategies and instruments used by the world community in confronting the challenge of the drug problem and its effects. The Board welcomes and supports initiatives by Governments aimed at further enhancing international drug control, undertaken in conformity with the international drug control conventions.

257. At the same time, the Board notes with concern recent declarations and initiatives reported from some countries in the Western hemisphere proposing the legalization of the possession of narcotic drugs and psychotropic substances for purposes other than medical or scientific use, and the decriminalization of the cultivation of cannabis plant for non-medical use. In this regard, the Board notes with deep concern a proposal by the Government of Uruguay before the Parliament of Uruguay that would allow the State to assume control over and regulation of activities related to the importation, production, acquisition of any title, storage, sale and distribution of cannabis or its derivatives, under terms and

2. New psychoactive substances

260. The term “new psychoactive substances” denotes substances of abuse that are not subject to international control measures but that have effects similar to those of controlled drugs. It is a generic term that includes emerging drugs of abuse sometimes referred to as “designer drugs”, “herbal highs”, “research chemicals” and “legal highs”. It also includes substances that are not necessarily new but which have recently been increasingly abused.

261. In the past several years, the warnings about the dangers posed by new psychoactive substances have multiplied. Public health officials and drug control stakeholders have been raising awareness of the emergence of new psychoactive substances which are outside the scope of international control for some time. In its annual report for 2010, the Board warned Governments of this growing threat and recommended that they take concrete steps to monitor the emergence of new psychoactive substances with a view to adopting national control measures intended to stem the manufacturing, export, import, distribution and sale of these substances.

262. The Board notes that the international community has taken notice of the problem and has turned its attention to identifying ways to address it effectively. The Board also reminds Governments that pursuant to the international drug control conventions, States parties are explicitly authorized to adopt whatever national control measures

they deem necessary in addition to those existing at the international level. In this regard, the Board acknowledges the adoption in many States of legislative and regulatory measures aimed at establishing mechanisms to address the public health dangers caused by the emergence of new psychoactive substances.

263. In March 2012, the Commission on Narcotic Drugs adopted resolution 55/1, entitled “Promoting international cooperation in responding to the challenges posed by new psychoactive substances”, in which the Commission encouraged States to take various decisive individual and collective actions to deal with the threat posed by new psychoactive substances. Through that resolution, the Commission recognized that the capacity of States to effectively deal with new psychoactive substances is a function of their ability to identify those substances in a timely manner, allowing for preventive measures to be taken, and, given the global nature of the problem, to share that information with other States and relevant stakeholders in order to make concerted action possible.

264. In recent years, there has been an unprecedented increase in the emergence of new psychoactive substances not within the purview of the international drug control conventions. The most common categories of these drugs have been synthetic cannabinoids, synthetic cathinones, piperazines and phenethylamines. According to EMCDDA, the number of notifications of new psychoactive substances received by the Centre averaged five per year from 2000 to 2005. In 2011, the figure had increased to 49, meaning that a new psychoactive substance was put on the market almost every week on average. Although it is impossible to know the exact number of new psychoactive substances on the market, experts have advanced estimates running well into the thousands. As abuse of these substances has increased, so too has the number of users who have experienced grave health consequences or even suffered death due to exposure to them. In many countries, use of such substances has manifested itself in marked increases in emergency room visits for adverse health reactions caused by the ingestion of new psychoactive substances, as well as in significant increases in calls to poison treatment centres.

265. The Board encourages all Governments to establish formal mechanisms aimed at collecting information regarding new psychoactive substances, including information regarding their chemical make-up, patterns of abuse, marketing techniques, trade names, distribution and diversion methods and countries of origin. There is mounting evidence suggesting that many new psychoactive substances are being manufactured in China and India. The Board urges the Governments of China and India to investigate this matter and to take decisive action to

prevent the manufacturing of new psychoactive substances on their territory.

266. The Board notes that several States have established early warning systems for new psychoactive substances, which have been pivotal in national efforts to identify and move to control new psychoactive substances. With respect to the regional level, the Board acknowledges the leading role taken by EMCDDA on the question of new psychoactive substances, particularly through its establishment of a European early warning system. The Board encourages those States that have not yet done so to consider establishing early warning systems and to establish mechanisms for the sharing of obtained information with other States and with multilateral stakeholders, including WHO, INTERPOL, UNODC and INCB. The Board urges those multilateral stakeholders to continue to examine specific aspects of the problem of new psychoactive substances and to disclose their findings to the international community. The Board also acknowledges the particularly important role of WHO in monitoring the emerging abuse of uncontrolled substances and recommending scheduling when it deems appropriate.

267. The Board particularly welcomes efforts made by UNODC in response to Commission on Narcotic Drugs resolution 55/1 aimed at collecting information about new psychoactive substances, including through the elaboration and distribution to national laboratories of a questionnaire on the topic. The Board encourages UNODC to act as a focal point on the question of new psychoactive substances and to gather information from States regarding new substances of abuse and measures adopted to address the problem. The Board also encourages States to continue to support ongoing UNODC activities regarding new psychoactive substances such as the global Synthetics Monitoring: Analysis, Reporting and Trends (SMART) programme.²¹

268. A particular challenge to Government efforts to place new psychoactive substances under national control is the difficulty of identifying those substances in a timely manner, given the rapid succession of new substances entering the market, their inconsistent chemical composition and the lack of technical and pharmacological data and reference material, as well as insufficient forensic and toxicological capacity on the part of some States. The Board acknowledges the recommendation contained in Commission on Narcotic Drugs resolution 55/1 that UNODC should continue to provide technical assistance to States, upon request, in order to assist them in bolstering the capacity of their institutions to deal with the problem of

²¹ Available from www.unodc.org/unodc/en/scientists/smart.html.

new psychoactive substances. The Board also encourages closer cooperation between States on a bilateral and multilateral level, as well the provision of technical assistance where required.

269. In order to raise awareness of the public health dangers associated with many new psychoactive substances and, in particular, to dispel the misconception that those substances are safe since they are not controlled, the Board invites all Governments to include new psychoactive substances in the scope of all existing prevention programmes, and, if deemed necessary, to design specific prevention initiatives targeting this phenomenon. The Board reminds States that it is impossible to gauge the extent of the abuse of new psychoactive substances without comprehensive data on prevalence of abuse, populations specifically at risk and patterns of abuse, and encourages Governments to include new psychoactive substances in their national drug abuse surveys and to effectively disseminate the findings of those studies to all stakeholders, as well as to the public, as an additional means of awareness-raising.

270. The Board also encourages States to cooperate in the development of chemical reference standards aimed at identifying new psychoactive substances and to make those standards available to drug-testing laboratories as necessary. Where such reference samples are not available, the Board encourages States to share analytical data. The Board is aware that in many cases, the work of forensic laboratories in identifying new substances is hampered by obstacles to the availability of test and reference samples of internationally controlled substances. INCB encourages States to consider the recommendations made by the Board in its *Guidelines for the Import and Export of Drug and Precursor Reference Standards for Use by National Drug Testing Laboratories and Competent National Authorities*²² and the “Additional courses of action in support of the implementation of the 2007 INCB Guidelines for the import and export of drug and precursor reference standards for use by national drug testing laboratories and competent national authorities”,²³ which are available on the Board’s website.

271. A further obstacle has been the distribution of new psychoactive substances through the Internet. The Board encourages Governments to monitor the activities of websites selling new psychoactive substances and products

containing those substances that are based in their territory, as well as such websites based in other countries, and to share information in that regard with the competent authorities of countries used as a base for such websites. The Board invites Governments to apply the recommendations contained in its *Guidelines for Governments on Preventing the Illegal Sale of Internationally Controlled Substances through the Internet*²⁴ to the extent to which they are relevant to addressing the sale of new psychoactive substances on the Internet.

272. In addition to the measures listed above, States have taken various legislative and regulatory action to reduce the supply of new psychoactive substances on their territory.

273. Traditionally, national attempts to address new psychoactive substances have been primarily concentrated within the ambit of drug control legislation. Given the speed with which new substances are designed, manufactured and put on the market, drug syndicates are often able to outpace existing controls by staying one step ahead of national legislative and regulatory norms. Further exacerbating this problem is the fact that the onus of identifying and evaluating the potential for harm of new psychoactive substances generally falls upon States, and in many cases no action can be taken to control the substance until that process has been concluded.

274. The adoption of traditional national control measures is often a lengthy and onerous process which, in many cases, has shown itself to be ill-suited for use in addressing such a dynamic phenomenon. In recognition of this fact, States have increasingly developed novel approaches to combating the problem of new psychoactive substances by supplementing traditional drug control measures through an innovative combination of emergency control powers, consumer protection measures and food and drug safety mechanisms in order to expedite the application of control measures to new substances.

275. Among the methods used by States to address the emergence of new psychoactive substances have been the use of “generic” and “analogue” scheduling. In the case of analogue scheduling, a substance that is both structurally similar and has a similar or greater psychoactive effect as a substance already controlled is deemed to be a controlled substance analogue and as such is also considered to be controlled. Under generic scheduling measures, particular variations of a core molecular structure are to be controlled. Thus, each substance does not have to be dealt with individually, and new types of substances can be controlled through these approaches. However, the

²² United Nations publication, Sales No. M.08.XI.6 (available from www.incb.org/documents/Narcotic-Drugs/Guidelines/reference_standards/NAR_Guidelines_reference-standards_en.pdf).

²³ Available from www.incb.org/documents/Narcotic-Drugs/Guidelines/reference_standards/Additional_courses_of_action_ref_standards_EN.pdf.

²⁴ United Nations publication, Sales No. E.09.XI.6.

analogue approach requires the availability of pharmacological data to be able to demonstrate the similarity of psychoactive effects.

276. In seeking to protect the public from potentially harmful substances, States have also made increasing use of “emergency scheduling” procedures that allow them to take swift action to remove a substance from the market while a decision is pending on whether permanent control measures are to be applied to that substance. The adoption of such emergency measures has been highly effective in ensuring that the public is not unnecessarily put at risk before a comprehensive evaluation of the substance can be undertaken by national authorities.

277. Another approach taken by States to limit the public health dangers posed by some new psychoactive substances has been to subject such substances to requirements similar to those imposed upon manufacturers of medications. This has meant that in order for a new psychoactive substance to be deemed to be legal and obtain market authorization, it must have gone through a rigorous approval process backed up by toxicological data, medical trials etc. States having resorted to this type of control measure have reported that the costs associated with the approval process have acted as an effective deterrent for manufacturers of new psychoactive substances.

278. In many countries, recourse has been made to provisions under consumer and health protection laws with respect to requirements for clear disclosure of ingredients, labelling and instructions for use, leading to the confiscation of contravening products, as well as the closure of retail outlets selling them.

279. As noted above, the legal framework established by the international drug control conventions provides the possibility for States to adopt national control measures beyond those mandated at the international level. The choice by each State of what type of measures to apply is informed by the real situation on the ground that such measures are meant to address, and is also governed by the legal and regulatory norms and structures in place. While the Board acknowledges that each State must pursue the adoption of measures tailored to its specific situation, it remains convinced that in identifying appropriate responses to the emergence of new psychoactive substances, States may benefit from an exchange of best practices on the matter.

280. A global problem such as the proliferation of new psychoactive substances requires global solutions. The Board notes the efforts that have been undertaken at the national, regional and international levels to find effective ways to deal with this imposing problem, and encourages

States and international organizations to continue to work together in sharing information, developing common strategies and exchanging best practices. In the pursuit of its mandate, the Board stands ready to assist Governments.

3. Abuse of pharmaceutical preparations containing narcotic drugs or psychotropic substances

281. Over the years, the Board has repeatedly drawn the attention of Governments to the increasing abuse of prescription drugs containing controlled substances. In its annual report for 2009, in particular, the Board devoted a special topic to this problem to highlight the need for Governments to give it increased attention and to introduce countermeasures. Since 2009, the abuse of prescription drugs has continued to spread in all regions of the world, and is posing serious health and social challenges in some countries. In North America and South and South-East Asia, as well as some countries in Europe and South America, prescription drug abuse has increased substantially in recent years. In the United States, for example, prescription drug abuse is more prevalent than the abuse of any other internationally controlled substance except cannabis. In Germany and the Russian Federation, sedatives and tranquillizers containing benzodiazepines ranked the second most commonly abused substance group. The most abused substances that have been reported include opioids containing buprenorphine, codeine, hydrocodone, methadone and oxycodone, sedatives and tranquillizers containing benzodiazepines, barbiturates or GHB, and stimulants.

282. The abuse of prescription drugs by injection, which increases the risk of HIV, hepatitis B and hepatitis C infection, has also been reported by many Governments. This problem is noted particularly in South Asia, where the most commonly injected prescription drugs include a variety of benzodiazepines and buprenorphine. Health-care coverage among injection drug users in the region is low; this increases the likelihood of drug abusers sharing their injection equipment.

283. One particular concern of the Board is the increase in recent years in the reported abuse of prescription drugs containing psychotropic substances. According to a recent CICAD report on drug abuse in the Americas, the past year prevalence of the abuse of tranquillizers obtained without a prescription among secondary school students was higher than 6 per cent in Bolivia (Plurinational State of), Paraguay and Colombia. In Singapore, the Government has reported a large increase in the abuse of sedatives and tranquillizers containing benzodiazepines. Increased deaths related to the

abuse of psychotropic substances have been reported by a number of countries.

284. While more and more Governments have become aware of the increased abuse of prescription drugs containing psychotropic substances, the problem remains largely underreported worldwide, compared to the abuse of prescription drugs containing narcotic drugs. Furthermore, the Board is concerned that the general public, in particular youth, are not adequately informed about the damaging effects of such abuse.

285. As with the abuse of prescription drugs in general, the abuse of prescription drugs containing psychotropic substances has gained popularity, owing mainly to the fact that such abuse is less stigmatized than the abuse of illicitly manufactured drugs, the perception that such medications can be obtained legally (for example, from health-care professionals) and the mistaken belief that the abuse of such substances is not damaging to health.

286. Another concern of the Board relates to the role of health-care professionals: they may intentionally or unintentionally contribute to the problem of prescription drug abuse in different ways. According to the latest United States National Survey on Drug Use and Health, the majority of prescription drug abusers who obtained such preparations from a friend or relative indicated that the friend or relative had obtained them using a legitimate prescription. Research has indicated that the training that health-care professionals have received in prescribing and dispensing controlled substances and identifying substance abuse was insufficient in many countries. In addition, the dispensing of prescription drugs by pharmacists without the required prescriptions is a factor in sustaining the illicit use of prescription drugs in some regions, such as South Asia.

287. In response to the challenges posed by prescription drug abuse, many Governments have taken action to address this growing problem. For instance, the Government of Singapore requires medical practitioners to report information such as the duration of treatment periods and the dosage and quantities of prescription drugs that are prescribed to suspected drug addicts. The Governments of Germany and the United States have formulated targeted action plans to monitor and reduce prescription drug abuse. However, more needs to be done.

288. The crucial first step is to improve knowledge about the nature and extent of the abuse of prescription drugs, so as to devise a targeted response. Although a number of studies and research papers regarding prescription drug abuse have become available recently, knowledge about this problem in most countries remains extremely limited. The lack of information on the extent of abuse is a particular

concern in Africa, where the availability of prescription drugs on unregulated markets outside the control of the health authorities appears to be a serious problem. As the Board outlined in its annual report for 2009, Governments should include prescription drugs containing controlled substances in national drug abuse surveys to obtain information on the nature and extent of the abuse. In some countries where this has already been done, the questions on the abuse of prescription drugs in the surveys tend to be unspecific and do not lead to sound conclusions. In some other countries, queries about the abuse of psychotropic substances have been omitted in such surveys, perhaps owing to the perception that the high abuse of opioid analgesics is a greater concern. In all such cases, national surveys should be improved by making the questions comprehensive as well as specific regarding the type of substance abused.

289. Secondly, although there has been significant improvement in some countries in raising awareness about the harmful effects of prescription drug abuse, many people, including from the medical profession, are still not aware that the abuse of prescription drugs containing controlled substances can be as dangerous as the illicit use of other drugs such as heroin and cocaine. Therefore, it is necessary for Governments to formulate and implement effective prevention strategies; such strategies should target the general public and medical professionals, who need to be better educated about the dangers associated with prescription drug abuse. Health authorities and professional organizations should develop guidelines and codes of conduct and enhance training programmes for health-care professions, with the aim of promoting rational prescription and dispensation and reducing abuse of prescription drugs.

290. In some countries, prescription drugs that have high rates of abuse have been removed from the market or replaced with variants less prone to abuse. While such approaches can be part of an effective strategy to tackle the abuse of certain prescription drugs over the longer term, care needs to be taken when applying such approaches because they might limit the availability of those substances on the licit market. In addition, dependent abusers can switch to other forms of abuse to substitute for the substance or substances they were abusing previously, and the substitutes may be even more harmful. Therefore, a balanced approach is needed to prevent abuse while at the same time ensuring the availability of prescription drugs for licit purposes.

291. Last but not least, to tackle the problem of prescription drug abuse, measures need to be taken to prevent the illicit supply of prescription drugs. In addition to diversion from licit channels, the clandestine

manufacture of pharmaceutical preparations containing controlled substances has been uncovered in some countries. This suggests that the abuse of certain prescription drugs has become so widespread that traffickers are seeking new methods to meet the demand. Therefore, the Board urges all Governments to take measures to prevent the diversion and illicit manufacture of prescription drugs, as an effective way to prevent abuse.

292. Some psychotropic substances, all of them central nervous system stimulants, are used mainly in the treatment of attention deficit hyperactivity disorder (ADHD), a mental and behavioural disorder that usually results in learning problems, among many others. Methylphenidate is the most widely known and prescribed substance, and in some countries the only substance, used for such treatment. Dexmethylphenidate, the more potent stereoisomeric form of methylphenidate (which is controlled under the 1971 Convention), is now increasingly imported and used in some countries. Furthermore, amphetamine and dexamphetamine, alone or in combination products, are used for the treatment of ADHD. All three substances mentioned above are included in Schedule II of the 1971 Convention, since they are considered to be of little to moderate therapeutic usefulness and their liability to abuse constitutes a substantial risk to public health. On a much smaller scale, pemoline, a substance included in Schedule IV of the 1971 Convention, has also been used in the treatment of ADHD. More recently, lisdexamfetamine, a prodrug of dexamphetamine (after consumption it metabolizes in the body to dexamphetamine) that is not under international control, has been developed. That substance is considered to be less liable to abuse than amphetamines and methylphenidate, and its use in the treatment of ADHD is spreading in some countries. A number of other substances that are not under international control are also used in the treatment of ADHD.

293. The diagnosis of ADHD, in particular in children, is time-consuming and should follow complex assessments of medical, developmental and educational parameters to exclude the possibility that the behavioural and learning problems are caused by other disorders or by family and environmental circumstances. Diagnosis of ADHD and its treatment with the help of central nervous system stimulants, primarily in children, started to grow substantially in North America about two decades ago, and that growth has subsequently spread to many countries and regions. Since consumption of the substances used to treat ADHD improves academic performance and alleviates behavioural problems, there have been reports of pressure

from schools or parents to prescribe such substances to pupils and students without a proper diagnosis of ADHD. ADHD was previously considered to be mainly a problem of schoolchildren; however, ADHD in pre-school children and in adults has also been increasingly diagnosed and treated with stimulants such as methylphenidate.

294. Partly as a consequence of the developments described above, global use of the substances used in the treatment of ADHD has increased during the past two decades, although there have been changes in the use levels of the various substances mentioned above. Whereas global manufacture and use levels of amphetamines increased in the 1990s, when they were consistently much higher than the manufacture and use of methylphenidate, they have followed a downward trend since about 2000. The manufacture and use of pemoline were also much higher in the 1990s and have declined since. In contrast, the global manufacture of methylphenidate, which increased more than tenfold, from 4.2 tons in 1992 to 45.2 tons in 2011, and in 2009 surpassed the combined global manufacture of all amphetamines, continues to grow. The calculated global consumption increased during the same period from 4.2 tons (139 million defined daily doses for statistical purposes (S-DDD)) to 51 tons (1.5 billion S-DDD). While the Board has no direct information on the levels of use of many stimulants such as lisdexamfetamine that are not internationally controlled, there are signs that the total manufacture and use of central nervous system stimulants for the treatment of ADHD are not levelling off.

295. The high demand in the United States, where the use of methylphenidate and other substances for the treatment of ADHD is heavily advertised, including directly to potential consumers, and is promoted at schools, has been the major driving force for the manufacture and use of methylphenidate. The United States has traditionally been the major manufacturer and user of methylphenidate, in addition to being the major importer of amphetamines used in the manufacture of preparations to treat ADHD. In that country, the levels of calculated consumption²⁵ of methylphenidate increased steadily and sharply

²⁵ The 1971 Convention does not require that Governments furnish to the Board statistics on the consumption of psychotropic substances. In 2011, the Commission on Narcotic Drugs, in its resolution 54/6, requested Governments to submit consumption statistics for psychotropic substances to the Board to enable it to evaluate the availability of psychotropic substances in countries and regions. Some Governments have started to submit such statistics; however, so far the data received are not sufficient for the comparison of statistics between countries and years.

from 1.5 S-DDD per 1,000 inhabitants per day in 1992 to 10.8 S-DDD per 1,000 inhabitants per day²⁶ in 2011.

296. The use of methylphenidate for the treatment of ADHD has spread to a number of other countries. In 1992, the share of the United States in the total calculated use of methylphenidate was 86 per cent; in 2011, that figure dropped to 69 per cent. Whereas in 1992 a total of 63 countries and territories reported use of methylphenidate, in recent years over 100 Governments have reported such use. In 2011, Canada and Iceland, for the second consecutive year, showed higher calculated per capita consumption levels than the United States. Other countries in Europe and Oceania²⁷ that show very high rates of per capita consumption of methylphenidate are also among the countries with very high per capita consumption levels of amphetamines.

297. It should be noted that about half of the countries and territories in the world do not report any use of the psychotropic substances that are typically used in the treatment of ADHD. In particular, many countries where the population is much younger than in the countries reporting high consumption levels of stimulants used in ADHD, and that presumably would have a high rate of ADHD, hardly use such stimulants.

298. The increase in the availability and use of the substances used to treat ADHD, in particular methylphenidate, has been accompanied by frequent reports of diversion and abuse of the pharmaceutical preparations containing those substances from licit distribution into illicit channels, in particular in countries where consumption levels have been high. The preparations are typically abused by two groups: (a) students and pupils who want to improve their academic performance and who seem to ignore the health risks involved in the use of such substances without medical supervision, and (b) abusers of amphetamine-type stimulants who crush and subsequently snort, dissolve or inject the substances in question, such as methylphenidate, or mix them with street drugs to create what is called a "speedball". In the United States in the mid-1990s, the levels of abuse of substances that are used to treat ADHD were not less than the abuse levels of stimulants that were illicitly manufactured.²⁸ Whereas most other amphetamine-type stimulants have been obtained from illicit manufacture, all

the methylphenidate found in illicit markets is believed to be diverted from domestic distribution channels.

299. Many methods for the diversion of those preparations were identified. For example, methylphenidate is among the substances most often obtained through illegal Internet pharmacies. In several countries adolescents and young adults reported little difficulty in obtaining preparations containing methylphenidate or amphetamines from friends or schoolmates. Furthermore, schools have been broken into and medication supplies stolen. In some countries there were reports that methylphenidate could be obtained without a prescription, in contravention of the provisions of the 1971 Convention. At least one criminal network was identified that was involved in falsifying orders for preparations containing methylphenidate.²⁹

300. The Board recognizes the usefulness of stimulants in the treatment of ADHD when prescribed on the basis of careful and appropriate diagnosis and proper treatment evaluation. Nevertheless, the Board has repeatedly expressed its concern about the high level of consumption of methylphenidate and the other substances used in the treatment of ADHD, which has led to the widespread diversion and abuse of pharmaceutical preparations containing those substances. The Board has requested the countries concerned to ensure that the control measures foreseen in the 1971 Convention are applied to the stimulants listed in Schedule II of that Convention and to take additional measures, as necessary, to prevent both the diversion from licit distribution channels and the abuse of preparations containing that substance.³⁰ The Board has also stressed on numerous occasions the importance of education and training for health professionals on the rational use of psychoactive drugs, to prevent the abuse of prescription drugs. In this connection, the Board noted that the significant increase in the use of stimulants for ADHD treatment in many countries could be attributed to possible overdiagnosis and overprescription.

301. Diversions of methylphenidate and other substances used in the treatment of ADHD, direct advertising to the general public to promote their use and wide public dissemination of information about the misuse and abuse of such substances, as well as the sources where they can be obtained, have helped to create an illicit market for preparations containing such substances. The Board is therefore concerned about the unabated increase in consumption of methylphenidate in a number of countries.

²⁶ Since 2010, statistical data on consumption were reported by the United States. The reported data confirm excessively high consumption levels.

²⁷ Namely, Australia, Belgium, Denmark, the Netherlands, New Zealand, Norway, Spain and Sweden.

²⁸ *Report of the International Narcotics Control Board for 2006* (United Nations publication, Sales No. E.07.XI.11), para. 87.

²⁹ *Report of the International Narcotics Control Board for 2009* (United Nations publication, Sales No. E.10.XI.1), para. 98.

³⁰ For example, in recommendation 24 of the *Report of the International Narcotics Control Board for 2009*.

Inadequately controlled supplies of those substances at sites such as schools, private homes and illegal Internet pharmacies, as well as the continued lack of awareness on the part of potential abusers about the health risks associated with the abuse of those stimulants, may lead to increased diversion and abuse.

302. The Board therefore reiterates that Governments should closely monitor the consumption levels of all stimulants that are used in the treatment of ADHD and ensure that they are prescribed in accordance with sound medical practice, as required under article 9, paragraph 2, of the 1971 Convention and in line with the rational use of psychoactive drugs, as recommended by WHO. The competent authorities of the countries concerned should further increase their vigilance with regard to the diversion of, trafficking in and abuse of stimulants in Schedule II used for the treatment of ADHD. Where necessary — for example, at schools — safety measures for storage and distribution should be enforced. Health professionals prescribing substances for the treatment of ADHD and health authorities should advise the general public, students and, in particular, parents of young patients of the risks and consequences of the abuse of such substances. The Board calls further on all Governments to inform it of any new development with regard to the diversion of, trafficking in and abuse of those substances.

4. Diversion of pharmaceutical preparations containing narcotic drugs or psychotropic substances

303. Reported seizures of pharmaceutical preparations containing controlled substances and the reports of increasing abuse in many countries and regions (see paras. 281-302 above) prove that these preparations continue to be readily available on the illicit market. Unlike the case of heroin, cocaine and amphetamine-type stimulants, which are well known to be clandestinely manufactured, the illicit manufacture of pharmaceutical preparations containing controlled substances has rarely been reported, indicating that their supply has been originating primarily from diversion from licit domestic distribution channels.

304. The most commonly diverted pharmaceutical preparations contain the following:

- Strong analgesics such as fentanyl, hydrocodone, morphine and oxycodone
- The substances buprenorphine and methadone which are mainly diverted from substitution treatment

- Stimulants such as methylphenidate and phentermine
- Many sedatives and tranquillizers (certain benzodiazepines and barbiturates, and GHB).

Diverted pharmaceutical preparations containing narcotic drugs and psychotropic substances are frequently abused in the countries of diversion. However, they are also often smuggled from the countries where they were diverted to other countries and regions where they are abused, as reported by a number of countries. For instance, diverted preparations containing buprenorphine were smuggled from France into Mauritius, where the abuse of buprenorphine is a significant concern.

305. Governments are increasingly aware that pharmaceutical preparations continue to be diverted to feed the illicit market, yet knowledge about how those drugs are being diverted remains limited. Of the 65 Governments that have returned the 2011 annual report questionnaire, 25 Governments indicated that they had seized pharmaceutical preparations containing narcotic drugs and psychotropic substances; however, only 7 Governments could identify the source of supply or methods of diversion. Lack of knowledge about the diversion methods makes it difficult to devise targeted countermeasures.

306. On the basis of information available to the Board, the diversion of pharmaceutical preparations containing controlled substances continues to occur mainly in the domestic supply chain. While such diversion appears to be a problem in many countries, it is most prominent in countries where either the national legislation or its implementation is weak.

307. Diversion is often facilitated knowingly or unknowingly in the health-care sector, for instance, through unethical practices of health-care professionals, such as prescribing controlled substances in a manner that is not medically appropriate. The role of some pharmaceutical companies is also important in this regard when they boost sales by offering incentives to medical practitioners for promoting their products. Pharmacies are another important source of diversion for pharmaceutical preparations containing controlled substances. Preparations that require a prescription are obtained in many countries illicitly from pharmacies with or without prescriptions, sometimes owing to a lack of qualified pharmacists in those pharmacies. For example, according to a report of UNODC, in South Asia significant quantities of pharmaceutical preparations are diverted from licensed and unlicensed pharmacies both with and without prescription.

308. Furthermore, pharmaceutical preparations containing controlled substances are often diverted by patients. The sale of legitimate prescriptions to unauthorized persons, forgery of prescriptions, “doctor shopping” using false identification and obtaining drugs from friends are indicated by Governments as being the major methods of diversion. In some cases, drug abusers misuse prescriptions from doctors by making repeated purchases from multiple pharmacies using a single prescription (“pharmacy shopping”).

309. In recent years, illegal Internet pharmacies and mail and courier services have flourished as important channels for diversion, because shipments are difficult to track and the sheer volume of international mail makes it impossible to screen every package. Benzodiazepines appear to be the substances under international control that are most commonly ordered from illegal Internet pharmacies. There is another related concern: the majority of the drugs supplied by illegal Internet pharmacies may be counterfeit.

310. Since 2009, the Board has been collecting information on the smuggling of internationally controlled substances by mail in response to the request by the Commission on Narcotic Drugs (resolution 50/11). To enable the Board to fully assess trends relevant to this issue, Governments are requested annually to provide the Board with information on all seizures of pharmaceutical products containing internationally controlled substances sent through the mail, whether ordered via the Internet or not, and add information regarding the use of the Internet in the relevant transactions, if possible. The Board notes that, while the number of responses received has increased since 2009, several countries with major experience in the control of narcotic drugs and psychotropic substances smuggled by mail did not submit data to the Board, which makes a full analysis of trends difficult. The Board therefore reminds all Governments, pursuant to Commission on Narcotic Drugs resolution 50/11, to submit to the Board the form entitled “Notification on seizures of internationally controlled licit substances smuggled through the mail, including those ordered via the Internet”,³¹ which is sent every year to all Governments.

311. Theft from hospitals and warehouses has also been a method of diversion in many countries. For instance, in Canada between 2009 and 2011, over 3 million tablets were diverted, with over 70 per cent having been stolen. Most of the stolen tablets contained opioids such as oxycodone, hydromorphone and morphine, substances with a high potential for abuse. In the Russian Federation, theft from

hospitals and doctors’ offices was the primary method of diversion for preparations containing fentanyl, benzodiazepines and barbiturates such as phenobarbital.

312. Pharmaceutical preparations that are exempt from the prescription requirement under the international drug control treaties, such as cough syrup containing codeine, have often been targeted by traffickers, since they are easily available in large quantities for abuse or use in the illicit manufacture of other drugs. For instance, in the Russian Federation, codeine preparations that were exempt from the prescription requirement were found to be used in the illicit manufacture of desomorphine, a substance that has been much abused in that country.

313. The Board is aware that some Governments have implemented targeted measures to address the specific challenges posed by the diversion of pharmaceutical preparations containing controlled substances in their country, or are planning to do so. For example, in the United States, prescription drug monitoring programmes have been established in 35 states to track controlled substances prescribed by authorized practitioners and dispensed by pharmacies. In India, where pharmacies were found to be frequent points of diversion of pharmaceutical preparations destined to feed the illicit market in the subregion of South Asia, a programme to monitor the distribution of pharmaceutical preparations to vulnerable areas close to international borders, as well as an online prescription monitoring system is planned. In Australia and China, law enforcement actions against illegal Internet pharmacies have been intensified, leading to the dismantling of a number of illegal online pharmacies and significant seizures of diverted preparations containing controlled substances. In June 2012, the Russian Federation introduced a prescription requirement for the purchase of any codeine preparation in order to reduce the diversion of such preparations.

314. The Board believes that preventing the diversion of pharmaceutical preparations containing controlled substances requires a combination of actions to respond to specific methods of diversion, as shown in the examples above. Strengthening regulatory control measures and building up the capacity of law enforcement authorities so that they are fully aware of the problems associated with the diversion of prescription drugs, are essential. Where appropriate, Governments should introduce or expand programmes to monitor the movement of prescription drugs. New legislation might have to be adopted. For example, the sale of internationally controlled substances by Internet pharmacies should be prohibited. It is equally important for Governments that experience problems of diversion of pharmaceutical preparations to carry out studies of the domestic supply chain, from manufacture or

³¹ Available from www.incb.org/incb/en/narcotic-drugs/Yellowlist_Forms/forms.html.

import of the preparations containing controlled substances to the point of their retail distribution, in order to ascertain the points that are most vulnerable to exploitation by traffickers. In addition, the origin of seized preparations should be investigated by law enforcement authorities to identify their sources and points of diversion. In this connection, the sharing of information and cooperation between the law enforcement authorities of the countries concerned is needed to investigate the smuggling of diverted pharmaceutical preparations.

315. Furthermore, measures are needed to reduce the abuse of diverted pharmaceutical preparations (see paras. 281-291 above), since without such abuse there would be no diversion of those preparations. In this connection, awareness-raising programmes should be conducted for the health-care professions, targeting the legal and ethical aspects of prescribing and dispensing preparations containing controlled substances. Last but not least, Governments should make every effort to ensure that measures to strengthen control of the supply and distribution of controlled substances should never jeopardize the availability of those substances for medical treatment.

5. Substances not under international control

316. In recent years, the Board has repeatedly drawn the attention of Governments to the reports of abuse of and international trafficking in ketamine, a substance currently not under international control. The Board has noted with concern that diversion or trafficking of ketamine has been noted in all regions of the world and that the abuse of ketamine has become a health risk in a number of countries. Widespread abuse of ketamine, particularly among youth, continues to be reported by countries in East and South-East Asia, as well as in the Americas.

317. The international community shares those concerns of the Board. The Commission on Narcotic Drugs, at its forty-ninth session, in March 2006, adopted resolution 49/6, entitled "Listing of ketamine as a controlled substance", in which the Commission called upon Member States to consider controlling the use of ketamine by placing it on the list of substances controlled under their national legislation, where the domestic situation so required. In March 2007, the Commission took further action in its resolution 50/3, encouraging Member States to consider adopting a system of precautionary measures for use by their government agencies to facilitate the timely detection of the diversion of ketamine.

318. The Board notes the adoption of the above resolutions of the Commission on Narcotic Drugs and calls

upon all Governments to implement those resolutions without delay. In 2008, the Board sent a questionnaire to all Governments requesting information on the specific legal or administrative measures adopted pursuant to Commission resolution 49/6, including, in particular, information on measures to control imports and exports of ketamine. The Board received information from 104 countries and territories. Of those, over 50 per cent reported that ketamine had already been placed on the list of substances controlled under national legislation, pursuant to Commission on Narcotic Drugs resolution 49/6. With regard to the control of licit international trade in ketamine, 59 countries and territories informed the Board that they required import and export authorizations for ketamine.

319. The Board has published, on a secure page of its website, information on the requirements for import and export authorizations for ketamine in individual countries, with a view to assisting trading countries in rapidly verifying the legitimacy of individual trade transactions involving that substance without unduly delaying licit trade. The Board calls upon the competent authorities of exporting and importing countries to consult that information before authorizing imports or exports of ketamine. Moreover, the Board reiterates its requests to all Governments that have not yet done so to furnish it with updated information on their national regulatory control measures for ketamine that are applied in their countries pursuant to Commission on Narcotic Drugs resolutions 49/6 and 50/3.

320. In recent sessions of the Commission on Narcotic Drugs, a number of Governments have commented on the health risks and other problems associated with abuse and diversion of ketamine as experienced in their countries. Those countries expressed their disappointment with the fact that the substance was not under international control and called for urgent international action to counter the abuse of and trafficking in ketamine. Welcoming the national controls applied in many countries in accordance with the above Commission resolutions, those Governments stressed the need for concerted action by all Governments, which would best be achieved when ketamine was controlled under the international drug control treaties.

321. The Board notes that ketamine has been illicitly manufactured in some countries, in addition to being diverted from licit channels, and has been subsequently trafficked between countries and regions, to satisfy the growing illicit demand for the substance. The Board shares the opinion of the Governments concerned that national control measures alone may not be sufficient to enable law

enforcement cooperation between the countries involved, the concerted investigation of such crimes or the prosecution of the criminals behind them, to name a few of the actions that need to be taken in this regard.

322. The Board therefore recommends that Governments that do not apply control measures to ketamine remain vigilant, in view of the risk that ketamine might be diverted or abused in the country. The Board further encourages Governments to inform the Board and UNODC of cases of diversion or attempted diversion of ketamine that they may uncover and to collect epidemiological data on the abuse of the substance, and reminds Governments that experience difficulties with the diversion and abuse of ketamine to provide the relevant information to INCB, UNODC and WHO.

323. Another development of concern is the increasing abuse of tramadol, a synthetic opioid not under international control, which has become a serious problem in a number of countries in Africa, notably Egypt. Abuse of tramadol has also been reported by Jordan, Lebanon, Libya, Mauritius, Saudi Arabia and Togo.

324. In response to that emerging threat and concerned by the increasing abuse of tramadol preparations in the country, the Government of Egypt placed that substance, as well as its salts and derivatives and preparations containing tramadol, under national control in 2012. Tramadol is also under national control in other countries, such as Jordan and Saudi Arabia.

325. According to information available to the Board, tramadol seems to be diverted mainly from international trade. For instance, Egyptian authorities seized in the country's main seaports about 120 million tablets containing tramadol in 2011 and about 320 million tablets in the first quarter of 2012. The preparations were reportedly smuggled into Egypt mainly from China and India. Increasing amounts of seizures of preparations containing tramadol are also reported by Saudi Arabia.

326. In West Africa, a series of large seizures of tramadol preparations, totalling more than 132 tons of such preparations, were effected between February and October 2012. The preparations had been concealed in sea containers coming from India and were intercepted by the law enforcement authorities of Benin, Ghana, Senegal and Togo.

327. The Board is concerned about the growing abuse of tramadol in some African and West Asian countries and the increasing amount of trafficking in tramadol preparations to Africa, as evidenced by recent large seizures of such preparations in North and West Africa. The Board calls on countries in Africa and West Asia to take the measures

necessary to address that problem and to furnish pertinent information on the extent and nature of the abuse of and trafficking in tramadol to the Board and WHO.

6. Plant materials not under international control containing psychoactive substances

328. The utilization of plant-based preparations that are not under international control and which contain natural psychoactive ingredients is often part of traditional indigenous rituals, traditional medicine and religious ceremonies. Examples of the plants or parts of plants from which such preparations are concocted include khat (*Catha edulis*) from East Africa and the Arabian peninsula; ayahuasca, a preparation made from plants indigenous to the Amazon basin of South America, most importantly a jungle vine (*Banisteriopsis capii*) and another tryptamine-rich plant (*Psychotria viridis*), containing a number of psychoactive alkaloids, including DMT; the peyote cactus (*Lophophora williamsii*), containing mescaline; magic mushrooms (*Psilocybe*), which contain psilocybine and psilocine; *Ephedra*, containing ephedrine; "kratom" (*Mitragyna speciosa*), a plant indigenous to South-East Asia containing mitragynine; *Salvia divinorum*, a plant originating in Mexico that contains the hallucinogen salvinorin A; and iboga (*Tabernanthe iboga*), native to western Central Africa, containing the hallucinogen ibogaine.

329. The Board pointed out some of the problems related to the use of those plant materials outside their original socioeconomic context in its annual report for 2010 (paras. 284-287). Since then, increasing interest in the use of such plant materials for recreational purposes has been noted, possibly encouraged by a lack of clarity with regard to the control status of the plants at the national or the international level. At present, no plants, including the ones containing psychoactive ingredients, are controlled under the 1971 Convention, although the active ingredients they contain are sometimes subject to international control. For example, cathine and DMT are psychotropic substances included in Schedule I of the 1971 Convention, while the plants and plant-based preparations that contain them, namely khat and ayahuasca, respectively, are not subject to any restrictions or control measures. This situation is seemingly exploited by drug trafficking networks and online retailers, resulting in increased trade, use and abuse of these plant materials in many countries.

330. The easy availability of those plant materials through the Internet is evidenced in the 2011 EMCDDA survey on the online availability of new psychoactive substances in the European Union. According to that survey, the most commonly sold new psychoactive substances based on

natural products in Europe include “kratom”, *Salvia divinorum*, ayahuasca and hallucinogenic mushrooms.

331. Furthermore, the Board notes the increasing popularity of practices that purportedly have spiritual connotations, such as “spiritual tourism”, under the cover of which the plant-based psychoactive materials are consumed. Several centres around the world offer “initiatory journeys” with the presence and assistance of a shaman. Some online travel agencies offer “initiatory journeys” “supervised” by shamans, although such events are usually totally outside the sociocultural context that they claim to represent. Shamanic practices during such initiatory journeys, such as trance, ecstasies, hallucination and divination, are reached mainly through the ingestion of preparations made out of plant materials containing the psychoactive substances mentioned above.

332. The Board notes with concern that the use of those substances has been associated with various serious health risks (both physical and psychological) and even with death. The Board therefore wishes to draw the attention of Governments to the fact that the use of such plant materials for whatever purpose could be unsafe practice.

333. In view of the health risks associated with those materials, a growing number of Governments have placed such material or preparations under national control, or are considering doing so, and are taking other measures to prevent negative health consequences of such use. For example, in 2009 *Salvia divinorum* emerged in Canada as a substance of concern; in 2010, an estimated 1.6 per cent of Canadians aged 15 years and over had used the substance in their lifetime and 0.3 per cent reported having used it in the past year. Although *Salvia divinorum* is not currently scheduled under the Controlled Drugs and Substances Act, Health Canada has proposed to include it as a controlled substance under that Act. In the United States, the substance has been placed on the Drug Enforcement Administration’s “Drugs and Chemicals of Concern” list. In addition, several states in the United States have banned the substance.

334. The Board reiterates its recommendation to the Governments of countries where the misuse and trafficking of such plant materials may occur to remain vigilant and recommends that appropriate action be taken at the national level where the situation so requires.