TOPIC

The Current Situation Regarding the Use of Illegal Drugs in the Czech Republic

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SUMMARY

Illegal drugs are a substantial health, social, legal and economic problem, both for individuals and society as a whole. Since 1989 the Czech drug scene has undergone considerable changes, leading to an almost total disappearance of its original features and to the emergence of a new, market-based drug scene similar to that existing in other, western European countries. The authors present a summary of the current data relating to the whole spectrum of drug-user groups and point out that the perception of drug users in the past has often been erroneously reduced to groups of persons entering treatment or starting prison sentences. In fact, the largest and least researched group is that of "recreational" drug users, the majority of whom will never have any experience of therapy or prison. A new system of data collection introduced in the CR four years ago is presented; this system allows a comparison with other EU countries. It covers surveys on drug use among adult and school-age populations, surveys on the prevalence of problem drug users, monitoring of treatment demand, drug-related infections and drug-related deaths. Data on drug-related crime, drug consumption and drug seizure are briefly presented.
Key words: illegal drugs, drug use, drug scene, epidemiological indicators, trends in drug use.

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The tradition of systematic research into fields related to illegal drug use is rather short in the Czech Republic. While before 1989 researchers in the field of alcohol abuse recorded considerable success, especially in treatment but also in research, the same could not be said of prevention of harmful consumption of alcohol and tobacco products. The worst situation, however, related to research into illegal drug use where, apart from rare therapeutic activities, there was in fact no comprehensive system of monitoring the situation and transferring the findings to practical use. With some exceptions, the data from this period are restricted to data received from doctors and staff of therapeutic facilities and from certain state-run institutions (e.g. prisons) that were in contact with users of illegal drugs. This, in reality, was just the tip of the iceberg when it came to the number and variety of the whole spectrum of users of illegal drugs. Our outline of the current state of the drug scene and of its development[1] in the first half of the 1990s is limited by the data sources available and the very restricted spectrum of users (1). However, the state of information on the pre-1989 drug scene was not by any means merely a consequence of the political and economic circumstances. One important factor was also the fact that drug research is primarily an interdisciplinary activity. Today, the scientific and research core is based on an interdisciplinary approach, although there is, of course, a specialized field as well (in pharmacological research, etc.). The result has been a clearer demarcation of the field, allowing the subsequent establishment of a new scientific discipline. Following the example of the United Kingdom and many other countries, a new discipline called addictology is now being established at the 1st Medical Faculty of Charles University in Prague.

Before 1989, self-supply was the dominant system applied by groups of users of illegal drugs (individual groups got their own raw materials and made drugs), i.e. the market was not of a commercial nature. There was no traditional pyramidal system of sale; with minor exceptions, sale and manufacture was not organized into larger entities or chains. The core of the drug scene before 1989 can be characterized as enclosed, as based on personal acquaintance, with very low permeability between the individual layers and groups. A typical feature was the bond between the individual and a certain community or gang, which had its own internal system of acquiring drugs, usually on a self-supply basis (1). It was relatively easy to get the raw materials at a low price, and users had relatively few problems with the law (due to lack of equipment and inadequate familiarity with the problem on the part of the police). The media paid only very little attention to illegal drugs and provided only a very small amount of information; there was no systematic prevention. There is almost no reliable information on illegal drug use in prisons. True, Nožina does provide a summary of basic details (dominance of medicinal products, home-made alcohol, different variants of extracts and teas, etc.) in his publication (2), but the data are not sufficiently supported by research surveys; on the whole, a persisting shortcoming in this area is the absence of research surveys applying qualitative methods and of the possibility of independent verification of data (3).

From a broader point of view, the development of the drug scene in the 1990s can be divided into two long phases. A number of sources give 1992–1993 as the period of the first radical changes, but the roots of the change are identifiable as early as 1990-1991 (4, 5). The drug scene opened up. For the first time, less familiar and previously almost unavailable drugs from

[1]For the purposes of this text, "drug scene" is understood narrowly as the scene related to illegal drugs.

abroad appeared on the black market in large amounts. Although the massive growth in the use of heroin is usually dated in the second half of the 1990s, heroin users appeared as early as the start of the decade (5). The dominant substances used by the hard core of the drug scene were derivatives of codeine, sedatives, hypnotics and stimulants. Medicinal products like Rohypnol® (flunitrazepam), Diazepam® (diazepam), or the analgesic Beforal® (butorphanol) were widespread. Other popular pharmaceuticals were Tramal® (tramadol), Dolsin® (pethidin), and also Triphenidyl® (trihexyphenidyl) and medicinal drugs of a similar basis, with a combined euphoric and hallucinogenic effect. Solutan® (ephedrine) is in a category of its own as the raw material for the production of the dominant metamphetamine (pervitin). It is no exaggeration to refer to metamphetamine as to one of the symbols of the Czech drug scene in the period from the 1980s until today. Both raw materials were, however, used also "raw". Together with alcohol, cannabis is usually a secondary drug.

The culmination and subsiding of the first large wave of changes on the drug scene (1993–1995) was reflected by one of the first sub-surveys of a project analyzing the impact of new drug laws in the Czech Republic (6), which applied the Rapid Assessment and Response methodology developed under the auspices of the WHO[2]. In the national context, this was a period when the media started speaking more frequently about illegal drugs as a serious problem and when the issue became significantly politicized. It was becoming evident that there was an unstoppable and relentless trend towards the commercialization of the drug market, both in the acquisition of raw materials and in drug dealing, and that a vertical differentiation of the scene was taking place, caused by the rise of commercially based dealing. The growing numbers of drug users ("clients"), increased activity on the part of the police and the courts, irregular supply options, entry of capital – all these things started moving the scene towards a commercialization of relations (7).

1997 can be considered the year of the rising second wave of changes in the development of the Czech drug scene. Drug users refer to this year as the time of major changes in the strategy and conduct of special police units when, in their opinion, there was a markedly visible turn towards a more professional approach. The drug users themselves think that since 1997 the drug scene has remained relatively stable. It is characterized by distinctive commercialization, tough rules dictated by economic interests, the rise (compared to earlier periods) in the number of dealers and their more professional conduct. The introduction of modern technology to the market – especially cell phones, but also better production technology – led to an even more significant shift and differentiation between street dealers and the "higher ranks" of the dealer pyramid (1).

At the end of the 1990s the originally hard core of the drug scene underwent a probably final transformation, and everything now seems to point to the hard core becoming stabilized (8, 9). The drug market has, it seems, thus come to terms with the socio-political and economic changes in the CR. The metamphetamine (pervitin) market was transformed, metamphetamine production and distribution became fully professional – gone were the days of cooking metamphetamine next to the kitchen sink. A market similar to the heroin market emerged, and the two became more or less intertwined (1). The 1999–2002 period is one characterized by a stabilizing trend in the spectrum of used substances and of patterns of use; parallel to this trend there is the existence of a more stabilized market controlled mostly by organized groups. The described trend is projected in the outcome of epidemiological surveys (8, 9). The latter can be added to data acquired by qualitative methods to complete the triangle.

SYSTEM OF COLLECTING DATA ON THE USE OF ILLEGAL DRUGS IN THE CR

The first comprehensive assessment of the illegal drug use situation in the CR was carried out in 1999–2000 as a part of the Analysis of the Impact of New Drug Laws (*Projekt analýzy dopadů nové drogové legislativy v ČR*, PAD) (6). The authors applied, *inter alia*, the data acquisition methodology developed by the European Monitoring Center for Drugs and Drug Addiction (EMCDDA) in Lisboa. Some parts of this methodology had already been implemented in the Czech Republic in earlier years (e.g. the system of collecting data on the first treatment demand, school attendance, etc.), but they concerned only partial aspects, and a major part of data remained uncovered.

The results of survey were then followed up by two extensive Phare projects[3], which established the framework for the gradual development of the National Monitoring Center for Drugs and Drug Addiction as a CR reference work center within the framework of REITOX. Today, this center is responsible for the quality of acquisition and processing of data in the CR. There are similar centers in all EU countries, and the CR was bound by the accession agreement to develop one, too. It is the European Monitoring Center for Drugs and Drug Addiction which provides methodological guidance to the network of centers. The advantage of the mentioned system is the availability of relatively detailed descriptions of the procedure of acquiring and processing data for each monitored sphere. The benefit for all is the subsequent possibility of mutual comparison of the illegal drug use situation in different EU countries. Development of this epidemiological data gathering system started in the first half of the 1990s[4]. It can be described, very simply, as a system of routine, periodical acquisition of harmonized key indicators and of core indicators. One of the most recent detailed Czech-language descriptions of the data gathering system is that published by Zábranský (10). The manner in which the data collection systems are structured makes them correspond, roughly, with the layers of the basic user-group layers, which are described elsewhere (11). This means that the key indicators cover, at one end of the scale, persons for whom drug intake has been a solitary experiment, whereas the trends monitored at the other end of the scale reflect the prevalence of infectious diseases among injecting drug users or drug-related deaths – i.e. the consequences for health of high-risk methods of drug use. Since 2001 the data acquisition system in the CR has, in essence, been meeting EMCDDA requirements and is compatible with data of other EU countries.

[2] The Rapid Assessment and Response methodology is used worldwide; its development and enhancement has been going on since the 1970s. The WHO has invested considerable funds into its continuous improvement, making it available free of charge for research purposes.
[3] The first was Phare Twinning Project: "Drug Policy", the second Phare Project Cooperation EMCDDA – CEECs.
[4] EMCDDA was established by Council of Europe Decision No. 302/93 of 1993.

KEY EPIDEMIOLOGICAL INDICATOR DATA

The EMCDDA system of harmonized key indicators consists of five broad research fields – general population and school surveys, prevalence surveys, surveys focused on demand for social and therapeutic intervention, monitoring of drug-related infectious diseases and drug-related deaths.

General population and school surveys

General population surveys are targeted at the adult population, age range usually 15 to 64, and are usually carried out as a survey using questionnaires or short structured interviews. Telephone interviews are sometimes used. In the CR there are four institutions carrying out general population surveys at national level: the Center for Public Opinion Research attached to the Sociological Institute of the Academy of Sciences (CVVM), the Prague Psychiatry Center (PCP), the State Health Institute (SZÚ) and the Institute of Health Data and Statistics (ÚZIS).

In the first survey carried out by CVVM in 1993 (12) life-time prevalence[5] of experience with illegal drugs in the adult population was 5%; in 2002 (13) the figure increased threefold. A complementary indicator is the percentage of the population who has been offered a drug at any time in their lives. The survey of 2001 (12) showed, for example, that 27% of the adult population in this country has been offered an illegal drug by somebody at some time in their lives. The most vulnerable group are those aged 15 to 19, where 65% of the group have been offered illegal drugs.

In 2002 the PCP carried out an international survey, GENACIS (Gender and Alcohol Comparative International Survey), on a cohort of 2,526 persons aged 18 to 64 years (14). The level of life-time prevalence of experience with an illegal drug reached 21% in the adult population (i.e. approx. 1.7 million adults in the CR). Table 1 reflects gender differences.

In the second half of the 1990s our indicators of life-time prevalence values reached a level comparable with the EU average (see for example comparisons in EMCDDA: Annual Reports 1997–2002 (15)). In this connection, however, we have repeatedly pointed out that the indicator of life-time prevalence is probably not as significant as originally assumed (e.g. 11, 16). Critical discussions about its significance started in the mid-1990s (17, 18). Long-term monitoring of mutual relations between the indicators appears to be more significant.

School surveys, like general population surveys, are interdisciplinary surveys concerning sociology, psychology and epidemiology (19). Each of the participating disciplines contributes to the final shape of these surveys in an irreplaceable manner. School surveys are a strongly represented group in the CR.

An important international survey is the European School Survey on Alcohol and Other Drugs (ESPAD), focused on the sixteen-year-old secondary school population. The CR has been involved in this project since its start, i.e. from the time of the first survey in 1995 (20). The last survey to date was performed in 2003 (21). Another project implemented in the CR at national level is the Youth and Drugs (MAD) survey, carried out by the Prague Public Health Authority (*Hygienická stanice hl. m. Prahy*) on the secondary school population aged 15 to 19. The core of the questionnaire contained standard ESPAD questions; the last cross-section survey to date was performed in 2000 (22, 23). Another extensive project (implemented by the Psychological Institute of the Academy of Sciences of the CR) is the Non-alcoholic Drugs (NEAD) survey carried out on the 15–19 year-old secondary school group. The last survey took place in 2000 (24).

Table 2 shows the indicators of life-time prevalence of experience with illegal drugs during the last two MAD and ESPAD surveys and the indicator of repeated use of illegal drugs (the criterion is five or more uses during a lifetime) in the group of sixteen-year-old secondary school students and apprentices in vocational training (25).

Mravčík and Zábranský (25) compared the ESPAD and MAD surveys and reached the conclusion that in the second half of the 1990s a differentiation in the experience and attitudes of the 16-year-old group towards illegal drugs occurred, based on the different trends in the use of cannabis-related drugs, MDMA, hallucinogens, etc. and the opioid drug group (especially heroin) and stimulants (especially metamphetamine). This trend was confirmed by the data in the last annual report (2002) on the drug situation in the CR (9).

One of the few surveys on school children, Health and Health Behavior in School-Age Children (HBSC) carried out by PCP,

Tab. 1. Indicator of life-time prevalence and prevalence of experience with an illegal drug in the adult population (in %) (14)

	Life-time prevalence			Prevalence in the last year		
	Total	Men	Women	Total	Men	Women
Cannabis	21.1	26.3	16.1	10.9	14.4	7.5
Opioids	0.7	1.2	–*	–*	–*	–*
Stimulants	2.3	3.5	1.1	1.1	1.8	0.5
Ecstasy	4.0	5.5	2.5	2.5	3.1	1.9
LSD	2.2	3.6	0.8	1.0	1.9	–*

*Values below 0.5% in population questionnaire inquiries are considered zero values.

Tab. 2. Life-time prevalence of use of cannabis and repeated use of cannabis (in %) in sixteen-year-olds (21, 22)

Type of drug	Indicator	MAD 1997	ESPAD 1999	MAD 2000	ESPAD 2003
Any illegal drug or volatile substance	Lifelong prevalence	46.7	34.9	42.9	43.8
	Repeated use (5x or more)	19.4	17.4	23.2	25.3

[5] At least one experience with an illegal addictive substance in an individual lifetime.

confirmed the rising popularity of cannabis-related drugs and of synthetic drugs (ecstasy, etc.). Life-time prevalence of experience with an illegal drug in final-year school children was 31.0% (26).

The dominant group of drugs is cannabis-related drugs which, apart from alcohol and tobacco, are the most commonly used drugs in this country. The detailed analysis of the state of use of this group of addictive substances is the topic of another article (16, 27) and will not be dealt with in this text, in spite of its rising significance.

Prevalence estimates for problem drug users

EMCDDA defines problem users as users who inject drugs and/or use opioids, amphetamine-type drugs or cocaine for prolonged periods and/or on a regular basis. Since the prevalence of cocaine use is low in the CR, problem use is considered to be application by injection and/or long-term or regular use of opioids (especially heroin) or amphetamines (especially metamphetamine, i.e. pervitin). Prevalence estimates are a group of surveys that form a part of addictology research, which facilitate attempts at determining the overall number of persons meeting the definition criteria of 'hidden populations' (28). Applying different methods, we try to make the most accurate estimate of the overall number of such persons for a set period and location. Such surveys are based on the presumption that the hidden problem users have the same characteristics as users entered into therapeutic databases or the databases of law and order bodies.

Prevalence estimates in the CR applied the in-treatment rate and capture-recapture methods; the methodology is described in earlier publications (9, 29). In 2003, an estimate of problem opiate users was made on the basis of a questionnaire sent out to general practitioners.

In the multiplication method, the basis for the calculation is the number of problem users in contact with low-threshold facilities, extrapolated to the total number of such facilities in the CR. The in-treatment rate, or estimated share of problem users in contact with such facilities, was acquired with the help of a special questionnaire module within the Seroprevalence VHC in Drug-Injecting Users survey (30). Applying the capture-recapture method, the survey was carried out as a triple-source survey, drawing on: (1) the register of hospital-admitted patients with primary diagnosis, (2) with secondary diagnoses F11, F15 and F19, and (3) the register of reported new cases of viral hepatitis in drug-injecting users (EPIDAT). The estimate was performed for 2001 and 2002. Since none of the applied sources was independent, the saturated log-linear model was applied to estimate problem drug use. The prevalence estimate for problem users of opiates (only) was carried out with the help of a questionnaire inquiry among general practitioners concerning their experience with, attitudes to and expectations of opiate agonist treatment of adults in general practitioners' offices.[6]

Using the above-mentioned methods, the number of problem drug users in the CR in 2003 was estimated at 21,000 to 38,000 individuals. The real number is probably somewhere around 30,000, of this 11,000 heroin users, 19,000 metamphetamine users, 29,000 drug-injecting users. In the last couple of years there has been a movement of problem opiate users towards substitution therapy, especially treatment with Subutex® (buprenorophine), which is reflected in the declining trend in prevalence estimates made on the basis of drug therapy data (for more see 9, 30).

Demand for treatment

In the CR demand for treatment has been a regularly collected harmonized indicator for a long time, in spite of the fact that this collection system had encountered problems at the beginning with defined criteria (e.g. criteria for defining a case) and their observation. The criteria were published in their entirety for the first time by Hartnoll (28) and later were subjected to various small adjustments. Since 1995 the CR data collection system has been administered by the Prague Public Health Authority. Two indicators in particular are monitored – First Treatment Demand (FTD), which is focused on monitoring incidence in any given year (i.e. it captures the number of first demands for therapeutic contact made by users – the number of users who have sought such a contact for the first time in their lives) and Treatment Demand (TD), which is focused on monitoring prevalence of treated individuals in any given year, i.e. the total number of individuals in therapeutic contact over a monitored period (10). It should be added in the interest of thoroughness that the monitoring of the two indicators also involves other than health care facilities, and that the term 'therapeutic contact' should be understood in the broad sense of the word, which extends beyond the purely medical meaning (31).

In 2003 the Prague Public Health Authority (32) registered 8,522 individuals demanding treatment (5,865 men and 2,646 women, in the case of 11 users the gender had not been entered); of this number 4,158 persons (2,788 men and 1,361 women) were first treatment demands. The most frequent primary drug in all users and first treatment demand users were stimulants (53.4% in all demands, 55.5% in first treatment demands), opioids were second in all treatment demands (25%) and cannabinoids in first treatment demands (23.6%). The largest age group among all treatment demanding users were 20 to 24 year-olds (34.4%), among first treatment demand users 15 to 19 year-olds (41.3%).

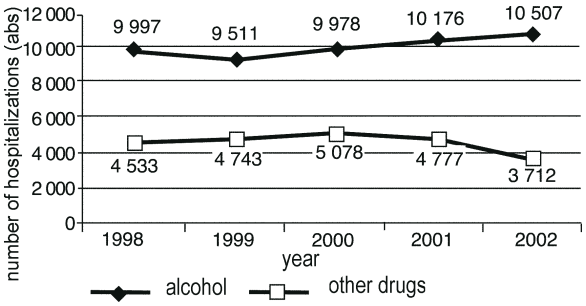
Data on hospital admissions and patients in out-patient therapeutic facilities being treated for consequences of use of drugs, collected by the Institute of Health Care Data and Statistics (*Ústav zdravotnických informací a statistiky,* ÚZIS), are close to the TD indicator concept. Of the total number of 58,568 admissions to psychiatric departments and psychiatric therapeutic institutions in 2002, 10,507 (17.9%) were admissions due to disorders caused by alcohol (dg. F10) and 3,712 (6.3%) admissions due to disorders caused by other psychoactive substances (dg. F11-F19) (33, 34). The trend in the number of hospital admissions in 1995–2002 is shown in Graph 1.

In 2002 41,136 drug users received active treatment in out-patient facilities; more than one-third were users of illegal drugs. The dominant age group was aged 30 to 39, in the illegal drug group 20 to 29 (33, 34).

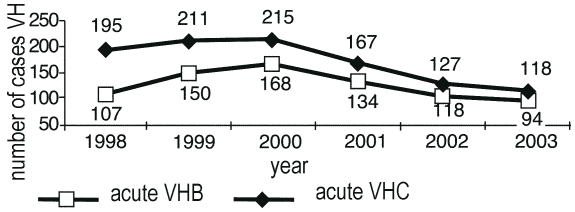
Infectious diseases

Information on reported new cases of infectious diseases is collected by the EPIDAT system administered jointly by the State Health Care Institute (*Státní zdravotní ústav*, SZÚ) and the network of regional public health offices. From the point of view of drug epidemiology, emphasis is put on such infectious diseases where the connection with injection application

[6] The GPs were asked 2 questions that served the prevalence estimate: (1) How many registered patients do you have? (2) How many of them are drug-injecting or long-term users of heroin or other opiates?



Graph 1. Admissions to psychiatric hospitals in 1995–2002 due to disorders caused by alcohol and other drugs (35)



Graph 2. Reported cases of acute VHB and VHC in drug-injecting users in 1998–2003

of drugs or with other forms of risk behavior (unprotected sex, etc.) has been proven. The most important infections are viral hepatitis and HIV.

The data on recorded new cases of acute viral hepatitis types B and C in 1998–2003 (Graph 2) clearly show there has been a decline in the number of acute cases of both types of viral hepatitis. In the case of viral hepatitis type C (VHC) it is difficult to distinguish on first detection whether the infection is acute or chronic, and it is therefore necessary to combine the acute and chronic VHC category for the purpose of trend evaluation. In the case of VHC, too, the number of reported infected drug-injecting users has leveled off in recent years (9, 30). This favorable trend has no doubt been influenced by the increasing number of needles and syringes distributed within the exchange programs, which since 1998 has risen from 490,000 to 1,770,000; the year-on-year increase was lowest in 2000–2001 (30,000 less), in the remaining years the increase was 230,000 to 360,000 exchanged needles (30).

As of December 31, 2003 there were 664 HIV+ persons with permanent residence in the CR; of this number 26 were drug-injecting users (DIU) and another 9 persons were simultaneously DIU and homo/bisexual. Over the last 8 years there have been one to four new drug-injecting users reported annually, so it can be claimed that the incidence of new cases of HIV infection in the CR has stabilized since the mid-1990s (36).

The HIV contamination rate of drug-injecting users remains below 1%. Prevalence of viral hepatitis type C in drug-injecting users is approx. 30% and among opiate users receiving substitution therapy it is somewhat higher (9, 30, 37, 38).

Drug mortality

The drug mortality situation is more complex. Drug-related deaths can be divided into three groups (10, 39), which are evaluated differently. The conclusion is relatively simple in the case of overdosing. The etiologic factor is equal to one, i.e. the primary cause of death is drug overdose. The second group of drug-related deaths includes cases of damage to the organism caused by drug use (e.g. organ damage), resulting in death. The third group of possible drug-related deaths includes deaths due to other causes, occurring in a state of acute intoxication (traffic accidents, accidents at work, suicidal behavior, etc.). Recording the statistics of some of these groups is not performed at all satisfactorily in the CR; thus the drug-related deaths survey is reduced to proven overdosing.

In 2001 169 deaths due to overdose of hallucinogenic and psychotropic substances were recorded. Most of the deaths (as in previous years) were caused by overdose of psychotropic medicinal substances (83 cases). Paramount among illegal drugs were opiates (53 cases), followed by volatile substances (14 cases) and metamphetamine (5 cases). The situation was similar in 2002 when the most common cause of overdose (115 deaths) was, apart from psychotropic medicinal drugs (72 deaths), opiates (21), followed by volatile substances (14) and metamphetamine (8).

SPECIALIZED ADDICTOLOGY SURVEYS

In the context of this article, specialized addictology surveys are multidisciplinary sociological, criminological, legal, psychological and economic surveys, as far as these overlap with the fields of the drug market, drug-related crime and broader legal and economic consequences of the existence of the 'black market' and the drug scene. A section of these surveys come under the umbrella of EMCDDA core indicators and, as such, they are monitored and evaluated regularly by each EU member state.

Consumption estimates and illegal drug seizure rates

An estimate of the consumption of illegal drugs in the CR (Table 3) has been carried out only once so far (40). The baseline used by the author was the bottom limit of the prevalence estimate of the number of users of illegal drugs made for the PAD survey (Analysis of the Impact of New Drug Laws in the CR) (41) and their average annual consumption.

Data on recorded drugs are registered centrally in the CR by the National Anti-Drug Center of the Police of the CR and by the General Customs Directorate of the Ministry of Finance of the CR. The National Anti-Drug Center carried out 74 actions in 2002, during which more than 13 kg of illegal drugs were

Tab. 3. Estimated annual consumption of drugs in the CR in 2000 (40)

Drug	Estimated number of consumers	Average consumption (year/head)	Consumption in the CR
cannabis (kg)	250,000	0.1	25,000
ecstasy (tablets)	5,820	50	291,000*
metamphetamine (kg)	22,500	0.18	4,500
heroin (kg)	15,000	0.36	5,400
LSD/hallucinogens (kg)	6,540	12	78,480
cocaine (kg)	1,860	0.03	55.8

*According to the preliminary estimate of the Czech Statistical Office made in 2003, approx. 840,000 tablets of ecstasy were consumed in the CR in 2002.

seized, 843 marihuana plants and 5,649 tablets of ecstasy (42). In 2002, the National Anti-Drug Center seized 13.24 kg of illegal drugs, which was 5.93 kg less than in 2001 (19.17 kg). The General Customs Directorate keeps a register of actions by customs bodies during which drugs are seized. In 2002, 73 kg of illegal drugs and precursors were seized in 313 cases, which was 155 kg less than in 2001 (228 kg) (43).

Surveys focused on monitoring the development of the drug scene

This group involves surveys applying mainly qualitative research methods (44). One of the monitored areas from which we have selected some basic data is risk behavior of drug-injecting users. Several surveys are available here. Data on sharing injection material reflect 25% (45) to 51% (46) of sharing users in the three preceding months. As for sharing the material at any time during a drug career, the data show a range of 49% (47) to 91% of the respondents (46). According to updated information from the central section of the VHC Seroprevalence in Drug-Injecting Users survey (48) completed in December 2003, 76.9% of the 762 respondents (586 individuals) have at some time applied a drug with a syringe that had previously been used by somebody else (105 of them used, exclusively, syringes that had been previously used by their partners); on the other hand 20.9% (159 individuals) have never done so. During the preceding month, 6.7% of the respondents (37 individuals) applied drugs with a used syringe; during the preceding year, 39.6% of the respondents (231 individuals) did so. Other implements needed for drug injection were shared by 77.8% of the respondents (592 individuals), 20.8% (158 individuals) have never shared. Of the 212 respondents who have, at some time in their life, been in prison, 56.6% (108 individuals) have at some time injected drugs while there; 10 injected drugs for the first time while in prison (30).

Drug-related criminal activity

Monitoring and research of drug-related crime are further important pillars of addictology research. It has become common practice to distinguish primary, secondary and tertiary drug-related crime (3). Primary drug-related crime, as defined by the criminal code, is a group of bodies of crime concerning the production, possession, any form of distribution of drugs or 'spreading drug addiction', i.e. sections 187, 187a, 188 and 188a of the criminal code. Secondary drug-related crime is, in particular, crime against property, where the whole concept is based on the hypothesis that a (problem and/or addicted) drug user is forced to obtain money for drugs by committing criminal offences (41). Tertiary drug-related crime is a frequently neglected form, not really discussed in our specialized literature and often blending with secondary drug-related crime. Many drug users, as a consequence of their drug use, become involuntary[7] victims of criminal acts committed by other persons. They are blackmailed, coerced into stealing or forced to engage in sexual activities like involuntary prostitution, subjected to unlawful restraint combined with sexual abuse, etc. (3). Due to the complex nature and scope of the research data in this field, only a brief summary of details relating to primary drug-related crime has been selected for this article (Table 4).

The outline of the results shows a continuously growing trend in the number of offences prosecuted pursuant to the most important sections. The only exception is section 188a ('spreading drug addiction'), which, however, represents a marginal set of problems.

Tab. 4. Number of prosecuted offenders – Police Presidium data (30)

Year/ Section	§187	§187a	§188	§188a	Total
1999	1436	98	42	177	1753
2000	1412	139	78	186	1815
2001	1525	166	80	181	1952
2002	1757	178	120	149	2204
2003	1828	232	125	110	2295

COMPARISON OF DRUG USE SITUATION IN THE CR AND EU COUNTRIES

To conclude the text we have included a short comparison between the situation in the CR and in other EU countries (Table 5). For this purpose, we have drawn a cross-section of the individual groups of indicators and selected those that represent certain major areas. The first column gives the figure for the current value of the given indicator in the CR and the adjacent column presents the interval of values for the remaining EU member states (or, in some cases, the average value of the given indicator in these countries).

In virtually all evaluated areas the CR finds itself close to the average or to the bottom of the range of values for the remaining EU member states. In certain key areas the figures are, in fact, quite encouraging (e.g. HIV prevalence among drug-injecting users). One unfavorable phenomenon is the below-average number of opioid (especially heroin) users receiving substitution therapy.

Tab. 5. Comparison between the CR and EU countries in selected indicators for 2002 (30)

Indicator	CR	Range of values/ EU average
life-time experience with cannabis in general population (%)	16–20	20–25*
number of problem drug users (per 1,000 inhabitants aged 15–64 years)	5	2–9
number of drug-injecting users (per 1,000 inhabitants aged 15–64 years)	4	2–7
number of heroin users on treatment demand (%)	25	50–70
number of cannabis users on treatment demand (%)	16	3–24
number of opioid users receiving substitution therapy (%)	7	20–60*
HIV prevalence among drug-injecting users (%)	<1	1–34
VHB prevalence among drug-injecting users (%)	10–50	20–60
VHC prevalence among drug-injecting users (%)	30–60	40–90
lethal overdose (per 100,000 inhabitants)	1	2
share of marihuana in prosecuted drug-related offences (%)	37	37–85
share of drug possession for personal use in all prosecuted drug-related offences (%)	10	55–90

*range of value for most EU countries

[7] Be it due to consequences for health (especially the development of a strong addiction) or social difficulties (loss of home or income) caused by drug use.

DISCUSSION

The presented outline of illegal drug use is but a simplified insight into the current state of addictologic research. Apart from an extremely brief explanation of the basic data collection principles, the text is limited, in particular by its selection of indicators. The diversity of indicators normally applied is very large, and an article of this scope cannot include them all. It was thus not possible to reflect one of the most important parts of all analyses, i.e. the search for mutual relations between indicators. That would have allowed the creation and modeling of various complex constructs providing a much deeper understanding of various health-care and social or legal and economic phenomena linked to the use of illegal drugs (49). Another important limitation is the fact that the EMCDDA system of data collection has been introduced in this country relatively recently. The normal, standard operations of this system date only from 2001. The time that has passed since then has been too short to be able to subject the system to any kind of qualified critique.

And, last but not least, two negative factors affecting the current state of knowledge of the field of use of addictive substances must be mentioned. The first is the inadequately developed tradition of addictologic research on home university soil. This is the reason for the very small volume of research activities in this field in the CR, which reflects, very accurately, the small volume of funds flowing into this field from domestic grant agencies (IGA and GAČR). The second negative factor is the different intensity of development in the research of legal and of illegal drugs. As a consequence, research into alcohol use and consequences of alcohol use acquired a lower priority in the 1990s, not to mention the almost zero indigenous research into tobacco use and impacts of tobacco use. We believe that these issues will be dealt with by the newly-developing center attached to the 1st Medical Faculty of Charles University, which will have as one of its tasks the enhancement of research in individual fields to bring them up to a mutually comparable level, as well as the improvement of the state of addictologic research in the CR to bring it up to the level of advanced countries.

Abbreviations

CVVM	–	Sociological Institute of the Academy of Sciences
EMCDDA	–	European Monitoring Centre for Drugs and Drug Addiction
ESPAD	–	The European School Survey on Alcohol and Other Drugs
FTD	–	first treatment demand
GAČR	–	Grant Agency of the CR
GENACIS	–	survey "Gender and Alcohol Comparative International Survey"
IGA	–	Internal Grant Agency
HBSC	–	survey "Health and Health Behaviour in School-Aged Children"
MAD	–	Scholl Survey Youth and Drugs
MDMA	–	3,4-methylendioxymetamphetamin
NEAD	–	non-alcoholic drugs
PAD	–	Analysis of the Impact of New Drug Laws
PCP	–	Prague Psychiatry Center
SZÚ	–	State Health Institute
TD	–	treatment demand
ÚZIS	–	Institute of Health Data and Statistics
VHB	–	virus hepatitis type B
VHC	–	virus hepatitis type C
WHO	–	World Health Organization

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