



European Monitoring Centre
for Drugs and Drug Addiction



Tim Pfeiffer-Gerschel, Ingo Kipke & Stephanie Flöter, IFT Institute for Therapy Research

Christiane Lieb, Federal Centre for Health Education

Peter Raiser, German Centre for Addiction Issues

In cooperation with Alicia Casati and Krystallia Karachaliou,

IFT Institute for Therapy Research

**2009 NATIONAL REPORT (2008 data)
TO THE EMCDDA
by the Reitox National Focal Point**

GERMANY

**New developments, trends and in-depth Information
on selected issues**

REITOX

IFT Institute for Therapy Research (Institut für Therapieforschung, IFT) (Epidemiology and Coordination)

Dr. Tim Pfeiffer-Gerschel (Head of the DBDD)

Alicia Casati

Dr. Stephanie Flöter

Krystallia Karachaliou

Ingo Kipke

Parzivalstr. 25

D - 80804 Munich

Tel.: +49 (0) 89 - 360804-40

Fax: +49 (0) 89 - 360804-49

Email: pfeiffer-gerschel@ift.de

Federal Centre for Health Education (Bundeszentrale für gesundheitliche Aufklärung, BZgA) (Prevention)

Christiane Lieb

Peter Lang

Ostmerheimer Str. 220

D - 51109 Cologne

Tel.: +49 (0) 221-8992 - 290

Fax: +49 (0) 221-8992 - 300

Email: christiane.lieb@bzga.de

German Centre for Addiction Issues (Deutsche Hauptstelle für Suchtfragen, DHS) (Therapy)

Peter Raiser

Gabriele Bartsch

Westring 2

D - 59065 Hamm

Tel.: +49 (0) 2381-901521

Fax: +49 (0) 2381-901530

Email: raiser@dhs.de

Note: For better legibility, the present report refrains from using female forms which are instead subsumed under the respective male gender.

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Abbreviations

Abbreviation	German	English
AMG	Arzneimittelgesetz	Medical Products Act
BÄK	Bundesärztekammer	German Medical Association
BAMF	Bundesamt für Migration und Flüchtlinge	Federal Agency for Migration and Refugees
BfArM	Bundesinstitut für Arzneimittel und Medizinprodukte	Federal Centre for Drugs and Medical Devices
BGH	Bundesgerichtshof	
BKA	Bundeskriminalamt	Federal Criminal Police Office
BMAS	Bundesministerium für Arbeit und Soziales	Federal Ministry for Employment and Social Affairs
BMFSFJ	Bundesministerium für Familie, Senioren, Frauen und Jugend	Federal Ministry for Family, Senior Citizens, Women and Youth
BMI	Bundesministerium des Innern	Federal Ministry of the Interior
BMJ	Bundesministerium der Justiz	Federal Ministry of Justice
BMG	Bundesministerium für Gesundheit	Federal Ministry for Health
BtM	Betäubungsmittel	Narcotic drugs
BtM-ÄndV	Betäubungsmittelrechts-Änderungsverordnung	Amending regulation on narcotic drugs
BtMG	Betäubungsmittelgesetz	Narcotics Act
BtMG-ÄndG	Gesetz zur Änderung des Betäubungsmittelgesetzes	Amending Narcotics Act
BtMVV	Betäubungsmittelverschreibungsverordnung	Regulation on the prescription of narcotic drugs
BUB-Richtlinien	Richtlinien über die Bewertung von ärztlichen Untersuchungs- und Behandlungsmethoden	Guidelines on the evaluation of medical examination and treatment methods
BZgA	Bundeszentrale für gesundheitliche Aufklärung	Federal Centre for Health Education
DBDD	Deutsche Referenzstelle für die Europäische Beobachtungsstelle für Drogen und Drogensucht	German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction
DGVS	Deutsche Gesellschaft für Verdauungs- und Stoffwechselkrankheiten	German Society for Digestive and Metabolic Diseases
DHS	Deutsche Hauptstelle für Suchtfragen	German Centre for Addiction Issues
DND	Drogennotdienst	Drug Emergency Service
DRV	Deutsche Rentenversicherung Bund	German National Statutory Pension Insurance
EBDD / EMCDDA	Europäische Beobachtungsstelle für Drogen und Drogensucht	European Monitoring Centre for Drugs and Drug Addiction
ECDP		European Cities on Drug Policy
EDDRA	Austausch über Aktivitäten zur Reduzierung der Drogennachfrage	Exchange on Drug Demand Reduction Action
ESA	Europäische Suchtstudie (früher Bundesstudie)	Epidemiological Survey on Addiction
EU	Europäische Union	European Union

Abbreviation	German	English
FIA Berlin	Forschungsteam Internationaler Arbeitsmarkt Berlin	Research Team International Labour Market Berlin
G-BA	Gemeinsamer Bundesausschuss	Common Federal Committee
GKV	Gesetzliche Krankenversicherung	SHI -Statutory Health Insurance Scheme
GRV	Gesetzliche Rentenversicherungen	Statutory Social and Pension Insurances
HAART		Highly Activating Antiretroviral Treatment
HBV	Hepatitis B Virus	Hepatitis B Virus
HCV	Hepatitis C Virus	Hepatitis C Virus
HDG	Horizontale Drogengruppe	Horizontal Drug Group
IFT	Institut für Therapieforchung	Institute of Therapy Research
IDU	IVD -Intravenös applizierender Drogenkonsument	Injecting drug user
KJHG	Kinder- und Jugendhilfegesetz	Law on children and youth welfare
LAAM	Levoalphaacetylmethadol	Levomethadyl acetate hydrochloride
LVA	Landesversicherungsanstalt Sachsen	Land Insurance Agency Saxony
MoSyD	Frankfurter Monitoring System Drogen	Frankfurt Monitoring System Drugs
NGO	Nicht-staatliche Organisation	Non-governmental organization
REITOX	Europäisches Informationsnetzwerk zu Drogen und Sucht	REITOX- European Information Network on Drugs and Addiction
RKI	Robert Koch Institut	RKI - Robert Koch Institute
SGB	Sozialgesetzbuch	Social Security Codes
SQ	Strukturierter Fragebogen	Standard Questionnaire
ST	Standardtabelle	Standard Table
StBA	Statistisches Bundesamt (DESTATIS)	Federal Statistics Office
StGB	Strafgesetzbuch	Penal Code
THC	Tetrahydrocannabinol	Tetrahydrocannabinol
UN	Vereinte Nationen	United Nations
WHO	Weltgesundheitsorganisation	World Health Organization
ZI	Zentrales Institut der Kassenärztlichen Versorgung	Central Institute of SHI-accredited care services
ZOOM	ZOOM - Gesellschaft für prospektive Entwicklungen e.V. in Göttingen	ZOOM – Society for prospective developments in Göttingen

Abbreviation	Land	Abbreviation	Land
BW	Baden-Württemberg	NI	Lower Saxony
BY	Bavaria	NW	North Rhine-Westphalia
BE	Berlin	RP	Rhineland-Palatinate
BB	Brandenburg	SL	Saarland
HB	Bremen	SN	Saxony
HH	Hamburg	AT	Saxony-Anhalt
HE	Hessen	SH	Schleswig-Holstein
MV	Mecklenburg-Western Pomerania	TH	Thuringia

Introduction

One of the major tasks of the German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction (Deutschen Beobachtungsstelle für Drogen und Drogensucht, DBDD) is to report yearly to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) on the drug situation in Germany, serving as a contact partner for the latter in its function as the so-called German REITOX¹ focal point.

The German REITOX Report 2008/2009 has been produced by the DBDD in accordance with the standard European guidelines issued by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), taking into account the quality report's feedback on previous reports. The report is mainly based on the data from the year 2008, but also includes findings from the year 2009 as far as available until completion of the report.

Each chapter of the report has an introductory passage presenting the most important and updated background information – e.g. on the structure of the health care system or the available data sources. These parts have only been revised according to requirements and updated. They describe the most important fundamentals such as methodological aspects of regularly carried out surveys. The introductory passages are to help to see the up-dated information on the drug situation in context and comprehend it without having to resort to supplementary literature. For the first time in 2009, these parts of the report have been marked (framed and highlighted in grey colour) so that readers, familiar with the framework conditions of the German reporting system, may, while reading, concentrate on the new developments.

The other sections of the individual chapters provide exclusively new data and findings from the reporting year. Older data are only used for comparative purposes where appropriate. Otherwise, the report refers to earlier publications or to pertaining standard tables (ST) and structured questionnaires (SQ) of the EMCDDA which contain a multitude of information. They are electronically available over the statistical bulletin released by the EMCDDA, but can, of course, also be electronically supplied by the DBDD on request.

This year, the report devotes two chapters under “selected issues“ to the topics “Cannabis markets and production“ and the “Treatment and care of older drug users“. Although problems resulting from cannabis use have meanwhile moved into the centre of attention, information on the characteristics of the pertaining markets is still scarce. The information available in Germany on this topic has been compiled in the selected issue and complemented by data specifically collected by the DBDD for this purpose. As a result of the fortunately increasing life expectancy of drug users, the care and help system is faced by changing requirements in certain areas. Therefore, the second selected issue thoroughly investigates the

¹ Réseau Européen d'Information sur les Drogues et les Toxicomanies.

situation of older drug users and their specific problems. In 2010, both our topics will be dealt with in publications rendered by the EMCDDA and placed in a European context.

On behalf of the German Reitox Reference Centre I would like to express my special thanks to all experts who have cooperated with us supporting us through their work and providing us again with a host of valuable information in the reporting year. It is only thanks to this extensive network that cross-sectional reporting like within the framework of the Reitox Report is made possible.

Finally, I would like to draw your attention to the new and re-designed website of the DBDD on which you find further information on the DBDD and on the national report (www.dbdd.de). Information on the EMCDDA, data from other EU-countries and on the European report can be found at www.emcdda.europa.eu.

Tim Pfeiffer-Gerschel

Head of the DBDD

Summary

The present report on the drug situation in Germany has been prepared on behalf of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) which is an agency of the European Union. The report is the result of joint work between the German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction (Deutsche Beobachtungsstelle für Drogen und Drogensucht, DBDD), the Institute for Therapy Research (Institut für Therapieforschung, IFT), the Federal Centre for Health Education (Bundeszentrale für gesundheitliche Aufklärung, BZgA) and the German Centre for Addiction Issues (Deutsche Hauptstelle für Suchtfragen, DHS). The DBDD is funded by the Federal Ministry for Health and Social Affairs and the EMCDDA. The overall report is structured according to EMCDDA guidelines and is available for download at www.dbdd.de.

Drug policy: legislation, strategies and economic analysis

Isolated “drug” concepts have meanwhile been replaced by a cross-substance “addiction²” policy which increasingly sets the focus on common aspects of the whole range of psychotropic substances. The current “Action Plan for Fighting Drugs and Addiction” is the mainstay of the overall policy concept in which various activities are embedded. The national “Board on Drugs and Addiction” which is to accompany and evaluate the goals and measures laid down in the action plan, introduced its work programme in September 2005. The programme focuses on reducing smoking and alcohol consumption among teenagers as well as on bringing down experimental and regular use of cannabis. In its report rendered at the end of 2008, the Board on Drugs and Addiction concludes that the goals set in the area of tobacco and alcohol prevention have been fully achieved, the ones set in the area of cannabis prevention have also, despite some delays, been nearly achieved and the ones set for regular use have been clearly reached. In the field of illicit substances, national policy-making continued focusing in the reporting year on the improvement of care offers for persons with cannabis problems, the research of the effects of abusive cannabis use as well as the initiation of further research work on the long-term outcome of substitution treatment. Moreover, the first findings of a study funded by the Ministry for Health venturing for the first time an estimate of public expenditure for the whole area of “illicit drugs” were presented in 2009 within the framework of congress contributions. A publication of the findings is in print.

Drug use in the population and specific targeted groups

The results of the last Epidemiological Survey on Substance Abuse (ESA) carried out in 2006 corroborate the findings of earlier surveys, showing that about a quarter of the adult population in Germany has had experience with drugs. The portion of adults who took drugs in the last 12 months fell to 5%; only about 3% used drugs in the last 30 days. Prevalences among teenagers and young adults continue to be higher, but have also decreased com-

² The term “addiction” no longer refers to a narrow target group, but comprises risky, harmful and addictive consumption.

pared to studies of previous years. Apart from the statements made on the last 30 days, prevalences found by the most recent Drug Affinity Study (DAS) for the consumption of “illicit drugs“ (total) by the age groups 12-15 years and 18-19 years have declined in comparison with the survey carried out in 2004. These findings are mainly attributable to the decline of cannabis consumption. Only 9.6% of the 12- to 17-year olds and 28.3% of the 12- to 25-year olds reported to have smoked cannabis at least once in their lifetime (2004: 15.1% and 31.1% respectively). Regular cannabis use of teenagers and young adults too has been on the decline according to the findings of the DAS, applying to only 2.3% (2004: 3.1%) of the 12- to 25-year olds in 2008. The 12-months prevalence for cannabis consumption among teenagers in the age group between 12 and 19 years currently lies below 10%. The most recent findings of the school survey carried out within the frame of the Frankfurt Monitoring System Drugs (MoSyD) indicate a continual stagnation of the lifetime prevalence for cannabis consumption and a slight increase in the prevalences of the use of “hard drugs“ among Frankfurt pupils in the reporting year 2008 compared to previous years. In 2007, the results of European School Survey Project on Alcohol and Other Drugs (ESPAD) were presented. 28% of the school children reported in the survey that they had tried any illicit drug (cannabis, amphetamine, ecstasy, LSD, cocaine, crack or heroin) once in their lifetime. From 2003 to 2007, lifetime prevalences for cannabis consumption fell from 31% to 25% among the pupils interviewed within the framework of ESPAD. The lifetime prevalence for the consumption of illicit drugs (apart from cannabis) however, has hardly changed since 2003 (10.0% vs. 10.2%).

Prevention

The strategy of the Action Plan for Fighting Drugs and Addiction and its implementation prove to be very successful as impressively shown by the most recently collected epidemiological data. The success is, especially in the area of tobacco prevention, mainly attributable to the effective combination of behavioural and condition prevention measures. Tobacco and cannabis consumption were significantly reduced.

However, when looking at the consumption prevalences for alcohol, one gets an ambivalent picture with regard to substance use among teenagers and young adults. On the one hand, the per capita consumption of pure alcohol or alternatively the frequency of binge drinking has declined, while, on the other, hospital admissions due to alcohol intoxication among teenagers have significantly increased. This shows that changing consumption patterns and addictive modes of behaviour should be matched by prevention strategies combining existing activities on the one hand with developing new measures on the other.

Schools remain the most important setting for universal prevention strategies. Commonly used in the meanwhile are also early intervention measures which form part of indicated prevention activities. At present, early intervention measures are mainly used in the area of extensive alcohol consumption among teenagers. In a first step, the target groups of early intervention measures generally receive individual counselling with a view to initiate critical

reflection on their extensive consumption behaviour so that, ideally, a significant reduction or cessation of substance use is achieved.

Central approaches to enhance effectiveness and efficiency of addiction prevention are evaluation, networking and transfer. Part of these are also the development of quality standards and the further development of existing quality assurance measures in the prevention of addiction. Within the framework of the experts' conference "Quality in addiction prevention" held in May 2009 by the BZgA together with the *ginko* foundation for prevention, the foundations for a common practice-oriented quality assurance concept in the prevention of addiction were laid.

Problem drug use

Based on the figures from treatment, police contacts and records of drug-related fatalities, estimates venturing the prevalence of problem (i.e. risky, harmful or dependent) drug use make the number of problematic users of heroin range between 82,000 and 156,000 persons (1.5 to 2.8 persons per 1,000 inhabitants) in the age group 15-64 years. For problem use in a broader sense, the following figures were found within the framework of the Drug Affinity Study carried out by the BZgA: "regular consumption" of cannabis by the 12- to 25-year olds: 2.3% (2004: 3.1%), by the 12- to 17-year olds: 1.1% (2004: 1.6%).

According to the most recent findings, the high-risk phases for initial substance use and the onset of regular consumption and substance-related disorders (substance abuse and dependence) lie in the second decade of life. Noteworthy is especially that in the majority of all cases, the transfer from initial use to regular use and from initial use to substance use disorders takes place in the first few years after initial use. The shortest transfer period in this context was found for cannabis (in comparison with alcohol and nicotine). Crucial years for the transfer from initial use to substance use disorders are in the age span from 15 to 18 years. A trend analysis of the data from the monitoring system for the abuse of medical drugs between the years 2002 and 2008 shows that the misuse of substitution drugs among patients affected by opioid-related disorders has been on a continual rise.

Drug-related treatment: treatment demand and availability

About half (49.1%; 2007: 49.6%) of the clients who seek help from outpatient drug counselling facilities in connection with illicit drugs, have primary opiate-related problems; about a third (32.8%; 2007: 32.5%) suffer primarily from cannabis-related disorders. Cannabis-related cases account for 59.0% (2007: 51.2%) of the first-time clients in addiction therapy, while opioids play a minor role among this population (19.8%; 2007: 27.7%). In about every tenth case, stimulants are the reason for contacting an outpatient addiction counselling facility for the first time. They account for about 7% of all newly admitted and leaving patients. In the inpatient setting, opioids continue to play a predominant role in the area of illicit drugs. As for acute (hospital) treatments, toxicoses caused by sedatives/hypnotics are the reason for admittance in about one case out of ten. Cocaine or disorders related to the use of stimulants are also the focus of treatment in every tenth case admitted to one of the specialized drug

clinics which take part in the German Statistical Report on Treatment Centres for Substance Use Disorders. The number of substitution therapies continued to climb in 2008 reaching 72,200. Substitution therapy offers and demand are still subject to significant regional differences. In May 2009, the *German Bundestag* (lower house of the German Federal Parliament) has passed the "Act on diamorphine-assisted substitution therapy" by changing the Narcotics Act, the Medical Products Act and the Regulation on the Prescription of Narcotic Drugs to pave the way for the transfer of diamorphine-assisted therapy into regular health care.

Health correlates and consequences

In the year 2008, a total of 6,195 cases of hepatitis C diagnosed for the first time were reported. Intravenous drug use which, in all probability, has a causal connection with the diagnosed hepatitis C infection, accounts for 36% of the cases in which the types of exposition were indicated. All in all, hepatitis C infections among drug users have shown a slightly downward trend over the last years, but still remain one of the central health issues of this group of persons.

In 2008 1,449 people died of drugs. With this, the number of drug-induced deaths has been up again on the previous year after having shown a continual downward trend since the year 2000. The deaths were mostly caused by opioids which were frequently used in combination with other psychotropic substances including alcohol.

Responses to health correlates and consequences

Various authors establish in their most recent publications that treatment of HIV- and hepatitis-C-infections is effective also in IDUs, especially within the frame of a substitution therapy, and therefore should not be withheld from them.

Social correlates and social reintegration

Unemployment, low education and low income are still commonly found problems among drug users. Special measures undertaken by social security agencies and offers made by the second labour market are geared to tackle these problems which play a decisive role for the outcome of the therapy, but which are hard to solve under current labour market conditions.

Marked by homelessness and missing regular occupation, the social situation of members of the open drug scene remains very precarious.

Drug-related crime

In the year 2008, a total of 240,000 drug crimes were recorded. Out of them 169,000 were general offences committed against the Narcotics Act and about 56,000 were dealing/trafficking crimes. With this, drug-related crime decreased again by 3.4% with respect to the previous year, with the decline in dealing/trafficking crimes (-12.8%) being clearly more pronounced than in the general offences committed against the Narcotics Act (-1.2%).

Drug markets

There was little change in the development of drug prices between 2007 and 2008. The wholesale price for marijuana slightly increased relative to the previous year, while at street level the price decreased marginally. After a slight decline in the previous year, the price for heroin at street level in 2008 was about 2% above the price of the previous year. This development is in contrast with a decline in heroin prices at wholesale level of about 7%. Street prices for amphetamines and cannabis resin (which had slightly gone down between 2006 and 2007), also slightly increased in comparison with 2007. While in 2008 the wholesale price for cocaine was somewhat above the one of the previous year, the price at street level declined by 3%.

Despite some variations, the level of active substance in amphetamines has been on a continual decline since 1997 averaging 5.4% in 2008. The concentration of active ingredient of heroin at wholesale level has been continually increasing since 2005 reaching the highest figure on record at 51.1% in 2008. At street level, the concentration of active ingredient has been ranging between 15% and 20% since 1999 (2008: 18.2%). The level of active ingredient of street cocaine was at 40% showing a slightly declining trend between the years 2000 and 2005. After having fallen to the lowest figure since 1997 at 24.6% in 2006, the median concentration of active ingredient increased again to 40.4% in 2008. At wholesale level, the concentration of active ingredient has been varying only slightly since 1997 lying at 70.6% in 2008.

After having strongly declined from 8.4% in 2005 to reach the lowest figure in the previous 10 years at 6.7% in 2006, the median THC-content of hashish slightly increased during the last two years and reached 7.2% in 2008. Between 2007 and 2008 no changes of the median THC-content of marijuana (7.4%) were found. Since 2006 all participating laboratories have been reporting their data discriminating between herbal cannabis and sinsemilla which has a higher concentration of active substance. In 2008, the content of active substance found in the flowering tops was at 10.5% somewhat lower than in 2007 (10.0%).

Selected issue: Cannabis markets and production

Ahead of hashish, marijuana is the most popular and most widely spread cannabis product used in Germany. Regular cannabis users report knowledge about the source of drug to be the most important precondition for purchasing cannabis. They also report that they keep distance to other illicit drugs.

Traditionally, hashish is mainly produced in Morocco and other countries of the Arab region. It finds its way to Germany via the Netherlands and variations of the Balkan route. As in previous years, the marijuana available in Germany stems from the Netherlands and increasingly from indoor plantations in Germany (mainly from home growing). The production of marijuana in large plantations in Germany for the Dutch market has increased over the last years. As a result of the intensified efforts undertaken by police and customs authorities in the areas close to the Dutch border, cannabis production has moved away from the border regions, gaining in importance countrywide.

While the quantities of marijuana and hashish as well as of the plants seized have been subject to considerable fluctuations, the number of seizures of cannabis plants and marijuana almost doubled (since 2001 for the first and since 1998 for the latter) until 2008. The number of seizures of hashish, by contrast, strongly decreased in the same period of time. At present, the quantities of marijuana seized in the individual cases appear to be smaller than the ones of hashish seized.

The number of trafficking and consumption-related offences in connection with cannabis has been on a downward trend since 2004.

Selected issue: treatment and care for older drug users

Verifiable data on the topic of treatment and care of older drugs users are only available for users of opioids in Germany. Surveys and statistics point to a growing portion of older opioid users. Since the year 2002, the average age of opioid users in treatment has increased from 29.2 to 32.6 years. Crucial for this development have been the introduction of harm-reduction measures offered by drug aid facilities and the expansion of substitution treatment. In addition to problems related to dependency, the situation of older opioid users is, both in social and health terms, problematic also as a result of increasing co-existing chronic diseases. Drug users above 40 years of age display an early and accelerated aging process. Their care requirements often correspond to the ones of 15 year older non-drug-using patients. It is to be expected that the age trend is going to continue, with older opioid users increasingly requiring additional care.

PART A: NEW DEVELOPMENTS AND TRENDS

1 Drug policy: legislation, strategies and economic analysis

1.1 Introduction

1.1.1 Definitions

In Germany, the term 'drug policy' is undergoing a gradual change of meaning. Until the end of the last century, it was exclusively related to illicit drugs which were at the centre of the political interest. There was no comparable conception for an alcohol or tobacco policy nor for an 'addiction³ policy', comprising the whole range of addictive substances. Since a few years however, (1) disorders resulting from licit psychotropic substances and (2) common aspects of all substances (e.g. in universal prevention or in patients with multiple abuse) as well as non-substance-related forms of addiction⁴ (e.g. pathological gambling) have increasingly moved into the focus of the political interest. This is the reason why the terms 'drug and addiction policy' or 'addiction policy' find more frequent use gradually replacing the term 'drug policy'. As a result of the differences in the policy aims pursued and strategies deployed in the area of licit and illicit substances, the term 'drug and addiction policy' finds preferred usage in the German language.

Moreover, the range of vision is expanding from the original main focus on substance-related addiction to risky and harmful use and thus to a comprehensive understanding of health policy for substance-related disorders and risks. However, in the German language there is no appropriate term reflecting this expansion of the concept, so that the (unsatisfactory) term of 'addiction policy' continues to be used. As a consequence, licit substances and common strategies for both licit and illicit substances have to be taken into account in the annual reports of the DBDD. In many cases however, it is not possible any more to set the two categories apart due to technical and political developments. Nevertheless, in line with the guidelines given for the topic of this report, exclusively illicit substances will be taken into consideration, where possible. Non-substance-related addiction is currently of no relevance for this report.

³ The term "addiction" no longer refers to a narrow target group, but comprises risky, harmful and addictive consumption.

⁴ There is still scientific controversy over the question whether pathological gambling should be regarded as a non-substance-related form of addiction or as a disorder of impulse control. So far, no final agreement could be reached on this. The non-uniform use of terms in this REITOX-report does not constitute a preference for either of the concepts.

1.1.2 Objectives and focal points of national drug and addiction policy

Created in 1998, the position of the Federal Government Commissioner on Narcotic Drugs reports to the Federal Ministry for Health. The Commissioner coordinates the drug and addiction policy of the Federal Government which is based on the following four cornerstones:

- Prevention of drug use
- Counselling and treatment of drug users
- Survival aid and harm reduction
- Repression and supply reduction

The intention hereby is to create a balance between measures undertaken to reduce both demand and supply. The Federal Government's addiction policy comprises licit psychotropic substances and associated risks taking into account European developments.

In line with the broad conception of the WHO, addiction is understood as a complex illness associated with psychological, somatic and social disorders requiring treatment. Existing measures undertaken to combat drug use and addiction are to be made available as early and comprehensively as possible. Prevention of addiction plays a primordial role in addiction policy. It aims at preventing or at least significantly reducing risky consumption, harmful use and substance dependence. Existing measures and offers are to be further complemented and their quality secured.

The national "Action Plan for fighting Drugs and Addiction" passed in 2003, continues to set the framework for current addiction policy. More details can be found in the REITOX Report 2004.

1.1.3 Political framework

Responsibilities of the Federal Government and the *Laender*

The Federal Government and the *Laender* share their responsibilities in drug and addiction policy. According to the Basic Constitutional Law, the Federal Government has legislative authority over the narcotic drugs law, the penal law, the law of penal execution and the social welfare law. On this basis, it has defined a legal framework for its drug policy and has formulated specific standards. However, the execution of these federal laws mainly falls under the responsibility of the *Laender*. In addition, the *Laender* also have their own legislative authority in areas which are of relevance for drug and addiction policy including school, health and education systems. The actual implementation of the drug and addiction policy – in particular also funding – mainly lies in the hands of the *Laender* and municipalities which may very well set different focuses within the framework of given legal guidelines and common goals.

Currently, as part of the implementation of the drug policy, a few *Laender* are working on shifting competences especially with regard to counselling, care and general prevention activities to the municipalities (e.g. Hessisches Sozialministerium, 2006), in order to, among others, improve integration between youth welfare and addiction support systems. However,

this will tend to render supra-regional exchange of information and surveying of the overall situation more difficult.

The role of the funding organs

Funding of treatment and rehabilitation is, for the most part, provided by the health or pension insurance schemes respectively. Alternatively, funding is taken over by social welfare providers. Costs caused by (secondary) disorders resulting from drug use and withdrawal (detoxification) are generally borne by the health insurance funds whereas outpatient and inpatient medical rehabilitation is paid for by the pension insurance funds. Social insurance providers act as independent self-governing bodies under public law. Therefore, political decisions often do not have a direct impact on the funding practice with regard to certain treatment offers.

The role of non-governmental organizations

In Germany, health care and social work in particular are governed by the principle of subsidiarity. The associations of SHI-accredited doctors (i.e. general practitioners) are tasked to guarantee outpatient medical care. Private charity organizations in particular, organize large parts of the measures of socio-therapeutic care for drug users for which they receive public funding – from national, *Laender*- and municipal budgets according to certain criteria. Only in few cases (e.g. counselling facilities run by public health offices or psychiatric clinics), the Federal Government itself provides special treatment offers and services for persons with addiction problems. Youth welfare relies on the joint work of governmental and non-governmental institutions (Social Security Codes, Sozialgesetzbuch, SGB VIII).

A general outline of the institutional framework and policies can be found in the structured questionnaire 32.

1.2 Legal framework

1.2.1 Laws, regulations, directives or guidelines in the field of drug issues (demand and supply)

Narcotics Act (Betäubungsmittelgesetz, BtMG)

The Narcotics Act (BtMG) contains all important regulations on how to deal with these substances taking into account the respective UN-conventions on addictive substances. Substances which are deemed as narcotic drugs in terms of the German Narcotics Act are listed in three schedules encompassing all substances mentioned in the international agreements on narcotic drugs:

- Schedule I: narcotics not eligible for trade and medical prescription (e.g. MDMA, heroin, cannabis).
- Schedule II: narcotics eligible for trade but not for medical prescription (e.g. Delta-9-tetrahydrocannabinol (THC), dexamphetamine).

- Schedule III: narcotics eligible for trade and medical prescription (e.g. amphetamines, codeine, dihydrocodeine, cocaine, methadone, morphine and opium).

The prescription of narcotics (schedule III) as part of a medical therapy is subject to the special regulations on the prescription of narcotic drugs (BtMVV) and requires for example the use of special prescription forms for narcotic drugs.

Social Security Codes

The social security codes define the framework for the financing of addiction therapy. The costs of drug addiction therapy (rehabilitation) are mainly borne by the pension insurance funds. Physical withdrawal (detoxification) and substitution therapy are paid for by the health insurance funds. Other funding organs are the local or supra-local social welfare providers and communities as supporting organs of youth welfare.

With the fusion of unemployment aid and social aid in 2005 ("Hartz IV"), the social security codes (in particular SGB II) have become even more important for people with drug problems. The central goal of the reform being to improve procurement of work, efforts are undertaken to work more intensely on the removal of obstacles hindering the placement on the job market. In this context, drug addiction represents a particularly problematic obstacle requiring specific attention.

According to the social security codes (SGB II), the following institutions are in charge of granting aid: the employment agencies or working groups formed by the latter and the municipalities as well as the so-called opting municipalities.

Other laws

Other relevant laws in which the possible legal consequences of the consumption of psychoactive substances are defined, for example with regard to participation in road traffic, are:

- the Road Traffic Regulations (Straßenverkehrsordnung, StVO) which specify for example how to conduct traffic controls,
- the Road Traffic Act (Straßenverkehrsgesetz, StVG) which sets blood alcohol limits and also describes driving motor vehicles under the influence of other intoxicating substances as a regulatory offence,
- the Criminal Code (Strafgesetzbuch, StGB), which also goes into the consequences of the consumption of alcohol and other intoxicating substances in road traffic and
- the Driving License Regulation (Fahrerlaubnisverordnung, FeV), which deals with the conditions for driving, doubts about the qualification for driving and the revocation of driving licenses for example because of an existing dependence on narcotic drugs.

1.2.2 Laws implementation

A host of information on legal practice and prosecution was provided in a selected issue of the Reitox Report 2008 and a publication of the EMCDDA. Both documents are available from the DBDD.

Discontinuance of prosecution

The German Narcotics Act § 31a provides for the possibility to discontinue prosecution for possession of drugs under certain circumstances, namely when the offender has grown, produced, imported, exported, bought or received and possessed in any other way narcotic substances in small amounts exclusively for personal use and when his guilt is deemed as minor and there is no public interest in prosecution. This provides the public prosecutor with an instrument to stop proceedings for consumption-related offences without court approval. All Federal *Laender* have regulated details of the application of § 31a BtMG through recommendations or guidelines. However, these regulations still diverge in crucial points (cf. Schäfer & Paoli 2006).

Threshold values for “small amounts” of cannabis and other substances

In the meantime, most of the *Laender* have introduced comparable threshold values for “small amounts” (upper/lower limit) for cannabis. The limits set by the individual *Laender* are guideline values from which public prosecutors and judges may diverge in individual cases. There is no legal claim to the discontinuance of prosecution in the case of possession of small quantities of drugs. However, discontinuance of prosecution does not automatically mean that the crime has no consequences. Public prosecutors have the right to stop proceedings under certain conditions (e.g. community service, fines or counselling in a social institution).

On 3 December 2008, the Federal High Court of Justice lowered the “non-small” amount for methamphetamine from 30 grams methamphetamine base to 5 grams in a principle-establishing ruling. In view of the scientific findings gathered on the toxicity of methamphetamine over the last ten years, the Senate considered it necessary to change the existing law and lower the threshold value. Contrary to a Land Court, the Federal High Court fixed the threshold value not to five gram methamphetamine hydrochloride but to methamphetamine base (for more details see also Patzak 2009).

Already in April 2007, the Federal High Court of Justice rendered a ruling defining the “non-small amount” of buprenorphine. With that, the Federal High Court of Justice added another decision to the series of landmark rulings on “non-small amounts” in which it dealt for the first time with a substance used in substitution therapy which has also made its appearance on the illicit market causing some concern (Winkler 2007). The “non-small amount” in the wording of the BtMG does not refer to – contrary to the term “small amount” – the weight of the seized substance but to the active ingredient contained in the substance.

Act on diamorphine-assisted substitution therapy⁵

In November 2007, the *Bundesrat* (upper house of the German federal parliament) tabled a bill on diamorphine-assisted substitution therapy in the *Bundestag* (lower house of the German federal parliament) (BT Drucksache 16/7249) and another one on the same subject in March 2009 (BT Drucksache 16/11515). The aim of both bills is to transfer diamorphine-assisted therapy into regular care. At the same time, a motion was filed to launch a new demonstration project on heroin-assisted substitution therapy of opioid addicts to evaluate future options (BT Drucksache 16/12238).

On 28 May 2009, the German Bundestag passed the “Act on diamorphine-assisted substitution therapy” creating the legal preconditions for a transfer of the diamorphine-assisted therapy into regular care by changing the Narcotics Act, the Medical Products Act and the Regulation on the Prescription of Narcotic Drugs. The act stipulates among others that diamorphine (pharmaceutically produced heroin) becomes eligible to prescription – on very narrow criteria – as a narcotic drug used for heavily dependent opioid addicts. The act was then presented to the Bundesrat and finally endorsed in a plenary session on 10 June 2009. The Act on diamorphine-assisted substitution therapy entered into force on 21 June 2009.

The act makes it possible for the findings of a clinical study funded by the Federal Ministry for Health, which investigated the treatment of heavily dependent opioid addicts with diamorphine in comparison with a methadone-assisted treatment, to be turned into actual practice. The study was carried out in seven cities. All evaluations on the federal demonstration project on diamorphine-assisted treatment (2001–2007) (cf. also the Reitox Reports 2007 and 2008) were available since 2008 and suggested the long-term superiority of the diamorphine-assisted therapy of severely addicted heroin users over other treatment forms in terms of improving the health condition, achieving abstinence or respectively reducing consumption and facilitating social integration. These findings were recognized again in a public hearing of the Health Committee of the German *Bundestag* on 23 March 2009. The large majority of the members of the committee endorsed the motion to offer the diamorphine-assisted therapy to a small group of seriously ill heroin addicts as an additional treatment option.

At present, the treatment of severely addicted heroin users with diamorphine is still based on an exceptional permission under the Narcotics Act. At the end of the year 2008, about 300 patients were treated with diamorphine.

22nd Amending Regulation on Narcotic Drugs (Verordnung zur Änderung betäubungsmittelrechtlicher Vorschriften, BtMÄndV)

Since summer 2008, numerous media in Germany (and Austria) reported on herb mixtures circulating under various names like “Spice”, “Silver”, “Gold”, “Diamond”, “Sence”, “Yucatan”, “Fire”, “Chill” or “X” which were said to have effects similar to cannabis when smoked. In the following, traders reported bottlenecks in the supply of these herb mixtures for the German

⁵ Federal Law Gazette (2009). Part I No. 41, Bonn: 20.07.2009.

market. Looking at the labelled ingredients, experts had no explanation for the effects described by the users, even not after the first toxicological examinations had been carried out. Early in December 2008, the Frankfurt Institute THC-PHARM discovered a synthetic cannabinoid named “JWH-018“, which appeared to have been purposefully added to the herb mixtures. Shortly afterwards, the Institute for Forensic Medicine of the University Freiburg found together with the Federal Criminal Police Office another substance: the synthetic cannabinoid “CP-47,497“ and its homologous. These substances come from medical drug research and have by far a stronger potency than the THC contained in the cannabis plant. Even before Christmas 2008, the Federal Ministry for Health instituted fast-track proceedings to have the substance placed under the Narcotics Act.

The fast-track regulation entered into force on 22 January 2009. On request of the Land Bavaria it was established at the same time that certain herb mixtures may not pass as legally admitted medical drugs in terms of the Medical Products Act and therefore are not eligible for trade. Shortly after the ban, the herb mixtures disappeared from the shelves of the “head shops” and from the Internet websites of the dealers in Germany. Upon invitation by the EMCDDA, an experts’ meeting was held on the topic in March 2009. A summary of the most important results of this meeting was prepared by the EMCDDA as an internal white paper.

23rd Amending regulation on Narcotic Drugs (Verordnung zur Änderung betäubungsmittelrechtlicher Vorschriften, BtMÄndV)

The 23rd Amending Regulation on Narcotic Drugs⁶ (23. BtMÄndV) expanded the stipulations of the Regulation on the Prescription of Narcotic Drugs (Betäubungsmittel-Verschreibungsverordnung, BtMVV) with regard to the substitution treatment of narcotic drug addicts. Especially §5 BtMVV was amended in two important points: the locum-tenency procedure was modified to be better able to bridge vacation and sickness periods of substituting physicians. It has moreover become possible for substituting doctors to write prescriptions for substitution drugs for up to two days in order to guarantee uninterrupted nationwide care of patients in substitution treatment (e.g. also during weekends).

Furthermore, the maximum quantity eligible for prescription of fentanyl and the list of substitution drugs was adapted to the most recent medical findings. Maximum quantities permissible for prescription for the substances modafenyl and phenmetrazin were cancelled since these substances do not fall any more under the schedule III BtMG. The 23rd Amending Regulation on Narcotic Drugs entered into force on 25 March 2009.

⁶ Federal Gazette (2009). Part I No. 15, Bonn: 24.03.2009.

1.3 National action plan, evaluation and coordination

1.3.1 National action plan

On 25 June 2003, the Federal Cabinet passed the "Action Plan for Fighting Drugs and Addiction" as a continual agenda to reduce addiction and drug problems in Germany. In the coalition agreement signed on 11 November 2005 for the 16th legislative period, the drug and addiction policy was defined as follows: "The drug and addiction policy continues to be based on the four proven cornerstones: prevention, therapy, harm reduction and repression. The mainstay of addiction and drug policy is the Action Plan for Fighting Drugs and Addiction. The guidelines laid down in the EU-drug strategy 2005-2012 on the reduction of demand and supply continue to be implemented with perseverance."

The coordination of the implementation of the Action Plan is shared between the Federal Government and the *Laender*. To this purpose, the Federal Government and *Laender* created the National Board on Drugs and Addiction in the year 2005 which was summoned by the Federal Government Commissioner on Narcotic Drugs in October 2005. The board is to accompany the implementation of the Action Plan. It is tasked to advise on the set targets and measures outlined by the Action Plan, to accompany their implementation, to verify the outcome of the measures and to make proposals for their implementation and further development.

The National Board on Drugs and Addiction reconstituted itself early in 2006 and passed a working programme with the following focal areas: "The primordial goal of the "Action Plan for Fighting Drugs and Addiction" is to reduce the consumption of licit and illicit substances as well as non-substance-related addictions with a view to curb health, psychosocial and economic risks and problems linked to substance use and use behaviour".

The Board is composed of representatives of socially relevant groups and institutions which are involved in the reduction of addiction-related problems and in the help provided for addicts. Focal areas of work are defined by the Board itself. In its session held on 6 March 2006, the Board decided on its working programme for the 16th legislative period.

In its working programme the Board established the following focal areas which it evaluated through surveys carried out by the BZgA among 12- to 25-year-old teenagers and adults. For the results of this evaluation see paragraph 1.3.2 (Implementation and evaluation of the national Action Plan).

With a special focus on German heroin policy, Vogt & Schmid (2008) have recently published an overview of the development of heroin policy in Germany as well as the creation and expansion of the legal basis both for prosecution and treatment (substitution treatment). They furthermore describe the German heroin project placing it in a European context of comparable projects as well as the findings and implications for German heroin policy. The authors conclude that it will be necessary to further examine the efficiency and quality of heroin-based substitution therapy to find out for which groups of persons this type of therapy is best suited or whether the therapy proves more successful also with persons who are not

severely addicted in comparison with the therapy based on methadone or another substitution drug. The authors moreover identify further need for research, for example with regard to qualitative studies or long-term studies that could give better insight into the connection between crime and drug addiction. According to the authors, it is difficult at present to predict the direction that the development of the political debate on drug policy at national and European level will take, since after two decades of a liberal and rational course followed by drug policy, signs of preserving the status quo or even of an increasing repression are to be observed.

1.3.2 Implementation and evaluation of the national action plan

Implementation of the Action Plan for Fighting Drugs and Addiction

The yearly Report on Drugs and Addiction was presented to the public by the Federal Government Commissioner on Narcotic Drugs in May 2009.

Focal points of national drug and addiction policy in 2008 and in the first half year of 2009 were the action programmes for tobacco and alcohol prevention. During its session held on 9 June 2008, the National Board on Drugs and Addiction presented its first proposals for the national action programmes for tobacco and alcohol prevention which sparked off a broad public controversial discussion on the adequacy, effectiveness and political feasibility of prevention measures.

Encouraged by the success of the year 2007, another action week placed under the motto "Alcohol? Know your limit!" was held in 2009. With more than 2500 events staged all over Germany, the week proved to be a great success again. Associations of addiction prevention and drug aid, self-help groups, associations of health promotion and medical care, cities and municipalities with their health, youth and social administration, sports clubs and companies, church communities, chemists and doctors addressed the public with the question "Have you got your alcohol consumption under control?"

Together with the Federal Commissioner on Narcotic Drugs, the Federal Ministry for Health continues to support efforts to find new ways and solutions for the treatment and prevention of addiction on medical drugs. The study "Motivational intervention in patients dependent on medical drugs in hospitals" (MIMIK), funded by the Ministry for Health, was completed in 2008. It confirmed that among certain groups of patients hospital admission can be successfully used to achieve changes in behaviour. Funded by the Federal Ministry for Health, PHAR-MON is a project to monitor misuse of and addiction on medical drugs among patients of outpatient addiction counselling facilities in Germany. Data from PHAR-MON are also used for the yearly REITOX Reports.

In 2007, the Act on Improving the Fight Against Doping in Sports and a Regulation on Doping Drugs Amounts entered into force in Germany. The goal of the new act and regulations is to combat criminal structures of doping drugs trafficking, operating within international networks across German borders. The Federal Government will present a report on the effects of the anti-doping act in the year 2012. In 2008, the Federal Government supported the sports

associations with several measures and set up special units in the Federal Ministry of the Interior and the Federal Criminal Police Office (Bundeskriminalamt, BKA) dedicated to doping control or respectively the fight against illicit medical drugs trafficking. The misuse of medical drugs to enhance performance needs to receive greater attention also in the area of mass and recreational sports. In order to assess the extent of medical drug abuse in recreational and mass sports, the Robert Koch Institute was tasked in 2009 to conduct a representative survey. The results are expected for summer 2010.

German addiction research network

Since 2001, one focal area of Germany's drug and addiction policy has been addiction research which was continued in the second funding period until November 2008. In four research networks, funded by the Federal Ministry for Education and Research, scientists from different fields have cooperated with facilities of primary care and addiction support within the framework of application-oriented research projects in their region. Even though government funding for the research networks stopped in 2007, it is to be expected that the formed networks will continue to carry out common research activities and will also be able to identify new funding possibilities to realize the numerous initiatives some of which are derived from Federal Government projects. A series of results presented in this report and pertaining publications stem from the projects carried out within the framework of the research networks or their follow-up initiatives.

Evaluation of the National Action Plan

In its working programme for the 16th legislative period (cf. 1.3.1), the National Board on Drugs and Addiction set concrete focal areas and evaluated them within the framework of surveys conducted by the BZgA among 12-25-year old teenagers and young adults. The National Board on Drugs and Addiction presented a summary of this evaluation in its report from 2006 to 2008 (Die Drogenbeauftragte der Bundesregierung 2008):

- **Goal:** the quota of smokers among teenagers (12-17 years) is to fall below 17% by 2008. It declined already from 28% to 18% between 2001 and 2005.
Result: In the year 2008, the overall quota of smoking teenagers was at 15.4%. The set target was reached and moves closer to the goal of below 12% set by the Federal Government in its strategy of sustainability⁷ by 2015.

⁷ In 2002, the Federal Government presented a strategy programme titled "Perspectives for Germany" to promote sustainable development. The concept was the national response to the "Agenda 21"- an action programme which the United Nations had passed at the world summit in Rio in 1992. In addition to measures and projects, the strategy programme contains political guidelines to promote a sustainable development. 21 indicators identify and measure progress made. One of the six health goals within the framework of the sustainability strategy is "reduction of tobacco consumption". Regular reports inform about the results achieved and set new focuses. The Federal Government has taken up the national sustainability strategy to develop it further.

- **Goal:** the quota of teenage consumers of alcoholic beverages is to be reduced from 20% to below 18% by 2008.
Result: After a temporary decline (following the introduction of a surtax on the so-called alcopops) in the portion of teenagers aged between 12 and 17 years who have drunk any alcoholic beverage at least once a week during the last year, the quota rose again in 2007 and reached the original level. This increase has however been compensated again. In the year 2008, 17.4 % of the teenagers drank alcohol once a week. With this, the target set for the reduction of the consumption of alcoholic beverages and alcopops was reached in 2008. However, great alcohol prevention efforts continue to be required especially for the problem of partially excessive binge drinking of sections of the teenagers for which the decline was less pronounced.
- **Goal:** the quota of cannabis users is to be brought down from above 31% experimental users in the year 2004 in the age group of the 12- to 25-year olds to below 28% by 2008. The portion of regular cannabis users in the age group of the 12- to 25-year olds is to be reduced to below a countrywide average of 3% by 2008.
Result: From 2004 to 2008, the lifetime prevalence for the group of the 12- to 25-year olds showed a statistically significant decline to 28.3%. Statistically significant is also the decline in the portion of teenagers and young adults aged between 12 and 25 years who have regularly consumed cannabis in the last year (more than ten times) which fell from 3.1% in the year 2004 to 2.3% in the year 2008. Experimental use also declined. The set targets were reached (Die Drogenbeauftragte der Bundesregierung 2008).

Demonstration programmes and research projects funded by the Federal Government

- **Pilot project on hepatitis C prevention in Berlin**
The Berlin counselling facility "Fixpunkt e.V." has been carrying out a pilot project on hepatitis C prevention since October 2008. The project is funded by the BMG from the budget for demonstration projects in cooperation with the Land Berlin which takes over the costs of the scientific evaluation which is carried out by the Centre for Interdisciplinary Addiction Research (Zentrum für Interdisziplinäre Suchtforschung, ZIS) in Hamburg. The goal of the project is to reach especially young drug users who do not yet apply drugs intravenously and to inform them about the risks of infection and, ideally, prevent intravenous consumption (www.fixpunkt.org).
- **INCANT**
The counselling centre "Therapieladen" in Berlin takes part for Germany in the research project INCANT. It succeeded in recruiting sufficient participants among the teenage cannabis consumers aged between 13 and 18 years. First interim findings of the study suggest the superiority of the multi-dimensional family therapy (MDFT) which is much shorter, but much more intense, over normal therapies on offer. Especially the integration and support of the parents and other family members proves to be of particular importance for a successful therapy outcome. Until December 2008, n=106 teenagers/families

were admitted to the study. Findings of the European study are expected for summer 2010 (www.incant.de or www.incant.eu respectively).

- **Transfer of the cannabis cessation programme “Quit the Shit“**
The cannabis cessation programme “Quit the Shit“ has been made available since 2004 at www.drugcom.de and has been successfully integrated in the communal structures of outpatient addiction aid (cf. also the REITOX Reports 2007 and 2008). The second transfer phase was completed in summer 2009 and the implementation of a quality assuring regional network “Quit the shit“ initiated in currently seven *Laender* (www.drugcom.de).
- **Transfer of the project “Realize it“**
As a result of the positive outcome yielded by the project “Realize it“, which has already been reported about in the last Reitox reports, the Federal Ministry for Health has tasked the “Villa Schöpflin“ (Lörrach) and the delphi-Institute for Research, Consulting and Project Development (Berlin) to transfer “Realize it“ into 60-80 counselling facilities in Germany in order to make the programme also available to other addiction and drug counselling facilities. Thanks to additional funding by the *Laender*, a nationwide transfer of “Realize it“ could be effected in a few individual *Laender* (Berlin, Hamburg, North Rhine-Westphalia, Lower Saxony) so that more than 150 addiction and drug counselling facilities could be integrated into the national network “Realize it“ by the end of 2008 (cf. also the Reitox reports 2007 and 2008). The results of the scientific evaluation of the transfer of “Realize it“ are expected at the beginning of 2010 (www.realize-it.org/).
- **Transfer of the CANDIS-Therapy**
Within the framework of a multi-staged, randomized controlled study on the “Implementation of a targeted therapy for cannabis disorders” in the outpatient German addiction aid system“ carried out by the TU Dresden between 2007 and 2009, it is being investigated how effective the modular therapy concept CANDIS proves to be under real conditions in outpatient addiction aid facilities. Patients were randomly selected to either start immediately with the standardized, manualized CANDIS individual therapy (standard therapy; goal: n=150) or to be assigned to a control group (waiting control group; goal: n=150) which had to wait eight weeks for the start of the therapy. All patients were interviewed in follow-ups three and six months after the therapy. A total of 11 facilities from the cities Munich, Stuttgart, Dresden, Bautzen, Hanover, Braunschweig, Osnabrück, Münster, Hamburg and Berlin participated in the demonstration project. The implementation phase was completed in May 2009; at present, the data are entered and evaluated. Initial interim results suggest that the CANDIS programme generally has been very positively received by the outpatient drug aid facilities. The clients show great interest in the structured short interventions. In the 12-month field phase it was possible for n=394 participants aged between 16 and 63 years to be admitted to the study (ST, n=254; WKG, n=140). A process evaluation carried out in the course of the study also shows that the large majority of the participating therapists and heads of the facilities appreciated the programme as a great gain to and valuable expansion of their current help offer. The final

results of the study will be presented by the end of autumn 2009 (www.candis-projekt.de).

- **Project “AVerCa”**
“AVerCa” is jointly carried out by the German Centre for Addiction Issues (Deutsche Hauptstelle gegen Suchtgefahren, DHS) and the LWL-Addiction Coordination Centre (LWL-Koordinationszentrum Sucht) to set up an effective care structure for the early recognition of and intervention in youth cannabis abuse with a view to facilitate the cooperation with and access to teenage cannabis users. “AVerCa” is made up of two modules: an Internet-based working platform was set up to provide staff, facilities and supporting organs with good-practice working materials. It was moreover investigated which secondary prevention tools and programmes are particularly suited to reach the parents of teenage cannabis users. The survey shows clearly that intervention and support concepts for parents of young conspicuous cannabis users are only available on a localized basis.
- **Development of the group training “CAN Stop”**
Tasked by the Federal Ministry for Health, the German Centre for Addiction Problems among children and adolescents (Deutsches Zentrum für Suchtfragen des Kindes- und Jugendalters, DZSKJ) analyses and evaluates from February 2008 until April 2011 a manualized treatment programme called “CAN Stop” which is addressed to young people (14 -21 years of age) with problematic cannabis use. A first phase carried out within the frame of a pilot study showed that the participants were responding very positively. The evaluation of “CAN Stop” is done within the framework of a multi-staged study with a controlled pre-post-design. The study is evaluated in different settings (outpatient youth aid, in- and outpatient medical care, youth detention centres).
- **Long-term effects of substitution therapy: PREMOS**
Based on the results of the COBRA-Study (Cost Benefit and Risk Appraisal of Substitution Treatments), the Federal Ministry for Health commissioned a research project in 2007, in order to gain insight into the long-term effects of substitution treatment. Within the framework of a nationwide representative, clinical epidemiological study running under the acronym PREMOS (Predictors, Moderators and Outcomes of Substitution Treatment), the clinical, psycho-pathological, social and substance-related course and outcome of the therapy of more than 2,600 patients from 223 facilities are longitudinally analysed and described over a period of time of up to five years. First results are expected by 2009 (www.premos-studie.de).
- **Government agency for labour market integration and reintegration of addicts**
Set up at the end of 2006, the government agency for labour market integration and reintegration of addicts “FAIRE” works on the basis of a demonstration project by the Federal Ministry for Health and the Land Rhineland-Palatinate (Ministry for employment, social affairs, health, family and women) to promote the integration of drug patients undergoing rehabilitation into the job market. Together with the Land Mecklenburg-Western Pomerania, the BMG moreover lends its support to the transfer of FAIRE into Mecklenburg-Western Pomerania (www.fachstelle-faire.de).

- **FreD goes net**

Placed under the title “FreD goes net“, the German demonstration project “Early intervention in drug users who have come to the notice of police for the first time - FreD“ (see also previous Reitox Reports) is currently transferred into 17 EU countries. In order to implement “FreD goes net“ also in other EU countries, the professionals of the participating countries are trained in a first step to run the courses within and outside the framework of cooperation agreements. Then the European curriculum will be tested. At the end of the project term, two transfer events will be held to train all interested professionals of the not yet participating countries on the contents and structures in a second step. “FreD goes net“ is carried out between November 2007 to October 2010 by the LWL-Coordination Centre Addiction and scientifically evaluated by the Cologne Society for Research and Counselling in Health and Social Affairs (Gesellschaft für Forschung und Beratung im Gesundheits- und Sozialbereich, FOGS). The project is jointly funded by the European Commission and the participating member states as well as by the BMG (http://www.lwl.org/LWL/Jugend/lwl_ks/Projekte_KS1/FreD/fred_goes_net/).
- **Access to the addiction aid system by people with a migration background**

With a view to develop, test and evaluate culture-sensitive addiction aid, the project “transVer-sucht“ was launched in early summer 2009. Funded by the BMG, the project will run for three years. Alongside six regional projects that are to serve as examples for testing and evaluating target group specific access and development of measures, the promotion initiative also comprises an accompanying scientific project that is carried out by FOGS (Gesellschaft für Forschung und Beratung im Gesundheits- und Sozialbereich - Society for Research and Counselling in Health and Social Affairs in Cologne) in cooperation with FTK – Fortbildung transkulturell (Society for transcultural further education) in Freudenstadt. Furthermore, a scientific advisory committee was set up to support the demonstration project. The promotion projects (carried out in Berlin, Cloppenburg, Cologne, Leipzig, Nuremberg and Warstein) realize a broad range of measures for various target groups in very different regional settings. Further detailed information is expected to be available at www.transVer-sucht.de as of middle of November.
- **Modular prevention concept for children from families with addiction problems**

Since 2008, the German Institute for Addiction and Prevention Research (Deutsches Institut für Sucht- und Präventionsforschung, DISuP) and the Catholic College NRW (Katholischen Hochschule NRW) and the German Centre for Addiction Research in Childhood and Adolescence at the University Clinic Hamburg Eppendorf (Deutsches Zentrum für Suchtfragen des Kindes- und Jugendalters, DZSKJ am Universitätsklinikum Hamburg Eppendorf) have jointly carried out the project “Conception and evaluation of a modular prevention concept for children from families with addiction problems – a prospective, randomised multi-centre study” that is also funded by the BMB. The goal of this multi-centre study is to test in a randomized controlled study the efficiency of a modular prevention programme called “Trampolin“ for children aged 8-12 years from families afflicted by addiction problems. The modular prevention concept is to reduce the psychological

stress of children from families with addiction problems, to strengthen their action- and stress-coping skills and to sustainably increase the resources and resilience of the children. Accompanying parental work and networkworking activities of the professionals are integrated into the programme as important project elements. Running for a total of three years, the project comprises a one-year conceptual development phase and a two-year field phase in which the efficiency of the modular prevention concept will be experimentally tested. As of November 2009, "Trampolin" will be tested for the first time at the Hamburg Verein Such(t)- und Wendepunkt e.V. (registered Association Addiction – Turning Point) and as of February 2010 at about 20 counselling facilities in Germany and scientifically evaluated (www.projekt-trampolin.de).

- **EU Project Senior Drug Dependents and Care Structures (SDDCARE)**
The project SDDCARE (www.sddcare.eu) combines research and practice from four European countries to clarify questions on the life situation and health of senior drug dependent women and men and to develop foundations for their care. Central project goals are to acquire basic knowledge of the life situation and health condition of older drug users as well as on their objective and subjective care requirements. Furthermore, practice-relevant concepts and guidelines are developed within the framework of the project to be implemented in outpatient and residential facilities for this target group. The project runs from January 2008 to the end of June 2010 and is jointly funded by the European Commission and the BMG (for more detailed information see chapter 12 in this REITOX Report).
- **EU-Project DRUID**
The German Federal Highway Research Institute (Bundesanstalt für Straßenwesen, BASt, www.bast.de) takes the chair in the project of the European Commission, in which 37 partners are working together on "Alcohol, Drugs, Medicines and Driving" (duration: 2006-2010). The results of this interdisciplinary research project are expected to provide important information on how often psychoactive substances appear in road traffic (individually or in combination with others) as well as on their risk potential. Moreover, experimental studies on these psychoactive substances are expected to serve as a basis for recommendations to be made on currently non-existing danger thresholds which are to be defined in analogy to the limits for alcohol blood levels (for more information see www.druid-project.eu).

Activities undertaken by the *Laender*

As a result of the federal structure of the Federal Republic of Germany and the principle of subsidiarity as well as the differences in the degree of problems and starting conditions, there exist considerable regional differences in how substance-related disorders are dealt with. As a consequence, drug and addiction programmes are subject to different guidelines and rules in the individual *Laender*. However, the *Laender* have agreed on a profile for regional outpatient addiction support facilities. There are no uniform formal requirements or criteria for quality assurance with regard to measures aiming at the reduction of drug de-

mand. Approaches going into this direction – e.g. the development of guidelines and programmes for quality assurance – are solely adopted at a technical level by professional and scientific associations as well as by the funding organs. Compliance with and application of these guidelines are, however, not mandatory (see 5.5). Therefore, a multitude of different approaches and methods or instruments are currently used in the individual *Laender* and municipalities. Furthermore, large differences with regard to the availability of resources are to be found between the *Laender*.

The *Laender* have a very well developed network at their disposal to deal with people suffering from addiction problems. It is based on the cornerstones of prevention, treatment and aftercare. The countrywide offers made range from prevention, outpatient counselling, qualified detoxification treatments, adaptation facilities, complementary measures (low-threshold facilities, day-care facilities, job programmes and employment projects, assisted living, youth housing, socio-therapeutic transitional residential facilities, hostels for the homeless), other specific offers (nursing homes and treatment ordered by a judge) to self-help initiatives. The work of the large majority of the care facilities is governed by an integrative approach (licit and illicit substances, pathological gambling, addictive problems linked to computer or Internet use, eating disorders, etc.), which is, if necessary, complemented by specific measures for certain target groups. As for the preventive activities undertaken for at-risk groups, both local approaches and countrywide available projects like early intervention in drug users who have come to the notice of police for the first time (FreD) or the implementation of the intervention programme “Realize it” in the *Laender* have proved successful.

The *Laender* too, have set a focus on children and teenagers as well as on licit addictive substances. Central to their work are a stronger target orientation of help offers, the comparison of demand and offer in addiction care and the optimization of the aid system through improved cooperation, cost control and work sharing. Some of the activities deployed by the *Laender* are also presented under the respective topics of the chapters.

There are numerous projects carried out in the Federal *Laender* addressing a series of target groups with different settings and focuses. They range from specific services offered like for example to migrants or socially disadvantaged families over school projects or initiatives undertaken by sport clubs to differentiated interventions, for example in drug users who have come to the notice of police for the first time.

Commissioned by the Ministry for Employment, Health and Social Affairs of North Rhine-Westphalia, the cannabis prevention programme “Strong instead of stoned” was developed by the GINKO-foundation for prevention (www.stark-statt-breit.de). The programme is to contribute to reducing cannabis use among teenagers and young adults and to motivate them to give up cannabis use completely. The modularly structured offers range from early prevention measures, school and youth work over cultural education activities to information material and guidelines for parents and educational experts. To promote safer road traffic and prevent cannabis use when driving, postcards are sent to young driving novices and applicants for driving licences to inform about road traffic safety. This countrywide postcard initiative supports local measures undertaken to prevent drugged driving. Integrated in these

initiatives are the counselling offers and help strategies successfully tested at national level like for example “FreD”, “Realize it!” and “Quit the shit”.

Since January 2009, the Area Association Westfalen-Lippe (LWL) offers certification courses to become a “FreD trainer” for the federal demonstration project “FreD” (early intervention in drug users who have come to the notice of police for the first time) carried out by the LWL-Coordination Centre Addiction. The qualification can be acquired either in a five-day training programme or in a one-day refresher course for more experienced professionals. The project “FreD” has already been described in detail in former Reitox reports.

In Berlin, the early intervention network has been integrated with different modules – ranging from the “FreD courses “ to the short-term intervention programme “Realize it” – into the existing addiction help system. Using various intervention tools, it mainly addresses cannabis users. Currently, a new module called “Break” is being implemented for young people with problem alcohol consumption. An integral part of the early intervention network is formed by the qualification and continuing education measures offered to staff of the drug and addiction counselling facilities.

In 2008, a capture-recapture study was carried out in Berlin to estimate the prevalence of opioid addicts. The final results have not been presented yet. The study is carried out within the framework of a master course for epidemiology at the Berlin School of Public Health in cooperation with the Robert-Koch-Institute.

In 2007, the data from the German Statistical Report on Treatment Centres for Substance Use Disorders were used to analyse specifically the data of patients undergoing substitution treatment and the data of clients with a cannabis-related main diagnosis treated in out- and inpatient facilities in Berlin. According to this analysis, the portion of patients with the main diagnosis for cannabis disorders is on average higher in Berlin than in the rest of Germany (15% in outpatient and 16% in inpatient facilities).

In April 2009, the demonstration project “Outreach social street work for adult drug addicts” started in Saxony as part of an action programme to improve the help system and enhance security in the east of Leipzig. Furthermore, the first Saxon drug and addiction report was published in spring 2009, giving a complete description of the situation in the area. The description of the actions required in the future will be the subject of the addiction help plan which is currently developed as a draft version by the Technical University Dresden.

In May 2009, the findings of the MODRUS IV study (*Moderne Drogen- und Suchtprävention – Modern Drug and Addiction Prevention*) were presented in Saxony-Anhalt. The results of the study can be viewed at <http://www.sachsen-anhalt.de/LPSA/index.php?id=1076>. Parts of the results are also presented in chapter 2.3 (Drug use in the school and youth population).

A new information brochure on the topic “natural drugs” has been issued within the framework of the addiction prevention project Mindzone in Bavaria in August 2009. It describes the risks and effects of various natural drugs and gives recommendations for drug-related emergencies. The brochure is specifically dedicated to the use of natural drugs and is solely in-

tended for secondary prevention purposes. Interested professionals can order the brochure at <http://www.mindzone.info/kontakt/>.

Activities undertaken by the Federal Centre for Health Education (BZgA)

The prevention activities undertaken by the BZgA aim at motivating potential and actual users of harmful substances to critically reflect their consumption behaviour and to establish less risky forms of use. Apart from illicit drugs, in particular the licit and socially accepted drugs nicotine and alcohol are given central attention among the prevention activities. In 2006, the BZgA added a new focus on its list of activities: the fight against 'pathological gambling'. When developing new measures and media, the BzGÄ attaches specific importance at systematically addressing target groups in their living environment. In the following, two measures carried out in 2008 are presented to give a glimpse of the multitude of addiction-specific prevention activities undertaken by the BZgA:

- National competition "Team 2011" in the context of the women's soccer championship 2011 in Germany

The BZgA participates as a premium partner in the national competition "Team 2011" in preparation for the world championship in 2011. 35000 schools and 27000 associations all over Germany are called upon to take part in the competition which is based on four modules. The BZgA will approach sports clubs and multipliers in clubs and schools to address children and teenagers from primary to secondary I school level. The target group is to be sensitized especially to the topic *Early addiction prevention by multipliers for children in crucial life phases*. The participation in the competition "Team 2011" gives the BZgA access to broad circles of children and teenagers who would otherwise only be reachable at a high expense of time and costs.

- Experts' meeting on quality assurance in addiction prevention
Quality assurance of prevention measures and the promotion of the efficiency of addiction prevention at local and *Laender* level was at the centre of interest of a two-day experts' meeting. Apart from information on current standards used in addiction prevention and their transfer into actual practice, basic information and good-practice approaches were presented. In a workshop, the conference produced as a result the basis for a common practice-oriented concept for quality assurance in addiction prevention.

Conferences and working groups

As in previous years, a host of conferences and working sessions were held also in the reporting year. From the large number of administrative, organisational, technical and scientific events, only a very small and arbitrary selection will be presented serving as examples for the host of events on offer.

- In June 2008, the first German Addiction Congress took place under the auspices of the German Society for Addiction Research and Addiction Therapy (Deutschen Gesellschaft für Suchtforschung und Suchttherapie, DG Sucht) in cooperation with the German Soci-

ety for Addiction Psychology (Deutschen Gesellschaft für Suchtpsychologie, DG-Suchtpsychologie). The congress was attended by more than 500 participants.

- In cooperation with numerous representatives of the German addiction aid system, the DHS organized an experts' conference on the topic "Addiction, dependencies, excessive behaviour – conditions and responsibilities" in November 2008 that mainly aimed at the transfer of research results into the field of practice. At the occasion of the experts' conference, a symposium was held on the "Findings from the research networks – a waste of time?"
- In March 2009, representatives of women's initiatives, representatives of the chemical industry, the federal authorities and experts of addiction and forensic medicine, were invited by the Federal Commissioner on Narcotic Drugs to meet for several talks to exchange information on the misuse of GBL and BDO. These talks served to obtain an overview of what is known about the misuse of GBL and BDO as a substance used for private consumption and as a drug used for robberies and rape attacks. Despite the fact that it is known that GBL is used as a drug in Germany (however with considerable regional differences), there is no valid data available on its prevalence. GBL is relatively easily available in Germany because it is produced and used in large quantities in industry. Thanks to an effective monitoring system installed by the chemical industry, the trade with GBL and BDO is – despite a few gaps – largely under control. There have only been few reports on cases of attacks with knockout drops, but the Federal Ministry for Health assumes that a lot of cases remain unreported. A new test method is expected to be introduced on the market in 2010 which will make it easy for any forensic laboratory to identify the substance.
- Placed under the title "Structures and processes of the European addiction and drug policy – additional value for the European member states?", the BMG held a conference on 29 January 2009 in Berlin which was attended by numerous national and *Laender* experts and representatives of the drug and addiction aid facilities, representatives of the EU-commission, the EMCDDA and other member states. Many participants advocated an integrated approach of addiction and drug policy also at EU-level which would not exclude specific measures undertaken for example to reduce the offer of illicit substances.
- In 2008, the results and conclusions of an experts' conference held by the EMCDDA together with the DBDD on the topic "Cannabis – new approaches in prevention and treatment" that were already described in the last REITOX Report, have been published (Pfeiffer-Gerschel & Simon 2008).

International cooperation

Germany actively cooperates with international institutions in the area of drugs and addiction. Its most important partners are the European Commission, the Horizontal Drugs Group (HDG), the European Monitoring Centre for Drugs and Addiction and the Pompidou-Group at the Council of Europe. Germany also plays an active role in the activities undertaken by the

United Nations such as the current assessment of the implementation status of the UNGASS-resolutions. Germany is also an active partner in the Commission on Narcotic Drugs of the United Nations (CND). The Federal Commissioner on Narcotic Drugs assumes an important coordinating function when representing Germany in the European and other international bodies dealing with drug policy (Die Drogenbeauftragte der Bundesregierung 2009). She shares her function with the special agencies of various ministries (Ministry of the Interior, Ministry for Health, Ministry of Foreign Affairs) or experts from other areas when representing Germany at the international stage. German representatives also actively participate in the Civil Society Forum on Drugs of the European Commission.

In the high-level segment of the 52nd session of the CND, high-ranking representatives of more than 130 member states passed a new political declaration on the orientation of the future UN drug policy. This declaration formulates the future goals and basics of drug policy as well as the future priorities set in individual action fields.

In the reporting period, Germany engaged in various bilateral cooperations with Latvia, Romania and Turkey on the subject of drugs and addiction (twinning projects) and participated in various international projects (e.g. DRUID, or „FreD goes Net“) in which German experts cooperated with colleagues from countries within and outside of the EU.

More information on current cooperation projects are to be found in the Drug and Addiction Report of the Federal Government Commissioner on Narcotic Drugs (2009).

1.3.3 Other drug policy developments

Care system

In December 2008, the “common framework concept on the outpatient medical rehabilitation of addicted persons“ developed by the German National Statutory Pension Insurance and the umbrella associations of the statutory health insurance funds and based on the agreement “Addictions” made in the year 2001 between the health insurance funds and the pension insurance providers entered into force. It describes the goals, preconditions and target groups as well as the requirements to be fulfilled by the outpatient rehabilitation facilities. In contrast with the schedules 1 and 3 of the Agreement “Addictions”, it goes into the details of the contents of rehabilitation, diagnostics, duration, frequency, as well as staff, facilities and equipment, networking and quality assurance (cf: The Federal Government Commissioner on Narcotic Drugs).

1.3.4 Coordination arrangements

Coordination between the Federal Government and the *Laender* takes place in the conferences of government departments and their working groups. The so-called interministerial working groups guarantee the exchange and coordination of cross-departmental measures between the various federal agencies. The national Board on Drugs and Addiction (Drogen- und Suchtrat, DSR) as well as its steering group also play an important role in this field since they facilitate both the vertical and horizontal exchange between the different institutions and

the federal and Land ministries. As part of the steering group, the working group ‘German Statistical Report on Treatment Centres for Substance Use Disorders’ has been installed in order to coordinate the collection of statistical data in this area. The working group ‘Interface problems in the care of addicts’ of the DSR also deals with coordination tasks. It mainly strives to improve the transfer of addicted people from treatment to work, to facilitate the transfer at the interface between prison and reintegration, as well as to improve early-intervention in counselling and treatment of people suffering from addiction and the cooperation with youth aid and the help system for the homeless. In addition, cooperation between Federal and *Laender* governments also takes place within the framework of various projects.

On a national level, the Federal Centre for Health Education (BZgA) is in charge of the planning and execution of prevention programs and the monitoring of preventive activities and their quality assurance. It chairs the working group “Addiction prevention” which also reports to the Board on Drugs and Addiction. The Federal Centre for Drugs and Medical Devices (Bundesinstitut für Arzneimittel und Medizinprodukte, BfArM) is responsible for the licensing of pharmaceuticals. Affiliated with the BfArM is the Federal Opium Agency which, among others, grants the licences to trade in narcotic drugs and precursors and supervises the trade in narcotic drugs and precursors among licence holders. It also keeps the national substitution register

1.4 Economic analysis

1.4.1 Overview

A detailed overview of the data sources available in Germany giving an insight into public expenditures as well as the presentation of the problems linked to the collection and analysis of these data were the subject of a selected issue of the Reitox Report 2007 which is available in German and English language at the website of the DBDD. In spring 2008, the EMCDDA moreover published a summary of the information provided by the member states on the subject matter which is also available from the DBDD.

To understand the structure of funding, one needs to have a grasp of the Federal structure of Germany and the principle of subsidiarity, which has led to a complex system of responsibilities at the Federal, *Laender* and local levels along with social insurance schemes with respect to the funding and execution of tasks. Especially information on financial resources which the *Laender* and local governments allocate to drug or addiction problems is not aggregated or compiled at the national level at present as a result of limited comparability.

Another problem posed by the compilation of public expenditures for drug-related issues is the fact that the German care system does not differentiate any more between individual substances or licit and illicit substances respectively rendering the task of ascertaining the share of illicit drugs in the costs expended almost impossible. It is furthermore particularly difficult to identify *non-labelled* costs specifically relating to addiction in the cross-sectional areas of police and judiciary, detention and social welfare system which would however account for a considerable portion in a comprehensive estimation of the overall costs

It is apparent, then, that solely the identification of costs incurred (prior to the calculation of specific shares for licit or illicit substances) is associated with considerable effort. A research project (see below) carried out in 2008 dealt with the topic to provide a better overview of the public expenditures.

1.4.2 Public expenditures and budget

Funded by the Federal Ministry for Health, the DBDD carried out a study in 2008 in cooperation with the chair of medical management of the university to venture for the first time an overall estimate of the direct (labelled and non-labelled) government expenditure and funds provided by the statutory social insurance schemes in the area of illicit drugs in the year 2006 (Mostardt et al. 2009, in print).

Various approaches were combined in the data collection: At the level of the central, regional and local authorities, the budget documents available to the public were analyzed, ministries and subordinate authorities as well as other key persons were interviewed. In areas where expenditures were assumed, but which were non-labelled in the budgets and could not be backed up by numbers by the authorities interviewed, data from published studies and statistics were used to develop alternative calculation or estimation methods. The data on the funds provided by the social insurance institutions were collected through written interviews. Apart from the German National Statutory Pension Insurance, the 40 largest health insurance funds were asked to fill in standardized questionnaires. The data from the health insurance funds were extrapolated to the overall funds expended by the German statutory health insurers.

Adding the identified and calculated expenditures, one gets a range between 5.2 and 6.1 billion EUR spent in 2006 for the area of illicit drugs which breaks down as follows: the portion of the German National Statutory Pension Insurance in the funding for medical rehabilitation, participation in working life and benefits granted for the reduction in earning capacity amounted to about 172 million EUR. The extrapolation of the expenditures of the medical health insurance institutions for medication, hospital treatment, rehabilitation etc. came to 1.4 billion EUR. At the institutional level, an amount of 3.6 to 4.5 billion EUR was provided for the prevention and reduction of the consequences of drug-related problems in the form of prevention, intervention and repression measures.

The expenditures are broken down in more detail in standard table STPE.

When assigning the expenditures to governmental functions in respect of the internationally used classification of the functions of government (COFOG)⁴ (European Commission 2007), one finds that a large part of the estimated expenditures (>65%) is to be assigned to the function "public security and order". Funds provided for the functions "health" and "social security" are often difficult to separate from each other and account for a considerably lower portion in the overall spending. However, here the largest gaps in data collection are to be found.

Due to missing data and methodological restrictions, the overall result needs to be regarded as a conservative estimation. Especially for the *Laender*, the expenditures calculated are based on very rough estimation methods. There are no representative data available from the municipalities. Even if the funds presented under this chapter do by no means lay claim to completeness, the result does represent the most comprehensive and best approximation currently available in Germany.

In view of the great expense associated with the data collection, the question arises however whether and how a regular update of the estimation of the expenditures can be done in the future.

1.4.3 Social costs

So far, there have been no studies carried out on the social costs of the use of illicit substances in Germany.

2 Drug use in the general population and specific targeted groups

2.1 Introduction

Aspects of drug use

Experience with drugs means, in many cases, a one-off or only infrequent use of drugs. After the drug was 'tried', its use is, in most cases, completely discontinued in the course of time. Drug use related to the lifetime is therefore only a rough indicator of the extent of drug use at a given point of time. The figures also include people reporting experience with drugs sometimes dating back 20 or 30 years.

Therefore, drug use in the 12 months (12-month-prevalence) prior to the survey is a better indicator of current user numbers. An even more up-to-date picture is provided by surveys on drug use 30 days prior to the survey. The clear difference which is shown in the total population between lifetime-prevalence, 12-month-prevalence and 30-day-prevalence identifies experimental or short-term use as the most common pattern of consumption.

National data sources and international studies

In Germany, epidemiological sources for drug use data are mainly available through regular national representative surveys and prevalence studies which are complemented by regional quantitative and qualitative studies. Furthermore, international studies in which individual *Laender* and regions are taking part, will also be mentioned in this chapter. Due to their international comparability, these surveys are also grouped under "national data" although studies like ESPAD (see below) or HBSC (see below) have so far not been carried out by all *Laender*. The short descriptions also contain information on the participating countries.

- The Drug Affinity Study (DAS) carried out by the Federal Centre for Health Education investigates the use, the motives for use and the situational conditions with regard to tobacco, alcohol and illegal addictive substances among teenagers and young adults (age group 12-25 years) on a long-term basis. The study has been conducted since 1973 every 3 to 4 years. Initially designed as a personal interview, it has been carried out as a telephone interview (CATI) with a sample of 3,000 interviewees. The last survey dates back to spring 2008 (BZgA 2008). The retention rate was at 68.4%. The findings are presented in this Reitox Report. In 2007, the BZgA additionally published the findings of a representative survey conducted on cannabis use among 3,602 interviewees in the age group from 12 to 19 years (BZgA 2007). A summary of the results was already presented in the last REITOX Report.
- The Epidemiological Survey on Substance Abuse (ESA) (former Federal Study on the abuse of psychoactive substances among adults in Germany) is a paper-based nationwide study on the use of psychotropic substances, their effects and assessment as well as on other basic data. Since 1980 the study has been conducted every 3 to 4 years on

the basis of a representative sample of the resident population in the age group from 18 to 64 years. Funded by the BMG, the survey has been conducted by the IFT since 1990. The sample taken in each survey has comprised about 8,000 persons since 1995. Some of the *Laender* have provided additional funding for a regional expansion of the sample to create a statistical basis for regional evaluations. The Epidemiological Survey on Substance Abuse 2006 (Kraus et al. 2007; Kraus & Baumeister 2008) used a random sample of 21,463 persons as a data basis. Out of these, 7,912 aged between 18 and 64 years took part in the survey. The response rate was estimated at 45%. The results of the non-response-analyses showed that the response behaviour (early/late/non-responder), correlates negatively with the data on the use of illicit drugs. The data for the next study will be collected in summer 2009 with results being expected in spring 2010.

- The “European School Survey Project on Alcohol and other Drugs” (ESPAD) was carried out already in 1995 in 26, 1999 in 31 and 2003 in 35 European countries. In 2007, some *Laender* participated for the second time in the survey after 2003. The participants in 2007 were Bavaria, Berlin, Brandenburg, Hesse, Saarland, Mecklenburg-Western Pomerania and Thuringia. Initiated by the Pompidou-Group at the Council of Europe and coordinated by CAN⁸ in Stockholm, the survey uses European-wide uniform standards for data collection. The survey is carried out among 15- to 16-year olds in school grades 9 and 10. In 2007, the adjusted sample size comprised 12,448 pupils from 586 classes at 567 schools. The ESPAD data are, in parts, also based on individual *Laender* surveys.
- As part of the WHO-funded Study on the Health Behaviour of School-Aged Children (HBSC), which is meanwhile carried out every four years in 41 countries, five *Laender* (North Rhine-Westphalia, Berlin, Hamburg, Saxony, Hesse) participated in the survey on the health behaviour of pupils between 9 and 17 years of age in 2005/2006. For the survey conducted in 2006, data was also collected on the use of illicit drugs. Results have been available since summer 2007 (Nickel et al. 2008; Settertobulte & Richter 2007). The Reitox Report 2008 presented also data from an evaluation of an HBSC study carried out by the Land North Rhine- Westphalia (Richter et al. 2008).
- Early in 2007, the first results of the Health Interview and Examination Survey for Children and Adolescents (Kinder- und Jugendgesundheitssurvey, KiGGS) were presented (Lampert & Thamm 2007). The findings are based on countrywide representative data on the health state of children and adolescents in the age of 0-17 years. A total of 17,641 children and adolescents participated in the study. For the analyses of the tobacco, alcohol and drug use, the data from the interviews conducted among the 11 to 17 year old boys and girls and their parents were used. The most important results of the evaluation have already been presented in the Reitox Reports 2007 and 2008. Schleswig-Holstein made its own contribution to the national health survey by publishing a report on the

⁸ Swedish Council for Information on Alcohol and Other Drugs

health state of children and adolescents in Schleswig-Holstein (RKI 2007b; Schütze et al. 2007) which was also referred to in the REITOX Report 2008.

Data from the *Laender* and regional monitoring systems

Apart from these surveys, most of which are conducted on a regular basis, various studies commissioned by some individual *Laender* are carried out irregularly at regional and local level focusing among others on the extent and effects of the use of a specific substance, use patterns or characteristics of a specific group of users. These studies are based in part on individual evaluations carried out within the framework of larger national studies which have already been mentioned under the rubric of the federal data sources (e.g. regional evaluations of KiGGs, HBSC and ESPAD).

- As part of the Local Monitoring System (LMS), a survey was conducted for the third time in 2007/2008 (the last one dates back to the year 2005) under the title “Hamburger Schulbus” among 14-18 year old students at schools in Hamburg providing general education or vocational training. The data of the “Hamburger Schulbus“ collected in the reporting year 2007/08 were based on a random sample of 1,287 adolescents and young adults in the age group of 14 -18 years (Baumgärtner 2008).
- Another source which has been supplying data on drug trends at local level for many years is the Monitoring System Drug Trends from Frankfurt on the Main. One module of the monitoring system is a school survey. In the reporting period 2008, N=1,463 students (adjusted sample) aged between 15 and 18 years at schools providing general and vocational training were interviewed (Werse et al. 2009). In addition, there are also results available from the trend scout panels and interviews carried out among drug experts and members of the drug scene within the frame of MoSyD.
- In May 2009, the findings of the MODRUS IV study (*Moderne Drogen- und Suchtprävention – Modern Drug and Addiction Prevention*) were presented in Saxony-Anhalt. In the fourth sociological - empirical MODRUS study, students and teachers from grade six to twelve were asked about their experience with and attitude towards licit addictive substances, drugs and their use of the computer and the Internet. The findings of the study can be found at <http://www.sachsen-anhalt.de/LPSA/index.php?id=1076>.

Use of available data sources

This report presents the respectively relevant results of the most recent studies focusing on the national epidemiological studies on substance and drug abuse (Epidemiological Survey on Substance Abuse, ESA and Drug Affinity Study, DAS). Insofar as no new data were published in the period under review, this report confines itself to presenting only a few basic data. The most important results of ESA 2006 on substance abuse among the adult population and of the two studies on cannabis and alcohol consumption among adolescents and young adults published by the Federal Centre for Health Education were already presented in the REITOX Reports 2007 and 2008.

When interpreting the results of population surveys, it needs however to be taken into account that the figures may be non-negligibly underestimated given the fact that in particular persons with a high use of illegal drugs are more difficult to reach by such studies and often have a tendency to underreport the frequency and quantity of their use. Therefore, especially in the case of heroin addicts, estimation methods tapping other data sources (e.g. police files, cf. chapter 4.2) are used. In addition to quantitative data, also qualitative studies, if available, have been taken into account.

2.2 Drug use in the general population (based on a probabilistic sample)

2.2.1 Overview of the use of various drugs

Table 2.1 presents a minimal estimate of the prevalence of the use of illicit drugs in Germany. It is based on the findings of the current DAS (2008) and the last ESA study (2006).

Table 2.1 Prevalence of illicit drugs in Germany

	Source	Age	Prevalence	Total ¹⁾
Lifetime	ESA 2006	18-64	23.7%	12,396,000
	DAS 2008	12-17	10.0%	524,000
12 Months	ESA 2006	18-64	5.0%	2,615,000
	DAS 2008	12-17	7.4%	387,000
30 Days ²⁾	ESA 2006	18-64	2.5%	1,308,000
	DAS 2008	12-17	2.8%	147,000

1) Figures were rounded. Population figures used: 18-64 years: 52,305,000 (2006); 12-17 years; 5,235,863 (2007) (GBE 2009)

2) DAS: "current use" instead of "30-day-prevalence"

Kraus et al. 2007, special calculations; BZgA 2009c.

The table shows that the lifetime prevalence of the use of illicit drugs among adults of the age group 18-59 years (ESA) practically remained unchanged between 2003 and 2006 (2006: 25.4%; 2003: 25.2%). However, the most recent figures of the year 2006 are markedly lower than the ones found by ESA 2003 (Kraus et al. 2007) both for the use of illicit drugs in the 12-month category (2006: 5.4%; 2003: 7.3%) and in the 30-day category (2006: 2.7%; 2003: 3.9%).

The evaluations based on the data on the lifetime prevalence (15.7% vs. 10.0%) and the 12-month prevalence (10.4% vs. 7.4%) also lie far below the figures found in 2004. Only the 30-day prevalence, which is referred to as "current use" in DAS, slightly increased from 2.5% to 2.8% with respect to 2004, which can be interpreted as a stable readiness of the age group for experimental use (BZgA 2009c) (details are contained in online standard table 1).

Both in ESA and in DAS, the declines in prevalences are almost exclusively explained by the lower prevalences of the use of cannabis which are probably an indicator of a trend reversal in cannabis use.

2.2.2 Comparison of the use of individual drugs

National data

The most recent data on the prevalences of the use of individual drugs stem from the ESA study 2006 and were already presented in the REITOX Reports 2007 and 2008. Data on the use of illicit substances among teenagers and young adults were provided by the most recent DAS in 2008. In order to give an overview of the use of the general population, the most important and most recent data on the lifetime, 12-month and 30-day prevalence for the use of individual substances for the age groups 12-17 and 18-64 were compiled in table 2.2.

Cannabis remains the by far most frequently consumed illicit drug. Worth mentioning were also the figures reached by cocaine, amphetamines, ecstasy and (mushrooms in ESA). The use of heroin, LSD and crack remained limited to specific and much smaller groups.

Table 2.2 Prevalence of the use of illicit drugs broken down by substances

Source Substance	DAS 2008 (%; 12-17 Years)			ESA 2006 (%; 18-64 Years)		
	Lifetime	12 Months	30 Days ¹⁾	Lifetime	12 Months	30 Days
Cannabis	9.6	6.6	3.7	23.0	4.7	2.2
Amphetamines	0.7	0.6	0.2	2.5	0.5	0.3
Ecstasy	1.1	0.8	0.3	2.0	0.4	0.2
LSD	0.4	0.3	0.0	1.7	0.1	0.0
Heroin	0.1	0.1	0.0	0.4	0.1	0.1
Cocaine	0.9	0.8	0.3	2.5	0.6	0.2
Crack	--	--	--	0.3	0.1	0.0
Mushrooms	--	--	--	2.4	0.4	0.1
Volatile substances	--	--	--	--	--	--
Any illicit drug	10.0	7.4	2.8	23.7	5.0	2.5
Illicit drugs besides cannabis	--	--	--	5.8	1.2	0.7

1) Corresponds to "current consumption".

BZgA 2009c; Kraus et al. 2007.

The use of illicit drugs is a phenomenon which occurs primarily in the younger age groups up to about 40 years. Apart from the trend data reported for young adults in the previous years, which are based on partial analyses of the ESA data, DAS has provided new data for teenagers and young adults in the reporting year. Table 2.3 contains the findings for the lifetime and 12-month prevalences as well as the current use of individual substances among the 12-25-year olds based on the current DAS data (BZgA 2009c). According to the evaluation, one third of the male interviewees and about a quarter of the female ones has had experience with any illicit drug. This portion practically corresponds to the prevalence of cannabis con-

sumption, with cannabis still being the by far most frequently used illicit drug (table 2.3). Current use is only worth being reported for cannabis (3.7%); as a result of the correlation between lifetime prevalence and current use in the large majority of teenagers and young adults, use of ecstasy, cocaine and amphetamines is still to be regarded as being transitional in nature.

Table 2.3 Prevalence of the use of illicit drugs broken down by gender (M/F) and substances (12-25 years) (DAS 2008)

Substance	Lifetime			12-Months			Actual use		
	M	F	Total	M	F	Total	M	F	Total
Illicit drugs ¹⁾	33.0	24.6	28.9	13.5	7.3	10.5	5.3	2.8	4.1
Cannabis	32.3	24.0	28.3	12.3	6.7	9.6	4.8	2.6	3.7
Heroin	0.4	0.2	0.3	0.0	0.1	0.0	0.0	0.0	0.0
Cocaine	2.7	1.7	2.2	1.2	0.5	0.9	0.4	0.1	0.3
Amphetamines	3.4	1.9	2.7	1.3	0.8	1.0	0.5	0.3	0.4
Ecstasy	3.4	2.9	3.2	1.1	0.7	0.9	0.3	0.3	0.3
LSD	1.4	0.7	1.0	0.2	0.2	0.2	0.1	0.0	0.0

1) Any illicit drug (cannabis, ecstasy, LSD, cocaine, crack, heroin, mushrooms, amphetamines).

BZgA 2009c.

Complementing the ESA data on the trends for the use of illicit substances in the age groups of the young adults aged 18-39 years (REITOX Report 2007) and 18-24 years (REITOX Report 2008), there are data available from DAS on the lifetime prevalence of the cannabis use among teenagers and young adults aged between 12 and 25 years, which will be reported on in chapter 2.3.2.

Data from the *Laender* and regional monitoring systems

More than half of the problematic drug users of Frankfurt's "open drug scene" have consumed crack (among others) within the last 24 hours; the substance, though, has lost somewhat in importance. However, the portion of the excessive users within the (smaller) group of the current crack users has increased. The price of the drug increased drastically within the last two years from approx. 50 Euro to about 100 Euro per gram – with an apparently slightly higher quality. Heroin clearly is again the most frequently consumed drug in Frankfurt's open drug scene: the 24-hour prevalence has, by comparison with previous figures, significantly risen to 71% now. This trend has also been confirmed by drug aid representatives who have also reported about an increase of inhalational use. This trend can be interpreted as a delayed reaction to the relatively low prices to be observed since 2004 (at a relatively stable high quality). Outside of this scene however, heroin is still met with strong rejection. Less than 1% of the 15-18-year olds have consumed heroin at least once in their lives. A substantial increase in the use of benzodiazepines is to be found within the Frankfurt open drug scene: after a continual rise of the use for several years, the 24-hour prevalence jumped

from 29% in 2006 to 47% in 2008. Apart from the use of these illicitly traded medical drugs, also trafficking with substitution drugs (especially methadone but also buprenorphine) has gone up (Werse et al. 2009).

The most important data from the report on the drug and addiction situation in Berlin 2008 (Senatsverwaltung für Gesundheit, Umwelt und Verbraucherschutz 2008) have already been presented in the last REITOX Report. According to last year's report, about 165,000 people currently use illicit drugs and approximately 8,000-10,000 are addicted to opioids in Berlin. It is estimated that almost 900,000 people have experience with the use of illicit drugs in Berlin.

Data on the use of methamphetamines from the most recent epidemiological studies have not been collected in a discriminating manner. Information on the experience with the use of methamphetamines is available from MoSyD and is presented in chapter 2.3.

2.3 Drug use in the school and youth population

With a prevalence of about 5-6%, psychological disorders linked to the use of illicit drugs in children and adolescents continue to be among the epidemiologically most important psychiatric disorders occurring during childhood and adolescence (Sack et al. 2008). Current studies moreover suggest that cannabis use has a much more harmful effect on the brain in adolescents than in adults (Sonnenmoser 2008; Thomasius & Petersen 2008). The vast majority of adolescents stop using drugs again when entering adulthood. Early interventions can help to prevent the onset of substance-related disorders and the beginning of an addiction career (Stolle et al. 2007). Alongside the majority of young people who do not develop any persisting disorders, there is a non-negligible group, though, who displays highly problematic use patterns already at an early age and, in many cases, also develops psychological co-morbidities at a later stage such as disturbed social behaviour, affective disorders and anxiety disorders (e.g. Thomasius & Stolle 2008b). For this group of persons it is particularly important to be provided with specific treatment offers as described for example by Küstner and Kollegen (2008), (see also Thomasius & Stolle 2008a). Universal and selective prevention of nicotine consumption apparently assumes a key role in preventing the later onset of substance-related disorders in adolescents since nicotine dependence is highly associated with other disorders as a result of the use of illicit substances (Perkonigg et al. 2008). In view of the particular importance assumed by the use of also licit psychotropic substances (especially alcohol and tobacco) by teenagers and young adults, findings on the use of licit substances will be cursorily presented in the following.

According to the findings of the MODRUS IV study, the private use of licit and illicit addictive substances among teenagers in Saxony-Anhalt has significantly declined in comparison with the year 2003 in two respects: first, the group of abstinent and health-oriented teenagers has considerably grown, second, the group of regularly and frequently substance-using teenagers has shrunk for all categories of addictive substances.

2.3.1 Use of licit psychotropic substances

Alcohol

The most recent DAS findings (BZgA 2009a) confirm that experience with the consumption of alcohol among 12-25-year olds is very common. About three quarters (75.8%) of the 12- to 17-year olds already have had experience with alcohol once in their lifetime. Among the 18- to 25-year olds the quasi totality of all interviewees report consumption at least once in their lifetime (97.4%). The 12-month prevalences are only somewhat lower (68.0% and 94.1% respectively). Gender-specific differences were not found with regard to prevalences. As for regular consumption (defined as at least once per week) though, which has been on the decline since 1979 (from 44% to 29%), differences in gender and age are substantial. The portion of regular consumers among both genders first strongly increases after the age of 16 years. This increase does however not continue after the age of 18. Generally speaking, more male teenagers and young adults regularly drink alcohol. An indicator to measure risky consumption behaviour among young people is the so-called binge drinking defined as consuming five or more drinks at a time. At present, one in five teenagers aged between 12 and 17 years states to have practiced binge drinking at least once in the last 30 days, a third of this group reports to do this at least once a week. With this, there is a sizeable figure of young people showing risky alcohol consumption behaviour which increases the probability of the occurrence of later alcohol-related problems and disorders.

The study MODRUS IV also provides information on the alcohol consumption of young people. According to this study, only about half of the interviewed students have drunk beer/wine or mixed drinks/cocktails in the last year. Extreme consumption (defined as > 10 units per week) was only confessed by a small minority (approx. 1- to 2%) of the interviewees.

Findings on the alcohol consumption among young people from the Health Interview and Examination Survey for Children and Adolescents (Kinder- und Jugendgesundheitssurvey, KiGGS) (Lampert & Thamm 2007) and the HBSC study (Settertobulte & Richter 2007) were already presented in the REITOX Reports 2007 and 2008.

Tobacco

Data on tobacco consumption among teenagers and young adults are available from the DAS (BZgA 2009b). The lifetime prevalences of smoking among the 12- to 25-year olds were at 60.9% in 2008. About one in five teenagers and young adults smokes daily, little less than 14% even more than 10 cigarettes per day. The average age at onset of smoking is 13.7 years and has not changed much since 1986. The quota of smokers among the 12- to 17-year old teenagers continually declined between 1979 and 1993 to rise again until 1997 and stagnate at a high level until 2001. Since 2001, the portion has considerably shrunk again and currently is at 16% (for both genders).

Within the framework of the MODRUS IV-study, 32% of the students called themselves smokers, girls more so than boys. About one in five students reported to smoke more than 7

cigarettes a day. No significant differences in the average figures are to be found when comparing the genders (FOKUS-Institut 2009).

Findings on the tobacco consumption of young people from the last HBSC study (cf. also: Nickel et al. 2008) and KiGGS have already been presented in the REITOX Report 2007.

2.3.2 Use of illicit drugs

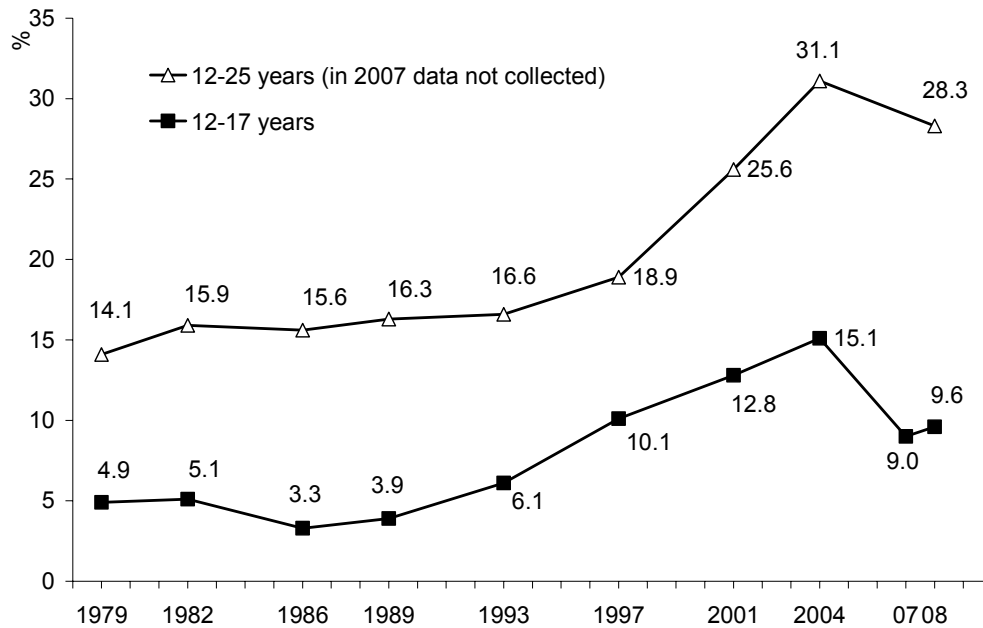
National data

The results of the European School Survey Project on Addiction and other Drugs (ESPAD) were presented in 2007⁹. According to these results, 28% of the pupils surveyed reported to have tried any illicit drug (cannabis, amphetamines, ecstasy, LSD, cocaine, crack or heroin) once in their lifetime (Kraus et al. 2008b). The lifetime prevalence of the consumption of illicit drugs though, (except for cannabis) has remained almost unchanged since 2003 (10.0% vs. 10.2%). Among the illicit drugs (excluding cannabis), amphetamines (6%) were the most commonly tried drugs (at least once in a lifetime). The lifetime prevalences of all other illicit drugs lie below 5%, with the portion of boys being larger than the one of the girls for all substances. The portion of cannabis users also declined significantly in the German ESPAD survey compared to the figures found in 2003. In the period between 2003 and 2007, the lifetime prevalence fell from 31% to 25%, the 12-month prevalence from 25% to 17% and the 30-day prevalence from 14% to 8%.

The DAS data on the use of illicit drugs among teenagers and young adults – have- as far as available – already been presented under chapters 2.2.1 and 2.2.2. So far, first trend analyses for the illicit substances are only available for cannabis.

Data on cannabis use among teenagers and young adults have been collected within the framework of the DAS study since 1979 (BZgA 2008). Between 1979 and 2004, the portion of teenagers and young adults who have consumed cannabis at least once in their lifetime substantially increased for both genders. However, despite a new slight increase in the age group of the 12- to 17-year olds between 2007 and 2008, the lifetime prevalence in the overall group of the 12- to 25-year olds considerably declined (fig. 2.1) between 2004 and 2008.

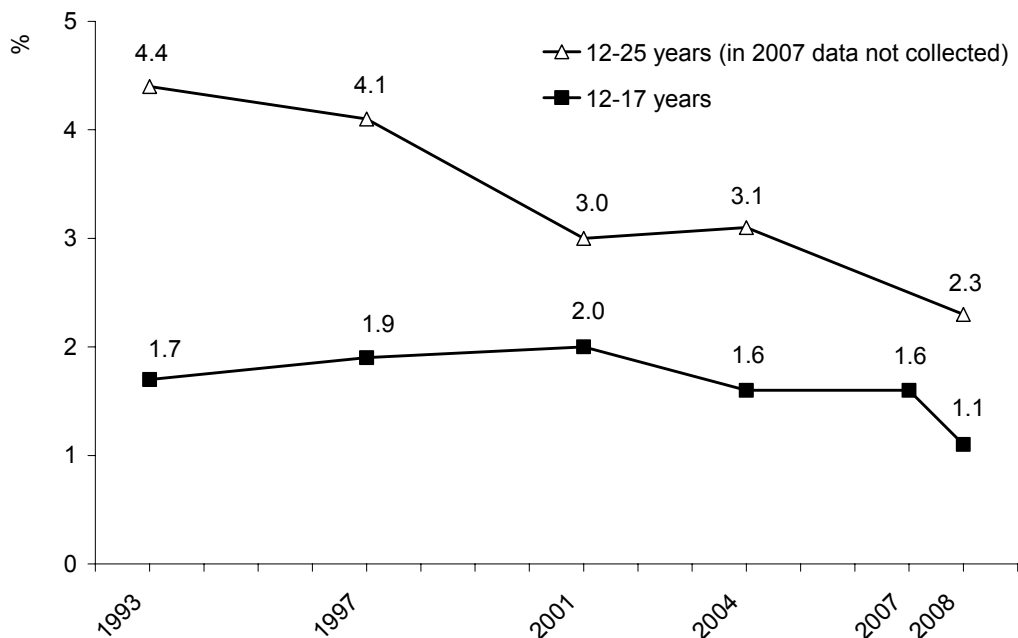
⁹ Even if ESPAD is not conducted at a national level in Germany, its findings are reported under the rubric of the national data given the international context the study is embedded in.



BZgA 2008.

Figure 2.1 Lifetime prevalence of cannabis use among teenagers and young adults 1979-2008 (DAS)

Regular (at least 10 times in the last year) cannabis use has been on the decline in the age group of the 12-25-year olds since 1993 (figure 2.2). This development is to be observed both in the male and female teenagers and young adults (BZgA 2008).

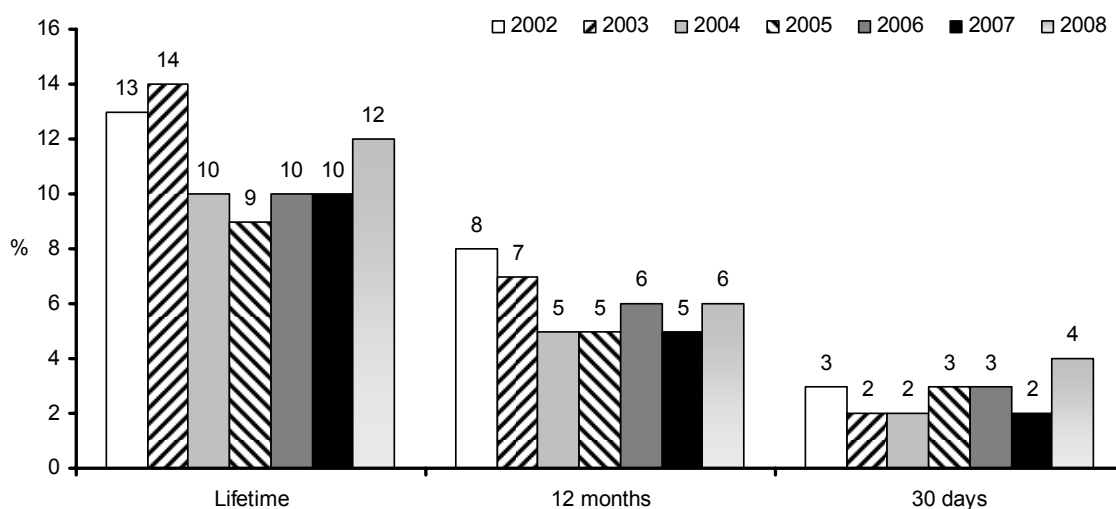


BZgA 2008.

Figure 2.2 Regular cannabis use among teenagers and young adults 1993-2008 (DAS)

Data from the *Laender* and the regional monitoring systems

Only a minority of the teenagers interviewed within the framework of the MODRUS IV study in Saxony Anhalt reported that they had experience with illicit substances. Two development trends were found for the users of illicit drugs in Saxony-Anhalt compared to the year 2003: use of illicit substances has gone up for all groups of users (almost all users of marijuana/hashish, ecstasy/speed and cocaine/heroin also smoked cigarettes and drank alcohol). A special role seems to be played by waterpipe-smoking (“shisha”) - a type of use that has become popular among young people only in recent years. One in four of them also took other illicit addictive substances.



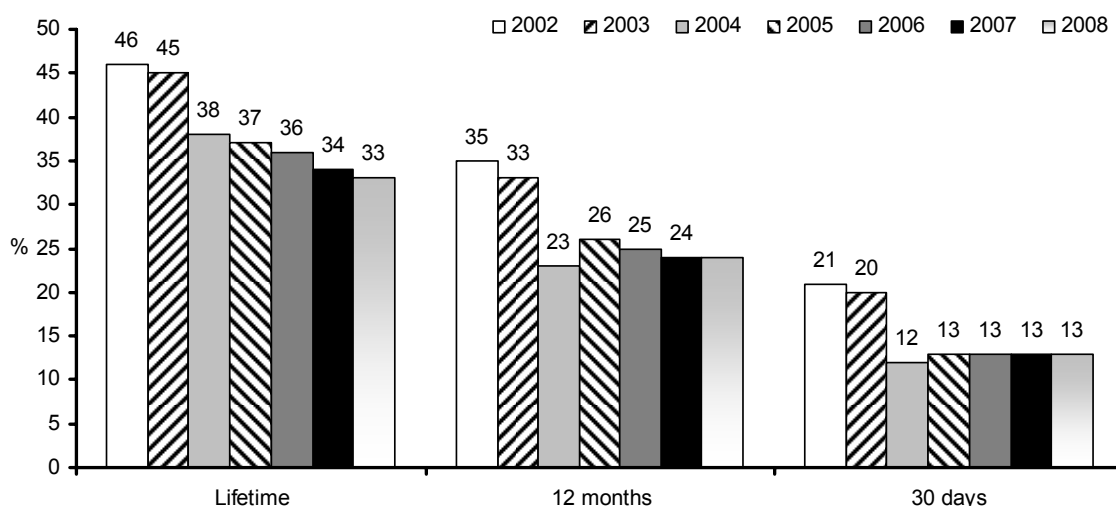
Werse et al. 2009.

Figure 2.3 Lifetime, 12-month and 30-day prevalence of the use of illicit drugs (except cannabis) among Frankfurt students aged between 15 and 18 years - 2002-2008 (MoSyD)

12% of the 15-18-year old students in Frankfurt reported in 2008 to have had experience with at least one illicit drug except cannabis (figure 2.3). 3% of the students have taken ecstasy at least once in their lives, 1% also in the last month. After a decline in 2004, these figures remained largely stable. Consumption did not increase despite the data available on the revival of techno among Frankfurt young people – a music scene which is strongly associated with this drug. The lifetime prevalence of amphetamines remained stable at 5% in 2008. Further (though slight) increases are however to be found for the 12-month and 30-day prevalence of amphetamines (4% and 2%). The portion of 15-18-year-old Frankfurt students who had experience with the use of cocaine, slightly increased (6%). The lifetime prevalence also slightly went up after having declined in 2004 and stagnated for a while. The 30-day prevalence, too, slightly increased and reached its highest level since 2002. The lifetime prevalence of methamphetamines which are among the most strongly rejected drugs in the age group of the 15- to 18-year olds, is at 1%. Practically no changes were found for the

consumption experience with psychoactive mushrooms and LSD. Still very few (<1%) of the 15-18-year olds have experience with heroin (Werse et al. 2009).

With regard to cannabis use, the findings of the current school survey conducted within the framework of the Frankfurt MoSyD do not indicate either any striking changes for 2008. The lifetime prevalence of cannabis use among Frankfurt students has been on a continual decline since 2002 (Werse et al. 2009). The 30-day and 12-month prevalences have practically remained stable (figure 2.4).



Werse et al. 2009.

Figure 2.4 Lifetime, 12-month and 30-day prevalence of cannabis use among Frankfurt students aged between 15 and 18 years - 2002-2008 (MoSyD)

Werse and colleagues (2009) surmise that the image of cannabis has suffered even more among teenagers and young adults in the last two years. They base their assumptions on the statements made on the “favourite drug” as well as on observations made in party scenes, among others in connection with a deterioration of the quality of drug (Werse et al. 2009).

Within the framework of the school survey MoSyD, data were collected for the first time in 2008 on the consumption of herb mixtures which have made their appearance under the name “spice” in 2008 (see also chapter 1.2.2). According to the survey, around 6% of the 15-18-year olds reported in 2008 to have consumed “spice” at least once in their lives, 3% also in the last 30 days (Werse et al. 2009) (table 2.4). These interviewees are mainly young people who have anyway a high affinity with licit and illicit drugs. Despite a generally high demand for this substance especially at the end of 2008, “spice” like other (still legally available) herb mixtures play a negligible role in Frankfurt’s party scenes. Werse and colleagues surmise that the regular consumers are mainly cannabis users who are not that young any more and who use the substance as a substitute without having to fear legal consequences.

Table 2.4 "Spice" – lifetime and 30-day prevalence as well as five-time consumption (%) in the age group of the 15- to 18-year olds broken down by age (MoSyD)

	15-year olds	16-year olds	17-year olds	18-year olds	Total
Lifetime	4	8	4	9	6
30 days	1	3	1	5	3
>5-time-use	0	1	2	1	1

Werse et al. 2009.

The preliminary findings of the "Hamburger Schulbus" survey 2007/2008 were already presented in the last REITOX Report. A final report is not available yet (as of August 2009). The Report on the Health of Children and Teenagers in Schleswig-Holstein (RKI 2007b; Schütze et al. 2007) which is based on a partial evaluation of the Health Interview and Examination Survey for Children and Adolescents (KiGGS) and an evaluation of the HBSC study for North Rhine-Westphalia (Richter et al. 2008) have also been presented in the last REITOX Report.

Summary and trends

After the substantial increases in cannabis use prevalences from about the middle of the nineties onwards, recent findings give the impression that the situation has somewhat eased in terms of consumption and prevalences especially among teenagers and young adults. During the last three to four years in particular, numerous initiatives and projects have been launched addressing especially (young) cannabis users. These projects range from low-threshold offers to highly structured psychotherapeutic interventional approaches. Moreover, possible risks and long-term consequences of intense or addictive cannabis use have much more often been the subject of discussion both in the general public and in expert circles.

Sustainable changes in the use of other substances have not been reported recently. However, consumption behaviour still does vary at regional level. Significant figures of crack users for example have been reported for years only from Hamburg and Frankfurt. The characteristics of the markets like prices and/or purity of the various substances are also subject to considerable regional differences (the prices for crack for example have almost doubled in Frankfurt in a very short time (Werse et al. 2009)) and can therefore influence changes in the consumption behaviour of the general population but also of specific target groups like for example youth populations. Moreover, individual substances or groups of substances (e.g. GHB/GBL, methamphetamines, biogenic drugs, tilidin) have repeatedly moved into the centre of attention in recent months, often in connection with intense media reporting. It is a problem that regular monitoring systems are not available for all of these substances. Moreover, some of the appearances of these substances are transitional phenomena which cannot necessarily be taken as indicators of sustainable changes in the use patterns.

In connection with the use of illicit substances by teenagers and young adults it is important to note that the use of illicit and licit substances (especially alcohol, tobacco but also medical drugs) is often closely linked so that important developments may possibly be neglected when looking at the use of illicit substances in an isolated manner.

It remains to be seen how far the appearance of synthetic cannabinoids, which was first reported on in connection with the consumption of herb mixtures such as “spice”, will lead to a change in the market. With the ban of these substances, which were identified in December 2008, the large majority of the mixtures which were free to sell on the market until then, are not available any more in Germany.

The Frankfurt drug aid and youth support facilities report a continuously high demand for therapy offers in connection with cannabis. Therapy is especially sought by young people who, in addition to their intense use patterns, are struggling with further complex psychological or psychosocial problems. With regard to the totality of the youth population, cannabis-related problems seem to have decreased a little. This information corresponds with the interpretation of the data provided by other studies conducted over the last two years (e.g. ESPAD, HBSC, ESA).

There are still no national monitoring systems available to monitor the use of methamphetamines at national level. From Frankfurt it is currently reported that methamphetamines still circulate only in a few sub-groups of the party scene (the lifetime prevalence of the use of methamphetamines among school-aged children has been surveyed within the framework of MoSyD since 2007 and currently lies at 1%). It is generally estimated that methamphetamines are still not very common in Germany in comparison with other substances.

A bit more frequently spotted, though at a very low level, was the use of ketamin (“special K”) at Frankfurt’s party scenes, especially at the so-called “afterhour partys”. The synthetic drugs 2C-B, m-CPP and BZP have also made their localized appearance in the Frankfurt clubbing scene. The slight increase in the prevalence of GHB or GBL (“liquid Ecstasy”) at the Frankfurt party scenes that was assumed in the previous year, was not confirmed in 2008. The predominant role assumed by speed among the hard drugs has been reported for years from the Frankfurt party scenes. It is to be assumed that its prevalence has even slightly increased. In these circles the drug has a neutral to positive image (it corresponds to the “Zeitgeist”) and is consumed in a casual manner.

Table 2.5 Prevalences of the use of illicit drugs by teenagers and young adults – various studies

Study ¹⁾	Year	Age group	Region	Prevalence		
				30 Days	12 Months	Lifetime
BZgA	2008	12-15	National	1.6% ²⁾	3.7%	4.2%
BZgA	2008	16-17	National	5.0%	13.6%	19.9%
BZgA	2008	18-19	National	7.0%	16.2%	35.8%
BZgA	2004	12-15	National	1.3%	5.6%	7.7%
BZgA	2004	16-17	National	5.1%	20.7%	32.1%
BZgA	2004	18-19	National	6.7%	18.8%	40.6%
ESPAD	2007	15-16	7 <i>Laender</i>			10.1%
ESPAD	2003	15-16	6 <i>Laender</i>	3.8%	8.3%	12.3%
MoSyD	2008	15-18	Frankfurt	4%	6%	12%
MoSyD	2007	15-18	Frankfurt	2%	5%	10%
Schulbus	2007/08	14-18	Hamburg	2%		7%
Schulbus	2005	14-18	Hamburg	5% ²⁾		12%

1) BZgA: Cannabis, heroin, cocaine, amphetamines, ecstasy and LSD. Data on the use of "illicit drugs except cannabis" are not available. These data are the result of a re-analysis carried out by the BZgA in 2004. Therefore, figures can diverge from the ones of previous years. ESPAD: amphetamines, LSD, ecstasy, cocaine, crack and heroin. ESPAD interviews students from grades 9 and 10, the focus therefore being on the age group 15-16 years, but also a few students aged 14 and 17 years took part. MoSyD: psychoactive mushrooms, ecstasy, speed, cocaine, LSD, crack, heroin, crystal and GHB/GBL. Schulbus: ecstasy, mushrooms, LSD, speed/amphetamines, cocaine, crack and heroin.

2) Corresponds to "present use" (BZgA) or resp. "current use" (Schulbus).

Tables 2.5 and 2.6 summarize the results found by the most recent studies conducted on the prevalence of substance use among youth populations for all illicit drugs or cannabis respectively. When comparing the figures, it needs to be taken into account however that the age groups are not identical. It also needs to be considered that ESPAD and HBSC have only been conducted in some of the 16 *Laender*, which can also lead to distortions. Some of the divergences between the prevalence estimates can also be attributable to the use of different interviewing methods (telephone vs. face-to-face interviews) or different wording used in the questionnaires.

Table 2.6 Prevalences of the use of cannabis among teenagers and young adults – various studies

Study	Year	Age group	Region	Use in period (%)		
				30 Days ¹⁾	12 Months	Lifetime
HBSC ²⁾	2006	15	5 <i>Laender</i>	7.1/4.3		18.1/13.8
HBSC	2002	M=15,7	4 <i>Laender</i>		18.0	24.0
KiGGS ²⁾	2003-2006	11-17	National		9.2/6.2	
BZgA	2008	12-19	National	3.7 (2.0) ³⁾	9.1	16.7
BZgA	2007	12-19	National	3.4 (2.3) ³⁾	8.0	15.1
BZgA	2004	12-19	National	3.4 (2.3) ³⁾	12.1	21.3
ESPAD ⁴⁾	2007	15-16	7 <i>Laender</i>	8.1	17.2	25.2
ESPAD	2003	15-16	6 <i>Laender</i>		24.0	31.0
MoSyD	2008	15-18	Frankfurt	13	24	33
MoSyD	2007	15-18	Frankfurt	13	24	34
Schulbus	2007/08	14-18	Hamburg	10 ⁵⁾		28 ⁵⁾
Schulbus	2005	14-18	Hamburg	17.1		39.1
Schulbus	2004	14-18	Hamburg	17.3		40.3

1) BZgA (30 days = "present"), Schulbus ("current use" = 30 days).

2) HBSC (2006) and KiGGS: First figure: boys, second figure: girls.

3) In brackets: Regular use (> 10 times in the last year).

4) ESPAD interviews students from grades 9 and 10, the focus therefore being on the age group 15-16 years, but also a few students aged 14 and 17 years took part.

5) Preliminary data.

Details on the general population surveys are contained in online standard table 2, the ones on the youth surveys in standard table 30.

2.4 Drug use among targeted groups / settings at national and local level

Repatriates and migrants

Substance abuse among migrants is in third place on the list of psychological disorders. Even more frequent are psychosomatic and depressive syndromes. Post traumatic stress disorders and psychoses have a lower incidence than drug dependence (Collatz 2001). Adolescent ethnic German immigrants from Russia constitute a specific social risk group in Germany exhibiting disintegrated biographies at a disproportionately high scale including substance abuse and deviance. Access to migrants who only make use of care offers upon referral continues to constitute a special problem. Mediators speaking the mother tongue of the immigrants could contribute to overcoming barriers both in preventive and curative care and facilitate the access to the health care system (Walter et al. 2007).

Studies analyzing the explanatory models for addiction-related illnesses of repatriates from the former Soviet Union, migrants from Turkey or native Germans confirm that cultural differences assumed by the explanatory models with regard to substance abuse may lead to

communication problems with the personnel of addiction support facilities (Heimann et al. 2007; Penka et al. 2008). The lower usage of health care offers by patients with a migration background in comparison with native Germans also results from a different conceptual understanding of “addiction“ and care structures which are to be called on if necessary. It is also not possible to convey medical or every day conceptions beyond merely linguistic notions without taking into account the respective cultural context and related connotations of language.

(Techno-) party scene and other youth cultures

The Frankfurt MoSyD reports that techno music continued to gain in popularity in 2008. Consumption of hard drugs among techno fans that was observed to be on the rise in the previous year did however not follow the trend. Yet, the figures found for this relatively large group (29% of the interviewed teenagers) are way above the average. All prevalence figures for licit drugs and cannabis are comparatively high among techno fans. Therefore it is not fanciful to assume that the techno revival among the youth populations could contribute to an increase in substance use. Observations made *within* the techno clubbing scenes seem to indicate however that substance use in the clubbing scene is on the decline (Werse et al. 2009).

3 Prevention

3.1 Introduction

3.1.1 Organizational framework

The primary goal of prevention is to promote the health of the individual, maintain abstinence, prevent and reduce abuse and addiction. The prevention of addiction is - alongside addiction therapy and repressive measures – an integral part of the comprehensive addiction and drug policy of the Federal Republic of Germany. Apart from severe psychological and physical harm done to the individual, substance abuse and addiction also cause enormous damage to the national economy. Prevention of addiction therefore assumes a central position in Germany. Prevention is one of the four corner stones German addiction and drug policy is based on (cf. chapter 1.1.2).

The prevention of addiction has been strengthened in the Action Plan for Fighting Drugs and Addiction by the development of a comprehensive prevention strategy that matches set targets with concrete measures in the area of addiction prevention.

Responsible for the implementation of the Action Plan for Fighting Drugs and Addiction and the pertaining prevention activities are the respective ministerial agencies, in particular the Federal Centre for Health Education (Bundeszentrale für gesundheitliche Aufklärung, BZgA), the *Laender*, communal administration and the self-governmental bodies of the insurance funds. Obligated to the principle of subsidiarity, this multitude of actors makes sure that the preventive measures are broadly spread across all federal levels of the Federal Republic of Germany.

The goals set by the Action Plan for Fighting Drugs and Addiction were moreover given shape by the working group “Addiction Prevention“ set up by the national Board on Drugs and Addiction. The working group has developed strategies, measures and targets like for example in the national action programmes on tobacco and alcohol prevention (Facharbeitsgruppe „Suchtprävention“ des Drogen- und Suchtrates 2009b; 2009a). These action programmes provide a general framework for implementing the measures in close cooperation between the players.

3.1.2 Current developments and trends

The epidemiological data available for the reduction of cannabis consumption indicate that the used strategies prove successful. In the year 2008, the quota of those who have consumed cannabis at least once in their lifetime declined to 28.3%, the 12-month prevalence to 9.6% (BZgA 2008). The decline in the number of regular cannabis users also provides proof

of the effectiveness of the comprehensive measures which aim, among others, at creating and promoting awareness for a healthy lifestyle.¹⁰

If one also looks at the prevalences of the licit substances alcohol and tobacco, one gets an ambivalent picture of substance use among teenagers and young adults. While, on the one hand, the per capita consumption of pure alcohol has declined, alcohol abuse in the youth population, on the other, has increased. This clearly shows that from today's perspective, prevention needs to react to changed consumption patterns and addiction forming behaviours by bundling existing activities and developing new measures. In this, the focus needs to be shared between children and teenagers on the one hand and alcohol consumption of adults on the other. Adults need to be sensitized for the health risks posed by excessive drinking and for their function as role models for the alcohol consumption of children and teenagers.

At present, German addiction policy focuses on intensifying the measures undertaken in the area of alcohol prevention. To this purpose, the aforementioned National Action Programme for Alcohol Prevention of the Board on Drugs and Addiction 2009-2012 was developed. It contains, among others, suggestions for the targets to be set in selected areas of prevention (Facharbeitsgruppe "Suchtprävention" des Drogen- und Suchtrates 2009a).

3.1.3 Effectiveness and efficiency in addiction prevention

Prevention activities are carried out by various players in Germany. This makes it possible to take a broad approach and transfer promising and successful measures into actual practice.

From today's perspective, central approaches to increase effectiveness and efficiency in addiction prevention are evaluation, networking and transfer. In order to guarantee a structured and systemic sustainable exchange and transfer, structures and co-operations at various levels with almost all relevant players have been successfully developed over the last years. Among these are for example also the development of quality standards and the further development of existing quality assurance measures in addiction prevention. In this connection, the BZgA-Laender-cooperation group "addiction prevention" (a cooperation between the Laender representatives and the BZgA) is equally trend-setting as the events and experts' meetings organized by the German Monitoring Centre for Drugs and Drug Addiction (Deutschen Beobachtungsstelle für Drogen und Drogensucht, DBDD), the BZgA, the German Centre for Addiction Issues (Deutsche Hauptstelle für Suchtfragen, DHS) as well as by many other players, and last but not least the monitoring system Dot.sys (documentation system used for addiction prevention), a joint project of the BZgA and the Laender.

¹⁰ Since especially the youth population consumes less cannabis, it is not fanciful to assume that the successful prevention measures undertaken in the area of tobacco consumption also have contributed to the decline in cannabis consumption.

Experts' conference on quality in prevention

Initiated by members of the BZgA-*Laender*-cooperation group, the two-day experts' conference "Quality in the prevention of addiction" held in May 2009 was devoted to aspects of quality enhancement of prevention measures and the promotion of the effectiveness of addiction prevention at local and *Laender* level. Concrete goals of the conference were to present current standards of addiction prevention and to promote the transfer of these standards. Apart from providing basic information and presenting good-practice approaches, the basis for a common, practice-oriented concept for quality assurance in addiction prevention was created.

Dot.sys

The project *Dot.sys* jointly carried out by the BZgA and the *Laender* provides comprehensive information on the prevention activities implemented in Germany in the calendar year. With this, *Dot.sys* makes an important contribution to reporting on prevention and improving also the quality and transparency in prevention practice. The counselling centres, authorities, associations, specialized ambulatories and coordination agencies at Land level participating in *Dot.sys* permanently document their activities in the electronic data collection system. Documentation takes place on a voluntary basis, therefore no claim can be laid on completeness of the documented prevention measures.

In the reporting year 2008, about 320 facilities across Germany documented their prevention measures in *Dot.sys* (approx. 260 facilities in the year 2007). For 2008, documentation is based on a total of 33,000 entered prevention measures, projects and programmes which were implemented in Germany in the year 2008. Selected results show that:

- About 50% of all the prevention activities documented by *Dot.sys* are addressed to multipliers, another 44% to final addressees and 6% fall under the category "public relations".
- The large majority of the documented measures are carried out in schools (42%). These measures are addressed both to teachers (33% of the measures are intended for multipliers) and to pupils (57% of the measures are geared to final addressees). As a work setting, schools are particularly suited for practical prevention work. On the one hand, it provides direct access to the target group and, on the other, it enables universal prevention to be carried out among children and teenagers to lay the basis for a responsible consumption behaviour in the future.
- Substance-related prevention activities carried out in 2008, focused in particular on the substances alcohol (73%), cannabis (44%) and tobacco (41%). Given the disquietingly high consumption prevalences in the general population, alcohol is given special attention among substance-specific prevention activities.
- Out of the total measures, less than a third was submitted to an evaluation in 2008. 74% of the evaluations are mainly carried out as outcome evaluations.

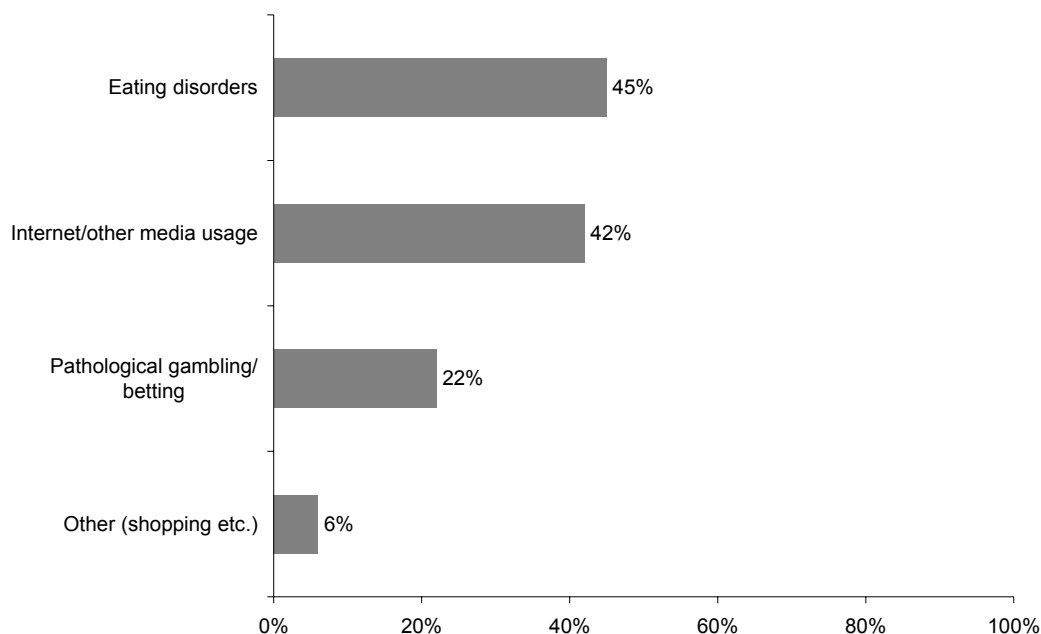
3.2 Universal prevention

Universal prevention forms the mainstay of current prevention activities. Universal prevention comprises programmes, projects and activities which address the general population or parts of it that run a low or average risk of developing addiction or dependence. The typical work setting for universal prevention activities is the school. Work settings, communal facilities or sports clubs are further promising settings for carrying out universal prevention activities (Spring & Philips 2007).

In general, universal prevention activities are made up of projects aiming at specific substances, non-substance-related measures as well as cross-substance projects. Cross-substance prevention activities are mainly such activities that serve to teach life-skills or to promote forming critical opinions.

Based on the Dot.sys documentation, these measures accounted for 48% of all addiction prevention activities carried out in Germany, forming the focal point of addiction prevention in 2008. Targeted by these measures were children and teenagers especially in the school setting but often also in nursery schools and daycare centres.

In the reporting year 2008, substance-related measures were focused on alcohol, cannabis and tobacco. All other – in particular illicit – substances are only targeted by one in six prevention measures carried out. As shown by figure 3.1, new focuses have been formed in the area of non-substance-related and behavioural addictions:



Dot.sys 2008, N=2.620 Maßnahmen.

Figure 3.1 Behavioural addictions targeted by prevention measures

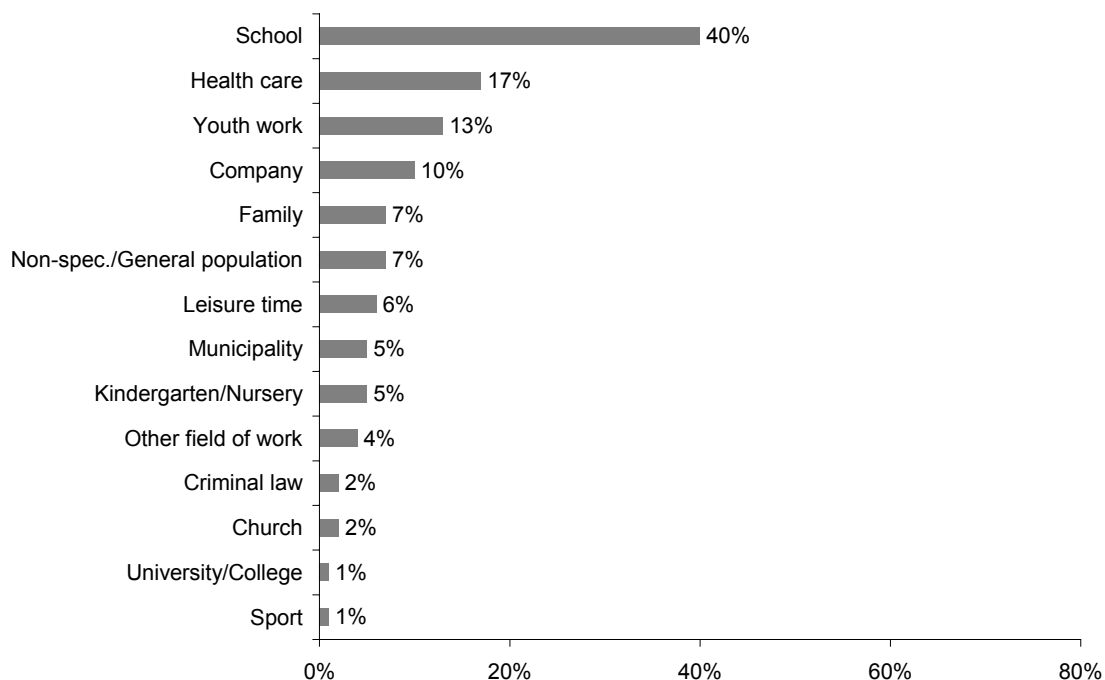
Especially eating disorders and media usage (e.g. online and computer games) are focal areas of the activities undertaken with regard to behavioural and non-substance-related

forms of addiction. The prevention activities targeted at pathological gambling are also a response to the increasing number of people who are at risk of developing habit forming behaviours by engaging in sports betting, Internet or slot machine gambling. Thanks to the State Treaty on Gambling which entered into force on 01.01.2008, measures were intensified and appropriate help offers developed at national and *Laender* level. In this connection, the BZgA developed and implemented a national umbrella campaign to prevent pathological gambling or problematic gambling behaviour respectively.

3.2.1 School

Schools are an ideal setting for carrying out universal prevention measures. They provide the broadest access to the main target group of universal prevention and make it possible for preventive measures to be integrated into the school curriculum. From today's perspective, schools are equally suited for substance-related, non-substance-related and cross-substance-related activities.

In the school setting, programmes are implemented at a national level, like for example Be smart – Don't Start and Smokefree school, but also at a regional level like ...really strong, better clever than drunk (...ganz schön stark, Lieber schlau als blau) or Clear View Schlesweg-Holstein (KlarSicht Schleswig-Holstein). The aforementioned programmes are generally made up of different modules ranging from promoting social skills over conveying information to motivating to lead a healthy lifestyle.



Dot.sys 2008, N=32.817 measures.

Figure 3.2 Settings of prevention measures

40% of all prevention measures documented in 2008 were carried out in the school setting. These measures are addressed both to pupils and teachers in the form of continuing education and training programmes. The measures carried out in schools are based both on non-substance-related (48.1% of the measures documented in 2008) and substance-related (43.5% of the measures documented in 2008) prevention approaches. Focal areas of these activities are the promotion of health and life skills as well as the provision of information and the formation of critical attitudes.

The so-called “peer approach” is gaining in importance also in the school setting. Peer education approaches are based on the assumption that fellows of the same age (peers) are better suited than for example teachers or counselling experts to create favourable preconditions for initiating learning processes. This is among others, attributable to greater social closeness between peers, the use of common language codes and thus to greater authenticity (Backes & Schönbach 2002). Teenagers who are willing to assume the roles of peers, are trained to provide support as experts in problem situations and to promote problem solving skills among their fellow students. Peers thus serve as prevention helpers at ground level, i.e. also at places where licit and/or illicit drugs are consumed. An example for this is the Buddy-Project that is dedicated to the topic of addiction prevention. Peer group education, self-efficiency, life-orientation and participation are the cornerstones of this educational concept.

Behavioural prevention activities often go hand in hand with condition prevention measures. Part of these are for example the integration of teachers in prevention measures or the implementation of the nationwide smoking ban at schools. With respect to alcohol prevention, condition prevention measures have so far mostly been limited to individual regional measures. Individual communities plan to restrict the business hours during which alcoholic beverages may be sold at petrol stations or they provide intensive training programmes for sales personnel with respect to youth protection regulations. The necessity of such additional trainings was underlined by sporadic test purchases of minor teenagers.¹¹

3.2.2 Family

As the most important and constant socialisation instance for children and adolescents, the family assumes an important role in the field of work of prevention. Until the start of puberty, the family exerts the largest influence, positive or negative, on the norms and values adopted by children and thus also on forming different modes of behaviour. Parents and siblings, but also close relatives and acquaintances often serve as role models whose lifestyle is - consciously or unconsciously - imitated and adapted to. Given this, the family also has a great influence on the health education and thus on the health condition of the child which are both target areas of prevention activities.

¹¹ Within the framework of such test purchases it was for example found that high-proof alcoholic beverages were not infrequently sold to minor teenagers (aged below 18) despite submission of their passports.

7.8% of the prevention activities documented in 2008 were carried out in the family setting. It is equally suited for the implementation of non-substance-related and substance-related measures. On closer inspection however, one sees that the measures that are targeted to the final addressees are mainly substance-related whereas the ones that address multipliers are mostly non-substance-specific in nature.

The actual interventions are often not carried out together with the family at a counselling facility, but, for example, in a nursery school or daycare centre. *Papilio* for example is a programme which tries to counteract preventively the development of addiction at later stages of childhood or adolescence by promoting socio-emotional skills and reducing behavioural problems at early childhood age (Hessische Landesstelle für Suchtfragen e.V. 2009). *Papilio* is currently implemented in nursery schools and daycare centres in 10 *Laender*.¹² Alongside measures intended for the children, nursery staff assume a central role in the programme. They are to support the children and promote their development through their educational behaviour. Parents are integrated into the programme through parents' evenings at which they are provided with information to enable them to turn individual modules of the programme into practice at home. Within the framework of *Papilio* 2,480 nursery staff from 638 facilities were trained and 44,640 children reached.

3.2.3 Community

To be holistic and sustainable, addiction prevention needs to integrate not only family and school but also the social environment of children and teenagers. This means that also communities, cities, regions and districts need to participate more in the development and implementation of prevention measures. In this context, communities are not only to serve as a setting for the implementation of these measures but they are to assume a more active role. Generally speaking, the role of a community as an active player in addiction prevention strongly depends on its size or more specifically on the number of inhabitants. Small municipalities often do not have the staff and financial resources to implement preventive measures at a local government level.

Community-based addiction prevention activities are often carried out in inter-community and supra-local cooperation projects with various local partners being involved like for example addiction prevention facilities, churches, self-help organizations, local clubs and institutions, parties and associations etc. Apart from kindergartens and schools, especially organized and non-organized recreational settings as well as the public health sector serve as field of works for community-based prevention.

In order to support the activities undertaken within the framework of community-based addiction prevention in Germany, the BZgA launched the federal competition *Community-based Addiction Prevention*¹³ in 2001. Taking place in two-year intervals and with varying focal

¹² Status: April 2009.

¹³ Further information on the federal competition "Municipal addiction prevention" can be found at: www.kommunale-suchtpraevention.de

areas, the competition has the primary goal to identify “excellent community-based prevention activities and measures undertaken for children, award them the good-practice label and make them known to the public to motivate others to follow the example of good practice and exchange experience at an inter-community level” (Böhme 2009). 123 communities took part in the competition 2008/2009 that was placed under the title “*Addiction prevention for children and teenagers at local level*”. The large majority of the submitted projects combine behavioural and condition prevention approaches and mainly target children and teenagers aged between 11 and 18 years as well as parents and multipliers.

3.2.4 Recreational settings (including reduction of drug and alcohol-related harm)

Apart from the aforementioned fields of work (school, family and community) recreational and sports settings are not unimportant areas of activity for universal prevention measures. More than 70% of all children and teenagers are, at least for a short time, members of a sports club. Sports clubs exist throughout the country and thus guarantee high accessibility to children of different social strata including the socially disadvantaged ones.

Organized by the BZgA, the national campaign *Make children strong* makes use of the possibilities offered by sports settings addressing adults in sports clubs who have responsibility for children and teenagers to make them familiar with the goals of the campaign which are to strengthen self-assurance and self-worth and to promote conflict solving and communicational skills. From a strong, self-assured position, children are to learn to say “no” to addictive substances of any type.¹⁴

In order to guarantee reach and sustainability of the campaign, the BZgA has entered a strategic partnership with sports associations with large memberships (German Soccer Association, German Gymnastics Federation/Gymnastics Youth Federation, German Olympic Sports Federation, German Handball Federation, German Athletics Federation, DJK-Youth Sports Associations). Within the framework of the campaign, the BZgA sets a focus on the implementation of short-training concepts which had been developed on the topic of prevention to be used as a regular module of the qualification training for multipliers in mass sports. The BZgA also supports the so-called *KSM-Tour* by participating in numerous big sport and family events. About 500,000 people have been reached so far at big events in the year 2009.

In order to support the mass sports associations in their qualification tasks, 120 organizers and coordinators of educational fields of work (of the DFB, DHB, DLV, DTB/DTJ and DSJ) received short trainings on prevention in 2009 (status: June 2009). During the week-long alcohol prevention campaign *Action Week Alcohol* organized in 2009, more than 900 sports clubs followed the invitation to enjoy sports without consuming alcohol. The campaign reached additionally 2,700 multipliers and about 250,000 members of the sports clubs.

¹⁴ Further information on “Make children strong” can be found at: www.kinderstarkmachen.de

3.3 Selective prevention in at risk groups and settings

Selective prevention is addressed to groups of people who have a significantly higher risk of developing addictions than the average population. This risk can be immanent or a group of people can carry a higher risk of developing addiction through their whole lives (Spring & Philips 2007). Both biological, psychosocial, social and environmental influences are to be taken into account as risk factors. Selective prevention measures are for example developed for

- school drop-outs
- socially disadvantaged people
- homeless youth
- people with a migration background
- children and teenagers from families with addiction problems
- teenagers with consumption experience
- clubbers

to mention only a few.

The target groups of selective prevention measures are often addressed in recreational settings. Interventions for socially disadvantaged youth or children and teenagers from families with addiction problems are often carried out in school and pre-school settings. Generally speaking, this approach has got the advantage of using existing resources at an early stage. However, the risk of stigmatizing the target groups of selective prevention activities cannot be denied. Therefore, pros and cons need to be carefully weighed against each other.

3.3.1 At-risk groups

Socially disadvantaged groups

People living in socially difficult circumstances are very often placed at particular health risks. Statistically, the risk of falling seriously ill or dying earlier is double as high for people from a lower social class than for those from the highest social strata. Social disadvantages thus create inequality in health conditions (BMG 2008). Poverty, unemployment and a low social status are further risk factors favouring the onset or aggravation of addiction-related problems. It is therefore particularly important to promote and strengthen this group of people in the development of their personality as early as possible. However, children and teenagers with special educational needs often do not have the personal, social and/or cognitive skills to sufficiently translate prevention contents so that the “usual” prevention measures are hardly useable for the work with these children and teenagers.

Taking into account these specific problems, *PeP – Educational programme for health promotion and prevention of addiction and violence* was for example developed for children and teenagers with special educational needs. *PeP* is currently successfully used in several

Laender especially in schools for children with learning difficulties, integration classes and lower secondary schools. *PeP* is based on a concept designed for grades 3 to 9 with varying areas of concentration and goals according to the age and skills of the children and teenagers.

Prevention of addiction for people with a migration background

Addiction prevention for people with a migration background comprises a multitude of measures ranging from establishing contact with a public addiction facility over activating and supporting self-help initiatives to strengthening the personality and reducing the risk of developing addictions. These activities are generally embedded in comprehensive measures to promote the social and societal integration of immigrants, which are for example funded by the Federal Ministry for Families, Senior Citizens, Women and Youth (Bundesministerium für Familie, Senioren, Frauen und Jugend, BMFSFJ) or by the Federal Agency for Migration and Refugees (Bundesamt für Migration und Flüchtlinge, BAMF).

In the reporting year 2008, a total of 221 projects to promote the social and societal integration of immigrants were funded or respectively implemented by the BMFSFJ. Among these were seven projects that were dedicated to addiction and drug prevention and that were to improve access to addiction aid facilities (Die Drogenbeauftragte der Bundesregierung 2009). Since April 2009, the Federal Ministry for Health has been promoting various demonstration projects which are to test over a period of three years the improved access to the addiction aid system by various target groups with a migration background (www.transversucht.de).

There is furthermore a host of specific measures that are carried out for people with a migration background in the individual *Laender*. Mentioned as an example here are the activities undertaken by the Addiction Prevention Agency of Land Berlin. The Land Berlin has published a health brochure for immigrants in German and Turkish language titled *Culture Sensitive Addiction Prevention* as well as guidelines for *Culture Sensitive Addiction Prevention in Companies*. Taking into account the different cultural background of the target group, both publications try to reduce obstacles but also unclarities like for example with regard to the responsibilities assumed by the medical care or help services. In order to gain better access to families with a Turkish migration background, the Addiction Prevention Agency of the Land Berlin partners with the Turkish community in Berlin opening up new possibilities of spreading information material.

3.3.2 At-risk families

Children and teenagers from families with addiction problems

At present, about 2.7 million children and teenagers live in families affected by addiction. An estimated 6 million adults grew up as children in families with addiction problems¹⁵. Since consolidated scientific findings are showing that alcohol and drug addiction often reoccur in families, this group is one of the largest known target groups of selective prevention measures. As reasons for the higher risk of developing addiction to be mentioned here among others are domestic violence, separation and divorce of the parents, physical and emotional abuse or also sexual abuse that occur more frequently in addiction-stricken families than average (Thomasius et al. 2008).

In order to protect children and teenagers of addiction-stricken families at an early stage, the action programme “Early help for parents and children and social early warning systems“ was initiated in 2006 and the “National Centre for Early Help” (Nationales Zentrum Frühe Hilfen, NZFH)“ set up at the BZgA and the German Youth Institute (Deutsches Jugendinstitut, DJI). One of the tasks of the NZFH is to help institutions (youth welfare office, health offices, youth aid facilities, doctors, etc.) to better recognize family risk factors at an early stage and provide support tailored to the specific needs. In this connection, the NZFH also lends its support to the implementation of numerous initiatives and demonstration projects. One of them is for example the demonstration project *Chances for children of parents suffering from psychological and/or addiction-related problems* in Mecklenburg-Western Pomerania. The goal of the demonstration project is to establish a low-threshold offer for psychologically ill parents with babies or very small children. One concentration area of the project is the early promotion of parental educational and relational skills together with the prevention of negligence of and danger to the children resulting therefrom (Nationales Zentrum Frühe Hilfen 2008).

Various organizations moreover bundle their activities offering among others information material on the topic and support for the work of multipliers. In Hamburg, for example, the cooperation initiative *Lina – Pregnancy – Child – Addiction* was founded with a view to bundle and combine already existing measures. To this purpose, a data base is currently set up which is to contain all available data from facilities in Hamburg and to provide prevention experts with concise information.¹⁶

3.3.3 Recreational settings (including reduction of drug- and alcohol-related harm)

Prevention measures carried out in recreational settings offer the possibility of addressing a very heterogenous group of children and teenagers. These may be teenagers meeting in a youth centre, school drop-outs in a youth welfare facility or clubbers. Among them often are teenagers with drug use experience, socially disadvantaged youth or juvenile delinquents

¹⁵ www.nacoa.de

¹⁶ Further information can be called up at: www.suchthh.de/schwangerennetz.htm

who require different prevention responses than youth without consumption experience.

Generally speaking, recreational settings may be split into an organized and a non-organized area. In the organized one (youth aid institutions, church-run organisations, community-based youth centres) prevention measures are carried out that are often derived from the Law on children and youth welfare (Social Security Codes, SGB VIII). These measures mainly aim at promoting children and teenagers in their development and helping them to become social individuals capable of living in a community. As a result of the described heterogeneity, it is imperative to take children and teenagers seriously in the environments they live and to orient activities to teaching them skills like risk competence and risk management instead of limiting them merely to abstinence or reduction of consumption.

In the non-organized area, prevention of addiction is more open. This means that activities and offers are low-threshold and generally voluntary. They mainly aim at minimizing behaviours that are harmful to health and at promoting responsible substance use. In the non-organized area, prevention work is based among others on the guidelines of acceptance-based drug work and resource-oriented prevention. These approaches are to be found in numerous scene- or party-based projects offered in many, mostly larger cities. Activities undertaken within the frame of such party projects are mostly carried out by drug agencies or addiction prevention facilities respectively in cooperation with local clubs, discotheques or organizers of music and party events.

As a representative example of the host of activities offered for clubbers, the project *mindzone* is mentioned here which is carried out at a supra-regional level in Bavaria. Launched by clubbers in Munich in 1996, *Mindzone* is an initiative funded and supported by the Bavarian State Ministry for Environment and Health. The goal of the initiative is to primarily prevent drug abuse and substance dependence. To this purpose, young and (not yet) consuming clubbers are supported and confirmed in their drug-free position. Substance consuming clubbers are provided with information on effects and risks of psychoactive substances in order to prevent acute harm to health in drug emergencies and to reduce health damaging effects. *Mindzone* also wants to serve as a contact partner for youth with already problematic substance use. Further goals are the minimization of risks caused by the use of psychotropic substances and the support of consumers in their attempts to quit.¹⁷

3.4 Indicated prevention

The target group of indicated prevention measures are persons who have a high risk of developing addiction. In this connection, the necessity of indicated prevention measures is derived from the existence of important individually attributable indicators that promote the later development of addiction. In contrast to selective prevention, indicated prevention is generally carried out at an individual level, and this means it is not about the identification of groups of persons who fit the mentioned criteria (EMCDDA 2009).

¹⁷ www.mindzone.de

3.4.1 Children and teenagers at risk with individually attributable risk factors

Behavioural disorders in children are a central risk factor for the development of addiction-related problems at teenage and adult age. There are indications of psychological problems for a total of about a fifth of the children and teenagers. About 10% are displaying psychological problems, i.e. specific disorders ranging from anxieties over depression to social behaviour disorders (RKI 2007a). Psychological disorders are significantly more common in children and teenagers with a lower socio-economic background than in children and teenagers with a higher socio-economic background. These children and teenagers generally have lower social and personal resources and are thus running up against additional problems (cf. also the passage on socially disadvantaged youth).

Meanwhile, explanatory models of psychological disorders more and more comprise protection factors in addition to risk factors. Family cohesion has a protective effect with respect to psychological disorders, i.e. it considerably lowers the risk of developing psychological disorders. Family cohesion is also a central protection factor with regard to the development of addictive behaviour. These risk and protection factors should by all means be taken into account both in the prevention of addiction and in the treatment of behavioural disorders in children and teenagers.

3.4.2 Children with ADHD

It is currently estimated that about 3-5% children and teenagers have an attention deficit/hyperactivity disorder. Various studies could show that children with ADHD have a significantly higher risk of developing an addictive disorder (Krause & Krause 2003). Findings of the studies have already been presented in last years' reports. Various factors are discussed as possible reasons for the correlation between ADHD and the development of an addiction. It is to be assumed that children and adolescents with ADHD often do not fulfil the expectations of their environment. As a consequence, feelings of disappointment and of a low sense of self-worth can develop in the long-term. By consuming addictive substances, these children and adolescents can find access to peer groups with drug-affinity. In the care and treatment of children suffering from ADHS, cooperation with kindergartens and schools forms an integral part. The BZgA for example picks up the topic ADHD within the framework of the teaching tool "Chronic illnesses as a problem and topic in school".

3.4.3 Early intervention

At the interface between indicated prevention and therapy, measures have meanwhile been established which are assignable to the term "early intervention". The target group of early intervention measures is characterized by problems caused by increased substance use and/or which are closely linked to it. This group of people has a very high risk of developing addiction. However, at the time of the intervention, it does not meet the DSM-IV or ICD-10 criteria (yet) (EMCDDA 2009). Generally speaking, treatment needs to be based on a dependence diagnosis according to DSM-IV or ICD-10.

Early intervention programmes are meanwhile widely spread in the Federal Republic of Germany. They are carried out to counteract both excessive alcohol consumption and use of illicit substances. This is also confirmed by the information provided by the monitoring system Dot.sys. In the year 2008, almost 30% of all measures documented in Dot.sys could be assigned to the prevention area “early recognition/intervention“. Looking at the target group, it shows that most of the early intervention measures were carried out or documented for final addressees. The portion of measures carried out for multipliers in this intervention field does however not lag much behind (26.9% short interventions measures in multipliers vs. 32.9% measures in final addressees).

At present, a multitude of different early intervention measures is carried out by prevention professionals. Some of them are implemented at national level, others are specifically tailored to problems at regional level. The programmes differ with regard to the substances they are targeting and with respect to the approach they are using to access the target group. Teenagers who come to the notice of the judicial system for example because of their cannabis use or who are admitted to a hospital because of alcoholic intoxication are directly approached, whereas some self-initiative is required to take part in other initiatives like for example the cessation programme *Quit the Shit* offered by the BZgA. To be mentioned in this connection are also the projects *FreD – Early Intervention in First-Offense Drug Users (Frühintervention bei erstaufrälligen Drogenkonsumenten)*, *Close to the limit (Hart am Limit, HaLT)* and *Self control training (Selbstkontrolltraining, SKOLL)*, which are all carried out at national level. Serving as an example for the host of initiatives undertaken in this area, the project *HaLT* is presented in the following.

The *HaLT*-concept was developed by the Centre for Addiction Prevention Villa Schöpflin and implemented as a federal demonstration project at national level following an 18-month pilot phase. *HaLT* is made up of a reactive and a proactive project module which complement and reinforce each other. Within the framework of the reactive project module, teenagers who have been admitted to hospital because of alcoholic intoxication are generally directly approached and advised while they are still in hospital. In addition to individual counselling, the teenagers are offered an eight- to twelve-hour group session to grapple with their excessive consumption behaviour. In addition to the cooperation with the clinics, other counselling facilities are included to reach teenagers with risky alcohol consumption behaviour at an early stage. Complementing the reactive module, a community-based prevention strategy is to prevent alcohol excesses and harmful alcohol consumption. The role model behaviour of adults in dealing with alcohol as well as strict compliance with the Youth Welfare Law at events, in bars, restaurants and in retail shops and a broad sensitization of the general population also play a central role in this.¹⁸

HaLT thus combines the individual approach of indicated addiction prevention with regional prevention strategies integrating furthermore not only teenagers and adults but also other players like doctors, communities or youth aid facilities into regional networks. Within the

¹⁸ Further information is available at: www.halt-projekt.de

frame of the national transfer of *HaLT*, more than 60 locations have been set up and about 300 prevention professionals have been trained.

3.5 National and local (media) campaigns

National and regional (media) campaigns are instruments that are used within the frame of universal prevention activities. (Media) prevention campaigns are founded on the assumption that consumption behaviour can be influenced by persuasion and provision of information over messages spread over the media (Bühler & Kröger 2006). To this purpose it is initially attempted to make a campaign known to the public by using mass media. Messages spread over advertisements are for example used to give food for thought and to stimulate reflection processes that, ideally, lead to a change of consumption behaviours.

In the reporting period, especially campaigns dedicated to the consequences of high or respectively extensive alcohol consumption were initiated. Parts of the BZgA-campaign "*Alcohol? Know your limit*" for example address specifically adults informing them about the negative consequences of excessive alcohol consumption. The goals of the campaign are, among others, to counteract playing down the consequences of risky, harmful and addictive alcohol consumption, to inform about consumption quantities and promote critical reflection on alcohol consumption. Apart from information brochures distributed to the general population, there is also an Internet website¹⁹ available which, as a low-threshold medium, provides important information on the responsible use of alcohol. Part of the campaign is also an interactive alcohol self-test which enables interested people to assess their own alcohol consumption and test their knowledge about the topic alcohol.

Under the auspices of the Federal Commissioner on Narcotic Drugs, the criminal police prevention campaign *Don't drink too much – Stay Gold* warns against alcohol abuse and violence. The campaign uses in parts drastic picture – text combinations that are to shake up the youth. The goal of the campaign is to make teenagers realize that excessive drinking is harmful.²⁰

In June 2009, the *Action Week Alcohol* took place within the frame of the campaign placed under the motto *Alcohol? Know your Limit*. In the foreground of the campaign was the goal to make people aware of their own alcohol consumption and to help them to develop a feeling for risky or abusive drinking patterns. The action week was organized by the German Centre for Addiction Issues (Deutsche Hauptstelle für Suchtfragen, DHS e.V.) together with the BZgA under the auspices of the Federal Commissioner on Narcotic Drugs. The Action Week Alcohol 2009 is based on a multi-stage concept with many people organizing events at public places like shopping malls, drug aid facilities, churches and sports clubs.²¹

¹⁹ www.kenn-dein-limit.de

²⁰ Further information can be found at: www.staygold.eu

²¹ Exact data on, for example, the number of events staged and people reached, were not available yet at the time of going to press.

In the Land Berlin, the addiction prevention campaign “*Of course...!*” was launched by a host of individuals and groups active in addiction prevention to counteract risky consumption patterns like for example alcohol abuse. In the year 2009, various events dedicated to the topic of alcohol will be staged in all districts of Berlin to make alcohol prevention visible and sustainably effective. So far (status: June 2009) thousands of calendars for teenagers, flyers and campaign posters have been distributed, a competition to gather ideas on the topic has been organized and numerous partners and supporters of the campaign have been won.²²

²² Further information can be found at: www.praevention-na-klar.de

4 Problem drug use

4.1 Introduction

The term “problem drug use“

There is no uniform definition of the term ‘problem use’. However, there are practical definitions for specific areas (e.g. the prevalence estimation of the EMCDDA). Generally speaking, consumption is regarded as problematic if at least one of the following criteria is fulfilled:

- Risk carrying use (risky consumption)
- Harmful use (F1x.1) or addiction (F1x.2) in terms of a clinical diagnosis (ICD / DSM)
- Harm inflicted on other persons
- Negative social consequences or delinquency

In addition to the collection of clinical diagnoses "dependency" and "harmful use", for which the international criteria of the ICD-10 (Dilling et al. 2005) apply, the German Core Data Set proposes a definition for "risky drug use" (German Centre for Addiction Issues, Deutsche Hauptstelle für Suchtgefahr, DHS). According to expert opinion, "risky drug use" shall be recorded for any substance or disorder, if neither the ICD-criteria for addiction nor for harmful use are fulfilled and thus no diagnosis can be made and if at the same time the number of consumption days during the last 30 days is bigger than zero. In this case, the recommendations of the WHO, the British Medical Association and the board of trustees of the DHS apply to the evaluation of the individual "risky alcohol consumption". For other substances, there are currently no binding recommendations.

Irrespective of the above definitions, consumption can also be problematic if the user himself experiences it as problematic and for example considers himself as being addicted without having an objective diagnostic classification of addiction (Kleiber & Soellner 1998). The working definitions used at different places respectively comprise different subsets of the described total group. Only the terms based on clinical classification systems are clearly defined. As for other terms like for example ‘risky drug use’, definition and understanding of the concept vary considerably.

Measuring and estimation methods

Sometimes there are considerable methodological difficulties in evaluating data from specific collection systems or studies with regard to problematic use in terms of addiction. Whereas with police records only the higher probability of intense drug users to be picked up by police can be interpreted as an indication of problem drug use, surveys make use of additional information (frequency of use, accompanying circumstances, diagnostic criteria) or adapted clinical tests to differentiate. A relatively safe classification is possible in therapy facilities where staff has been trained or has experience in diagnosing such cases. The abovementioned definition of “risky consumption” in the German Core Data Set excludes any consump-

tion (within the last 30 days) of a substance of the categories F11 (opioids) – F19 (multiple substance use and other substances) of the ICD-10 classification. Concretely defined threshold values only exist for alcohol (F10).

In addition to content-related and general methodological difficulties in defining problem drug use, specific difficulties arise when collecting data on illicit drugs. A series of surveys shows that users of drugs like heroin or cocaine tend to report only the consumption of 'soft' drugs like for example cannabis correctly while denying using for example heroin or correcting down intensity and frequency of use.

While population surveys allow for valid statements to be made on experimental drug use and lighter forms of multiple or sustained drug use, intense or regular users are generally underrepresented in the population sample. Moreover, in their case, the extent of the problem is under-reported. Methodological problems have been described by Kraus et al. (1998) and Rehm et al. (2005).

Based on a literature review on the epidemiology of multiple use of illicit drugs in Hamburg, Ilse and colleagues (2007) conclude that in view of frequently occurring poly-drug use, the diagnostic methods should be further developed and adapted to the complexity of consumption patterns. Furthermore, discriminating between licit/illicit substances and focusing on the concept of problem use of a primary drug or respectively a medical classification of a main drug is - according to the authors - not sufficient. These difficulties are of special relevance in particular for extrapolations which are based on treatment data.

National and local estimates of drug use

The EMCDDA has collected a series of methods for estimating the prevalence of problem drug use at national level and has developed them further. The selection of the target groups of these methods are based on the definition of problem drug use as an "intravenous or long-term/regular use of opioids, cocaine or amphetamines" (Kraus et al. 2003). However, as it would not have been possible to exclude multiple mentions in police records when reviewing several substances, and as valid mortality estimates are only available for heroin users, the prevalence estimates for Germany were restricted to the target group of heroin users.

In view of the particular risks carried by intravenous drug use, this use pattern is of particular interest when trying to minimize secondary harm. Although injecting drug use has been on the decline among the patients of addiction aid facilities in Germany for several years now, it continues to be strongly linked to heroin. Therefore, differentiation among user groups for estimating prevalences and describing patients is done in terms of main drug and not in terms of administration route.

4.2 Prevalence and incidence estimates of PDU

4.2.1 EMCDDA estimate methods (indirect estimates)

For the year 2007, two multiplier methods were recalculated and based also on results of the previous years:

- Estimate based on police contacts
Assuming an average consumption period of 8 to 10 years, the numbers of heroin users who have come to the notice of police for the first time (incidence), are summed up over the respective years. The portion of persons in drug-related death cases already known to police is used respectively to calculate the estimated number of unknown cases.
- Estimate based on drug-related deaths
The number of drug-related deaths in the reference year is extrapolated to the overall figure of opiate users in the population using the quota of drug-related deaths in outpatient clients per year.

Moreover, the estimate based on the treatment data from the year 2007 was recalculated. Since some of the data (diagnostic data of the patients in hospitals) that are needed for the estimation calculation, are generally made available only with considerable delay, it is not possible for the current Reitox Report to venture an estimate for this multiplier based on the data for the year 2008.

- Estimate based on treatment admissions
The overall figure of treated cases is calculated on the basis of recorded client figures in outpatient and inpatient treatment, the total figure of counselling facilities as well as a multiplier for reaching the target group.

All results are only to be taken as a rough approximation since different preconditions are to be presupposed. Especially the multipliers used have only limited validity as they are based on small case figures and selective samples. The methods have been described elsewhere. The other methods have not been used since the necessary parameters were not available in a timely, empirically evidenced form.

The individual estimates can be found in standard table 7.

Results of the prevalence estimates

Calculations based on figures collected from treatment, police contacts and drug-related deaths lead to an estimated figure of problem heroin users ranging between 82,000 and 156,000 persons (if one takes the estimates of the previous year as a basis for the treatment data).

This corresponds to a quota of 1.5 to 2.8 persons per 1,000 inhabitants in the age of 15 to 64 years (table 4.1), which has thus practically remained unchanged with respect to the previous year. A slight decline was found again for the estimate of the multiplier "treatment demand". This change is however to be interpreted with some caution since the data collection

instrument (revised core data set as of 2007) has been changed. The result nevertheless fits into the overall image of a continually decreasing portion of injecting heroin users in the treatment facilities. The number of heroin users who have come to the attention of police for the first time has also been on the decline for years (2000) (with a stable portion of drug-related deaths since 2005 which had been classified as first-offence drug users before). The number of drug-related deaths has slightly increased again in 2008 so that the interval of the estimate is smaller than in the previous year.

These figures continue to be within the range of the prevalences that were calculated within the framework of an European meta-study for the dependence on illicit substances among the age group from 18 to 65 years (3.0/1.000; thresholds: 2.0-6.0) (Wittchen & Jacobi 2005). Further details are to be found in chapter 4.2.2.

Table 4.1 Prevalence estimates of problem opioid use from 2004 to 2007 (number in 1,000, age group 15-64 years)

Data source	Reference year					Prevalence per 1.000
	2004	2005	2006	2007	2008	
Treatment	102-150	155-184	136-162	131-156	¹⁾	2.4-2.8
Police contacts	136-172	128-166	117-159	108-149	99-137	1.8-2.5
Drug-related deaths	87-115	78-111	76-108	82-116	82-121	1.5-2.2

1) Cf. chapter 4.2.1 on the missing calculation of the estimate based on the treatment data for 2008.

DBDD 2009, special calculations.

When choosing a broader definition of the target group including users of opioids, cocaine, crack and amphetamines, the following problem arises: these substances do comply with the definition of the target group by the EMCDDA. However, there is no possibility to verify injecting or highly frequent consumption of these substances with the data sources available. In this way, an unknown number of persons whose problems with drug use might be less severe would be taken into account possibly leading to an overestimation of the prevalence.

Up-dated calculations based on treatment data from the year 2007 which include clients with cocaine and amphetamine problems, produce a prevalence of 167,000 to 198,000 (2006: 169,000-200,000). This corresponds to a prevalence of 3.0 – 3.6 (in 1,000 inhabitants) (2006: 3.1-3.6) which has remained unchanged compared to the previous year (the declining figures for heroin users are in contrast with the increasing ones for cocaine clients). Estimates based on police data and drug-related deaths are not performed for the extended target group because of the reasons described above.

The results of the national prevalence estimates are contained in standard table 7 and of the local prevalence estimates in standard table 8.

4.2.2 Incidence estimates on PDU

The incidence of problematic opioid consumption (the number of new cases registered in a specific year) makes it possible to exactly measure changes over time serving as an early indication of future developments with respect to prevalences and treatment demand. However, the estimation models used are based on several assumptions and only make it possible to perform partial incidence estimates since they are solely based on cases that have been registered by the drug treatment facilities. The EMCDDA has recently developed new guidelines for incidence estimates in cooperation with a group of European experts with a view to stimulate further progress in this area (Scalia Tomba et al. 2008). No new studies have been conducted in Germany on the subject matter.

4.3 Data on PDUs from non-treatment sources

Estimates on problem drug use in prisons

Persons who serve a custodial sentence for drug-related crimes – mostly drug-trafficking offences – or for other reasons, often continue to consume psychotropic substances in prison. Epidemiological data on the consumption of psychotropic substances in penal institutions are very difficult to collect and have little validity. A general picture of the situation can be obtained from Simon & Tischer (2006) on the basis of the data provided by the Ministries of Justice of the individual *Laender*. Insofar as data were collected and estimates of the prevalence or dependence on licit and illicit substances performed, figures range between 40% and 50%. The portion of prison inmates who are assumed to be addicted to illicit drugs amounts to about 33%. Prevalences for female inmates tend to be somewhat higher than those for male ones.

There are no current estimates of P.D.U available which for example are based on the data from low-threshold facilities, police records or emergency admissions.

In order to broaden the narrow concept of “problem drug” use according to the definition of the EMCDDA, further data sources and approaches will be used in the following to estimate the figures for the target group in Germany.

4.4 Intensive, frequent, long-term and other problematic forms of use

4.4.1 Description of the forms of use falling outside the EMCDDA’s PDU²³ definition (in vulnerable groups)

Problematic/intensive use of cannabis

Various studies have been conducted recently to collect data on “problematic” or “risky” use of cannabis. However, terminology and operationalisation differ from study to study so that data comparability is very restricted. It appears nevertheless necessary to include cannabis

²³ Problem Drug Use.

use in the investigation of problem and risky use patterns given the data available on the possible long-term effects of cannabis use.

The Reitox Report 2008 already presented the results of the last survey conducted in Hamburg (Hamburger Schulbus, see also chapter 2.1) among a very young age group of users (14-18 years) according to which 4% of the interviewees (2005: 5.1%) were found to show "risky consumption" (at least 25 times in the lifetime and at least one use in the last week and also in the school setting as well as alone at home) (Baumgärtner 2008).

The results of the most recent BZgA study on the changes of the portions of "regular" cannabis users in the age groups 12-25 years or respectively 12-17 years have already been presented in chapter 2.3.2. According to these findings, regular use (in the last year at least ten times) of cannabis in the age group of the 12-25 year-olds has been on the decline since 1993 (1993: 4.4%; 2008: 2.3%)²⁴. In the same period of time, regular use also declined among the 12- to 17-year olds, though to a less significant extent (1993:1.7%; 2008: 1.1%) (BZgA 2008).

Within the framework of the last ESPAD (see chapter 2.1) a screening instrument has been used for the first time as an optional module to collect data on the problems linked to cannabis use (Cannabis Abuse Screening Test, CAST, Legleye et al. 2007). In 17 out of the 35 countries participating in ESPAD, data were collected for CAST. Piontek and colleagues (2009) have conducted a detailed analysis of the individual CAST items and of the CAST overall score based on a partial sample of the current users (defined as those participants who had reported to have consumed cannabis within the last 12 months). According to this analysis, the current cannabis users in Europe report on average one to two out of six possible problems in connection with cannabis use ($m=1.7$). The cut-off value for problematic use according to CAST is set by the authors of the instrument for a presence of four or more problem areas. Only 2% of the European students falling under the respective age category with the current use pattern of cannabis reported the presence of all six problem areas screened by CAST within the last 12 months. One third of the users reported not to have had one single problem in connection with cannabis. (Together with the Latvian and Polish students) the German participants report less problems than the European average ($m=1.1$). Only the question whether their cannabis use has been addressed by friends or relatives, was answered in the affirmative more often by the German participants than by the European average – however, the answers here were still below the ones given by numerous other countries like for example Slovakia, Greece or Italy.

²⁴ Apart from the exception of the comparison between the years 2001 (3.0%) and 2004 (3.1%), the portion of the "regular" cannabis users in the age group of the 12-25-year olds has been on a continual decrease since 1993.

4.4.2 Prevalence estimates of intensive, frequent, long-term and other problematic forms of use, not included in PDU definition

Other data on teenagers and young adults

In the following, selected findings from the most recent studies analyzing the connections between problematic, risky or regular use and the later onset of substance-related disorders will be reported to complement the data from the repeat surveys presented in chapter 4.3.

Using a classification method that is particularly suited for qualitative properties (latent-class analysis), Wittchen, Behrendt and colleagues (2009) showed in a representative random sample drawn among adolescents and young adults (EDSP-study) that 59.2% of all persons who repeatedly used illicit substances over a period of 10 years, had a largely inconspicuous problem profile characterized by the absence of cannabis-specific problems and the absence of the development of abuse and dependence in the high-risk phase of incident substance use disorders. The remaining 40.8% of the surveyed persons however showed various problematic characteristic profiles. The average age of initial use of cannabis in all groups with problematic characteristic profiles is lower than in the group with the inconspicuous profile. Of note among the problematic sub-groups is one sub-group (8.5%) that is mainly characterized by cannabis-related disorders, problems associated with cannabis use and low treatment rates. These findings underline the importance of profile-specific interventions for people with problematic cannabis use and cannabis disorders.

Based on the data of the EDSP-study, Behrendt and colleagues (2009) could not only show for cannabis but also for alcohol and nicotine that an early onset of substance use in adolescence compared to a later start of substance use in adolescence is connected with a higher risk of developing substance abuse and dependence. However, the later and not as expected the earlier onset of use is connected with a speedier transition to alcohol use disorders, nicotine dependence and cannabis abuse. Since adolescents with a later onset of consumption perform the transition to a substance use disorder more quickly, factors which promote these faster transitions in later adolescence need to be identified (availability, higher social acceptance of consumption, difficult life events or circumstances). The findings on the development of substance use disorders in adolescents and young adults make it possible to derive necessary requirements with regard to the care services. In this connection, Perkonig and colleagues (2009) point to the increased demand for new allocation structures and measures for adolescents especially in early stages of cannabis dependence and alcohol-related disorders.

The high-risk phases for first substance use and the onset of regular consumption and substance use disorders (substance abuse and dependence) lie in the second decade of life. It is of note that large parts of the transitions from initial use to regular use and from initial use to substance use disorder occur in the first few years after initial consumption. In this context, the shortest transition period was found for cannabis (compared to alcohol or nicotine). After initial use, the age from 15 to 18 years is the decisive period in which the transition to substance use disorders takes place. Differences between male and female adolescents with

respect to the high-risk phases for incident substance use and substance use disorders in terms of speed regarding the transition from initial substance use to substance use disorders were not to be found (Wittchen et al. 2008c). However, the use of cannabis is not necessarily a transient youth phenomenon. People with a high consumption frequency during adolescence continue to use cannabis until the third or fourth decade of their lives. Alcohol dependence and difficult life events are risk factors for the continuance of cannabis use into the third and fourth decade of life (Perkonigg et al. 2008).

4.4.3 Medical drug abuse

Overview

Estimates of the prevalence of dependence on medical drugs range between 700,000 (Schwabe 2007) and 1.9 million people addicted to pharmaceuticals in Germany (Kraus & Augustin 2001; Soyka et al. 2005). According to the results found by the Epidemiological Survey on Substance Abuse 2006, almost 5% of all people interviewed in the age group from 18 to 64 years display a problematic use of medical drugs according to the criteria of the short questionnaire on the use of medical drugs. Despite the high prevalences of the dependence on medical drugs, the disease - often named "quiet addiction", is hardly perceived by the public in contrast to drug and alcohol addiction (Rabbata 2005). Mostly older people (Ruhwinkel 2009) and women (Simoni-Wastila et al. 2004) are dependent on medical drugs. But also teenagers, young adults and people afflicted by psychopathological disorders as well as people with substance use disorders represent important groups at risk of developing disorders in connection with medical drug abuse. For opioid addicts, for example, it is easier to get access to the black market. They have a higher tendency of misusing pharmaceuticals as effect modulators for drugs (Küfner & Rösner 2008).

Even if especially disorders caused by the use of benzodiazepines are not a new topic any more, benzodiazepine addicts – and people dependent on other drugs – very seldom undergo addiction-specific medical treatment. Holzbach (2008) surmizes that the reasons for the countrywide low usage of withdrawal treatment by medical drug addicts are connected with the absent balancing of the pros and cons of long-term treatment and the overestimation of the difficulties and stress associated with the withdrawal treatment. Medical drug addicts represent a group in their own right among dependent patients since they differ from for example alcohol addicted patients in terms of onset and processing of the disease. Dependence on medical drugs often remains much longer undetected due to the socially inconspicuous behaviour of the people affected and is also often negated by the dependents. Generally, medical drug addicts gain access to medical drugs through the contact with the medical care system and not via black markets or the free market.

Changes of conceptual framework conditions possibly also have an influence on the misuse of medical drugs. The quantities of substitution drugs prescribed in Germany (methadone, buprenorphine) have continually increased in parallel to the extension of the substitution treatment offers made in Germany over the last years (Böger & Schmidt 2008). But the prescribed quantities of other medical drugs (especially opioids/analgesics) have as well sub-

stantially increased over the last years (Böger & Schmidt 2008), so that a higher availability of these groups of medical drugs – also on the black market – is to be assumed.

In addition to the problem posed by the misuse of analgesics and benzodiazepines that has been known for many years, new trends have been recently discovered in the misuse of medical drugs like for example the misuse of antidepressants (Küfner et al. 2009) or the misuse of performance enhancing (doping) drugs (Die Drogenbeauftragte der Bundesregierung 2009). Doping at work has developed into a new phenomenon of medical drug abuse over the last years. It is estimated that more than 2 million people in Germany take medical drugs to enhance their performance at work (Die Drogenbeauftragte der Bundesregierung 2009). As a reaction to this new trend, the Act on Improving the Fight against Doping in Sports and the Regulation on Doping Drugs Amounts have been passed in 2007. The main goal of the anti-drug act and regulations is to curb the activities of the internationally linked criminal structures.

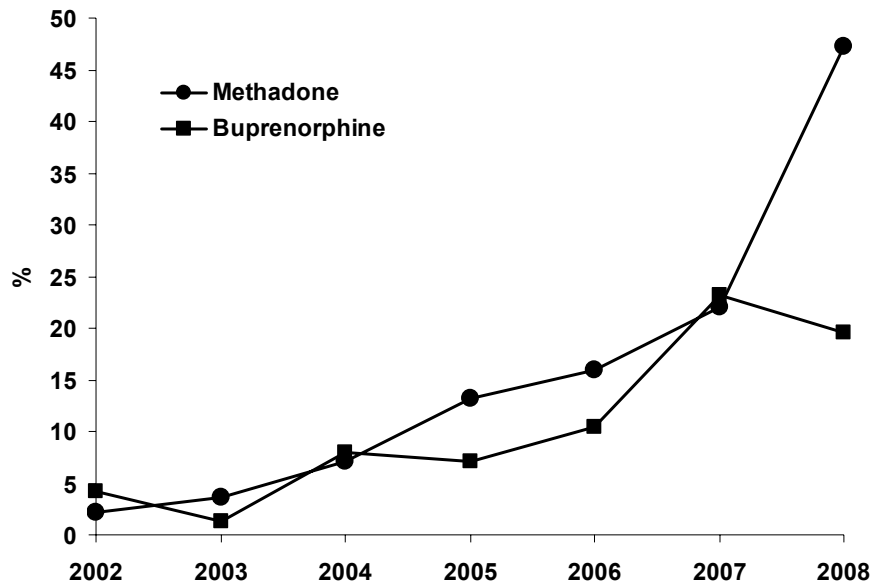
Data from the monitoring system Phar-Mon

Funded by the BMB, the Phar-Mon project has been investigating medical drug abuse among clients of a random sample drawn among outpatient addiction counselling facilities in Germany since 1988. The goal of the project is to collect data on the misuse and addiction potential of medical drugs and to contribute to the identification of trends of medical drug abuse.

A trend analysis of the data from Phar-Mon from 2002 to 2008 shows that the misuse of substitution drugs in the group of patients with disorders caused by the use of opioids, continually increased for six years (Casati et al. 2009). The increase in the misuse of substitution drugs intensified especially during the last two years. Figure 4.1 shows the portions of the mentions of methadone and buprenorphine misuse in this population. After a parallel development of the misuse of methadone and buprenorphine documented within the framework of the Phar-Mon-sample over several years, considerable differences showed in 2008 in the shares of these two substance groups²⁵.

In 2008, suboxone (active ingredients: buprenorphine and naloxone) made its appearance for the first time in the Phar-Mon monitoring system. This substitution drug contains naloxone, an opioid-antagonist, which is to counteract misuse. Despite the admixing of naloxone, Stimmel (2007) warns against the misuse potential of suboxone. Smith and colleagues (2007) moreover report about cases of suboxone misuse. But they also noted that misuse cases are relatively seldom in comparison with the number of prescriptions of this medical drug. The substituted patients surveyed by Smith and colleagues report that they do not only use suboxone to avoid withdrawal symptoms but also to induce anxiety and pain reducing effects. In view of the reasons given by the patients, it is not fanciful to suppose that this medical drug is used as a tranquillizer, psychostimulant and analgesic.

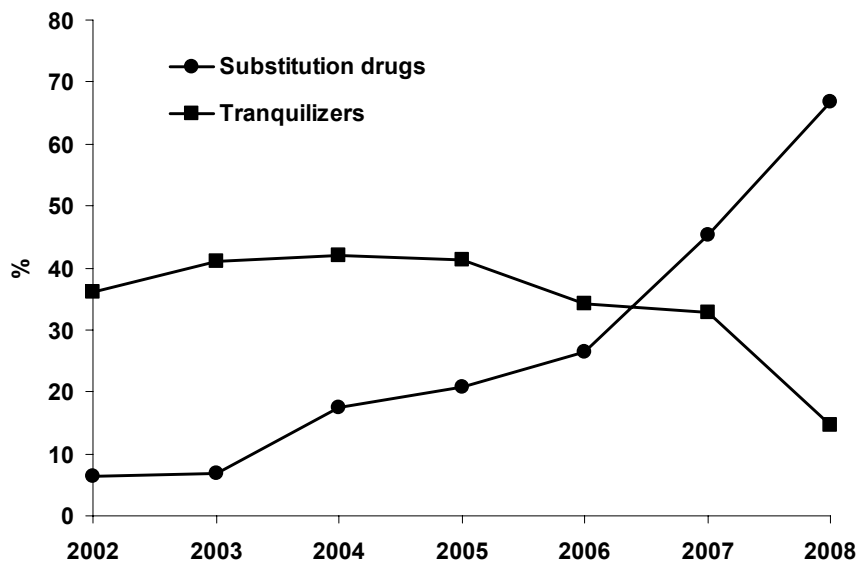
²⁵ Upon the completion of the Reitox Report, the GKV-data for the year 2008 were not available yet.



Phar-Mon 2009, their own calculations.

Figure 4.1 Misuse of substitution drugs documented in Phar-Mon between 2002 and 2008

Apart from substitution drugs, tranquilizers and hypnotics are also often misused by opioid users. A longitudinal analysis of the Phar-Mon data conducted between 2002 and 2008 shows trends of the misuse of tranquilizers and hypnotics. Figure 4.2 represents the course of the misuse of tranquilizers/hypnotics within the main diagnosis group opioids between 2002 and 2008 (Casati et al. 2009).



Phar-Mon 2009, their own calculations.

Figure 4.2 Course of the misuse of substitution drugs and of tranquilizers/hypnotics between 2002 and 2008 for patients of the main diagnosis group opioids

The number of misuse cases involving these substances has shown a development complementary to the one of the substitution drugs. Apart from a slight increase observed between 2002 and 2003, the portions of misuse cases involving tranquilizers/hypnotics recorded by Phar-Mon have been on a continual decline. The quantities prescribed of these medical drugs have also declined over the last years according to the records of the Statutory Health Insurance Schemes (Lohse & Müller-Oerlinghausen 2008), while prescription frequency of the substitution drugs has continually increased. This reversal relation could also be seen as a result of the diverging availability of these medical drugs on the black market.

The misuse of tranquilizers/hypnotics in the Phar-Mon random sample is almost exclusively attributable to the hypnotic flunitrazepam and the sedating diazepam. These two benzodiazepines are mainly used by people with disorders caused by opioids to compensate withdrawal symptoms. Flunitrazepam moreover has a modulation component: the effect of the opioid is increased in combination with heroin (Poser & Poser 1996).

Summarizing, it can be said that the quantities of prescribed substitution drugs increased in parallel with the mentions of substitution drugs misused by patients in outpatient counselling facilities. In this context, the misuse of methadone is generally higher than the one of buprenorphine. Seen in comparison with the portion in the overall quantities prescribed by the Statutory Health Schemes, buprenorphine is clearly overrepresented compared to methadone. As a result of its application form (tablets), buprenorphine is possibly more attractive for black market trafficking than the liquid methadone.

Other current developments

In its endeavours to curb the problem of medical drug abuse, the German Medical Association developed the guide "Medical drugs – harmful use and addiction". The guide is to inform medical professionals about risky groups of pharmaceuticals, early recognition of patients at risk of developing addiction and possibilities of treatment. The Federal Ministry for Health provides funding for an evaluation of the guide. In 2008, the German Pharmacy Association published a similar document for pharmacists to provide practical support for recognizing harmful use and misuse as well as to inform about misuse and dependence potentials of various medical drugs.

In connection with the development of new treatment approaches, proactive and short interventions were carried out in medical drug addicts within the framework of the study "Motivational interventions in medical drug addicts in hospital". Findings show significant reductions of the used quantities of medical drugs in users of sedatives/hypnotics and opioids (Die Drogenbeauftragte der Bundesregierung 2009).

5 Drug-related treatment: treatment demand and treatment availability

5.1 Introduction

Treatment phases

People willing to overcome their substance dependency with professional support are offered a wide range of quitting counselling and therapeutic services. On the one hand, there are substitution offers with a limited target orientation aiming at stabilizing the overall condition, and, on the other, abstinence-oriented treatment offers. The two concepts complement each other, since, in the long term, substitution too, aims at abstinence from drugs, where possible.

Based on the present state of knowledge, abstinence-oriented therapy can be subdivided in four basic phases ("phase model"):

- contact and motivation phase
- withdrawal phase
- rehabilitation phase
- integration and after care phase

The therapy is structured according to the above phase model. The goal of the *contact phase* is to develop, maintain and strengthen the motivation to have addiction treated. All measures undertaken should be embedded in a treatment and help plan for the therapy which should start with counselling comprising medical, psychological and social diagnostics and case history. The help plan should take account of therapy and health care offers available at regional level in order to select the measures which are best suited for the individual case.

In the *withdrawal phase*, multi-professional teams assist in working on addiction with all its aspects in a 'qualified withdrawal' programme. The duration of the withdrawal phase may vary, depending on the individual circumstances, between two to six weeks.

The goal of the *rehabilitation phase* is to stabilize the abstinence achieved in the detoxification phase and to put a definitive end to addiction. Rehabilitation therapies can be carried out in an outpatient, inpatient- or a day-patient setting. The standard therapy duration is six months.

The *integration and after-care phase* comprises, on the one hand, a "phase of assimilation", and, on the other, assisted living or other outpatient after-care measures. In the assimilation phase, individual therapeutic measures move into the background in favour of an outward orientation with a view to promote integration into work and society. In the integration phase, clients receive support from the special service departments of the job agencies as well as from the social security administration.

Data sources

Information on the characteristics and consumption patterns of clients in treatment is available from various sources.

Based on the German Core Data Set on the Documentation of Addiction Treatment (Deutscher Kerndatensatz, KDS), the German Statistical Report on Treatment Centres for Substance Use Disorders (Deutsche Suchthilfestatistik, DHS) (Pfeiffer-Gerschel et al. 2009) provides extensive data on outpatients from the large majority (2008: n=753; 2007: n=720) of the outpatient facilities funded by the *Laender* and municipalities. Since January 2007, most of the addiction aid facilities in Germany use the new Core Data Set (DHS 2008). Due to revisions made in connection with the introduction of the new Core Data Set, the results of the evaluations of the statistical report for the out- and inpatient facilities from 2007 onwards may only be cautiously set in relation to the data of the previous years (on the introduction of the new core data set see also: REITOX Report 2008, chapter 4.3). The "Treatment Demand Indicator (TDI)" of the EMCDDA is integrated in the Core Data Set. However, there are still divergences between the TDI and the KDS because the German treatment system orients itself to the ICD-10 classification, which renders substance-based analyses difficult or impossible.

The German Core Data Set is also a rich statistical source for the inpatient setting. However, only 131 (2007: 147) facilities (Pfeiffer-Gerschel et al. 2009e) took part in the evaluation in 2008.

A lot of the larger, especially psychiatric clinics which also offer addiction-specific treatment are not represented in the DSHS. In order to fill these gaps as far as possible, two other sources were tapped for data on clients in inpatient therapy.

- The Statistical Report on Hospital Diagnoses, whose most recent data are available for the reporting year 2007 (Statistisches Bundesamt 2008b), documents the diagnoses on the discharge of all patients from inpatient facilities. Apart from the main diagnosis it also records age and gender. The Report of the Federal Statistical Office thus serves as an information basis for the data from the DSHS. Though complete, the Statistical Report on Hospital Diagnoses is not addiction-specific and offers little detailed information for the area of interest. It does however allow a differentiation of the number of cases according to the ICD-classification (F10-F19). Apart from accounting information on services provided by hospitals, there is no systematic compilation of comprehensive statistical data on hospital treatments. However, general documentation standards do exist for example for psychiatric clinics or facilities for child or adolescent psychiatry. These contain information on the treatment of patients with addiction problems. So far, no systematic analysis has been carried out on the transfer of these data into the KDS standard.
- The statistics from the German Statutory Pension Insurance (DRV 2008) document all cases for which the costs were borne by the pension insurer. However, the part of inpatient therapies which were acute treatments or which were financed by other sources, is missing.

The distribution of main diagnoses in the two statistical reports is identical to a large extent, if one takes into account the substantially higher portion of undifferentiated diagnoses in respect of F19 (multiple substance use and consumption of other psychotropic substances) in the data recorded by the DRV.

- Since 1 July 2002, data on substitution therapy is recorded by the substitution register with the purpose to avoid double prescriptions of substitution drugs and to monitor the implementation of specific quality standards in therapy. The short-term use of substitution drugs in detoxification is not recorded by this register. For 2008, this data source provides information on the number and gender distribution of treated clients and on the substitution drugs used, complete with a list of names of the doctors in charge of therapy.
- Data from regional monitoring systems, can, insofar as they use the German Core Data Set, be compared to the federal data. Partly based on the original data and covering whole regions, these evaluations are a valuable complement to the national statistical reports.

As a result of the different data sources, it is more difficult to describe the profile of drug-addicted patients in treatment than of drug-addicted patients out of treatment. While it is necessary to use various sources at the same time, one needs to bear in mind that each source has a different type of selectivity.

Information on the characteristics of the treated drug users are to be found in standard table 3.

5.2 Strategy / Policy

According to the analysis of the most recent *Laender* short reports²⁶ (Flöter & Pfeiffer-Gerschel 2009) there are about 1,100 specialized outpatient drug counselling facilities which treat patients mainly for problems with drugs or other psychotropic substances²⁷. In about 300 specialized hospital wards 8,800 beds are provided for people with substance use disorders. More than 110 facilities (>2,030 treatment slots) carry out qualified withdrawal treatment (OPS 8-985). At least 311 facilities (>13,165 treatment slots) offer inpatient rehabilitation measures and at least 109 facilities (>1,062 treatment slots) carry out daycare rehabilitation measures (including alcohol and other substances). These services are complemented by at least 126 adaptation facilities (>1,292 treatment slots), 261 inpatient (>11,026 beds) and 139 daycare (>1,832 treatment slots) social therapy facilities as well as by services offered in the area of assisted living (in at least 840 facilities; >10,257 places) and 232 job and employment projects (>3,342 places) (Flöter & Pfeiffer-Gerschel 2009). The

²⁶ The *Laender* short reports contain the data collected by the DBDD on the number of drug-addicts in the *Laender* and on the help offers made by the respective *Laender*. Compared to the last survey (2004), some of the categories were removed and others were combined so that comparisons over time are only possible on a limited scale. For the reporting year 2008, the data sets from 15 out of the 16 *Laender* are available.

²⁷ This is an estimation of the total number of ambulatory psychosocial counselling facilities among which facilities exclusively or primarily treating users of illicit drugs, are in the minority.

majority of the facilities are independent non-profit organizations. Especially inpatient therapy is carried out by public and private providers. Supported by the Federal Government, the *Laender* and the associations, the DBDD has set up a central register of all addiction aid facilities in Germany which, for the first time, will provide an almost complete overview of all existing professional offers made in the area of addiction. The register is oriented to the classification of the German Core Data Set (DHS 2008), (Süss & Pfeiffer-Gerschel 2009).

Low-threshold services and counselling (>300 facilities) are, for the most part, funded by the Federal Government. However, a relevant portion of the costs of outpatient facilities is borne by the legally and economically responsible providers themselves. Except for the therapeutic treatment, outpatient addiction support is, for the most part, voluntarily funded by the *Laender* and municipalities. However, the institutions have no legal claim to these funds.

Acute treatments of drug-related problems and withdrawal treatments are generally carried out in hospitals. The costs for this withdrawal phase are in general borne by the statutory health insurance. The main diagnosis for all patients treated in German hospitals is reported to the Federal Statistical Office which regularly publishes these data (Statistical Report on Hospital Diagnoses).

Rehabilitation is to stabilize long-term abstinence and to restore the earning capacity of the patient. Therefore, the costs of rehabilitation are generally borne by the statutory health insurers. These also decide on the type, scope and duration of the therapy. Statistical data on the services rendered are available from the social administration authorities.

In Germany, inpatient and outpatient treatment of addicted persons is mainly done by psychiatric facilities. Following the model of qualified withdrawal, physical withdrawal treatment is complemented by continuing after-care measures. A lot of clinics for psychiatry and psychotherapy also have special wards for qualified heroin withdrawal treatment. According to the data collected within the framework of the "Staffing Directive for Psychiatry" (Personalverordnung Psychiatrie) (2006: 247 clinics and wards with about 42,000 beds), the portion of (all) addicted patients is stable at 18%. A shift in treatment demand towards increasingly intensive treatment forms has been observed for a long time. Outpatient care of addicted people in psychiatric facilities has been strongly expanded especially through the set-up of psychiatric ambulatories in institutes tasked to carry out treatment for addicts. In 414 psychiatric ambulatories about 650,000 treatments are carried out per year, 12% of them for addicted patients. At the local and regional level, psychiatric-psychotherapeutic facilities closely cooperate with the psycho-social counselling facilities and the out- and inpatient rehabilitation facilities. In some *Laender*, like for example in Baden-Württemberg, well-structured help-networks for drug patients have meanwhile been established at a local level.

Except for a few specific cases, there is no legal funding basis provided by the Social Security Code (SGB IV and XII) for the integration or after-care phase. Here, the legally and economically responsible bodies of the facilities have to resort to financing models tapping federal government budgets or budgets of the social security funds and job agencies.

5.3 Treatment systems

The German treatment system for people with drug-related problems or their relatives is – as described above – very elaborate ranging from institutions offering first low-threshold contacts over counselling services to intensive treatment and therapy in specialized inpatient facilities and a large offer of substitution treatments. Planning of the treatment demand in the various segments of the medical and/or social help system at a national level does however not match with the federal structure of the Federal Republic of Germany. Planning is done instead at *Laender* or community level.

A differentiation between drug-free and pharmacologically-assisted treatment – especially substitution treatment - is not very useful to describe the therapy system in Germany. The question as to whether psycho-social counselling facilities, which play a central role in the care for drug addicts, are to be assigned to drug-free or pharmacologically-assisted treatment, is problematic to answer especially in the case of psycho-social care provided within the framework of substitution programmes (with the exception of a few cases in which the counselling facilities themselves administer the substitution drugs). Generally, medical substitution treatment takes place outside of the counselling facilities. Psychosocial care or therapy, by contrast, take place in the counselling facilities and are thus, per se, neither obligated to a drug-free nor a medication-assisted approach.

There is also a host of self-help organisations working in parallel or cooperating with professional help services in the area of addiction. So far however, they have mostly been addressed to alcohol addicts and older target groups.

5.3.1 Organisation and quality assurance

Organisation

Contact, motivation and outpatient treatment are mainly offered by outpatient counselling facilities; withdrawal treatments/detoxifications are for the most part done in general hospitals but also in a few specialized clinics (often in the psychiatric ward). In the withdrawal treatment of opioid addicts, methadone and buprenorphine are, among others, temporarily used to reduce negative concomitant symptoms. Because of minimal side effects and less severe withdrawal symptoms the latter finds increasing usage. Statistical data on this type of treatment are not available in a differentiated form. However, the cases are contained in the Statistical Report on Hospital Diagnoses.

Outpatient counselling facilities are the first place of call for drug users insofar as their drug problems are not treated by primary care, i.e. generally speaking by office-based doctors. In most cases, counselling is free of charge. The facilities are mainly funded by the municipalities and *Laender* as well as by their, non-inconsiderable, own resources (donations, church taxes, etc.).

If drug problems and concomitant symptoms are too problematic, consequences too massive and the general situation for the drug addict himself and his environment too stressful, the

patient will be admitted to inpatient therapy. However, the transfer from outpatient to inpatient therapy is associated with some administrative effort and it needs to be clarified who will take over the costs for inpatient therapy (generally the statutory pension insurance fund, patients without employment are subject to other regulations). In some cases, inpatient therapy does not suit the client's situation - if for example existing employment would be jeopardized or no adequate care for the children of an addicted mother can be found. The transfer from outpatient to inpatient care also has the effect of a filter mechanism. Patients in inpatient therapy do not only differ from outpatient ones in the severity of the addiction problem but also in the gender distribution.

Rehabilitation treatments are carried out by specialized clinics or therapeutic communities. In the integration and after-care phase, a varied offer specifically geared to the needs of the clients is made with regard to employment, housing and re-integration into society. All fields of work are staffed with specialists who, for a major part, have received work-field-specific supplementary training. All offers made aim at stabilizing abstinence from drugs.

Since 2001, drug-maintenance therapy is regulated in detail by the Narcotics Law and is meanwhile a medically fully recognized treatment form. Substitution therapy has been part of the standard treatment of opioid addicts for many years. This treatment offer reaches a large number of drug addicts and has proven to produce beneficial effects on the psychological and physical well-being of the patients within the framework of numerous studies (Michels et al. 2007). Gerlach & Stöver (2005) give a good overview of the status of substitution treatment in Germany. The recently published results of a study conducted by Wittchen and colleagues (2008b) underline again the effectiveness of various types of substitution treatments with methadone and buprenorphine and show a retention quote of the patients in drug-related therapy which is comparable to the results of controlled clinical studies. Co-consumption (especially of cannabis and benzodiazepines as well as of opioids and cocaine) is in many cases the decisive factor for dropping out of therapy or other complications occurring during therapy. Patients in long-term substitution therapy appear furthermore to be a group of patients subject to an extremely high level of stress caused by somatic and psychological disorders.

The state of the art in medical sciences has been established by the guidelines passed by the German Medical Association already in 2002. In 2003, substitution therapy was acknowledged by the statutory health insurance without any qualification as a SHI- accredited care service to be borne by SHI. Substances eligible for substitution therapy in Germany are levomethadone, methadone and buprenorphine. Codeine and DHC can only be prescribed in exceptional cases for this type of treatment. The majority of patients in substitution therapy are treated by office-based doctors or in specialized outpatient facilities. Doctors carrying out substitution therapy need to be qualified in addiction-medicine. If not, they can treat up to three patients maximum in consultancy with a qualified colleague. Meanwhile, also some inpatient facilities have started to accept patients for substitution therapy.

In the current discussion on substitution therapy which is firmly established in the care system, the question as to what goals are to be pursued by drug-related therapy continues to

play an important role. The success criteria diverge indeed with the perspective adopted by the viewer. The reduction of co-consumption of other psychotropic substances can be rated as much a success as the (long-term) termination of opioid dependence or the successful treatment of other (somatic and psychological) disorders (Wittchen 2008).

Psychosocial care has been established as a part of substitution treatment by the Regulations on the Prescription of Narcotic Drugs and the guidelines passed by the Common Federal Committee and the National Medical Association in so far as it is regarded “necessary”. As a result of diverging interpretations of psycho-social care in the *Laender* and communities, psycho-social care is at national level subject to great variations in terms of organisation, funding and treatment offer.

It was confirmed by a judgement of the Hamburg Administrative Court in April 2008 that there is a legal claim to the service of necessary psychosocial counselling/care for substitution patients (provided the necessary preconditions according to SGB XII are fulfilled) to be provided by the local social administration authorities.

The status of integration between general health care and special drug care is still rather dissatisfying. At regional level however, cooperation and coordination of the offers are clearly better. Any attempt to give an overview of the care situation in Germany is associated with major problems as a result of the diverging goals and the regional differences they bring about.

On 28.05.09 the German Bundestag passed the “Act on the diamorphine-assisted substitution treatment“ that entered into force on 21.07.2009 (see also chapter 1.2.2 and the REITOX Reports 2007 and 2008).

Quality assurance

Various professional societies and experts have worked together over the last years to develop guidelines for the treatment of drug dependence and addiction problems. These publications are a condensed summary of the current state of knowledge and provide practical guidance for carrying out treatments under consideration of the quality of the empirical basis for the individual statements. Meanwhile, guidelines have been published for the acute treatment of opioid-related disorders (Reymann et al. 2003), for the post-acute treatment of opioid addicts (Havemann-Reinecke et al. 2004), for patients with cannabis-related disorders (Bonnet et al. 2004) as well as behavioural disorders caused by cocaine, amphetamines, ecstasy and hallucinogens (Thomasius & Gouzourlis-Mayfrank 2004). In the year 2006, the Working Group of the Scientific Medical Professional Societies (Arbeitsgemeinschaft der medizinisch-wissenschaftlichen Fachgesellschaften, AWMF) published the AWMF-guidelines on the diagnostics and therapy of substance-related disorders under the title “Evidence-based addiction medicine – treatment guide for substance-related disorders” (Evidenzbasierte Suchtmedizin – Behandlungsleitlinie substanzbezogene Störungen). The evidence-based guidelines are to make treatment of drug addicts more transparent and de-emotionalize the scientific controversies over the most efficient therapy approaches (Schmidt

et al. 2006).

At a consensus conference held in 2006, the guidelines of the German Society for Addiction Medicine (Deutschen Gesellschaft für Suchtmedizin, DGS e.V.) for the therapy of chronic hepatitis C in injecting substance users were passed (c.f. Backmund et al. 2007a). Contrary to recent practice, these guidelines recommend the treatment of hepatitis C also in opioid-addicts, in particular when they are in substitution treatment (Backmund et al. 2006).

Addiction therapy may only be provided by adequately skilled staff with work-field-specific supplementary training. In this context, the German Pension Insurance Fund has passed guidelines for the supplementary training of therapy staff working in individual and group therapy within the framework of medical rehabilitation of drug addicts, serving as a 'recommendation for the acknowledgement' of the respective advanced training courses. As part of the restructuring of the university education system in Germany according to European standards (introduction of Master and Bachelor programmes at universities and technical colleges) work specifications for therapeutic staff in addiction aid have to be newly developed and defined. At present, a lot of university or college courses are restructured in Germany and in many other European countries. In the meantime, it has already become possible to do a post-graduate course and earn a Master's degree (Master of Science) in substance abuse and addiction counselling. In the restructuring of the courses for social workers, psychologists and medical staff in the area of addiction aid, post-graduate education plays a very important role.

Cooperation between different professional groups from social work/education, psychology, psychiatry and other medical fields forms an integral part of the addiction treatment standards. As for outpatient offers (outpatient treatment centres and others), quality assurance and technical monitoring are mainly in the hands of the supporting organs of the facilities or respectively of the *Laender* and municipalities. The responsibility for detoxification and rehabilitation however lies with the respective insurance carriers (statutory health and pension insurance organizations). With also outpatient treatment offers being increasingly funded by social security administration, the abovementioned standards have also gained in importance in this setting, especially in the area of alcohol, but not so much with regard to drugs. In many *Laender*, cooperation between the different fields of work and organizations is promoted by *Laender*-financed institutions.

5.3.2 Availability and diversification of treatment

Planning of the treatment demand in the various segments of the medical and/or social help system at a national level does not match with the federal structure of the Federal Republic of Germany. Planning is done instead at *Laender* or community level. Examples of treatment demand planning based on a status analysis and on health reporting can be found in Berlin (Senatsverwaltung für Gesundheit Soziales und Verbraucherschutz 2005), Frankfurt (Müller et al. 2007) and Hamburg (Baumgärtner 2006; Behörde für Soziales Familie Gesundheit und Verbraucherschutz Hamburg 2006). In Hesse, integrated youth and addiction help centres have been created (Hessisches Sozialministerium 2006). The treatment forms generally

available in Germany have already been described in detail in chapters 5.1, 5.2 and 5.3.1 and are therefore not repeated here. With regard to the availability of treatment and help offers though, there are indeed some differences to be found between the *Laender*. For example, not all *Laender* offer consumption rooms as an element of harm reduction measures. It has moreover repeatedly been reported that there are difficulties in providing region-wide care for patients who would like to undergo substitution treatment in rural areas (in particular in the eastern *Laender*).

All in all, the situation with regard to the help offers made has not much changed recently. The only partially existing legal basis for the funding of outpatient services continues to lead to financing problems. The municipalities that provide the funds for most of these services are struggling with extremely tight budgets. Since the municipalities are not legally obliged to provide funds for outpatient addiction support, a lot of offers are cut down at various locations. At the same time however, facilities have started to engage in a professionalization of their operational and technical procedures.

In view of the rising figures of older drug users within the health care system (illustrated for example by the increasing average age of the users of various help offers), an international project, that is supported by the European Commission, has been dedicated to facilitate and accelerate the concrete planning of (demonstration) projects for older drug users (see also selected issue 12).

Data on the availability of treatments are contained in standard table 24.

5.4 Characteristics of treated clients (TDI data included)

5.4.1 Outpatient treatment

The data presented in the following are based on the detailed data of the table volumes published within the framework of the German Statistical Report on Treatment Centres for Substance Use Disorders (Deutsche Suchthilfestatistik, DSHS) of the year 2008 (Pfeiffer-Gerschel et al. 2009d). The data used in the presentation are taken from the partial evaluation of outpatient counselling and treatment. Detailed information on the variables of the treatment demand indicator (TDI) can be found in standard table 3. Information on clients undergoing treatment or receiving counselling while in prison and information on clients of low-threshold facilities is contained in chapters 9.6.1 and 7.2.

In the year 2008, data of a total of 303,842 therapies (without one-off contacts) carried out in N=753 outpatient facilities were collected within the frame of the DSHS. For this REITOX Report only data from clients primarily treated for illicit substance use were taken into account (patients treated primarily for alcohol-induced disorders accounted for 56% of all recorded cases in 2008).

Diagnostic data

For the year 2008, the German Statistical Report on Treatment Centres for Substance Use contains data on the main diagnoses of a total of 55,526 treatments which were started or

completed in outpatient psychosocial addiction support facilities because of problems with illicit drugs (portion of males: 79.6%, 2007: 80.5%). The main diagnoses are based on the diagnostic categories of the international classification system of the WHO (ICD 10) for disorders caused by psychotropic substances (harmful use or addiction).

Looking only at the statistical data on illicit substances, it shows that less than half of the clients (49.1%, 2007: 49.6%) sought treatment or counselling primarily for dependence on or harmful use of opioids. In almost a third of the cases (32.8%, 2007: 32.5%), clients were treated for primary cannabis-related-problems. The portion of clients who underwent treatment or received counselling for problems caused by the consumption of cocaine (7.2%; 2007: 7.6%), stimulants (6.8%; 2007: 6.4%) and other substances practically remained unchanged compared to the previous year. Among people who underwent addiction-specific treatment for the first time, cannabis lead the league of substances (59.0% of all clients; 2007: 51.2%) while the portion of patients treated for the first time for opioid-induced disorders significantly declined (19.8%; 2007: 27.7%) and the portion of users of stimulants remained stable (10.3%; 2007: 10.4%) (table 5.1). The portions of all other substance groups remained practically unchanged.

Table 5.1 Main diagnoses in outpatient therapy (DSHS outpatient data, 2008)

Main diagnosis harmful use/addiction of ... (ICD10: F1x.1/F1x.2x)	All persons treated ¹⁾ (%)			Persons treated for the first time (%)		
	Males	Females	Total	Males	Females	Total
Opioids	47.4	56.1	49.1	18.3	25.6	19.8
Cannabinoids	35.6	21.8	32.8	62.5	44.1	59.0
Sedatives/Hypnotics	1.2	6.0	2.2	1.0	6.2	1.9
Cocaine	7.7	5.2	7.2	8.2	6.8	8.0
Stimulants	6.3	8.8	6.8	9.1	15.8	10.3
Hallucinogenics	0.1	0.2	0.2	0.2	0.3	0.2
Volatile substances	0.0	0.1	0.1	0.1	0.4	0.1
Multiple/other substances	1.6	1.8	1.6	0.6	0.9	0.6
Total (N)	44,179	11,113	55,526	10,526	2,368	12,825

1) All patients treated were admitted / discharged in the reporting year.

Pfeiffer-Gerschel et al. 2009d.

Secondary addiction diagnoses in addition to the main diagnosis are relatively common. Among the clients with primary opioid-related problems, every fourth (25.2%; 2007: 27.5%) also had alcohol-related disorders (dependence or harmful use) or cocaine-related disorders. At 32.2% (2007: 35.7%), dependence on or harmful use of cannabis is the most common non-opioid-related secondary diagnosis to be found among these clients. At 37.5% (2007: 41.7%), fewer clients with opioid-related problems also had a single diagnosis for methadone. In clients with primary cocaine-related problems, cannabis (45.2%; 2007: 48.1%) also played an important role, followed by alcohol (36.8%; 2007: 41.2%), amphetamines

(18.5%, 2007: 19.1%) and ecstasy (9.4%; 2007: 10.7%). About every tenth client with a primary cocaine-related problem also fulfills the diagnostic criteria of a heroin-induced disorder (9.5%; 2007: 12.0%). 16.4% (2007: 16.0%) of the clients with a primary cannabis-problem make harmful use of or are dependent on amphetamines, 11.0% (2007: 11.7%) on cocaine. Seen across all substances, about a third of the clients (28.3%) with a primary disorder caused by the use of cannabinoids also fulfill the diagnostic criteria of an alcohol-related disorder. Thus, seen across all substances, a quarter to over a third of the patients had a disorder caused by alcohol consumption in addition to the primary reason of treatment (Pfeiffer-Gerschel et al. 2009d).

Socio-demographic information, consumption patterns and treatment duration

In the year 2008, 79.9% (2007: 80.5%) of all 55,526²⁸ outpatient clients with drug problems recorded by the German Statistical Report on Treatment Centres for Substance Use Disorders were male. 56.1% (2007: 57.6%) of all treated patients were between 15 and 30 years old. 83.7% (2007: 82.9%) of them were of German nationality, 2.8% (2007: 3.6%) were from other countries of the European Union, 8.8% (2007: 8.7%) from non-EU countries such as Turkey or the former Soviet Union. Since living conditions of the clients vary considerably depending on the main diagnosis or the drugs used, table 5.2 discriminates accordingly.

Further information can be found in standard tables 8 and 9 as well as in the TDI-tables.

Table 5.2 Socio-demographic data broken down by main drug (DSHS outpatient data, 2008)

Characteristics	Main diagnosis			
	Opioids	Cannabis	Cocaine	Stimulants
Years of age when starting treatment (m)	33.1	24.0	31.3	25.9
Years of age at first drug use (m)	20.8	15.3	21.4	17.9
Gender (ratio males)	76.8%	86.4%	85.5%	73.7%
Living alone	50.3%	57.9%	44.8%	50.0%
Working situation ¹⁾				
<i>Without work</i>	59.1%	35.8%	37.4%	39.9%
<i>In school / education</i>	4.1%	27.8%	7.2%	15.3%
Homeless ¹⁾	2.6%	0.7%	1.2%	0.7%

1) On the day before the start of therapy.

Pfeiffer-Gerschel et al. 2009d.

Table 5.3 shows the most common use pattern for various substances. Heroin continues to be mainly injected by more than half of the clients; however, intravenous use of heroin has been on the decline since 2003, yielding to smoking. Injecting use was also found in every fifth cocaine user. All other substances are mainly orally consumed, sniffed (especially co-

²⁸ Out of these n=55.292 clients with gender identification

caine) or smoked (especially crack). The most diversified use pattern was found for amphetamines.

Table 5.3 Drug administration routes (DSHS outpatient data, 2008)

Substance	Form of Application					Total
	Injection	Smoking	Oral	Inhalation	Other	
Heroin	63.0%	23.9%	2.4%	10.3%	0.4%	16.773
Methadone	3.3%	1.4%	94.1%	0.5%	0.7%	7.673
Buprenorphine	3.9%	1.2%	89.6%	4.2%	1.2%	1.628
Other opioids	14.7%	10.2%	67.0%	4.8%	3.3%	1.808
Cocaine	21.9%	22.7%	1.2%	52.4%	1.8%	9.417
Crack	8.7%	76.4%	1.2%	13.3%	0.4%	1.455
Amphetamines	1.6%	10.8%	37.3%	46.6%	3.7%	6.636

Multiple entries possible.
Pfeiffer-Gerschel et al. 2009d.

The DSHS also contains some basic data on the therapy intensity. The average number of contacts during therapy was the highest for opiate clients amounting to 20.7 (compared to the much higher figure of 32.6 in 2007) and the lowest for cannabis clients at 9.6 (2007: 11.2). Women who receive counselling or treatment because of substance-related problems apart from hallucinogens, generally have more contacts than men with comparable main diagnoses (table 5.4). The average treatment duration corresponds in its distribution to the contact figures. On average, opioid clients have the longest treatment duration and cannabis clients the shortest (clients treated for disorders caused by volatile solvents have not been taken into account because of low case figures). Apart from the female clients who receive counselling or treatment for primary problems caused by the use of opioids, women generally have shorter treatment durations in all substance categories than men despite of the higher contact figures. This is an indication of a higher treatment and counselling intensity in women.

Table 5.4 Number of contacts and treatment duration (DSHS outpatient data, 2008)

Main diagnosis	Number of contacts (m)			Duration of treatment (m) ¹⁾		
	Males	Females	Total	Males	Females	Total
Opioids	19.3	25.1	20.7	44.2	51.0	45.9
Cannabinoids	9.5	10.2	9.6	26.3	23.5	26.0
Sedatives/Hypnotics	12.3	15.4	14.3	26.8	34.3	30.9
Cocaine	14.2	15.4	14.4	29.8	27.5	29.6
Stimulants	11.8	12.0	11.8	33.6	30.8	32.7
Hallucinogenics	16.2	13.9	15.8	47.5	41.4	46.3
Volatile substances	10.2	14.7	11.9	14.9	18.7	16.1
Mult./other substances	17.3	22.5	18.4	36.4	33.6	35.7

1) In weeks.

Pfeiffer-Gerschel et al. 2009d.

5.4.2 Inpatient treatment

In general, inpatient treatment in Germany is carried out under drug-free conditions. Since documentation standards discriminate by type of funding and not by type of treatment (drug-free vs. pharmacologically-assisted), all inpatient treatments carried out for persons with main diagnoses F11-F16 or F18-F19 are presented in the following, discriminating between acute hospital treatment (statistical report on hospital diagnoses) and rehabilitation therapy (statistical report of the German Statutory Health Insurance Scheme). There are moreover data available from the DSHS which give information on some of the specialized clinics and facilities based on the Core Data Set.

Diagnostic data

Out of the total of 29,814 inpatients with substance-related disorders documented by the Statistical Report on Treatment Centres for Substance Use Disorders (Deutschen Suchthilfestatistik, DSHS) in the year 2008, 5,633 were treated for illicit substances (including sedatives/hypnotics and volatile solvents) (Pfeiffer-Gerschel et al. 2009e). Among them were 4,550 males, this corresponds to a male portion of 80.8% (2007: 83.4%). The main reason for inpatient treatments altogether continued to be alcohol-induced disorders (19,752 treatments; 2007: 13,013). Only completed treatments were recorded. In this setting too, the main diagnoses are based on the diagnostic categories of the international classification system of the WHO.

According to the data recorded within the framework of the DSHS, clients with a main diagnosis based on dependence on or harmful use of opioids (without main diagnosis alcohol) represent the largest single group in the inpatient setting (44.0%; 2007: 48.6%). The second largest group is formed by clients with disorders caused by cannabis use (20.6%; 2007: 19.6%), followed by clients with poly-drug use (12.5%; 2007: 9.9%). Problems in connection

with cocaine or stimulants were in 8.9% (2007: 9.8%) or respectively 9.7% (2007: 9.2%) of the cases the primary reason for treatment (table 5.5).

Table 5.5 Inpatients with addiction diagnoses

Main diagnosis	Hospital		DRV		DSHS			
	2006	2007	2006	2007	2007		2008	
					Total	Males	Females	
Opioids	33.5%	35.2%	20.3%	21.5%	48.6%	44.0%	44.1%	43.7%
Cannabinoids	6.7%	6.4%	8.1%	8.9%	19.6%	20.6%	22.2%	14.0%
Sedatives/Hypnotics	9.9%	10.1%	2.1%	1.9%	2.7%	3.8%	1.8%	12.4%
Cocaine	1.5%	1.4%	3.6%	3.5%	9.8%	8.9%	10.0%	4.0%
Stimulants	1.6%	1.9%	2.2%	2.7%	9.2%	9.9%	9.7%	10.5%
Hallucinogenics	0.5%	0.6%	0.1%	0.1%	0.2%	0.2%	0.2%	0.0%
Volatile substances	0.1%	0.2%	0.0%	0.1%	0.1%	0.1%	0.1%	0.2%
Mult./other subst.	46.1%	44.2%	63.6%	61.3%	9.9%	12.5%	11.8%	15.2%
Total (number)	87,907	89,888	11,737	13,692	6,855	5,633	4,550	1,083

DRV 2007b, 2008; Pfeiffer-Gerschel et al. 2009e; Sonntag et al. 2008; Statistisches Bundesamt 2008a, 2008b.

As in the previous year, cannabis-related problems recorded within the framework of the DSHS make the second largest group of diagnoses even ranging before poly-drug use. This is probably the expression of the increased importance of cannabis also in the inpatient context of specialized clinics. However, these data do not directly correlate with data of the rehabilitation and acute treatments where opioids and multiple substance use (which is practically always connected with opioid use) account for the large majority of cases. Among clients in inpatient treatment documented within the framework of the DSHS, cannabis continues to play a significantly minor role among women in comparison to men: only 14.0% (2007: 12.7%) of the women vs. 22.2% (2007: 21.1%) of the men have a cannabis diagnosis. Further differences between the genders at this scale are to be found in the DSHS only for sedatives/hypnotics with a ratio of 1:10 and for cocaine, which is the reason for treatment for more men than for women (10.0% vs. 4.0%; 2007: 10.6% vs. 5.5%).

Intoxications caused by sedatives and hypnotics continue to be relatively common in acute treatment (Statistical Report on the Hospital Diagnoses). About one in ten addiction diagnoses in the hospital treatments is referred to these substances. They play a rather minor role in rehabilitation treatments and in the DSHS. In rehabilitation treatment, patients with a cannabis-related disorder come in second place among the individual substances, though at a great distance to the opioids. Cocaine follows in the third place (table 5.5).

About half of the drug cases attended to in the acute setting in 2007 (44.2%; 2006: 46.1%) were related to poly-drug use. In the statistical report of the National Statutory Pension Insurance the portion amounted even to 61.3% (2006: 63.6%) of all cases in the same year.

However, in both statistics, the portions have been on a continual decline for a few years. Use of opioids as the primary reason for treatment was coded more often in the DSHS.

The importance of follow-up care offers following acute treatment has been illustrated again by Backmund and colleagues (2008a) on the basis of follow-up data. The authors compared the relapse quota of various patient groups after a successfully terminated opioid withdrawal treatment in relation to the question whether an inpatient follow-up therapy was planned (group 1) or no further therapy was offered following the acute treatment (group 2). It showed that one week and three months after the withdrawal treatment, group 1 had a significantly lower relapse liability than group 2 (after one week: 11% vs. 53%; after three months: 48% vs. 85%). However, one year after the withdrawal treatment, the relapse quotas of both groups had moved closer to each other (84% vs. 94%).

When comparing the data from the inpatient facilities participating in the DSHS to the statistics on the acute treatments carried out in hospitals and the measures paid for by the German National Statutory Pension Insurance, one gets the following picture: opioids continue to rank first among the illicit substances in all sources. If one adds the cases of multiple-substance use which, in most cases, probably involves a combination of opioid addiction and cocaine- and other drug-related addiction problems, the portion amounts to 50%-80% of the clients treated in the inpatient setting. An exception are here the cases reported within the framework of the DSHS (which shows a considerably higher portion of patients with primary cannabis-related problems). It is very likely that – apart from the treatment orientation of the participating facilities – also different coding habits can be held responsible for the differences found between the statistics.

Socio-demographic information and treatment duration

In analogy with the presentation of the data for the clients in outpatient treatment, table 5.6 summarizes some socio-demographic characteristics of the inpatient treatments documented within the framework of the DSHS for the main diagnostic groups. In comparison with the outpatients recorded within the framework of the DSHS (see table 5.2), the opioid and cocaine users treated in the inpatient setting tend to be even somewhat younger. Clients in the inpatient setting represent a different group of patients, which can be inferred from the fact that there are more jobless and single persons among them than in comparison to the treated outpatients. A comprehensive comparison between the two groups of patients would require a thorough investigation of the use parameters of the two groups which could for example provide information on the consumption intensity and thus on the gravity of the substance use disorder.

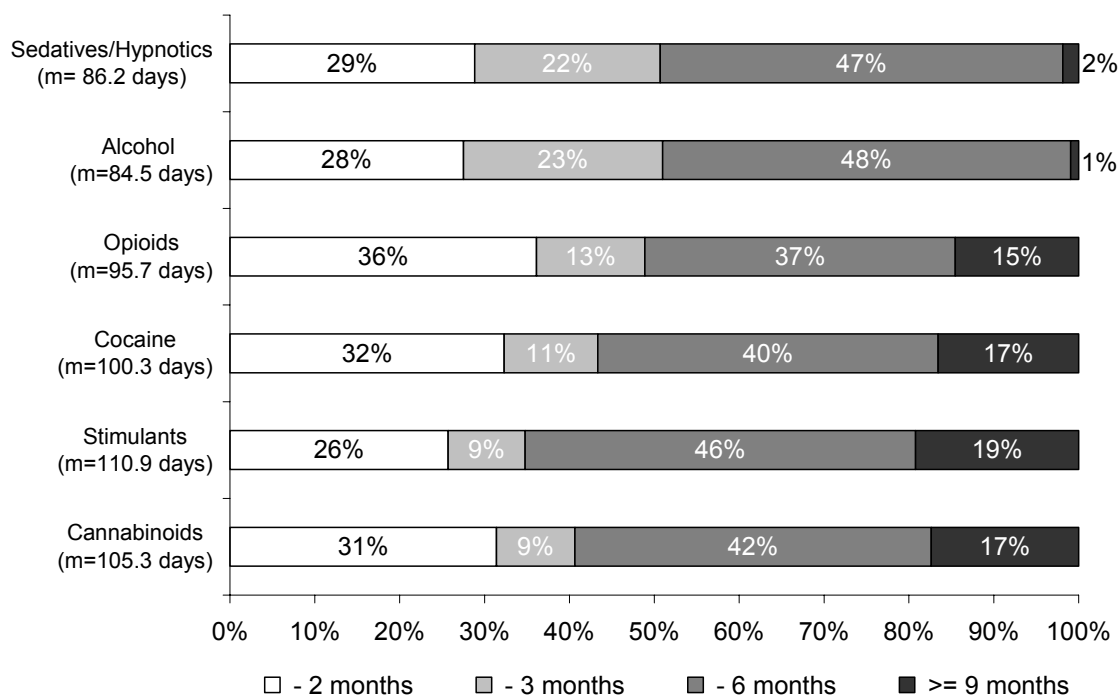
Table 5.6 Socio-demographic data broken down by main drug (DSHS inpatient data, 2008)

Characteristics	Main diagnosis			
	Opioids	Cannabis	Cocaine	Stimulants
Years of age when starting treatment (m)	31.7	25.3	30.5	26.2
Years of age at first drug use (m)	20.4	14.9	20.7	17.6
Gender (ratio males)	80.9%	86.9%	91.4%	79.5%
Living alone	59.6%	63.1%	48.8%	58.3%
Working situation ¹⁾				
<i>without work</i>	62.3%	56.6%	52.6%	54.2%
<i>in school / education</i>	1.6%	6.8%	1.8%	6.4%
Homeless ¹⁾	1.7%	0.9%	0.6%	0.9%

1) On the day before the start of treatment.

Pfeiffer-Gerschel et al. 2009e.

The results from the DSHS (Pfeiffer-Gerschel et al. 2009e) show clear differences in the treatment duration for the various main diagnoses (figure 5.1). In 2008, the average treatment duration for patients with primary disorders caused by the use of cannabis was 15.0 weeks (2007: 16.0), 15.8 weeks (2007: 15.4) for stimulants, 14.3 weeks (2007: 15.4) for cocaine, 13.7 weeks (2007: 14.0) for opioids and 12.3 weeks (2007: 11.9) for sedatives/hypnotics.



Pfeiffer-Gerschel et al. 2009e.

Figure 5.1 Duration of inpatient treatment broken down by substance use disorders (DSHS inpatient data, 2008)

The average duration for alcohol was 12.1 weeks (2007: 12.2). Treatment durations diverge in parts considerably. Striking is the fact that the average treatment durations (14-15 weeks) for disorders connected with illicit substances are longer than those for alcohol and sedatives/hypnotics. This is primarily attributable to the substantially smaller part of patients with treatment durations ≥ 9 months for alcohol and sedatives/hypnotics. The therapy duration for most of the clients in inpatient treatment has been on a clear decline which continued in the current reporting year.

Substitution treatment

With no identifying codes being used in the substitution register, persons admitted to several practices for substitution treatment may possibly be counted several times. The most recent census carried out by the substitution register permits to evaluate the number of persons reached on a set day but not over the course of the year. The number of people recorded in the substitution register on the set date 01.07 of the calendar year increased considerably from 46,000 at the introduction of the register in 2002 to 72,200 in 2008 (Die Drogenbeauftragte der Bundesregierung 2009).

The as of yet insufficiently known long-term effects of substitution treatment are to be investigated by a three-year-research study which is funded by the Federal Ministry for Health (cf. also chapter 1.3.3) (see 5.6 for a detailed description of the study).

According to the register kept by the Federal Centre for Drugs and Medical Devices, (Bundesinstitut für Arzneimittel und Medizinprodukte, BfArM) 6,919 (2007: 6,626) physicians

were licensed to carry out substitution treatments in 2008. However, the actual number of medical practitioners with a respective additional qualification is presumably higher because some *Laender* have granted the qualification automatically to psychiatrists and psychotherapists without them being fully registered. From a care point of view however, the fact that only 2,673 (2007: 2,786) physicians – and with that for the first time less than in previous year since 2003 - reported substitution treatments to the substitution register in 2008 is of much greater relevance (Die Drogenbeauftragte der Bundesregierung 2009). In the year 2008, about 220 (2007: 210) double treatments could be discovered through the substitution register. The doctors in charge were informed by the register and the double treatments stopped. Looking at the relation between reported substitution patients and population figures in the individual *Laender*, the three city states Hamburg, Bremen and (at a considerable distance) Berlin are at the top of the list as expected. The lowest numbers of substituted patients per inhabitant are reported by the three eastern *Laender* Thuringia, Mecklenburg-Western Pomerania and Brandenburg. With regard to the Land Brandenburg, it is to be presumed that numerous users turn to the metropolis Berlin for substitution treatment. The number of registered patients per substitution doctor is also subject to considerable variations between the *Laender*. Whereas a substitution doctor in Hamburg treated on average 44.7 patients in 2008 (followed by Saarland with an average of 37.2 and Saxony with 31.5), the average in Brandenburg is only 8.0 (Mecklenburg –Western Pomerania: 11.5 and Thuringia: 16.2).

Generally, access to substitution treatment is particularly difficult in rural regions in the east of Germany. Only 2.9% (N=2,562; 2007: 2.8%, N=1,988) of the registered substitution patients and 4.2% (N=111; 2007: 3.8%, N=106) of the substituting doctors are from the eastern *Laender* (without Berlin) (Die Drogenbeauftragte der Bundesregierung 2009). An alternative explanation would be that the number of opioid users in rural areas is lower than in conurbations.

The co-consumption of other substances by patients undergoing substitution therapy continues to pose challenges to the providers of drug-maintenance therapies. Based on the findings of the examinations of urine specimens of substituted patients within the framework of a study, Schneider and colleagues (2008) conclude that urine specimens underestimate the – frequent – co-consumption especially of other opioids and benzodiazepines. In their random sample, the authors also found indications of manipulations of the urine tests in about a third of those patients who already received take-home dosages of their substitution drug. The authors interpret this as an indication of the administration of take-home dosages to be based on wrong assumptions in some cases.

In his summary of the results yielded by a an experts' meeting held in May 2008 on psychosocial care in substitution treatment, Michels (2008) recently underlined again that psychosocial care assumes an important role in substitution therapy because it establishes a connection between physicians, institutions of the social network and the real life situations of the patients.

In a randomized controlled study, Soyka and colleagues (2008a) recently investigated possible cognitive deficits of substituted patients. To this purpose, they examined the cognitive functional level after a minimum of 14 days stable participation in substitution treatment with methadone or buprenorphine in n=59 patients and compared the results with those of a cured control group. Both under methadone and buprenorphine, the patients showed significant improvements of their concentration and their executive functions after eight to ten weeks. The healthy members of the control group however generally scored better results than the populations in treatment. According to the authors, the findings indicate a restriction of the cognitive functions in substituted patients. However, they found also that especially the selective attention of the patients improved in the course of the treatment.

Bernhard-Wehmeier and colleagues (2009) were able to show in a non-randomized study conducted on the effects of a dose reduction of methadone carried out at different speeds during qualified withdrawal treatment of opioid addicts that a slower dose reduction (average reduction <5 mg methadone/day; 48% regular treatment completions) was significantly superior to a faster reduction (reduction >5 mg methadone/day; 29% regular treatment completions).

The as of yet only insufficiently known long-term effects of substitution treatment are currently investigated within the framework of the three-year study PREMOS (Long-term substitution of opioid addicts: predictors, moderators and outcome; cf. also chapter 1.3.2) funded by the Federal Ministry for Health (the study was described in detail in the REITOX Report 2008 in chapter 5.6). Based on the findings yielded by the preceding study COBRA (Cost-Benefit and Risk Appraisal of Substitution Treatments), Wittchen and colleagues recently presented results on the effects of substitution treatment after 12 months in various settings (GP surgeries, specialized centres). The data were prospectively collected within the framework of a naturalized study carried out among n=2.694 patients. The authors found high retention quotas, low mortality and further improvements of numerous parameters except for psychological disorders and quality of life. Taking into account the initial gravity of the dependence, the authors found moreover that substitution treatments carried out in GP surgeries proved to be superior to specialized centres in terms of retention quotas, abstinence rates and co-consumption of other drugs (Wittchen et al. 2008a). Further results and the design of the COBRA study were already presented in the last Reitox Reports.

5.5 Trends of clients in treatment (incl. numbers)

5.5.1 Developments in the outpatient in inpatient setting

When calculating the changes in the patients' admissions to outpatient treatment by the shares held by various main diagnoses since 1994, it shows that the increases found within the DSHS were most marked for cannabis until 2005. After the increases of previous years, figures started to stagnate somewhat already between 2005 and 2006. Even though it is only possible to make trend analyses to a restricted extent due to the abovementioned reasons in connection with the introduction of the revised Core Data Set, the enormous increase rates found in the period before 2005, do not seem to continue. The portions of other substances

have stabilized too (fig. 5.2). However, the treatment demand as a result of problems connected to the consumption of stimulants continues to show slight increases.

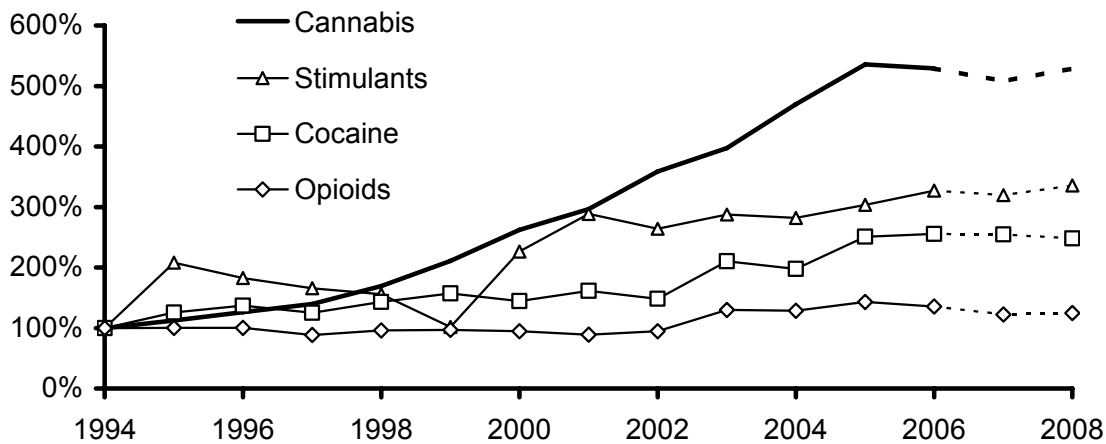


Figure 5.2 Long-term changes in the admissions to outpatient addiction treatment broken down by main diagnoses (DSSH outpatient data, 1994-2008; 1994=100%)

Among the illicit drugs, disorders caused by the use of heroin continue to play a predominant role both in inpatient and outpatient facilities. However, cannabis ranks first among the persons who seek outpatient therapy for the first time whereas opioids are the reason for establishing contact with a drug help facility only in one user out of five. Five years ago, this portion was still at about a third of the patients treated for the first time. Among all admissions to outpatient facilities, clients with disorders caused by the use of opioids continue to represent the largest individual population among the users of illicit drugs, but their portion has been on a continual decline for years.

The inpatient treatment of cannabis cases also plays an increasingly important role. This development can be best seen from the DSSH data. Acute treatments for cannabis use, by contrast, are still relatively rare.

All in all, the analysis of the case figures on rehabilitation therapy (based on the figures of rehabilitation therapies; German National Statutory Pension Insurance) gives a varied picture of the drug patients. After having slightly increased between 2004 and 2006, inpatient treatments significantly rose again by 15.2% to 9,746 in the year 2007²⁹. This development is possibly in connection with a decreasing average duration of the measures. Outpatient treatments increased significantly between 2003 and 2005. They stagnated in the following year and rose again by 13.3% to 1,274 cases between 2006 and 2007. Despite the slight increase of the previous year, the shift from in- to outpatient treatment observed over several

²⁹ Data for 2008 are not available as of yet (August 2009):

years did not continue in the current reporting year. The strongest increases in the area of the rehabilitation treatments were found for the treatments of multiple substance use - both in the inpatient and outpatient setting. With this, the increase reported for the inpatient setting in the previous year continued in the period under review while figures in the outpatient setting were found to decline in comparison with the previous year (it needs however to be added that small case figures quickly lead here to significant changes in percentages). So far, the available statistics do not present the day-patient treatments in a discriminating manner. However, the attempt to adopt a discriminating approach could lead to a deeper analytical insight into changes in the years to come.

The changes in percentages of patients undergoing rehabilitation therapy for medical drug abuse require cautious interpretation due to the low data volume. There are still seven to eight times more drug patients in inpatient than in outpatient rehabilitation therapy, while the ratio for alcohol is only about 1:3 (table 5.7).

Table 5.7 Rehabilitation treatments

Main diagnosis	Inpatient				Outpatient			
	2005	2006	2007	Δ '06/'07	2005	2006	2007	Δ '06/'07
Alcohol	27,213	26,416	29,492	11.6%	10,387	9,145	10,326	12.9%
Drugs	8,086	8,458	9,746	15.2%	1,141	1,124	1,274	13.3%
Pharmaceutics	314	297	313	5.4%	77	67	57	-14.9%
Multiple use	3,097	3,541	4,518	27.6%	520	478	667	39.5%
Total addictions	38,710	38,712	44,069	13.8%	12,125	10,814	12,324	14.0%

DRV 2007a,2007b, 2008.

While the overall figures of the acute addiction and drug treatments stagnated between 2005 and 2006 (Statistical Report on Hospital Diagnoses), they were found to rise again between 2006 and 2007 among others as a result of the treatments carried out for problems caused by the use of stimulants (+17.4%) and opioids (+7.3%). The number of treatments carried out for opioid addicts has been on a continual rise since 2004. For the first time since 2004, the figures for the acute treatments of patients suffering from cannabinoid- or cocaine-related problems did not increase again in the reporting year 2007 (table 5.8). It needs however to be kept in mind that the case figures for all illicit substances (apart from opioids and cannabinoids) are significantly lower in comparison to alcohol and multiple substance use (which often involves use of opioids and has been on the decline for years) so that percentages change more quickly and strongly. Looking at the distribution of diagnoses and their relative portions, there are practically no changes to be found (cf. table 5.5).

Table 5.8 Inpatient treatment of drug problems in hospitals 2004-2007

Main diagnosis	Year				Changes
	2004	2005	2006	2007	2007 vs. 2006
Alcohol	290,864	299,428	298,955	316,119	5.7%
Opioids	25,889	28,476	29,472	31,638	7.3%
Cannabinoids	5,107	5,789	5,932	5,790	-2.4%
Sedatives/Hypnotics	8,504	8,667	8,661	9,091	5.0%
Cocaine	1,096	1,210	1,336	1,300	-2.7%
Stimulants	1,139	1,226	1,424	1,672	17.4%
Hallucinogenics	562	518	471	532	13.0%
Tobacco	420	278	234	236	0.9%
Volatile substances	151	122	119	138	16.0%
Multiple/other substances	41,699	42,479	40,492	39,727	-1.9%
Total addiction	375,431	388,193	387,096	406,243	4.9%
Total drugs	84,147	88,487	87,907	89,888	2.3%

Statistisches Bundesamt 2008b.

5.5.2 Substitution

As for substitution therapy, there was a clear shift in the portion of substances used towards buprenorphine between 2002 and 2006. In 2008, buprenorphine was used in about one out of five substitution therapies. Since 2006 however, increases in the use of this substitution drug have been only moderate (table 5.9).

Table 5.9 Type and portion of the substances reported to the substitution register (2002-2008)

Substitution drug	2002	2003	2004	2005	2006	2007	2008
Methadone	72.1%	70.9%	68.3%	66.2%	64.1%	61.4%	59.7%
Levomethadone	16.2%	14.8%	15.0%	15.8%	17.2%	19.0%	20.6%
Buprenorphine	9.7%	12.9%	15.6%	17.2%	18.0%	18.6%	18.9%
Dihydrocodeine	1.7%	1.2%	0.9%	0.7%	0.6%	0.5%	0.4%
Codeine	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%
Diamorphine						0.4%	0.3%

Die Drogenbeauftragte der Bundesregierung 2009.

In a current six-month randomised study conducted on the effectiveness of methadone and buprenorphine in a random sample made up of n=140 opioid-(especially heroin-) addicted patients, Soyka and colleagues (2008b) did not find any differences between buprenorphine and methadone in terms of retention quota and reduction of substance use. The authors

conclude that substitution therapy has proven again as a safe and effective intervention in which both methadone and buprenorphine generally showed equal effectiveness confirming the findings of other studies conducted in this area (cf. for example Connock et al. 2007). The study found that the duration of preceding opium use and the age at the onset of substance abuse were the strongest predictors for treatment break-offs.

5.5.3 Special research findings

Substance use disorders in childhood and adolescence

Thomasius and Stolle (2008c) give an overview of the diagnostic and therapeutic strategies used in the treatment of substance use disorders in childhood and adolescence. They underline the importance of developmental psychological aspects in the diagnostics of substance use disorders to be able to differentiate between consumption and abuse/dependence. Motivational promotion during the initial contact phase assumes, according to the authors, an important role for substitution therapy. For the authors it is imperative to have medical, psychological, social and physiotherapeutic measures carried out in the acute and post-acute phase followed by educational measures and stabilizing and resocializing programmes in the after care phase. The authors therefore recommend expanding the (partly insufficient) network between the different providers of interventions in the addiction aid system to create and use synergy effects. They moreover criticise the insufficient number of treatment slots for children and adolescents in acute and post-acute inpatient care.

Psychotherapy in addiction

Bernow and Fehr (2009) evaluated the effectiveness and transferability of cognitive behavioural therapy (CBT), contingency management (CM) and motivational interviewing (MI) in an overview article. Summarizing, it can be said that all three intervention types seem to be useful and effective in the treatment of patients affected by addiction-related disorders and they also seem to be superior to standard treatment. Studies showed that especially the combination between CBT and CM or CBT and MI yielded convincing results and led to a reduction of substance use. Summarizing, it can be stated that more intensive interventions produce longer lasting effects.

6 Health correlates and consequences

6.1 Introduction

Drug use has an influence on morbidity and mortality of the users. Data on drug-related fatalities are collected by two countrywide systems: The Drugs Data File (Falldatei Rauschgift, FDR) kept by the Federal Criminal Police Office (Bundeskriminalamt, BKA) and the General Mortality Registry of the Federal Statistics Office (Statistisches Bundesamt, StBA). There are hardly any data available on the morbidity of untreated drug addicts which could be used for epidemiological purposes. That is why, alternatively, the descriptions of the health condition of the clients at the beginning of therapy are often used as an approximation. However, as these often represent a positive selection of the total of drug users, health aspects probably tend to get underestimated.

6.1.1 Infectious diseases

According to the Infectious Diseases Control Law, effective as of 1 January 2001, data on infectious diseases, including HIV and viral hepatitis, are to be reported to the Robert Koch-Institute (RKI). These data are published in regular intervals (www.rki.de). According to the German Regulation on Laboratory Reports and the Infectious Diseases Control Law (Infektionsschutzgesetz, IfSG) introduced in 2001, all laboratories in Germany are obliged to report confirmed HIV-antibody tests anonymously and directly to the AIDS-Centre of the Robert-Koch-Institute. These laboratory reports contain information on age, gender, place of residence of the infected individuals and routes of transmission. These data are complemented by supplementary anonymous reports of the doctors in charge, by limited clinical data and HIV-related laboratory parameters.

In addition, the AIDS-Case-Register anonymously collects epidemiological data on diagnosed AIDS-cases which are voluntarily reported by doctors in charge of the treatments. Thanks to a change in the collection of data on new HIV-diagnoses, it is now easier to avoid (formerly unrecognized) multiple data entries.

With the introduction of the Infectious Diseases Control Law in 2001, data on possible routes of transmission of hepatitis B and C (HBV and HCV) are also collected. This is done by the health authorities which investigate the case persons themselves or by the laboratories and general practitioners who pass on the information.

The updated data are published yearly by the Robert Koch Institute in Berlin in the "Yearbook – Infection epidemiology of notifiable infectious diseases" (Infektionsepidemiologisches Jahrbuch meldepflichtiger Krankheiten) (RKI 2009a) or respectively in the Epidemiological Bulletin of the RKI (RKI 2009b; RKI 2009c)

Since 2007, the German statistical report on treatment centres for substance use disorders records also data on the HBV- and HCV-status of patients in addition to the HIV-status. Since the number of facilities which report these data is very small and only patients with test

results are recorded, these data require cautious interpretation.

6.1.2 Drug-induced deaths

Drugs Data File

In general, drug-induced fatalities are recorded by the Land Criminal Police Offices in the individual *Laender*. The BKA has access to the database and is responsible for data quality management and data collection. Data collection modalities and the bases for the assessment of drug-induced fatalities differ between the individual *Laender*. The portion of autopsied drug-induced deaths as a measurement for the quality of the assignment of drug-related fatalities varies (in some cases considerably) between the *Laender*. Toxicological reports on body fluids and tissue play an important role in determining the cause of death providing clarifying information on the drug status at the time of death. Reports on autopsies and toxicological reports are generally written by different institutions. Since especially toxicological reports are often made available with considerable delay, they are not sufficiently taken into account in the classification of drug-related fatalities.

In order to facilitate the recording of drug-induced deaths and reduce mistakes, the following categories for drug-related fatalities were defined in a leaflet by the Federal Criminal Police Office (BKA 1999):

- drug-induced deaths caused by unintended overdosage,
- death as a result of health damage (physical decline, HIV or hepatitis C, weakness of organs) caused by long-term drug abuse (= long-term health damage),
- suicide out of despair over living conditions or under the influence of withdrawal symptoms (e.g. delusions, strong physical pain, depressive mood),
- fatal accidents under the influence of drugs.

General Mortality Registry³⁰

In Germany, a death certificate is written out for every case of death, complete with personal data and information on the cause of death. The death certificate is passed on to the health office and then to the Land Statistics Office. Aggregation and evaluation at national level is done by the Federal Statistics Office. Often, this data source doesn't take account of the results of delayed toxicological reports in the classification of the drug-related deaths either.

Only cases that correspond to the definition of "direct causality" are selected from the General Mortality Registry to be reported to the EMCDDA. The goal is here to record death cases within the framework of a sensitive data collection as shortly as possible after the use of opioids, cocaine, amphetamine (derivates), hallucinogens and cannabinoids, i.e. in particular

³⁰ The usage of the term "General Mortality Registry" is oriented to the terminology of the EMCDDA. The herein reported data are from the "Statistical report on the causes of death" ("Todesursachenstatistik") of the Federal Statistics Office.

after fatal intoxications. The selection is based on the specifications of EMCDDA (the so-called ICD-10 Code Selection B). As a basis for the assignment to the group of drug-induced fatalities, the assumed underlying disorder (ICD10-Codes F11-F19) or the assumed cause of death (ICD10-Codes X, T, and Y) in the case of accidents and suicides is used respectively. This means that long-term secondary diseases, accidents not directly caused by intoxications and suicides are not comprised by this definition although individual cases of this type may be included due to wrongly made out death certificates or coding errors. Especially in connection with the WHO coding guidelines, the F1x.x codes (“dependence” and “harmful use”, further psychological and behavioural disorders caused by psychotropic substances) contained in the ICD-10 code selection and valid until 2006 would have had specificity problems. The replacement of prioritized coding for “dependence” and “harmful use” by new coding guidelines for intoxications would indirectly reduce this problem. The data collected by the Federal Criminal Police Office, by contrast, explicitly set out long-term secondary diseases, suicides and accidents that have come to the knowledge of police. It is however not possible to completely isolate the registered cases of intoxication to achieve data comparability with the General Mortality Registry on the basis of the aggregated data recorded by the BKA due to the usage of not completely disjunct categories. Comparisons with other European countries should only be made on the basis of the General Mortality Registry, as this registry largely follows common standards. Due to the broader definition of the term ‘drug-induced death’, the data of the police register lead to higher estimates. The police register is of great importance for long-term comparisons of national trends but is less suitable for European-wide comparisons due to differences in the selection criteria and recorded age groups.

Neither of the two registers records the totality of drug-related fatalities. A certain number of relevant cases is not recognized, not reported or wrongly assigned – by either register. However, a long-term comparison of the two registers shows very similar developments and trends which can be seen as a kind of cross-validation of the two estimation procedures. An empirical analysis of the question as to whether the two systems record the same cases and in how far target groups overlap remains to be undertaken.

6.2 Drug-related infectious diseases

6.2.1 HIV/AIDS and viral hepatitis

Detailed data on the prevalence of hepatitis B and C and of HIV in drug users are contained in standard table 9. It needs to be noted here however, that there is a scarcity of recent and comprehensive epidemiological studies on the prevalence of hepatitis B and C and HIV as well as on determinants for the seropositivity among IDUs in Germany.

HIV-data from population statistics

2,806 newly diagnosed HIV-infections were reported to the RKI in 2008. This corresponds to a nationwide incidence of 3.4 cases per 100,000 inhabitants. With this, the overall figure of newly diagnosed HIV-infections increased less compared to the year 2007 (2,774) than in

the previous years. The small increase compared to 2007 can be almost completely explained by the higher number of new HIV-diagnoses in people coming from high-prevalence regions. The distribution of the reports of HIV-infections among the *Laender* and groups of people affected has varied only little in comparison to 2007.

The incidence of newly diagnosed HIV-infections in men was at 5.7 cases /100,000 inhabitants as high as in the previous year and significantly higher than the incidence in women which has not changed either at 1.1 cases/100,000 inhabitants in comparison with the previous year. The portion of women among the new HIV-diagnoses amounted to less than 17% (RKI 2009a).

Data on the routes of transmission were available for 85% of the newly diagnosed HIV-infections in the year 2008. Out of those with documented routes of transmission, men who engaged in sex with other men (MSM) still represented the largest group at 65%. The portion of individuals who stated to have acquired their HIV-infection through heterosexual contacts and who did not come from countries with a high-HIV-prevalence in the general population also remained stable at 17%. The portion of people coming from countries with a high prevalence in the general population slightly increased again in 2008 to 12% (previous year: 11%) of the new HIV-diagnoses. It is to be assumed that the large majority of the people from high-prevalence countries acquired the infection in their countries of origin. The portion of people who probably contracted an HIV-infection through intravenous drug use (IDU), was 5% which corresponds to 123 cases (2007: 5.5%; 2006: 6.1%).

The number of new diagnoses in IDUs has decreased after the peak of 163 reported cases in the year 2006. 123 new HIV-infections were diagnosed, in total 31 less than in the previous year. With 49 cases, NRW had again most of the new diagnoses. The incidence, however, slightly declined again compared to the previous year. In NRW, the regional concentration area of new HIV-diagnoses shifted from the area of Dortmund where figures declined to the area of Düsseldorf/Cologne which saw a rise in figures. The portion of new HIV-diagnoses with an infection risk via IDU and with Eastern Europe as the reported region of origin, reached a peak in 2008 at 22%.

Looking at the data on countries of origin and infection risks of men coming from Eastern and Central Europe and diagnosed with HIV in Germany, one finds striking differences between Eastern and Central Europe: in the successor countries of the former Soviet Union, the IDU-associated risk of transmission prevails while the MSM-risk is predominant in Central Europe. The three Baltic republics Estonia, Latvia and Lithuania take a position somewhere in between: with a relatively small number of men being affected, the distribution between MSM- and IUD-associated risks is more or less balanced.

Further differentiation of the presumed infection regions for men from Eastern and Central Europe with a reported infection risk shows that about half of the men from Eastern Europe with a drug-associated risk contracted the infection in Eastern Europe and the other half in Germany. As for the men from Central Europe, about a third contracted the infection in their country of origin and 2/3 in Germany.

The duty of notification of new HIV-infections as a data collection instrument does not allow to completely survey and represent the migration background of the people affected. Apart from the migrants from high-prevalence countries who account for a bit more than half of the new HIV-diagnoses in Germany, migrants from Eastern and Central Europe are mostly affected by the infection risks MSM and IUD. HIV-infections associated with drug-use were contracted by half of the people of Eastern European origin living in Germany in Eastern Europe and by the other half in Germany. This underlines the necessity of improving HIV-prevention in the drug area in Europe and of setting a particular focus in Germany's HIV-prevention on migrant groups of Eastern European origin (RKI 2009c).

HIV-data from other sources

According to the Federal Criminal Police Office, a positive HIV-status was found in 3.1% of the drug-related deaths (45 out of 1,449) (2007: 3.4%). In some *Laender* however, there is no information available on HIV-infections. In Berlin for example, the result of the HIV-tests is not passed on by the forensic institutes to the police. The figures there are based on records (like for example interviews of relatives or family doctors) which are not usable for statistical purposes (BKA 2009b).

From Hamburg data on the HIV-prevalence of clients of outpatient addiction facilities are available. The HIV-prevalence among opioid clients in the outpatient help system is at 6%, with women displaying a slightly higher HIV-positivity (7%) than men (6%). Compared to the previous years, the prevalence has remained stable (Verthein et al. 2008).

In Frankfurt/Main, a survey was carried out again in 2008 among 150 drug users of the open drug scene. It showed that the HIV-infection rate which was still at more than a quarter in the year 1995 and which ranged at a low level between 12% and 17% since 2002, was down at 6% in 2008 (Werse et al. 2009).

Data on the HIV-infection status of treated patients are also collected within the framework of the DSHS (Pfeiffer-Gerschel et al. 2009d). The prevalence among the tested opioid clients in outpatient facilities was at 3.9% (N=194) and among the tested patients with illicit drug problems at 3.3% (N=229).

AIDS

Among the new AIDS-cases registered between 01.01.2006 and 31.12.2008, 82% were men and 18% women. IDU accounted for 8% of the men who had contracted AIDS in the aforementioned 36-month period, whereas for women, IDU was recorded as the most likely infection risk for 18% of the diagnosed AIDS-cases. For 14% of the women, there was no data available on the route of infection. It is however to be presumed that the routes of infection split into IDU or heterosexual contacts of the women, though to what portions is unknown (RKI 2009c).

Hepatitis B – data from the population statistics

In the year 2008, a total of 1,850 cases of acute hepatitis B – less than in the year 2007 – were reported (2,204, status: 01.03.2009). Out of these, 822 cases (44%) corresponded to the reference definition (clinical symptoms and laboratory diagnostic evidence). A total of 1,028 reported cases did not correspond to the reference definition because they either did not fulfill the clinical criteria of acute hepatitis (80%) or because there were no data available on this (20%). For the year 2008, the incidence in Germany was at 1.0 infection per 100,000 inhabitants. There was no seasonal variation found over the course of time. Since 2001, a downward trend in the reported hepatitis-B infections or respectively in the yearly incidence is to be observed.

In 687 (83.6%) of the reported cases in respect of the reference definition, there were data available on possible expositions before the diagnosis was made. Multiple entries were possible. The relevance of the reported expositions for establishing causal connections is however questionable.

With 297 cases, sexual expositions were the most frequently reported expositions (43.2%). Out of these 33 (11.1%) were men who had sex with men (MSM). Operative-diagnostic interventions were reported in 57 cases (8.3%), flat sharing with a hepatitis-B-virus carrier in 41 cases (6.0%) and in the fourth place injecting drug use in 28 cases (4.1%). Out of the 28 cases in which IDU was reported, 26 (92.9%) were male (RKI 2009b).

Hepatitis B – data from other sources

In 2008, data on the hepatitis-B-infection status of clients in outpatient treatment were collected for the second time within the framework of the DSHS (Pfeiffer-Gerschel et al. 2009d). According to the statistical report, the prevalence among the tested opioid clients was at 10.7% (N=465; 2007: 13.8%) and among the tested patients with illicit drug problems at 8.1% (N=505; 2007: 10.6%) and has thus slightly declined compared to the previous year.

A survey conducted in the Frankfurt drug scene shows that the rate for a hepatitis-B-infection among drug users of the open drug scene was at 9% (men: 5%, women: 16%), following the declining trend observed since 2003 (Werse et al. 2009).

Hepatitis C – data from the population statistics

In the year 2008, a total of 6,195 cases of newly diagnosed hepatitis C were reported. This corresponds to a nationwide incidence of 7.5 new diagnoses per 100,000 inhabitants. With this, the calculated incidence of new diagnoses was lower than in 2007 (8.4) or respectively than the median from 2003 to 2007 (9.2). There was no seasonal variation found in the period under review. Since 2004, the nationwide yearly incidence of reported newly diagnosed cases has shown a downward trend.

For 4,456 cases (71.9%), data on possible expositions were available.

Intravenous drug use which is, in all probability, in causal connection with hepatitis C, accounted for 1,607 cases (36% of the cases with reported exposition), thus representing the

most frequently reported exposition. Among the 20- to 29-year-old men, IDU was reported 506 times (73% of the men of this age group with reported exposition). The fact that men are significantly overrepresented among IDUs, contributes substantially to the significantly higher incidence of new hepatitis C diagnoses in men compared to women.

A summarizing evaluation carried out by RKI underlines the importance of preventing intravenous drug use. IDUs should be motivated to undergo withdrawal treatment and, if this fails, they should be provided with sterile needles. In Germany, prevention of hepatitis C among youth in general and among IDUs in particular is given top priority. The epidemiological data available on hepatitis C clearly show that there is an urgent need for action in terms of surveillance, complementing epidemiological studies and targeted prevention measures for the at-risk population of the IDUs. This also comprises the development of preventive concepts in a broader sense as well as the generous provision of screening tests for IDUs as recommended by the WHO together with counselling and treatment (RKI 2009b).

Hepatitis C – data from other sources

Data on the hepatitis-C-infection status of clients of outpatient addiction facilities were also collected in 2008 within the framework of the DSHS (Pfeiffer-Gerschel et al. 2009d). According to the DSHS, the prevalence in the tested opioid clients was at 54.8% (N=3,866; 2007: 59.1%), in the tested clients with any other illicit drug problems at 43.8% (N=4,353; 2007: 49.8%) and has thus slightly declined in comparison with the previous year.

In the Hamburg base documentation of outpatient addiction aid facilities (Basisdokumentation der ambulanten Suchthilfe, BADO) 2007, the infection with hepatitis C continues to be seen as a central health issue: every second opium user is infected (49%). It was however possible to bring down the hepatitis-C-infection rate in comparison with the previous year (2005: 56%, 2006: 53%) (Verthein et al. 2008).

The survey carried out in the Frankfurt drug scene shows that the hepatitis-C-infection rate among the users of the open drug scene is at about two thirds of the interviewees (65%), remaining since 2002 at a nearly unchanged high level (Werse et al. 2009).

In the COBRA-study, two thirds (66.9%) of 2414 opioid-dependent patients in substitution treatment with a known HCV-infection status were HCV-infected. The HCV-infection was connected with a significantly higher degree of psychopathological symptoms and reduced quality of life (Schäfer et al. 2009).

Interesting results were yielded by a re-analysis of the BADO-data 2006, which showed that HCV- and HIV-prevalences among clients without migration background of the Hamburg drug support system (HCV: 58.0%, HIV: 8.6%) are significantly higher than in the group of the children of migrants (HCV: 43.8%, HIV: 4.5%) and of the migrants (HCV: 36.6%, HIV: 3.0%) (Schnackenberg et al. 2008).

6.2.2 Sexually transmissible diseases, tuberculosis and other infectious morbidity

There are no current data available on other infectious morbidity of drug users.

6.2.3 Behavioural data

For the first time, there are regional data available from a survey conducted among the Frankfurt drug scene (Werse et al. 2009) on the risk behaviour of IDUs. It shows that about one in five IDUs (19%) re-uses a syringe or an injection needle respectively, at least occasionally. About one in three (32%) shares utensils for intravenous use together with others and about one in five (19%) shares drugs with others in one syringe. A bare majority (53%) – men (60%) more than women (39%) – reported not to engage in any risky consumption behaviours.

6.3 Other drug-related health correlates and consequences

6.3.1 Non-fatal overdosages and mortality of drug users

Data on non-fatal overdosages are only available from regional sources. According to a scene survey conducted in Frankfurt/Main (Werse et al. 2009), 61% of those interviewed in 2008 have made the experience of overdosage at least once in their life. Related to the interviewees with at least one overdosage in their lifetime, the number of incidents of overdosage they survived is about at 3 (median). The last incident of overdosage in current IDUs occurred 24 months ago (median). Heroin remains the drug which is most frequently held responsible for overdosages. But also benzodiazepine gains in importance in this respect. The main reason mostly given for overdosage was unknown drug quality. An increase was found in 2008 for the answer: “too high consumption after previous abstinence”.

Drug-related emergencies are described in the annual report of the STEP gGmbH Hanover (Step 2009):

“Café Connection“ is a low threshold point of contact and counselling facility frequented daily by 120 to 170 drug users. Among its 350 to 400 regular clients “Café Connection” had 47 drug-related emergencies in the year 2008 (2007: 31, 2006: 29).

“Fixpunkt“- a contact and communication facility offering drug users the possibility of intravenous drug use - also keeps yearly emergency statistics. In 2008, a total of 26,796 consumption activities were registered (2007: 34,706, 2006: 29,332). 62 emergencies occurred (2006: 61), 33 of them were classified under the category “under surveillance” (2006: 26), 11 under the category “respiratory resuscitation” (2006: 26) and 18 under the category “emergency ambulance/emergency physician” (2006: 18).

6.3.2 Other topics of interest

Somatic and psychiatric comorbidity in opioid users

The base documentation kept by the Hamburg outpatient addiction aid system contains data on the physical and psychological health of the patients treated in 2007 (Verthein et al. 2008).

More than a fifth of the opioid users is described by the outpatient addiction aid staff as considerably or extremely affected by health issues. Further 31% are described as suffering from

moderately severe health problems. Liver damage is documented for a little less than a third of the clients and sleeping disorders for more than half of the opioid users.

Apart from the physical health problems, special attention needs to be given to the psychological problems which, on the one hand, play a role already in the onset of addictive behaviour but, on the other, are also a result of addictive behaviour. For more than a third of the opioid clients the extent of the physical and psychological ailments they are afflicted by is rated as considerable to extreme by staff of outpatient drug aid facilities in Hamburg. Almost every fourth suffers from considerable or extreme subjective feelings of unrest; a fifth is equally affected by depressive moods. Almost a third of the clients have attempted to commit suicide at least once in their lives (men: 27%, women: 44%). Among the opioid patients who are in their totality severely affected by psychiatric morbidity, women in particular are afflicted by psychological ailments. With regard to the overall evaluation, their portion (45%) is significantly higher than the one of the men (33%). But also with respect to the individual symptom levels, morbidity is, apart from a few exceptions, significantly more pronounced in women than in men.

The survey conducted in the Frankfurt drug scene also concludes that female morbidity is higher than the one in men. The interviewees (150 drug users of the open drug scene in Frankfurt/Main) report 1.4 symptoms which occurred during the previous 3 months. This average figure is double as high among women than among men (2.3 vs. 1.0). The most commonly reported symptoms are depression (41%), toothache (24%) and cardiovascular problems (23%) (Werse et al. 2009).

A study conducted by Backmund et al. (2008a) also shows a high morbidity of the surveyed opioid patients: 42% stated to have seriously tried to commit suicide at least once in their lives.

Surveys conducted by the Clinic for Psychiatry and Psychotherapy Göttingen and of the Northern German Addiction Research Association showed that 51.7% of the patients in methadone-maintenance therapy are affected by at least one psychiatric comorbid disorder (esp. dysthymia). The data on opioid patients (in particular women) show that patients suffering from anxiety and affective disorders often co-consume other substances which modulate the gabaergic system like for example alcohol and benzodiazepine (Wedekind & Havemann-Reinecke 2008).

Somatic and psychiatric comorbidity in cocaine users

The general health condition of the cocaine users recorded by the Hamburg base documentation of the addiction aid facilities (Verthein et al. 2008) is to be called relatively good in comparison with the alcohol and opioid clients. For more than two thirds of the persons no or only small problems are reported in this respect. No relevant gender differences were found. The most commonly reported complaints are sleeping disorders. This is, with regard to the main problem drug used by these clients (cocaine and amphetamines) not unusual. Equally common among cocaine users are cardiovascular and respiratory symptoms as well as liver damage. Serious diseases like hepatitis C or HIV are relatively seldom in this group.

However, cocaine consumers are affected to a much greater extent by psychological and emotional problems. Only a little less than a third of them is rated by the staff of the Hamburg addiction aid facilities as not or little affected. The most common symptoms the patients suffer from are extreme inner nervousness or unrest which presumably find their expression also in the abovementioned frequently occurring sleeping disorders. Depressions, too, reoccur as a psychiatric symptom of cocaine users. More than half of the female patients (51.1%) and about a fifth of the male ones (20.9%) have attempted to commit suicide at least once in their lives. Suicidal proclivity is on an upward trend. In the year 2005, 38.5% of the women reported to have tried to commit suicide at least once in their lives compared to 46.4% in 2006. The corresponding figures for men were at 12.4% in 2005 and at 15.6% in 2006.

Somatic and psychiatric comorbidity in cannabis users

The Hamburg base documentation also contains data on the health condition of cannabis patients. According to the assessment of the attending staff 9% of the cannabis patients suffer from considerable to extreme health problems. Such massive health problems are double as common in cannabis clients with alcohol-related problems than in clients without alcohol co-consumption (13% vs. 7%). The health condition of men was found to be somewhat better: 72% are described as little or not affected; the corresponding figure for women was only at 61%. Sleeping disorders are generally common among cannabis clients (44%) although their portion slightly decreased compared to the two previous years (2006: 47%; 2005: 49%). Women report more often about sleeping disorders than men (58% vs. 40%), so do cannabis users with alcohol diagnosis compared to cannabis users without alcohol problems (48% vs. 39%). As expected, differences are to be found between the two groups with regard to typical alcohol-related diseases: in 9% of the cannabis users with problematic alcohol consumption, damages of the nervous system are documented (cannabis clients without problematic alcohol co-consumption: 3%), in 14% liver damages (cannabis clients without problematic alcohol co-consumption: 1%), in 13% cardiovascular symptoms (cannabis clients without problematic alcohol co-consumption: 6%) and in 6% delirium (cannabis clients without problematic alcohol co-consumption: 0%). According to the attending staff, 31% of all cannabis clients, i.e. 3% more than in the previous year, are considerably or extremely affected by psycho-emotional problems. Women suffer from them to a much larger extent than men (46% vs. 28%). Gender differences also show – albeit at a somewhat lower level - in the portions of those who are considerably or extremely affected by concretely described psychological disorders. This applies for example to anxieties and phobias (women: 25%; men: 12%) or depressive moods (women: 26%; men: 15%). Between the consumption groups cannabis and cannabis/alcohol, by contrast, hardly any differences are to be found in respect of mental health (Verthein et al. 2008).

A study conducted by Gudlowski and Lautenschläger (Gudlowski & Lautenschläger 2008) found that persistent neurocognitive deficits, volume changes of the grey substance and an increased psychosis risk in cannabis users seem to show mainly in people who started with the consumption before they were 16/17 years of age, since at that period of time important developmental processes take place in the adolescent brain in which the endocannabinoid

system is largely involved. During this period of time, the endocannabinoid system has the highest receptor density and a long-term damage inflicted to this system (e.g. by downregulation and desensitization of CB1-receptors by exogenic cannabinoids) during this developmental period thus provides a basis for future neuropsychological and neurocognitive deficits as well as for an increased psychosis risk.

The goal of a study conducted by Wittchen and colleagues (2009) was to identify clinically relevant subgroups of cannabis users. To this purpose, a sample of 1089 adolescents and young adults aged between 14 and 24 years who displayed repeated use of illicit substances was investigated. Using a classification method particularly suited for qualitative features, four subgroups were identified: The “unproblematic cannabis users” (group 1) accounted for 59.2% of the sample. Another subgroup accounting for 14.4% stood out for “primary alcohol-related disorders” (group 2). Group 3 with a portion of 17.9% was composed of members with “delinquent DSM-IV-cannabis/alcohol abuse”. The fourth group described as “cannabis-related disorders with multiple problems” accounted for 8.5% of the random sample. Cannabis-related problems (interpersonal problems, violence and criminality, financial problems, problems at work) were most common and severe in groups 3 and 4. Comorbidity and other psychological disorders were most pronounced in groups 2 and 4. The probability of alcohol-related disorders and uncovered treatment demand were substantial in all three “problematic” groups (2 to 4). The authors surmise that there is a very large minority (40.8%) of young people with repeated illicit substance use who experience very problematic consequences. Therefore, there is a need for specifically tailored treatment programmes which, apart from cannabis consumption, also take the important role played by alcohol and other psychological disorders into account.

Opioid-addicted parents with minor children

A recently published study conducted by Fuchs and colleagues (2008) empirically investigated the connection between parenthood and addiction in relation to child welfare. To this purpose, three groups of opioid addicts (parents living together with their children, parents not living together with their children and childless adults) were compared with each other with respect to a series of risk indicators. The study is based on data from the base documentation of the Hamburg addiction aid system (BADO) and contains information on N=4,971 documented clients. Almost a third of all documented opioid addicts had children (30.3%), but only a third out of them actually assumed their parental role (35.9%). For almost all selected risk indicators (drug use, traumatic experiences, social situation, health condition) it shows that the situation of the parents who live with their children gives a more positive impression than the one of the parents who don't live with their children. Parents who look after their offspring, consume less heroin, alcohol or benzodiazepines than childless people, are less affected by traumatic life experiences, tend to be healthier and are significantly less exposed to precarious life conditions. As a result of methodological restrictions it is to be assumed that the number of affected minors is probably systematically underestimated. Based on the study data, it is however not possible to tell whether the parents living with children have been better off in the first place and therefore were able to keep their

children or whether they are doing better because they live together with their children. The observations made with regard to the connection existing between parenthood and addiction do nevertheless suggest to expand existing help offers so that addicted parents are offered help to help themselves.

6.4 Drug related deaths and mortality of drug users

6.4.1 Drug-induced deaths (overdosage/poisonings)

Data from the special police register on drug-induced deaths

The reliability of information on drug-induced deaths strongly depends on the question as to whether autopsies and toxicological examinations have been used to validate the initial classification as drug-induced death or not (cf. 6.1). On average, the autopsy rate in the reporting year 2008 was at 62% (2007: 62%; 2006: 67%); a few individual *Laender* however, diverged considerably from this value (BKA 2009b). During the last years, autopsy rates tended to decrease, which experts attribute to rising costs or respectively shrinking budgets.

After having dropped in 2006 (1,296 cases) to the lowest level recorded since 1989, the overall figure of drug-related fatalities (1,449 cases) increased by 3.9% from 2007 to 2008 (2005 vs. 2006: -2.3%; 2006 vs. 2007: +7.6%). With 949 cases, overdose of heroin (including use of heroin in combination with other drugs) remains the most common cause of death (66%; 2007: 65%; 2006: 65%). The portion of these cases has remained stable over the last four years. The portion of drug-related deaths in which substitution substances alone or in combination with other drugs were detected, declined again (2008: 12%; 2007: 14%; 2006: 16%; 2005: 25%); in 2002, the portion was still at 40%. Since 2006, the BKA statistics show the detected substitution substances broken down by methadone/polamidone and buprenorphine. According to the BKA data, the majority of death cases which were exclusively attributable to a substitution substance, happened in connection with methadone/polamidone (N=43; 98%). Among the 131 death cases, in which substitution drugs in combination with other drugs were found, there were also seven cases in which buprenorphine was detected.

Since the data collected by the Land Offices of Criminal Investigation for the national statistical report may contain multiple entries of the same case, it could for example be that a death case is coded both as a suicide and cocaine overdose. The sum of all overdose cases entered is already higher than the overall figure of death cases. This means that double entries are also contained in this category. Therefore, it is only possible to add up categories which have no overlapping data. This is for example the case for the categories "overdose of heroin (alone)" and "overdose of heroin and other drugs". The figure of death cases caused by overdosage can therefore not be calculated, but only estimated as an approximate value (cf. table 6.1).

The number of death cases in which substitution substances played a role, is still low which can be attributed to the good qualification of consultants and the reliability of quality assurance measures taken. Generally, it is however to be assumed that in the presentation of the involvement of substances in the recorded deaths, the number of mixed intoxications (com-

bination categories) but also the involvement of substitution substances is underestimated due to frequently missing exact toxicological data on a death case.

Table 6.1 Drug-related deaths 2003-2008 broken down by substances

Death causes	Percentage						Figure	
	2003	2004	2005	2006	2007	2008	2008	
1. Overdose of: ¹⁾								
Heroin	31	34	40	38	39	42	603	
Heroin + other drugs	18	22	23	27	26	24	346	
Cocaine	2	2	2	2	1	1	18	
Cocaine + other drugs	6	10	9	9	10	7	108	
Amphetamines	0	0	1	<1	<1	1	15	
Amphetamines + other drugs	1	2	2	3	2	3	42	
Ecstasy	0	0	0	<1	<1	<1	4	
Ecstasy + other drugs	1	1	0	1	1	1	14	
Pharmaceutics/Substitution drugs	4	3	6	5	4	3	39	
- thereof: Methadone/Polamidone						3	43	
- thereof: Subutex (Buprenorphine)						--	<1	1
Substitution drugs + other drugs ³⁾				12	9	9	131	
- thereof: Methadone/Polamidone					8	8	120	
- thereof: Subutex (Buprenorphine)					<1	<1	7	
Narcotic drugs + alcohol + substitution drugs ⁴⁾	24	22	19					
Other narcotic drugs/unknown	9	10	10	8	10	10	141	
2. Suicide ¹⁾	8	7	8	6	6	6	83	
3. Longterm damage	14	12	12	11	12	17	250	
4. Accident/other	3	2	2	13	12	11	153	
5. Total (N)	1,477	1,385	1,326	1,296	1,394		1,449	

1) Due to multiple entries in the categories "overdose" (different types of drugs) and "suicide", the sum of the recorded causes of death is higher than the overall number of drug-induced deaths.

2) Since 2006: substitution substance.

3) Since 2006

4) Does not exist anymore since 2006.

BKA 2009b.

Despite the increase in drug-related deaths between 2007 and 2008 by 55 cases (3.9%), the figure for the larger cities with more than 500,000 inhabitants – with the exception of Nuremberg (2007: 13; 2008: 19; increase: +46.2 %), remained stable or even decreased. This could be a further indication of the contribution made by the drug aid facilities in urbanized areas with a known drug scene to decrease the mortality rate among IUDs.

Regional data from police sources

On 29 January 2009, the annual national experts' meeting on drug-related deaths was held in Munich. The meeting was also attended by one representative of the Bavarian Land Criminal Police Office and one representative of the Forensic Institute Hamburg who reported on current data from their *Laender*.

A special evaluation carried out by the Bavarian Land Criminal Office at the suggestion of the DBDD showed that out of 246 death cases recorded in the year 2008 in Bavaria, 130 (53%) had been in prison before at least once and 33 (13%) had died within the first two months after release from prison. Data on this subject matter are unfortunately not available from other *Laender*.

In total, the increase in drug-related deaths in Bavaria amounted to 1.7%. The average age of the deceased was 33.5 years. 14.2% were not German. 111 death cases were attributable to long-term damage and 7 to suicide. Heroin continues to be the most common reason of death, often also in combination with other substances. In 30% of the cases, toxicological reports were made, in 70% an autopsy was carried out. Methadone/polamidon were the reason for death in 11 cases, so was fentanyl (Landeskriminalamt Bayern, personal communication).

A meeting between representatives of the Forensic Institute and the LKA is held three to four times a year in Hamburg to get an overview of the development of the drug-related deaths. At this meeting, every single death is analyzed to find out whether the death was drug-induced. The Forensic Institute provides some of the funds for the autopsies or toxicological reports if they are not ordered by the department of public prosecution.

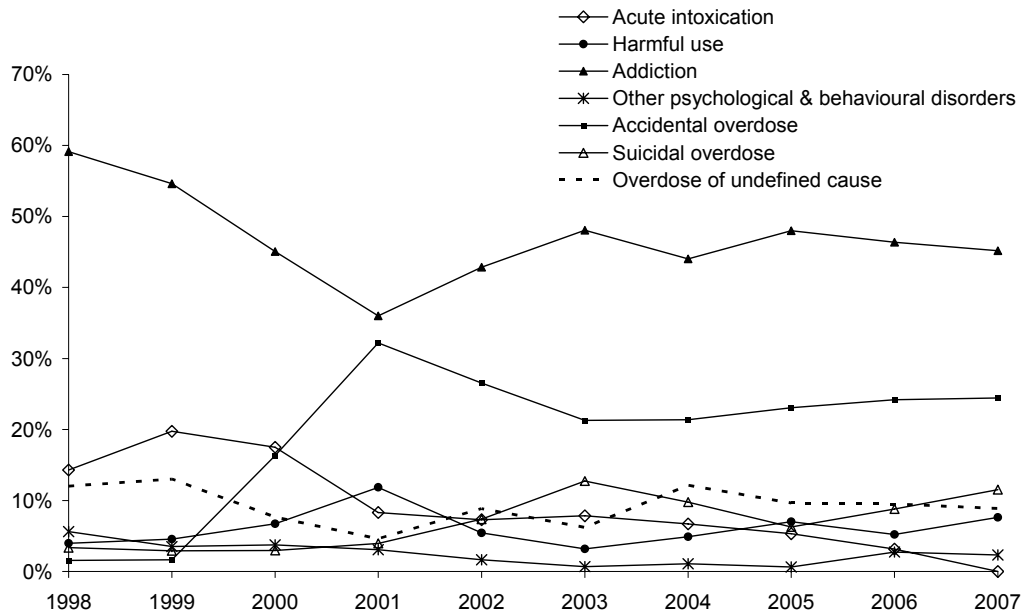
Since 2004, the number of drug-related deaths in Hamburg has been rather stable, lying just below 60. The portion of opioids involved in the intoxications increased again to above 80% in 2008. Methadone was involved in about 30% of the cases. With this, the figure has declined in Hamburg, but it is still the highest in the national comparison. As a reason for this the well established substitution system is mentioned, bringing a higher availability of methadone in its train, with parts of it ending up on the black market. The majority of the drug-induced deaths were not in substitution treatment at the point of death. One GHB-case was registered. Fentanyl-induced deaths were not registered in Hamburg. One needs to know however, that a search for fentanyl is only carried out for special reasons since the analysis of the substance is associated with high expense and requires special equipment (Institut für Rechtsmedizin der Universität Hamburg, personal communication).

In March 2009, the Governmental Administration for Health, Environment and Consumer Protection presented in a press communication the current figures of drug-related deaths in Berlin. In the year 2008, 152 drug-related deaths were registered in Berlin. In the previous year, 158 cases and in the year 2006 173 cases were recorded. 123 of the drug-related deaths were men (81%) and 29 women (19%). Most of them had used several substances at a time (86%). Among the substances detected, heroin continued to lead the league (portion of heroin 2008: 63%, 2007: 77%). The average age of the deceased slightly increased in

2008 to 35.2 years (2007: 34.7 years). Four young people at the age of only 17 years died of drugs in 2008. Since 2005 (195 cases) the number of drug-related deaths has continually decreased in Berlin contrary to the nationwide trend. The health senator attributes the decline to the well established addiction aid system in Berlin which also provides especially low-threshold offers of damage reduction (Senatsverwaltung für Gesundheit, Umwelt und Verbraucherschutz 2009).

Data from the general mortality registry

The most recent data on drug-related deaths recorded by the general mortality registry are available for the year 2007. Data from total of 1,284 persons were collected – 9.8% more cases than in 2006. Among them were 253 women (2006: 248) and 1,031 men (2006: 921) who died in connection with illicit drug use. With this, the number of death cases registered by the general mortality registry in respect of the definition of the EMCDDA has developed in parallel to the increasing number of deaths recorded by the BKA-register (+7.8%). Both registers show similar case figures. The number of drug-induced deaths recorded by the general mortality registry lies 4.6% above all the deaths recorded by the BKA – without taking into account the long-term diseases which were included in the latter, in order to be able to guarantee the comparability of the two registers, albeit to a limited extent. In the data collection year 2007, the underlying disease (addiction, harmful use of the drug, others) was coded as the reason of death in 55% of the death cases (2006: 54%). For the first time however, “acute intoxication” in respect of ICD F1x0 was not coded any more according to current coding rules. In 45% (2006: 46%) of the cases, it is possible to infer the underlying substance combination leading to death from the coding as overdoses in the groups a) accidental, b) suicidal and c) intoxication with unclear motives. This means that in more than half of the cases there are still codings used which do not allow to infer the direct cause of death. The coding behaviour of the *Laender* is still very heterogeneous. In Bavaria, 97% and in Berlin only 14% of the death cases were coded in 2007 only in relation to the underlying disease but not in relation to the cause of death, which continues to restrict the expressiveness of data recorded by the general register of deaths. The regionwide introduction of multi-causal coding of causes of death is however yet to come (figure 6.1).

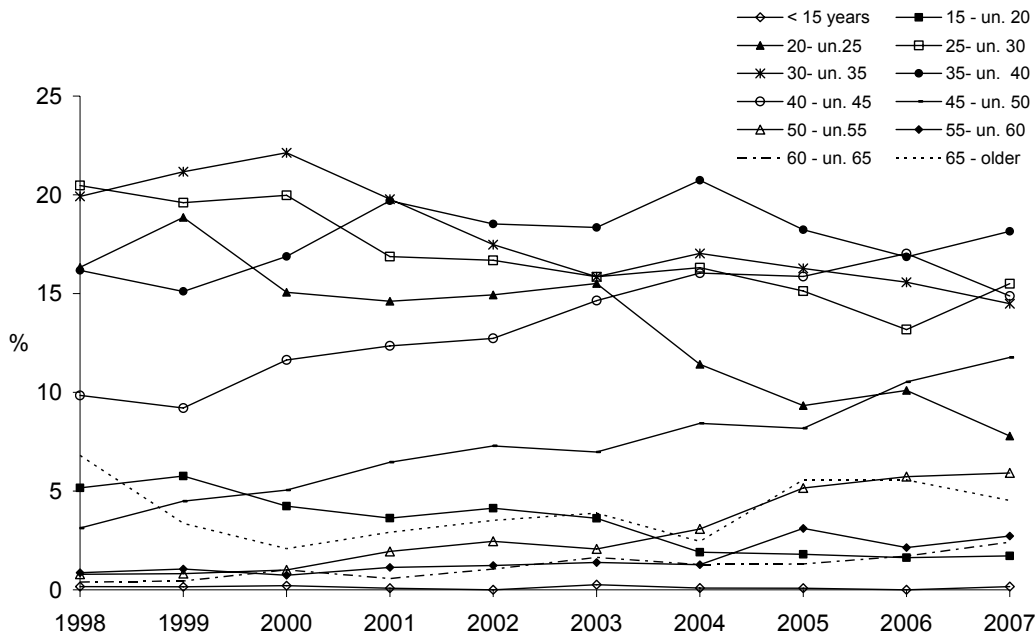


Statistisches Bundesamt, special calculations.

Figure 6.1 Codings of the causes of death in the general mortality registry (1998-2007)

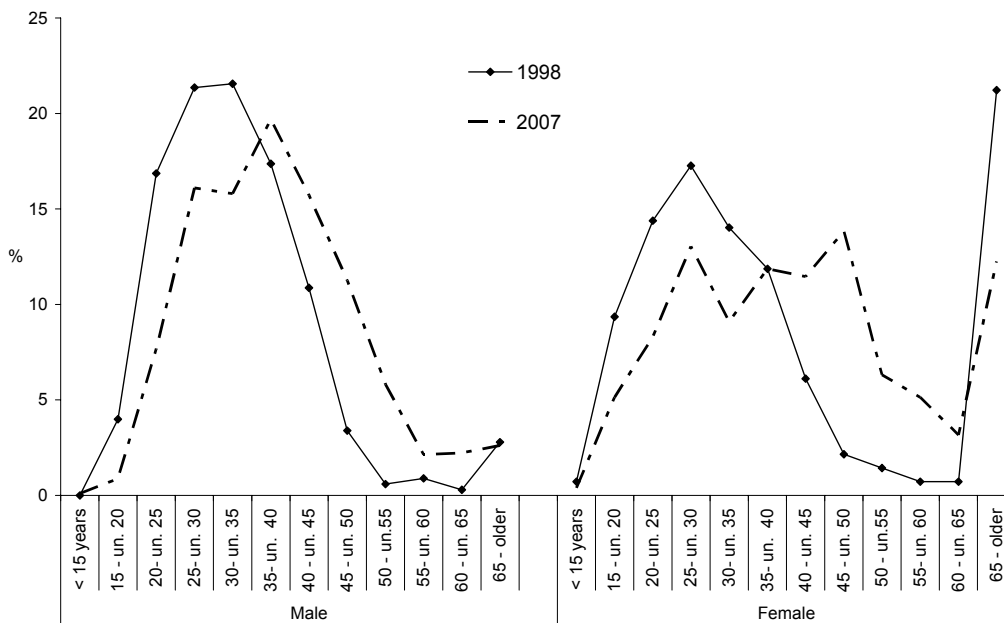
Looking at the age distribution of the drug-related deaths over the last ten years (figure 6.2), one notices that the portion of older drug users, especially of the 45- to 55-year-olds has been increasing for some years. This increase is paralleled by a decline in younger age groups, recently in particular in the one of the 30-45-year olds. These changes together with the also increasing average age of opiate users in outpatient treatment observed over the last years can be taken as an indication of fewer young heroin users to follow.

Differentiating by genders (figure 6.3), one can see that the “shift to the right“ in the comparison between 1998 and 2007 is more pronounced among women than among men. There are moreover indications of a series of wrong codings for women above the age of 65 with medical drug intoxications not related to narcotic drug use appearing in the ICD-selection.



Statistisches Bundesamt, special calculations.

Figure 6.2 Drug-induced deaths broken down by age groups 1998-2007

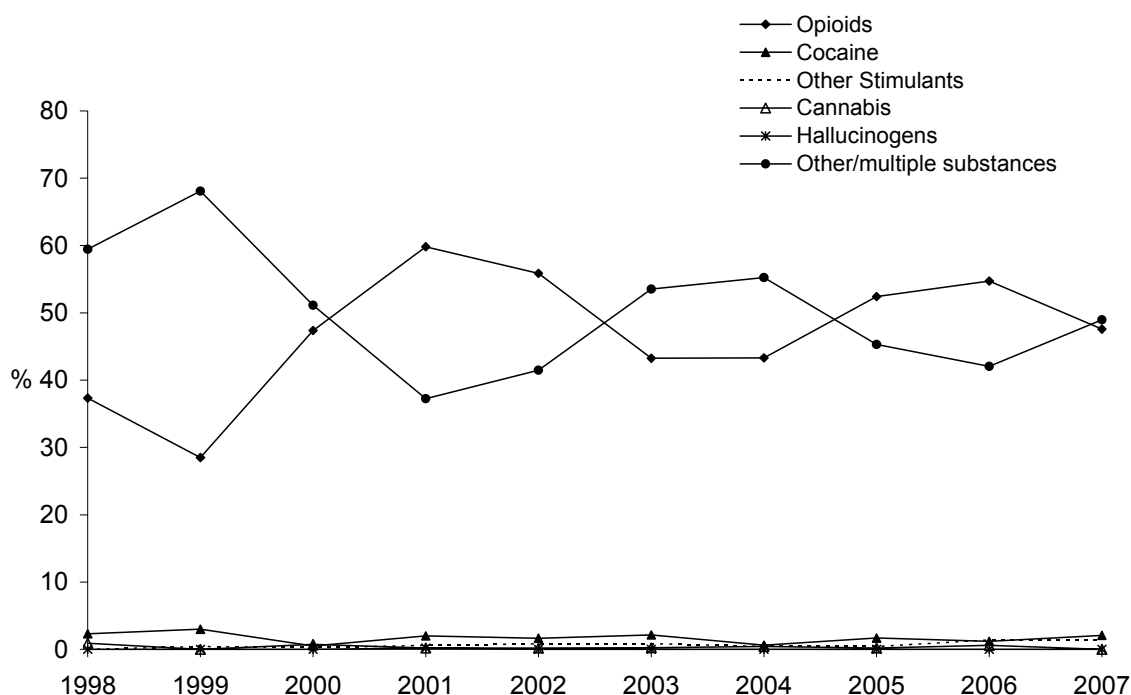


Statistisches Bundesamt, special calculations.

Figure 6.3 Drug-induced deaths broken down by gender and age group in the comparison between 1998 and 2007

Figure 6.4 shows the substances which were the direct cause of death in the respective death case based on relevant ICD-10-categories. However, this information is only available for 46% of the death cases which occurred in the year 2007 (see above). When these death cases were registered, they were coded in the ICD group X/Y as external causes of death.

Apart from monovalent opioid intoxications accounting for 50% of the cases, there was almost exclusively mixed consumption recorded which may have included opioids again. Summarizing, it can be said that there has been a slight trend towards opioids over the last three years until 2006, combined with a relative reduction of the portion of mixed intoxication spectrums. Other substances accounted for maximum 2% of the death cases. It is not exactly known how many of these classifications are actually based on chemical-toxicological data on the spectrum of substances which caused the death. The introduction of a multi-causal coding system for the cause of death will give here as well a much more differentiated picture especially of the mixed intoxications.



Statistisches Bundesamt, special calculations.

Figure 6.4 Distribution of the substance categories in fatal drug overdoses 1998-2007 with ICD X/Y- coding

6.4.2 Mortality and causes of deaths among drug users (mortality cohort studies)

There is no survey available on the mortality of the overall population of drug users nor have there been any regional cohort studies carried out recently. It is however possible to get at least closer to the question by resorting to the data which exist on drug addicts in therapy.

According to the German Statistical Report on Treatment Centres for Substance Use Disorders (DSHS) (Pfeiffer-Gerschel et al. 2009d) for the year 2008, therapy in outpatient counselling facilities ended in 1.2% (2007: 1.4%) of the opioid clients with death (opioid users accounted for 85.1% of the deceased patients recorded by the DSHS in 2008). In order to eliminate the effect of treatment duration, which has increased on average by more than 10

weeks since 2000, a treatment duration of 12 months was mathematically assumed. The resulting mortality per year was at the levels of previous years (since 2000), also in 2008.

However, when looking at these data, it needs to be taken into account that the counselling facilities are not always informed about the death of a client so that the actual mortality – in particular of treatment dropouts - is presumably higher than the value given here. Proceeding on the assumption that knowledge of the facilities about clients' deaths has not changed systematically over the years, it is nevertheless possible to interpret trends in the way presented (table 6.2).

Table 6.2 Mortality of outpatient opioid users – trend

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Death proportion among treatment outtake	1.1%	1.1%	1.2%	1.2%	1.2%	1.4%	1.3%	1.4%	1.2%
Treatment duration (days)	244.3	263.2	280.7	282.1	297.5	305.2	301.7	314.3	321.2
Mortality p.a.	1.6%	1.5%	1.6%	1.5%	1.5%	1.7%	1.6%	1.6%	1.4%

Pfeiffer-Gerschel et al. 2009d and their own calculations.

Data on the mortality of drug addicts are contained in standard table 18.

6.4.3 Specific causes of mortality indirectly related to drug use

There are no recent data available on specific death cases which occurred in indirect connection with drug use.

Data on road accidents in connection with drug use are presented in chapter 9.

7 Responses to health correlates and consequences

7.1 Introduction

Health aspects of drug use are addressed by specific offers provided for drug users as well as within the framework of general health care. Information on the scope and type of measures is generally only available for a part of the specific measures, as these are carried out by specialized facilities or as part of a specific program.

General health care

Data on general health care do not provide any information which could be specifically referred to the group of drug addicts. Except for a few individual cases, there are no data available on the overall number of emergency cases due to overdose or other life-threatening conditions caused by drug use. Nor are there any data on the treatment of secondary diseases carried out in office-based practices or clinics.

Special offers

Outpatient services facilitate access to basic medical care which is generally provided by office-based doctors in their function as medical consultants. Dental treatments which have been put off for a long time and other medical treatments are commonly carried out during inpatient addiction therapy. Basic data hereto are available from the German Annual Statistical Report on Addiction Therapy. In a few *Laender*, specific projects on dental hygiene and infection prophylaxis are offered as part of low-threshold drug aid.

7.2 Prevention of drug-related emergencies and reduction of drug-related deaths

Various targeted approaches are used to prevent drug-related deaths: they range from programmes for drug emergency prophylaxis that comprise training in the use of naloxone over offers providing immediate help (“therapy now”), the provision of drug consumption shelters to the expansion of substitution therapy as the most important measure. Apart from data on substitution treatment (see chapter 5) there is also updated information available on some consumption rooms.

Drug consumption rooms

In view of the still highly risky use pattern linked with heroin, drug consumption rooms and low-threshold facilities play an important role in offering help for addicted people at an early stage. Drugs are brought along to drug consumption rooms by the drug users themselves. Infection prophylaxis forms systematically part of the service provided. Paraphernalia brought along to the consumption rooms may not be used. The goal of this initiative is to secure the survival and stabilization of the health conditions of the drug users as well as to attract drug users who can otherwise not be reached by the system in order to provide them with motivational offers to quit drug use. Based on §10a of the Narcotics Act, which defines minimum

requirements for the operation of these facilities, the governments of the *Laender* may pass regulations specifying the authorization criteria to be fulfilled for setting up and running drug consumption rooms. In 6 out of 16 *Laender*, corresponding regulations have been passed. According to a survey carried out among the *Laender*, there are currently 27 drug consumption rooms with 220 consumption places attended to by 87 staff (Flöter & Pfeiffer-Gerschel 2009).

The contact and communication facility "Fixpunkt" in Hanover reports about more than 26,796 drug use activities that took place on their premises in 2008 (2007: 34,706; 2006: 29,332; 2005: 35,109). 18% (4,782) of these were carried out by women. In Hanover solely injecting use of heroin (95%), cocaine (2.5%) and the mixed use of heroin and cocaine (2.5%) are documented (Step 2009).

Supported by the German AIDS Help Organisation, the Centre for Interdisciplinary Addiction Research of the University Hamburg carried out a survey in the year 2008 among 900 drug addicts who make use of drug consumption rooms. It shows that the group of heroin addicts who make use of these low-threshold facilities has considerable educational deficits. More than 16% have no school leaving qualification, more than 40% only a lower secondary general education certificate. More than 50% have no completed vocational training. Almost 20% live with friends or acquaintances or in emergency shelters, 4% live on the street. Little less than a quarter is female, another quarter has a migration background. More than 90% have been held up by police for possession of drugs at least once, almost 80% have already been in prison. A quarter continued with drug use in prison and also shared injection paraphernalia. Less than a third had substitution treatment in prison.

Nearly all interviewees use heroin almost daily. Only in Hamburg and Frankfurt about a half of the clients use crack. Heroin is injected by 75%, crack by 35% of the interviewees. Since needle sharing is relatively common within this group, the offer of drug consumption rooms providing hygienic consumption utensils for this group of long-term addicts who are otherwise difficult to reach, is all the more important. The answer given to the question which help offers are important for the people affected were consumption rooms and contact cafés, followed by medical care and syringe exchange. For 80% of the interviewees, counselling is also rated important and for a third the referral to substitution and withdrawal treatment. A third makes daily use of the consumption rooms, 40% several times a week. All in all, it shows that the offer reaches the group of the most severely addicted people who are otherwise not or not easily reached by other help offers (Die Drogenbeauftragte der Bundesregierung 2009).

7.3 Prevention and treatment of drug-related infectious diseases

Prevention of drug-related infectious diseases by low-threshold work

The prevention of drug-related infectious diseases in low-threshold drug aid is mainly based on the provision of information on infectious diseases and risks as well as on the distribution and exchange of syringes together with the distribution of safer-use articles. Distribution and

exchange of syringes in low-threshold work is explicitly permitted under the Narcotics Act and is also practiced in many locations. According to the Drug and Addiction Report presented by the Federal Government Commissioner on Narcotic Drugs (2009) at least 25 of the 1,000 recognized outpatient counselling facilities and contact shops offer syringe exchange programmes. National statistics on the exact number of distribution locations or the number of distributed needles are not available. However, indications of developments and trends may be possibly gleaned from reports of individual facilities or supporting organs.

In the year 2008, 168,112 syringes were exchanged or sold in the Café “Connection“ in Hanover (2007: 74,743) (see also 6.3.1). The scene café “inkognito“ in Hameln had on average 25 clients per day and a total of 5,901 contacts in the year 2008. Syringes were exchanged or sold 31,162 times (2007: 19,331). The exchange and sale of syringes increased in response to the increase in the number of clients. Safer use articles (alcohol swabs, ascorbic acid, sterile water, plasters, filters, condoms etc.) were provided 15,896 times (2007: 10,778). 2,089 information sessions on the topic of health promotion were held (2007: 1,125) (Step 2009).

The Berlin contact and communication facility “Fixpunkt“ is carrying out a pilot project from October 2008 to September 2010 to develop and evaluate hepatitis C prevention measures. The project is funded by the Federal Ministry for Health, supported by the governmental administration of Berlin and scientifically evaluated by the Research Institute ZIS (Hamburg). The goal of the project is to approach drug users at an early stage of their “drug career“. To this purpose, possibilities of approaching drugs users and activity fields outside of the classic drug aid system are to be activated and used. The good-practice models identified within the project are prepared in such a way that they can be further developed and carried out by other facilities as well. The project is mainly implemented in contact facilities offering drug consumption rooms in Berlin (Die Drogenbeauftragte der Bundesregierung 2009).

The relevance of the systematic provision of safer-use articles within the framework of low-threshold offers is also underlined by a survey recently conducted by Giesel et al. (2008). The authors surveyed patients of the heroin ambulatory in Hanover in the year 2006 (N=28) and found that illicit injecting use of methadone linked to health problems is not uncommon among opioid users. But this topic is seldom addressed by the people affected out of fear of criminal prosecution or exclusion from substitution treatment. There are hardly any special information offers provided on safer use in particular for the consumption of methadone.

Treatment of HIV in drug users

Backmund et al. (2008b) stated in their draft of the therapy guidelines of the German Society for Addiction Medicine, the German Aids Society (DAIG) and the German work group of office-base practitioners on HIV-infections of IDUs that IDUs should be in a stable substitution therapy at the beginning of the anti-retroviral therapy (ART). IDUs who wish to undergo HIV-therapy and have an indication for it, but do not want to undergo substitution treatment, are to be offered HIV-therapy. For IDUs who are not in a stable substitution therapy, an ART-regime is to be chosen which only needs to be taken once per day.

In an overview recently presented on the treatment possibilities of HIV-infected drug addicts, Backmund (2008) concludes again that substitution therapy is the best setting both for the prevention of infections with HIV and hepatitis viruses and for the treatment of somatic diseases. He also underlines the importance of the cooperation between addiction and HIV-specialists. According to the author, substitution therapy can also provide the framework for an effective treatment of HIV-infection of drug addicts provided that addiction-specific medical and infectiological knowledge is combined in the therapy. In his overview Backmund estimates that 7% of the new HIV-infections are drug users who are mostly co-infected with hepatitis C. Backmund estimates the HIV-prevalence among drug users at 5%.

Treatment of hepatitis C in drug users

Within the framework of a naturalistic, prospective and representative longitudinal study conducted among 2,414 opioid-addicted patients (COBRA-study, cf. also the REITOX Reports 2007 and 2008) Schäfer et al. (2009) investigated the question

- whether antiviral treatment during substitution therapy is connected with increased psychopathological symptoms and lower quality of life (12-months-follow-up) and
- whether antiviral treatment during substitution therapy is in connection with changes over the course of time and treatment results after 12 months.

It showed that two thirds of the patients in substitution therapy were HCV-infected, but only about 10% received antiviral treatment. HCV-infected patients who received interferon therapy did not differ from the patients without antiviral therapy in terms of psychopathological symptoms and quality of life. The interferon therapy did not impact the reliability and effectiveness of substitution therapy.

Ebner et al. (2008) showed in a small random sample (N=17) drawn in their therapy centre that HCV can be effectively treated in stable opioid-addicted patients (6 months substitution treatment, no alcohol abuse, no personality disorders, no HIV-co-infection, no lung disease). At the follow-up examination 48 weeks after treatment, 88.2% of the patients were virus free. The authors report that severe depressive episodes and suicidal thoughts in the patients could be avoided thanks to the early introduction of antidepressant therapy.

Schulte et al. (2008) too showed in their survey conducted among N=27 patients undergoing both heroin-maintenance therapy and antiviral HCV-therapy that despite considerable health problems, 17 patients (out of 21 who finished treatment as scheduled) displayed a sustained virus response (SVR) six months after the end of treatment. The results do not only show the feasibility of the therapy of severely opioid-addicted patients but also that the outcome of therapy greatly depends on patients' adherence and an adequate management of the side effects.

Neubacher, too, (2008) concludes that an HCV-therapy of opioid-addicted patients in substitution therapy or after withdrawal treatment is very feasible and recommendable. In an appropriate setting early termination of the interferon/ribavirin therapy is seldom, the side-effects are controllable, psychiatric comorbidity does not represent an absolute contra-

indication, a depression occurring during HCV-therapy can be effectively alleviated by selective serotonin reuptake inhibitors (SSRI) and often co-consumption of illicit substances also declines.

At a round table meeting held on 6 March 2009 in Berlin on the therapy of chronic hepatitis C in IDUs, the participants agreed that even existing co-consumption of benzodiazepine and alcohol does not necessarily constitute an exclusion criterion for HCV-therapy; crucial for the therapy outcome is however patient compliance. The experts also noted that for addiction patients, HCV-therapy is often much more than the treatment of a liver disease – especially in terms of the psychosocial gain. According to the authors, the hepatitis-C-virus is also identifiable in the brain post-mortem and is associated with causing depression and the chronic fatigue syndrome. Thus, the treatment of hepatitis C does not only serve to treat a liver disease but probably neuropsychiatric disorders as well (Schäfer 2009).

7.4 Responses to other health correlates among drug users

A big problem in the substitution therapy of opioid addicts is posed by their common dependence on at least one other addictive substance. This makes it difficult to reach the goals of substitution therapy like the improvement of mental and physical health or social integration.

A recent literature review published by Scherbaum (2008) shows in international meta-analyses that cognitive behavioural group therapies and contingency management (CM) offered during substitution therapy help to reduce co-consumption (in particular of cocaine). However, controlled studies carried out by his work group to investigate the effectiveness of CM under routine conditions relativize the expectations placed on CM in the well equipped studies conducted on selected patients at university centres. They do however show the effectiveness of cognitive-behavioural group therapy but not of CM in polyvalent drug use.

Further information on health problems are also contained in chapter 5 (in the passages on substitution therapy).

8 Social correlates and social reintegration

8.1 Introduction

Drug use is often linked with difficult family and personal life circumstances. While it may be a consequence of these circumstances, it can also aggravate the situation and worsen the drug users' outlook for the future. The social framework conditions under which drug use takes place illustrate the marginalization especially of individuals with intensive drug use.

Some indication of the aggravated general living conditions of drug users can be gleaned from socio-demographic data of treatment documentation. Opioid-addicted members of the open drug scene are affected the most. Insight into the situation can be gained from data provided by the German statistical report on treatment centres for substance use disorders, the short reports of the *Laender* (cf. footnote 24 in chapter 5.2) and the regional monitoring systems used for example in Hanover, Frankfurt and Hamburg.

8.2 Social exclusion and drug use

8.2.1 Social exclusion among drug users

According to the DSHS data, almost every fifth client of outpatient therapy facilities with primary opioid problems (17.2%) and about every sixth client with primary cocaine-related problems (16.0%) and about a quarter of the cannabis clients (23.5%) did not have any school leaving qualification at the start of therapy. More than half of the clients with primary opioid-related problems (59.1%) are without a job at the start of therapy and so are a bit more than a third of the clients with primary cannabis- and cocaine-related problems (35.8% and resp. 37.4%) (table 8.1). In general, this situation practically does not change until the end of therapy. While as for cannabis clients, this may be simply due to the relatively young age, the rest (in particular opioid addicts) are mostly early school leavers (Pfeiffer-Gerschel et al. 2009d). In the year 2007, a total of 4,809 opioid clients (2006: 4,851) who made use of outpatient addiction help were registered within the framework of the status report of the Hamburg basic documentation system (Verthein et al. 2008). Out of these, 80% (2006: 82%) lived in stable housing conditions, but 70% (2006: 69%) were without a job or respectively without income. A total of 88% (2006: 87%) had at least a lower secondary school leaving qualification (table 8.1).

Since 2007, there are also data available within the framework of the DSHS based on evaluations carried out by low-threshold facilities (N=22) themselves. According to these evaluations, the socio-economic conditions of the clients who sought help from low-threshold facilities in 2008 are even worse than those found in other help areas. As can be seen in table 8.1, the figures for missing school leaving qualifications, unemployment and homelessness are for all substances higher than in clients in outpatient therapy. However, the percentage figures can only be interpreted with limitations since out of the total of 23 low-threshold facilities taken account of in the DSHS, only a maximum of 13 provided data on the

school leaving qualifications, 17 on the economic situation and 14 on the housing situation and the absolute figures of clients with illicit drug problems (there are 1,009 valid entries on the school leaving qualification, 1,001 on the economic situation and 1,515 on the housing situation) are relatively low (Pfeiffer-Gerschel et al. 2009b). Moreover, the total number of low-threshold facilities participating in the DSHS represents with N=23 only a small fraction of all treatment offers made in Germany and there is no information provided on the representativeness of the sample.

Table 8.1 Social situation of persons in outpatient therapy and low-threshold facilities broken down by main drug

Substance	Outpatient treatment			Low threshold facilities		
	without graduation ¹⁾	without employment ²⁾	without home ²⁾	without graduation ¹⁾	without employment ²⁾	without home ²⁾
Alcohol	6.0%	41.8%	0.5%	30.6%	43.6%	6.9%
Opioids	17.2%	59.1%	2.6%	23.0%	76.3%	8.7%
Cannabinoids	23.5%	35.8%	0.7%	31.2%	41.2%	1.1%
Sedatives/Hypnotics	5.5%	37.4%	0.2%	66.7%	100.0%	0.0%
Cocaine	16.0%	37.4%	1.2%	32.9%	60.5%	6.5%
Stimulants	14.8%	39.9%	0.7%	29.0%	59.1%	4.7%
Hallucinogenics	10.7%	50.0%	0.0%	0.0%	0.0%	0.0%
Tobacco	12.2%	9.9%	0.2%	0.0%	0.0%	0.0%
Volatile substances	40.0%	34.5%	0.0%	0.0%	0.0%	0.0%
Mult./other subst.	17.7%	54.3%	1.9%	0.0%	0.0%	0.0%

1) Or still at school.

2) On the day before the start of treatment.

Pfeiffer-Gerschel et al. 2009b; 2009d.

Even worse is the social situation of the members of open drug scene in Frankfurt. As in 2006, 44% of the drug users of the open scene lived in precarious housing conditions (homelessness, emergency shelters) in 2008. However, the number of homeless declined from 14% (2006) to 12% (2008). While housing conditions have slightly improved for the male members of the drug scene, they have remained unchanged or have become rather worse for the females. The portion of scene members without school leaving qualification significantly rose between 2006 (43%) and 2008 (57%).

In an interview given to the „Tageszeitung“ (taz-online, 10.03.2009) the head of the low-threshold drug aid facility “Fixpunkt”, Astrid Leicht, describes the open drug scene at the Kottbusser Tor in Berlin: The group is made up of 300 heroin addicts out of whom 100 form the core group. The large majority of the clients are male (approx. 80%). Migrants (especially from the Turkish-Arabian region) account for about 30%. Thanks to various drug aid programmes offered (in particular substitution and syringe exchange), the clients generally get older. Polytoxicomania (opioids + alcohol + medical drugs and other drugs) is however to be

found in the large majority of this group. The closure of a drug consumption room and a parking garage close by have led to more consumption activities taking place in public which provoked the disapproval of the people living in the neighbourhood although (also according to police) molestation and physical assaults tend to be exceptions. In order to curb the public drug scene, Mrs. Leicht suggests to find a new location for a drug consumption room and to treat also severely addicted people in Berlin with diamorphine.

8.2.2 Drug use among socially excluded groups

The topic addiction and migration has been receiving increasing attention in expert circles and scientific studies only since the middle of the nineties although almost a fifth (18.6) of the population in Germany meanwhile has a migration background as found by the microcensus 2005. Several surveys found higher incidences of addiction diseases among people with a migration background. Schouler-Ocak & Haasen (2008) point out in this connection that adequate care of the population requires culture-specific counselling and treatment strategies as well as low-threshold access. According to the authors, adequate care can only be provided when the explanatory models for addictive behaviour, attitudes and expectations of the target group are known.

8.3 Social reintegration

Last years' revision of the German Social Security Codes has created a series of preconditions for an improvement of the social reintegration also of people with substance-related disorders. More details on this can be found in the REITOX-reports of the years 2005, 2007 and 2008.

The "Law on the further development of the basic social assistance for people in search of work" effective as of August 2006, has laid down comprehensive regulations for the status of persons in inpatient facilities with regard to their right to basic social government care.

In connection with the health reform which entered into effect on 1 April 2007, not only parent-child-cures and geriatric rehabilitation but also medical rehabilitation for addicted individuals were included in the catalogue of standard insurance benefits.

Within the framework of the countrywide expansion of outpatient rehabilitation for substance abusers, the number of outpatient addiction support facilities and daycare facilities authorized to carry out rehabilitation treatment grew to a total of about 470 in 2008. The outpatient treatment offer was complemented by the opening of two further daycare rehabilitation facilities in 2008 (Die Drogenbeauftragte der Bundesregierung 2009). This expansion forms the basis for setting up regional treatment networks which can assure outpatient and inpatient care at regional level and at the interface between care levels. Within the framework of an 18-month demonstration project carried out by the former Landesversicherungsanstalt Sachsen (LVA) (Land Insurance Agency Saxony), the formerly required social report is dispensed with in the application procedure for rehabilitation treatment. This is to considerably shorten the application procedure for persons suffering from addiction.

There are data available on day-patient facilities of social therapy from the nine *Laender* (Flöter & Pfeiffer-Gerschel 2009). All in all, there are 139 facilities of this type with 1,832 treatment places spread over these *Laender*. However, it is not possible to differentiate between clients with licit and illicit drug use problems.

8.3.1 Housing

There is a series of offers available for drug addicts to tide them over homelessness. Statistical material on this is contained in the *Laender* short reports for the reference year 2008 (Flöter & Pfeiffer-Gerschel 2009). 840 facilities offer assisted living for 10,257 people. The transition from inpatient therapy to a fully self-sufficient life is to be facilitated by adaptation facilities. 126 of these are spread across the country (data available from 15 *Laender*) offering transitional support for 1,292 clients (data available from 13 *Laender*).

8.3.2 Education, training

In the last few years, a series of measures to improve integration of jobless people with handicaps into the labour market has been tested. Generally, these measures have not been specifically developed for people with substance-related problems, but they are commonly found among the target group of these activities. Parts of the test results have been taken into account of in the revision of the Social Security Codes II, III and XII.

Many facilities complement therapy by offering promotional programs for drug addicts to support educational attainment and vocational training or to provide orientation for their professional life. Drug addicts are also given the opportunity to catch up on missing school leaving qualifications within the framework of external school projects. Vocational training is made possible through close cooperation between craft and industry. However, in view of the high unemployment figures and the rather declining financial resources allotted to this area, an improvement of the situation is not in sight.

Klein and Schaunig (2008) interviewed 3,777 students from grades 6 to 12 in Cologne on their consumption of alcohol, tobacco, cannabis and other illicit drugs. Within the framework of this survey, city-specific use patterns of adolescents were investigated and differentiated analyses on type of school, school and social environment carried out. The survey yielded substantial differences among the teenagers depending on the type of school, social situation and school environment. It showed that students of grammar schools in quarters with a good social background displayed higher consumption rates for alcohol and cannabis than students from lower- and middle-level secondary schools from socially underprivileged quarters. These results underline that the average figures found within the framework of surveys carried out at a national level are only of limited validity for the development of local prevention or integration programmes since use patterns may vary enormously at local level.

Former drug addicts, people at risk of becoming addicted or addicts undergoing substitution therapy can earn a lower-level secondary school qualification (course duration: 1 year) and a middle-level secondary school qualification (course duration: two years) in a second-chance course offered by the STEP-Therapy-School in Hanover. In the year 2007, 27 out of a total of

105 course participants were under 20 years of age, 52 were between 21 and 25 years, 18 between 26 and 30 years and 8 over 30 years of age. Corresponding to the age of the participants, 20% of the costs of the courses were borne by youth aid (§§ 35 a, 41 SGB VII) and 80% by the social security administration (§§ 53 ff SGB VII). 27 of the originally 50 participants finished the course with a school leaving qualification (12 of these with a middle-level secondary school qualification). Twelve students were relegated and eleven dropped out (Step 2008).

8.3.3 Employment

The anyway tense situation on the labour market makes it difficult for substance dependent people to reintegrate into professional and social life. The unemployment quota among drug addicts is extremely high – depending on the severity of the problem up to 80%. Studies show however that social and professional integration is a crucial indicator for sustained abstinence.

The integrative approach adopted by the Social Security Codes II (SGB II) enables socio-integrative services to be provided in addition to the instruments of employment promotion. An integral part of these supporting integration services is addiction counselling (§ 16 paragraph 2 p. 2 no. 4 SGB II).

Addiction counselling as a service to be provided in respect of SGB II falls – like the other socio-integrative integration services - under the organisational and financial responsibility of the municipalities. The Federal Ministry for Employment and Social Affairs assumes supervisory functions defined by SGB II insofar as the Federal Employment Agency is the service provider but not with regard to services provided by the municipalities. These are placed under the supervision of the *Laender*. This is the reason why the Federal Government currently does not have any computed data at hand on specific measures or activities carried out with regard to drugs and addiction in the field of basic social care.

Following the recommendations passed by the National Board on Drugs and Addiction in November 2007 (cf. also Reitox Report 2008), the Federal Ministry for Health tasked a consortium made up of the “Forschungsteam Internationaler Arbeitsmarkt (FIA) (Research Team International Employment Market), Berlin“, Prof. Dr. Henkel (until summer 2008 Technical College Frankfurt/M.) and Zoom – Gesellschaft für prospektive Entwicklungen e.V., Göttingen (Society for prospective developments), to collect data on measurements, initiatives and cooperations undertaken by the working groups formed between the municipalities and the employment agencies (Arbeitsgemeinschaften ARGEn), institutions of the opting municipalities as well as social security administration – each according to their responsibilities defined within the framework of the Social Security Codes (SGBII) with regard to counselling and referral of addicted people or people at risk of developing addiction. Moreover, best-practice approaches tested over the last years with regard to the integration of addicted job seekers into the labour market are to be identified and documented. The findings of the study are expected to be presented in the REITOX Report 2010.

The Federal Ministry for Health supports the demonstration project FAIRE together with the Land Rhineland-Palatinate to improve the integration of people undergoing rehabilitation therapy into the labour market (see also REITOX Report 2008). In cooperation with the Land Mecklenburg-Western Pomerania, the Federal Ministry for Health has moreover been promoting the transfer of FAIRE in Mecklenburg-Western Pomerania since October 2008 (Die Drogenbeauftragte der Bundesregierung 2009).

According to a synopsis of the short reports of the *Laender* (Flöter & Pfeiffer-Gerschel 2009), there existed 232 work and employment projects with 3,342 places for people with addiction-related problems across the country in 2008 (data were available from 13 or respectively 11 *Laender*). With this, the number of projects and places available has almost doubled in comparison with the year 2004 (124 facilities with 1,787 places).

The example of STEP (2008) shows how difficult it can be to assign suitable candidates to a post: out of the 120 referrals by the working groups formed between the municipalities and the employment agencies (*Arbeitsgemeinschaften ARGE*n) in the year 2007, 93 candidates were invited for an interview, 43 of them did not show up for it. 23 candidates turned down the job offer (mostly one-Euro-jobs according to SGB II § 16); 16 preferred measures offered by other providers. Three did not turn up any more after signing the contract and eight turned out not be suited for the projects (guards at bicycle stations, movers, gardeners...etc.). Given their educational and vocational handicaps, it is a success for most of them not to drop out of the job creation measure. A total of eleven participants were able to transfer from the one-Euro-jobs to regular employment or self-employment.

The current employment situation among the members of the open drug scene in Frankfurt/M. has apparently slightly deteriorated again. In the year 2008, only 1% had a full-time job. About a fifth was without a job, most of them for a long time. At 4.9 years, the average duration of unemployment reaches the so far highest level in the year 2008 (2006: 4.6 years). The more a drug addict is attached to the scene, the more difficult it is obviously to reintegrate him into working life - the duration of unemployment increases with the intensity of the attachment to the drug scene.

Corresponding to the portion of unemployed, the large majority of the interviewees (around a quarter) receive public assistance (unemployment benefits and supplementary welfare benefits). While the portion of those who depend on social welfare benefits as their main source of income tends to increase, the portion of drug users who are able to secure livelihood through regular jobs or employment is on the decline. Apart from these sources, especially drug trafficking and prostitution (in the year 2008 exclusively by women), but also family/partners as well as other legal and illegal possibilities are used as sources of income. As found by all previous surveys, half of the interviewees manage to secure their livelihoods by exclusively legal ways. Both the average income realized and the average expenses effected for drugs significantly increased in the year 2008 (to approx. 590 Euro or respectively 480 Euro per week). The portion of the available resources expended for drugs has not changed (Werse et al. 2009).

Promotion by the German National Statutory Pension Insurance

Within the framework of the content-related and structural further development of existing rehabilitation offers, the targeted promotion of employment opportunities of jobless rehabilitants by the German National Statutory Pension Insurance (Deutsche Rentenversicherung Bund) at national level has become an integral part of the therapy for persons with addiction-related illnesses. It comprises for example indicative groups with regard to unemployment and trainings for job application. From the viewpoint of the social security administration, the central goal of addiction therapy is to restore the working capacity. Apart from somatic aspects also psychological factors – i.e. personal and social competences of the clients – are taken into account to prepare clients for working life.

Persons with drug-related problems do not seldom form part of the target groups of specific programs offered by employment agencies to promote reintegration of long-term unemployed people on the labour market. However, in general, the available statistical material does not provide specific data on this sub-group, so that measures undertaken and results achieved for this group cannot be presented separately in this report.

Social assistance and welfare benefits

People suffering from addiction are entitled to the same social assistance services – among these also outreach services - and welfare benefits from the government, employment agencies and social insurance funds as other needy groups. However, discriminating statistics are not available.

9 Drug-related crime, prevention of drug-related crime and prison

9.1 Introduction

As the possession of drugs is illegal, the most important negative consequences drug users face in this respect, not only in the EU member states, are penal sanctions. The Federal Criminal Police Office (Bundeskriminalamt, BKA) differentiates in its statistics on drug-related crimes between punishable acts in terms of violations of the Narcotics Act (Betäubungsmittelgesetz, BtMG) and cases of direct economic compulsive crime. The first ones are subdivided into four different groups of offences:

- General offences in terms of §29 BtMG (especially possession, purchase and distribution, so-called consumption-related offences)
- Dealing/trafficking in and smuggling of narcotic drugs in terms of §29 BtMG,
- Illegal import of narcotic drugs in non negligible quantities in terms of § 30 BtMG
- Other offences against the BtMG

Prosecution of economic compulsive crimes is mainly related to theft and robbery.

9.2 Drug-related crime

9.2.1 Drug law offences

In the year 2008, a total of 240,000 drug law offences were registered, out of these around 169,000 were general offences committed against the Narcotics Act and about 56,000 drug dealing/trafficking offences. With this, drug-related crime decreased again by 3.4% compared to the previous year (BKA 2009b).

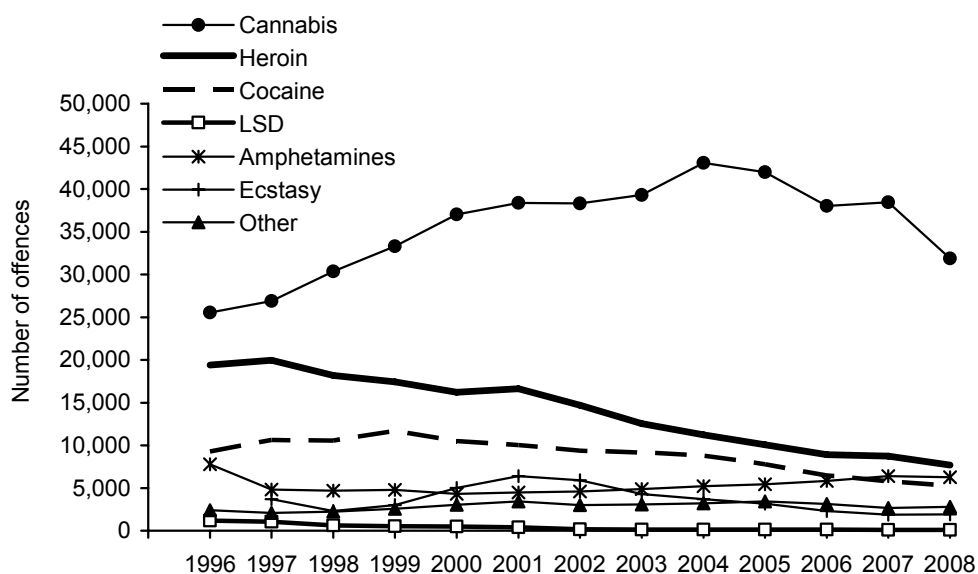
Direct economic compulsive crimes

Direct economic compulsive crimes are taken as referring to all criminal offences which are committed in order to obtain narcotic drugs, substitute or alternative drugs. In 2008, 2,698 cases (2007: 2,540; 2006: 2,234) of direct economic compulsive crime were registered by the Police Criminal Statistics (Polizeilichen Kriminalstatistik, PKS). With this, the number of this type of offences increased again by 6.2% in the reporting year (2006 vs. 2007: +13.7%). Almost three quarters (72.7%) of these offences are related to forgery of prescriptions or theft of prescription forms to get access to narcotic substances (BMI 2009).

Drug dealing/trafficking crimes

These crimes are related to offences committed in connection with commercial/professional dealing in narcotic drugs or smuggling of larger quantities of narcotic drugs. Just as consumption-related crimes, all dealing/trafficking crimes recorded by police are taken account of in this report irrespective of the outcome of later legal proceedings.

Both in terms of portions and absolute figures, cannabis plays the most important role in offences related to dealing/trafficking (31,868 offences, 57.0% of all offences; 2007: 38,460, 60.0%), followed – at a great distance – by heroin (7,687, 13.8%; 2007: 8,752, 13.7%) (figure 9.1). The number and portion of trafficking crimes in connection with heroin and cocaine (5,278, 9.4%; 2007: 5,822, 9.1%; 2006: 6,462, 10.0%) have slightly declined over the last years. Since the year 2000, the number of offences involving amphetamines has been continually climbing. In 2008, amphetamines accounted for 11.2% (6,282; 2007: 6,405 offences, 10%; 2006: 5,858, 9.0%) of all trafficking offences pushing cocaine out of third place again (as in the previous year) on the list of substances (BKA 2009b).



BKA 2009b.

Figure 9.1 Development of trafficking crimes

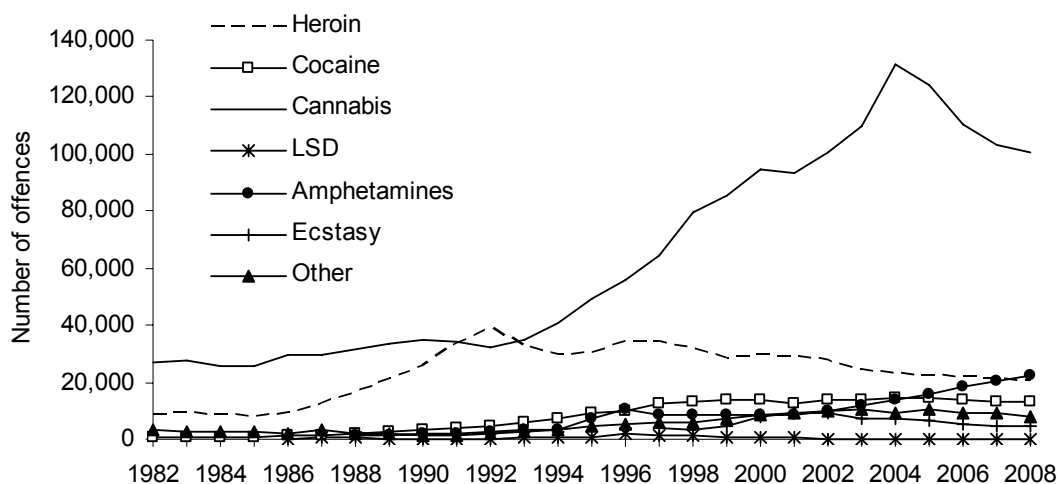
9.2.2 Consumption-related offences³¹

This section is about drug offences which are - due to the frame conditions (quantity, persons involved) - classified by police as "general offences" and are therefore taken as referring to consumption-related offences.

The Police Criminal Statistics (BMI 2009) show that in this category of offences cannabis plays a predominant role accounting for about 59.4% of all cases. Heroin (12.1%), amphetamines (13.3%) and cocaine (7.6%) make together 33.0% of all recorded cases, the rest are spread, at a similar scale, over ecstasy, LSD and other drugs. The decline of the overall figure (2008: 169.386; 2007: 171.496) was only -1.2%. While the number of offences de-

³¹ The term "consumption-related offences" is used to describe general offences committed against the Narcotics Act (Betäubungsmittelgesetz, BtMG). The offences committed in violation of § 29 BtMG comprise possession, purchase and distribution of narcotic drugs and similar offences.

clined for all other types of drugs in 2008 (cannabis: -2.2%; heroin: -2.4%; cocaine: -0.3%; ecstasy: -3.0%; other drugs: -12.8%), the number of amphetamine-related offences rose again by 10.0% (2008: 22,509; 2007: 20,468; 2006: 18,329) (figure 9.2).



BMI 2009.

Figure 9.2 Development of consumption-related offences

Users of hard drugs who have come to the notice of police for the first time

Alongside data on drug-related offences, the Federal Criminal Police Office also publishes statistics on persons who have come to the notice of police for the first time in connection with hard drugs. These statistics represent a kind of incidence measuring. However, the entries made on these persons have to be erased after a certain legally defined period of time provided no new offences have been committed in the meantime (generally, the data are stored for a period of ten years for adults, for a period of five years for adolescents and for two years for children; in cases of minor importance, the periods may be shortened respectively). In this way, an unknown number of repeat offenders is wrongly classified as "having come to the notice of police for the first time" and the measured incidence overestimates the actual value.

After having slightly fallen from year to year since 2004, the overall figure of users of hard drugs who have come to the notice of police for the first time, increased again for the first time in the year 2008. A total of 19,203 cases were registered in 2008 (2007: 18,620; +3.1%; 2007 vs. 2006: -3.6%). The most pronounced decline was found for crack (2008: 350; 2007: 498; -29.7%). Heroin (2008: 3,900; 2007: 4,153; -6.1%) and other drugs too (2008: 286; 2007: 311; -8.0%) were on the decline. The figures found for amphetamines, (2008: 10,631; 2007: 9,949; +6.9%), ecstasy (2008: 2,174; 2007: 2,038; +6.7%), cocaine (2008: 3,970; 2007: 3,812; +4.1%) and LSD (2008: 158; 2007: 145; +9.0%), by contrast, went up.

The users of amphetamines who have come to the attention of police for the first time meanwhile account for 55.4% of the total of substance-abusing first-time-offenders (heroin: 20.3%; cocaine: 20.7%, ecstasy: 11.3%, crack: 1.8% and others incl. LSD: 2.3%)³². These statistics only contain data on so-called “hard” drugs leaving cannabis-related offences out of account.

When analyzing the trends, it needs to be taken into account that the number of those coming to police notice for the first time, also depends on the intensity of criminal prosecution. Drug-related crimes are control crimes, i.e. the higher the control, the higher the number of detected crimes. Through triangulation, a comparison with trends in other recorded areas, e.g. the number of treated cases, can help to evaluate trends more reliably.

Convictions under the Narcotics Act and custody sentences

According to the sentencing statistics of the Federal Statistical Office (special series 10, part 3) 57,116 persons (2006: 52,165) were convicted in 2007 for offences committed against the Narcotics Act (data for 2008 are not available yet). 48,363 convictions were rendered under the general criminal law relating to adults (2006: 43,063) and 8,753 (2006: 9,102) relating to juvenile offenders. As for the convictions rendered in respect of the general criminal law, 18,341 (2006: 17,546) custody sentences – out of these 11,708 (2006: 10,935) were suspended on probation - and 30,022 (2006: 25,517) fines were imposed (Statistisches Bundesamt 2009a).

The overall figure of convictions was up 9.5% on the previous year (2005-2006: +1.3%). In terms of age structure, the rise is mainly related to the increase in adult offenders and a slight increase in young adults³³. The figure of juveniles³⁴, by contrast, went slightly down. In terms of type of offences, the overall increase is mainly attributable to an increase in unspecific consumption-related offences (§29 para.1 BtMG) by 11.0%. The number of trafficking crimes, too, increased again as in the previous year (2006: 5,841; +12.7%) - albeit at a low level (figure 9.3).

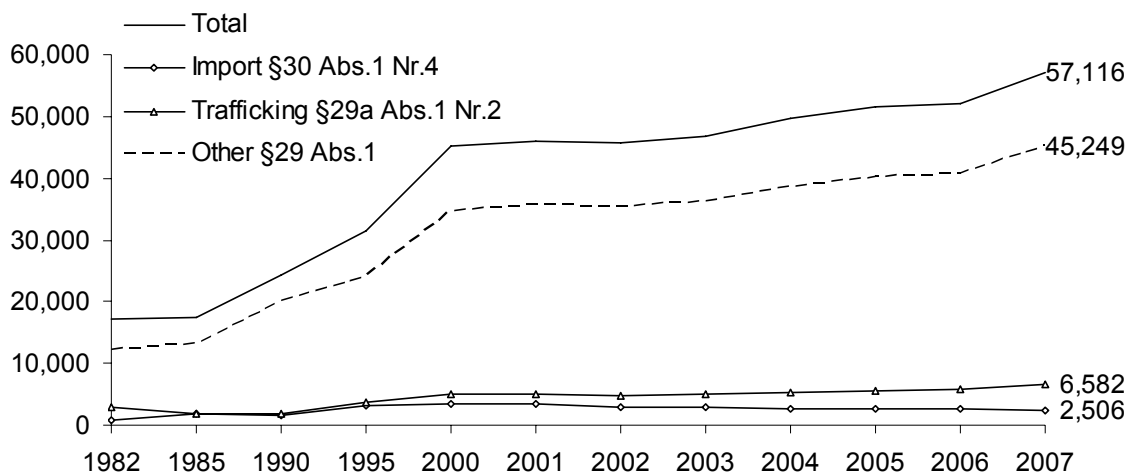
Violations of the Narcotics Act accounted for 6.4% of all convictions rendered in 2007. The portion of male offenders was about double as high as the one of female offenders (7.0% vs. 3.6%). Referred to juveniles, the share of convictions imposed for violations of the Narcotics Act was 4.0% while young adults aged between 18 and 21 years had a considerable higher share at 9.5%. As a result, drug-related offences committed by this age group have an above-average share in the overall crime rate. 62.0% of those convicted for offences committed against the Narcotics Act, have already been sentenced at least once before (men:

³² Each person is only counted once in the overall figure under the acronym “EKHD” (Erstauffälliger Konsument harter Drogen - first-time offender using hard drugs). However, to shed some light on the polytoxicomaniac use behaviour, it is possible, to count one person several times for several drug types so that the percental breakdown by drug type exceeds 100%.

³³ Young adults means persons who are aged 18 through 20 years at the time of the offence (§ 1 JGG). They can either be adjudicated according to the general criminal law or the criminal law relating to young offenders.

³⁴ Juveniles means individuals who are 14 through 17 years of age at the time of the offence (§ 1 JGG). They are adjudicated under the criminal law relating to adolescent offenders.

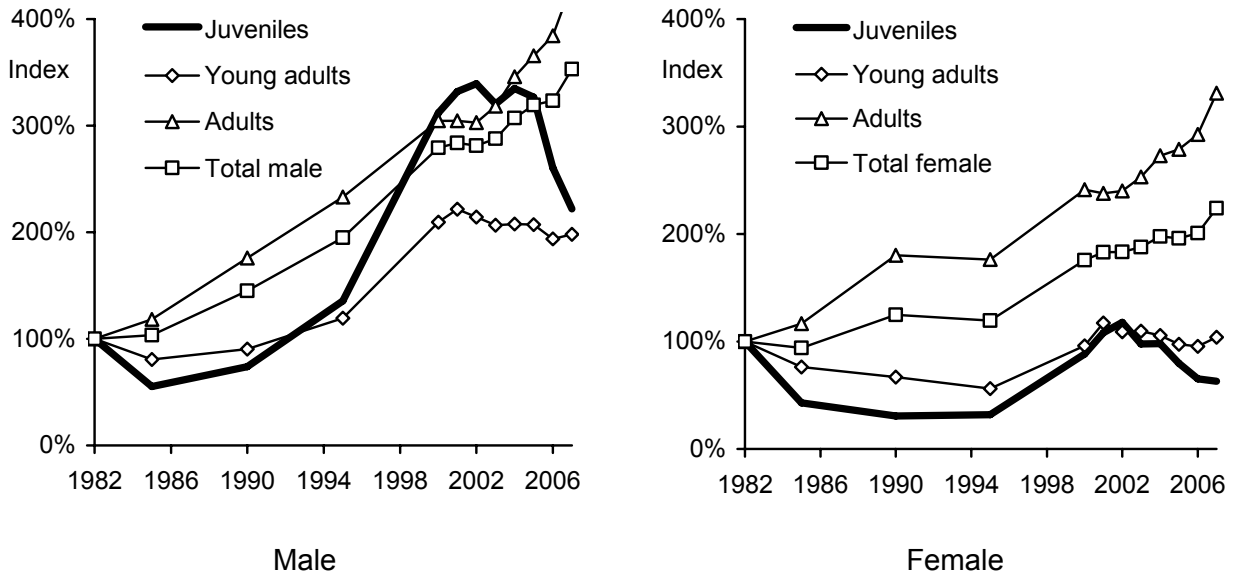
63.2%, women: 50.9%). In 60.8% of the cases, the crimes were committed by repeat offenders who had been sentenced at least three times before (Statistisches Bundesamt 2009a).



Statistisches Bundesamt 2009a.

Figure 9.3 Convictions rendered under the Narcotics Act

As in the previous years, about nine times more men than women were convicted for violations of the Narcotics Act in the year 2007 (men: 51,371; women: 5,745). The development trends of the last 24 years also show marked differences. Using the figures of 1982 as an index (=100%), the number of convictions of men more than tripled while the one of women doubled until 2007. Significant differences were found between juveniles and young adults. While for juvenile and young adult women the number of convictions in 2007 remained below or at the same level as the figures of 1982, the number of convictions of male juveniles and young adults doubled. This enormous increase in the convictions of male juveniles and young adults mainly happened between the years 1995 and 2000. Between the years 2000 and 2005, there were no further increases found for either of the groups, from 2005 to 2006 there was even a declining trend observed (-20.3% among juveniles; -6.5% among young adults) which however continued only in the juvenile offenders (-14.7% in the male and -3.6% in the female juveniles) but not in the young adults (+ 2.1% in the male and 9.2% in the female ones) in 2007 (figure 9.4).



Statistisches Bundesamt 2009a.

Figure 9.4 Trends in the convictions rendered under the Narcotics Act

Information on violations of the Narcotics Act can be found in standard table 11.

9.2.3 Other drug-related crime

Drug use and road accidents

Since 2003, the Statistical Report on Road Accidents published by the Federal Statistical Office has been providing information on the question as to whether the operator of a motor vehicle involved in an accident was under the influence of intoxicating substances other than alcohol. Since 1998, driving under the influence of drugs has been legally classified as a regulatory offence. This also applies to cases where unfitness to drive could not be proven. According to a supreme court decision, a THC-content of below 1.0 ng/ml in the blood cannot be taken as constituting an acute impairment of the fitness to drive (Bundesverfassungsgericht 2004).

In the year 2008, police-registered accidents on German roads totalled 320,649 with damage to persons and with 488,185 operators of vehicles being involved (table 9.1). Out of these, 18,382 (5.7%) were under the influence of alcohol and 1,440 (0.4%) under the influence of "other intoxicating substances" (Statistisches Bundesamt 2009c). While the total number of accidents with damage to persons and the number of accidents under the influence of drugs has been on a continual decline since 2003, the accidents caused under the influence of other intoxicating substances have been observed to increase since 2003. A possible explanation for this could be the improved controls. However, since alcohol is easier to detect than other intoxicating substances, it is still to be assumed that drug-related cases are under-represented in the road traffic statistics.

Table 9.1 Drug use and road traffic accidents – person-related causes

Year	Accidents with damage to persons	Defiance of drivers	Drivers under the influence of	
			alcohol	other intoxicating substances
2003	354,534	443,293	22,674	1,341
2004	339,310	417,923	21,096	1,457
2005	336,619	413,942	20,663	1,343
2006	327,984	403,886	19,405	1,320
2007	335,845	410,496	19,456	1,356
2008 ¹⁾	320,649	388,237	18,382	1,440

1) Preliminary data.

Statistisches Bundesamt 2009c.

Crime experienced by drug users themselves

In 2008, the survey conducted in the Frankfurt drug scene also dealt with crime experienced by the drug users themselves. According to the findings of the survey, violence and possession offences play a significant role in everyday life among scene members. On average, each interviewee was the victim of such a crime about four times in the previous month, females a bit more often than males. Leading the list of crimes in this context is fraud (38% stated to have been the victim of such a crime at least once in the last month), followed by emotional violence (29%) and theft (27%). But physical violence is as well mentioned by a substantial portion (14%) of the interviewees. More than four fifths of these offences are committed by other scene members, to a large extent in the “open drug scene” (Werse et al. 2009).

9.3 Prevention of drug-related crime

Apart from consequent repression, multifarious measures of criminal prevention are also required to combat crime successfully. Therefore, police has set a particular focus on prevention measures at a national level with the programme “Police criminal prevention of the *Laender* and the Federal Government”. The goal of this programme is to inform the population, multipliers, media and other groups who are active in prevention about different forms of crime and possibilities of preventing them. This is done, among others, by criminal preventive PR-work and the development and publication of media, measures and concepts that support the local police offices in their preventive activities. In the year 2008, the PC game “Luka and the hidden treasure” (“LUKA und der verborgene Schatz”) was released within the frame of the police criminal prevention programme which is to make children aged between 10 and 13 years aware of the dangers of alcohol, illicit drugs and violence. The special version of the PC game for educational staff supports the processing of the topics “Consumption of cannabis and alcohol, violence as a result of alcohol abuse or drunk driving” at school. A comprehensive booklet with recommendations for dealing with the topics in class and work sheets as well as information on individual drugs rounds off the media package. Already

before its release, the new PC game was nominated for the German Children Software Award TOMMI 2008. However, alongside this PC game, print media continue to be used within the framework of the police criminal prevention programme. The brochure “Sehn-Sucht. So schützen Sie Ihr Kind vor Drogen“ (Addiction – how to protect your children from drugs“) for example was up-dated and expanded (BMI 2009).

9.4 Interventions in the criminal justice system

9.4.1 Alternatives to prison

The Narcotics Act (Betäubungsmittelgesetz, BtMG) allows for the suspension of proceedings in cases of minor guilt or lack of public interest in prosecution (§31a BtMG). This applies mainly to consumption-related offences, in particular when they occur for the first time and third parties are not involved. These regulations are subject to different regional application as shown by a study carried out by Schäfer & Paoli (2006). With regard to the prosecution of consumption-related offences involving cannabis, there has recently been a move to greater convergence of the definitions of limit values for “small quantities“ in the *Laender* in line with the guidelines passed by the Federal Constitutional Court. Further details can be found in chapter 1.2.2.

It is moreover possible to defer prison sentences of up to 2 years to provide drug addicts with a chance to undergo therapy (‘therapy instead of punishment’, §35 BtMG).

9.4.2 Other interventions in the criminal justice system

There are possibilities, under certain circumstances, to cease criminal proceedings at all levels. Often, a few hours of community service are a first response of authorities to deal with problematic behaviour in connection with drugs.

There is a series of other possibilities available to curb drug crime and also economic compulsive crimes. Many cities have created legal possibilities to ban drug users from certain places to prevent the formation of open drug scenes.

At public prosecution level, it is possible to stop prosecution of crimes committed by adolescents³⁵ and young adults³⁶ who fall under the juvenile law or to discontinue proceedings in respect of the Juvenile Offenders Act (JGG, §§ 45 und 47). This is mostly applied in cases involving only small quantities.

In some *Laender*, local prevention measures like for example the widely spread programme “Early Intervention in First-Offence Drug Consumers – FreD“ is used as a possibility to intervene without starting criminal proceedings right away. The programme addresses 14- to 18-

³⁵ Adolescents are taken as referring to individuals who are 14 through 17 years of age at the time of the offence (§ 1 JGG). They are adjudicated under the criminal law relating to adolescent offenders.

³⁶ Young adults are taken as referring to persons who are aged 18 through 20 years at the time of the offence (§ 1 JGG). They can either be adjudicated according to the general criminal law or the criminal law relating to young offenders.

year-olds but also young adults up to 25 years who have come to the notice of police for the first time due to their consumption of illegal drugs (for more information on the programme FreD pls. see also the REITOX Reports of the years 2007 and 2008 as well as chapter 1).

9.5 Drug use and problem drug use in prisons

Current data on the prevalence of drug use in prisons are not available for Germany.

According to the data of the Federal Statistical Office (Statistisches Bundesamt 2009b), the number of those sentenced to a term of imprisonment for having violated the Narcotics Act totalled 9,540 (2007: 9,665) in 2008. This corresponds to a portion of 15.3% of the overall prison population. With 16.3% (2007: 16.2%) among male adults, the portion has remained stable compared to the previous year. After a drop in the year 2007, the portion of women detained for violating the Narcotics Act reached again its original level (2006: 18.8%) at 18.9%. Among the juveniles, the portion of those detained for violations of the Narcotics Act in 2008 was at 6.7% (males) and 9.8% respectively (females) (2007: 6.2% and 8.9%). While the number of those detained for having committed drug offences slightly decreased between 2007 and 2008, their portion in the overall sentenced population has continually increased since 2003 – though only slightly. As in the previous year, women only accounted for 6% of this group whereas the portion of drug-related cases among the female detainees has remained stable since 2003 ranging between 3-5 percentage points above the comparative value for men (table 9.2).

Table 9.2 Number of detainees and drug-related crimes

		Detainees and persons under preventive detention			Imprisonment of adults		Imprisonment of juveniles		Preventive detention
		Total	Males	Females	Males	Females	Males	Females	
2008	Detainees N	62,348	59,048	3,300	52,308	3,035	6,293	264	448
	BtMG N	9,540	8,939	601	8,517	575	419	26	3
	BtMG %	15.3	15.1	18.2	16.3	18.9	6.7	9.8	0.7
2007	BtMG %	14.9	14.8	17.4	16.2	15.0	6.2	8.9	0.2
2006	BtMG %	14.8	14.7	18.2	15.7	18.8	6.8	11.4	0
2005	BtMG %	14.6	14.4	19.2	15.4	20.1	7.3	10.2	0
2004	BtMG %	14.5	14.3	18.1	15.3	18.6	7.6	13.8	0

Note: "BtMG N": Number of persons detained for offences committed against the BtMG, "BtMG %": share of persons detained for offences against the BtMG.

Statistisches Bundesamt 2009b.

Drugs controls are carried out in prisons on a regular basis. The extensive control system comprises urine tests but also large-scale searches with police forces and tracker dogs. However, there are no new data on drug seizures in prisons available from the *Laender*.

First results of a comparing study on life and prison conditions of prisoners serving long prison sentences (≥ 5 years) have been made available by nine of the eleven participating

European countries on a total of 740 inmates from 30 penal institutions (Dünkel et al. 2009). The survey shows among others that the inmates suffer from enormous psychological stress in comparison with the general population which finds its expression in a high prevalence of traumas, depressions and self-destructive behaviour. 28% of the prison populations are drug users.

Data on drug use in prisons can be found in standard table 12.

9.6 Responses to drug-related health issues in prisons

9.6.1 Drug treatment, prevention and reduction of drug-related harm

Current data on internal and external treatment and counselling services offered in prison are available from 15 of the 16 *Laender* (Flöter & Pfeiffer-Gerschel 2009).

Eight *Laender* could not give any information on internal counselling/treatment services since there were no data available. The remaining *Laender* reported to have at least internal 125 services offered with 190.5 staff. One Land (Saxony) explicitly stated not to offer an internal drug counselling service.

Four *Laender* could not give any information on external counselling services, one Land (Saxony-Anhalt) explicitly stated not to offer any external addiction aid services in prison. The remaining *Laender* reported about at least 139 external addiction counselling services with at least 164 staff.

The data show that there are large differences between the *Laender* in this area. This can be shortly illustrated by the following examples:

In Saxony-Anhalt, each of the 8 penal institutions provides internal addiction aid services staffed with one drug commissioner of the higher social service who is generally supported by two to three addiction aid helpers of the middle general prison service. It is however not possible to designate posts solely dedicated to addiction counselling, since addiction work is shared between various staff who also assume other tasks in other work fields. External addiction aid facilities do currently not work in the penal institutions.

Hamburg also has internal addiction counselling and treatment services in all penal institutions which are additionally supported by external staff (3 services with a total of 9.3 positions).

The situation is different in Saxony, where prisons do not offer any internal addiction counselling but exclusively use external counsellors (11.2 positions) for this task.

Within the framework of the DSHS, a table volume has been computed for the second time for 2008 giving insight into outpatient therapy carried out in prisons (Pfeiffer-Gerschel et al. 2009c). However, with no information on the selection mechanisms for the participation on hand and the representativeness of the participating penal institutions being unclear, the figures require cautious interpretation all the more since this table only comprises six institu-

tions and since it cannot be ruled out that individual results depend on data provided by only one or two facilities

The average age of men with illicit drug problems who made use of outpatient help in prison in the year 2008 was 29.2 years (N=235) (2007: 28.3 years), women were on average 28.4 years old (N=20) (2007: 26.9 years). Particularly striking is the fact that 70% (2007: 80%) of the detained women who underwent addiction therapy, were treated for opioid-related problems, the portion of men, by comparison, was at 37% (2007: 45%). In prison, the portion of men undergoing therapy with the main diagnosis cocaine (13%) and stimulants (28%) is markedly higher than the one of those undergoing outpatient therapy in freedom. Primary cannabis-related problems, by contrast, play a minor role in the treatment of men in prison than in outpatient therapy outside prison. As for women, there was no case documented (table 9.3).

Table 9.3 Outpatient therapy of drug problems in prison

Main diagnosis	Males		Females		Total	
	N	%	N	%	N	%
Opioids	86	36.6	14	70.0	100	39.2
Cocaine	30	12.8	0	0.0	30	11.8
Stimulants	66	28.1	6	30.0	72	28.2
Hypnotics/Sedatives	1	0.4	0	0.0	1	0.4
Hallucinogenics	1	0.4	0	0.0	1	0.4
Cannabinoids	51	21.7	0	0.0	51	20.0
Mult./other substances	0	0.0	0	0.0	0	0.0
Total	235	100.0	20	100.0	255	100.0

Pfeiffer-Gerschel et al. 2009c.

The current Drug and Addiction Report presented by the Federal Government Commissioner on Narcotic Drugs (Die Drogenbeauftragte der Bundesregierung 2009) reports on the publication of two German multi-staged epidemiological studies (Centre for interdisciplinary Addiction Research of the University Hamburg / Bremen Institute for Drug Research at the University Bremen / Scientific Institute of the German Medical Association) which, for the first time, provide consistent data on the number of current/former injecting drug users and drug-associated infectious diseases from several German prisons (table 9.4)

Table 9.4 Portion of IDUs and drug-associated infectious diseases in German prisons and in the general population

	Intravenous drug users (IDUs)	HCV	HIV
Prisons	21.9 - 29.6%	14.3 - 17.6%	0.8 - 1.2%
General population	0.3%	0.4-0.7%	0.05%
Parameter	73 – 98-fold	26 – 32-fold	16 – 24-fold

Die Drogenbeauftragte der Bundesregierung 2009.

Substitution treatment, which has proven its effectiveness outside prison, can basically also be carried out in prison. While the number of opioid substitution therapies carried out in freedom in Germany increased by 50% to more than 70,000 patients over the last previous five years and about 45% of the estimated 150,000 opioid are reached by substitution offers, the development in German penal institutions does not run in parallel: only about 500-700 of the estimated 10,000 – 15,000 eligible prisoners undergo stable substitution therapy. The primary indication for treatment is the continuation of substitution therapies that were already started in freedom. Therefore, talks are being held with representatives of the ministries for justice of the *Laender* with a view to promote substitution therapy in prison.

Another contribution to this topic arrives at somewhat different figures, but points into a similar direction: according to Keppler (2008) 600-800 out of approximately 30,000 drug-addicted detainees currently receive substitution treatment in prison. Keppler, too, reports that access to and procedures of treatment are subject to large differences. Larney and Dollan (2009) found similar data in an international literature review on the implementation of substitution treatment in prison and estimated that out of a total of 75,719 prisoners in Germany about 500, i.e. less than 1%, received substitution treatment in 2007.

In their overview on drug addiction and drug care in prison, Stöver et al. (2009) criticise as well that prisons offer almost exclusively abstinence-oriented treatments. They therefore request to systematically offer substitution therapy as a recognized form of treatment in prison in order to do justice to the principle of equivalence.

Reimer (2008) interviewed 67 physicians working in German penal institutions (caring for 29,100 out of approx. 76,000 inmates) on addiction-specific medical and infectiological care of drug addicts in detention. He found in his survey that about a quarter of the penal institutions in question allowed substitution treatment when the following indication criteria were fulfilled (several answers possible): existing substitution therapy before the start of the prison sentence (64%), short prison term (42%), psychiatric comorbidity (36%). Abstinence from drugs (19%), dose reduction (13%) and continuation of therapy (13%) were given as main goals of the offer. The number of long-term substitution patients in detention surveyed within the framework of this study was 320.

Düinkel et al. (2009) oppose 12% of the detainees serving long prison sentences who are treated for psychological problems (including addiction-related symptoms) to a portion of 21% who wish to undergo treatment. Approximately 40% of the detainees of German prisons

with drug problems make use of treatment offers that explicitly aim at reducing the risk of relapse. The authors close their preliminary report noting that civil society is best protected against serious recidivism by tailored treatment offers and humane prison conditions (see also chapter 9.5).

9.6.2 Prevention, treatment and care of infectious diseases

According to the Drug and Addiction Report of the Federal Government Commissioner on Narcotic Drugs (2009), the treatment situation for HCV-/HIV-infections in prison is similar to the one of substitution therapy. Here as well, the main goal is to guarantee the continuation of a therapy already started outside prison.

Reimer (2008) conducted a survey on HCV- and HIV prevalence and treatment of these infections in German prisons. In his work, Reimer estimates the HIV-prevalence among German prison populations at 1.1% (range: 1-10%), the number of those treated for HIV-infection in prison at 300. The HCV-prevalence was estimated at 15% (range: 0-80%), the number of detainees undergoing HCV-therapy at about 400. With about 4,400 estimated HCV-positive detainees, the number of 400 patients undergoing therapy appears to be very small.

9.6.3 Prevention of overdose risk upon prison release and reintegration of drug users after release from prison

In its action plan on the implementation of the HIV/AIDS strategy, the Federal Government established that prisons represent a setting that requires specific health care measures to be undertaken. Therefore, talks are being held with representatives of the ministries for justice of the *Laender* with a view to promote substitution therapy in prison. The transition from prison to life in freedom in particular carries a special risk of overdose.

Heinemann and colleagues presented a catamnestic analysis of detention and drug-related deaths in Hamburg already a few years ago (2002). They retrospectively analyzed the detention periods of 1,213 drug addicts before their drug-related deaths registered by police between 1990 and 1997. In the centre of the analysis was a presentation of the distribution of the survival intervals between prison release and death in persons who had at least served one prison sentence. The authors moreover analyzed special risk factors for death during the first days after release from prison although this type of a retrospective survival analysis in a death collective is methodologically not directly comparable with a cohort study. 11.7% of all persons who had served a prison sentence died within the first 10 days after release from prison, out of the 40 deaths, 8 drug users died on the very day of the release. Commonly associated with an early death after prison release in comparison with later deaths are young age at prison release as well as longer prison experience in the past, higher overall number of detention periods and a longer duration of the last detention. Commonly found were prison sentences ranging between three and six months. Even though opioid tolerance loss and a statistically rising risk posed by frequent changes between prison and freedom but also lacking risk management skills linked to young age may be identified as determining factors,

the analysis of protective factors for the item survival duration in a selective collective in comparison with a survival analysis of a living cohort is not unproblematic.

The legal framework set for the preparation of the release of detainees from prison establishes that aids are to be provided for detainees upon prison release (§ 74 StVollzG in connection with § 15 StVollzG) with a view to promote societal integration after prison. In order to reach this goal prison services are to cooperate at inter-departmental level (§ 154 StVollzG).

Moreover, providers of social security services are to form networks and cooperate with the competent agencies to complement each other in the pursuit of the same goal (§ 68 Abs. 3 SGB XII und § 16 Abs. 2 SGB II). Corresponding strategies and measures are developed and implemented under the term transition management. On the one hand, it is tried to facilitate a smooth transition from prison to freedom with integration into training, work and employment, on the other, to tackle problems linked with detention and criminal careers. The main task of transition management is to improve the situation of the clients by offering them counselling and care but also possibilities of professional qualification and training as well as job placement. However, the discussion and implementation of a transition management are still in their infancy.

Within the framework of a systematic reintegration policy, new experience has been collected over the last years – often on the basis of projects. A combined approach of promoting professional qualification and care in prison, structuring the transition from prison to freedom and securing after-care has proven promising in the past.

In January 2009, the working committee “drugs and addiction“ of the working group of the Free Charity Organization (Freie Wohlfahrtspflege) in North Rhine-Westphalia has developed a concept for the transition management for addicted detainees from prison into the receiving community. The concept is the result of deliberations held by an inter-ministerial working group made up of the Ministry for Employment, Health and Social Affairs and the Ministry of Justice in North Rhine-Westphalia on the cooperation between drug aid and penal institutions. The discussions were based on the base data from the Ministry of Justice. The Aids Help Organisation North Rhine-Westphalia (AIDS-Hilfe Nordrhein-Westfalen) was also involved in the deliberations. The statement passed by the working group is to serve as a basis for a decision to be rendered by the Ministry of Justice on the subject matter (AG Freie Wohlfahrtspflege NRW - Arbeitsausschuss Drogen und Sucht 2009).

10 Drug markets

10.1 Introduction

Indicators of the situation on the illicit drug market are, apart from the perceived availability and supply of illicit substances, also the number and size of seizures, prices and levels of active ingredients or purity of the substances respectively. The attempt to get a grasp of new drugs, their structure and effects, is associated with considerable expense in the form of complex chemical analyses. Such analyses are for example carried out by the Forensic Science Institute of the Federal Criminal Police Office (Bundeskriminalamt, BKA). Information on seizures is also available from the BKA or the Land Criminal Police Offices (Landeskriminalämter, LKÄ).

Availability and supply

Availability and supply are two different perspectives of the drug market: the perspective adopted by the buyer on the one hand and by the supplier on the other. The availability of illicit substances as perceived by the population or the users can be assessed by means of statements made in surveys on how 'easy' or 'very easy' they are to obtain during a certain period of time. In Germany, these data are regularly collected by the Epidemiological Survey on Addiction (ESA) (not in 2006), the Drug Affinity Study (DAS) carried out by the BZgA and within the framework of regional monitoring systems (e.g. MoSyD Frankfurt). The perceived availability reflects the situation on local and regional drug markets but also personal opinions. Other aspects of availability are indicators like the price, purity and seizures. Seen from the perspective of the suppliers, the market situation is reflected by the number, quantity and quality of seized drugs.

Seizures

In Germany, in particular at the borders with neighbouring countries and at airports, large quantities of narcotic drugs are regularly seized. For some of the seized substances, the country of departure, origin or transit is identified by police and customs authorities. The BKA statistics presented in the following contain all data on the seizures made by the police offices of the *Laender*, the BKA and the customs offices.

Price

At the end of the year 2002, the Land Criminal Police Offices (Landeskriminalämter, LKÄ) and the Federal Criminal Police Office (Bundeskriminalamt, BKA) agreed on an expanded collection of data on domestic drug prices. Since then, apart from the highest and lowest prices, the so-called "predominant market prices" at street and wholesale level have been recorded, with a differentiation being made for the latter between trade volumes from 1-10 kg and above 10kg. In order to guarantee a maximum of representativeness of the price survey, data are generally collected at four to six locations in the *Laender* (by police offices in urban

and rural areas) and then transferred to the respective LKA. The Land Criminal Police Offices join the data from the measuring locations and further available information and transfer the current market prices of drugs in their Land to the BKA once a year. Based on these data, the BKA calculates the average drug prices for Germany.

The thus established drug prices can only be interpreted as rough approximate values, particularly since differences in purity and quality categories are not taken into account in establishing the prices. Furthermore, things are rendered even more difficult by the fact that prices only get known in connection with a few incidents, so that random effects may substantially alter these figures.

Purity

Apart from establishing prices, the Federal Office of Criminal Investigation also ascertains the purity of different drugs on the market. Samples taken from drug seizures serve as a basis for the analysis of purity and content of active substances. For better comparability the contents of psychotropic ingredients are related to the chemical form of the base, irrespective of the form in which the illicit preparation of the substance is found. All figures given may only be interpreted as rough values because large differences in purity levels of the individual substances seized may lead to marked random effects. As the distribution of values diverges considerably from the normal distribution, median values are used instead of arithmetic means.

The presentations are based on data provided by the BKA upon request of the DBDD. The active ingredients of the seized substances are quantified and broken down into three levels: street trafficking (< 1g), retail (1g to <1,000g) and wholesale (\geq 1000g). Results are presented in a discriminating manner, insofar as considerable differences in purity levels at wholesale and street trafficking level were found. The reason for this is that active substances are increasingly diluted from the wholesale to the street trafficking level for profit maximization. Apart from the data on active ingredients, the most frequently found additives are reported. Insofar as these are pharmacologically effective, they are categorized as adulterants (e.g. caffeine) or otherwise as diluents or fillers (e.g. sugar).

10.2 Availability and supply

10.2.1 Perceived availability of drugs, exposure and access to drugs

Information on the perceived availability of drugs is contained in the REITOX Report of the year 2005. The findings of the DAS 2008 on this topic are not available yet.

The annual report based on the data collected by the Monitoring System Drug Trends (MoSyD) Frankfurt/M. (Werse et al. 2009) (see also chapter 2) provides information on the question as to how many of the 15- to 16-year olds in Frankfurt were offered illicit drugs at least once in their lives. As in the previous years, cannabis was found to lead the league at 57% in 2008. 22% of the interviewees were offered cocaine at least once, 20% psychoactive substances and 16% ecstasy or speed respectively. Then came LSD at 12% and crack at 11%.

Heroin and crystal tended to be rather seldom offered (each 7%), so did GHB (5%) or methadone (3%). 37% of all 15- to 18-year olds reported not have been offered any of the illicit drugs monitored by MoSyD. Excluding cannabis, this portion increases to 57%. For most of the surveyed illicit substances, the number of those who have been offered drugs – increases – not surprisingly – with age, at least as regards tendency. The same tendency shows for all substances put together : 72% of the 18-year olds have been offered illicit substances once as opposed to only 55% among the 15-year olds (16-year olds: 61%, 17-year olds: 60%). A very similar connection is to be found for illicit drugs excluding cannabis (15-year olds: 34%, 16-year olds: 39%, 17-year olds: 37%, 18-year olds: 52%).

Since 2002, the portion of those who have been offered hashish or marijuana at least once in their lives, has declined every year (with the exception of 2007) reaching the lowest level ever found by all surveys in the year 2008. The trend is reversed for all “hard drugs“ put together (all illicit drugs except cannabis): after a continual decline until 2005, the portion of such offers continually increased, currently almost reaching the levels of the first two years of data collection (2002 and 2003). This development is however not attributable to one specific drug: speed, for example, whose course has been generally quite irregular over the years, was mentioned a bit more often this year whereas cocaine and GHB had been in the previous one. Whereas the figures for cocaine only show slight changes over the whole period of time, the figures for the generally rarely mentioned GHB strongly increased (2002-2006: between 1% and 3%; 2007: 6%, 2008: 5%). The figures found for psychoactive mushrooms (2002: 23%, 2008: 20%), ecstasy (2002: 25%, 2008: 16%) and LSD (2002: 16%, 2008: 12%) have generally declined, remaining however around the same levels over the last years.

In the trend scout panel of MoSyD (Werse et al. 2009) experts give information on the current availability of drugs in various scenes in Frankfurt (defined by recreational/clubbing activities). All in all, cannabis (especially marijuana), cocaine and ecstasy appear to have been a bit more difficult to obtain in 2008 than in 2007. In addition, consumers report about a deterioration of quality (through admixing of other substances) which manifested itself in an increase in unpleasant side effects so that ecstasy lost in popularity. In comparison with the previous year, amphetamines are somewhat more easily to obtain, relatively low-priced and in the meantime preferred by many (former) ecstasy users. In the small circle of the tech-house and party-house scene, ketamin seems to be more easily available and spreading. Seemingly arbitrary poly-drug use observed in various scenes is mainly a result of the availability of individual substances.

10.2.2 Drugs origin: national production versus imported

According to the Federal Criminal Police Office (BKA 2009a), illicit drugs, apart from cannabis (cf. chapter 11), are imported from abroad. The trade routes are described in chapter 10.2.3.

10.2.3 Trafficking patterns, national and international flows, routes, modi operandi and organisation of domestic drug markets

Heroin

As in the previous year, heroin was smuggled - in the vast majority of the cases - within the framework of drug runs from the Netherlands to Germany in 2008. In connection with larger heroin seizures, Turkey was identified as a country of origin and transit from which the substance was transported over the Balkan countries, Italy and Austria into Germany. The fact that the Netherlands is a hub for large deliveries to or respectively over Germany is illustrated among others by a seizure of around 460 kg in the Netherlands within the framework of an investigation carried out by the BKA.

Cocaine

The year 2008 did not see seizures of the scale of the two previous years, in which container loads of 400kg and more destined for further inter-European transport were confiscated in Bremerhaven. Cocaine was frequently smuggled within the framework of drug runs from the Netherlands to Germany. Cocaine smuggled from South America mainly came from Brazil, Peru and Argentina. Less frequently mentioned – though in connection with larger individual quantities – were the countries Columbia and Venezuela. Regarding Columbia as the world-wide largest coca plant grower, it is however to be noted that the origin of cocaine seized in Germany often could only be traced back to the transit or depot countries but not to the countries of origin.

Cocaine smuggled over West Africa to Europe still plays an important role although the number of seizures and quantities seized in Germany declined in 2008. In many cases, cocaine seized in Germany was destined for further distribution within Europe, especially for Spain and Great Britain. Relatively large quantities were frequently meant to be smuggled into the Netherlands and Italy.

Amphetamines

The large majority of the amphetamines seized in Germany came from the Netherlands. In several cases, they were also smuggled in from Belgium or Poland and in smaller quantities also from the Czech Republic. Around 83% of the quantity of methamphetamines (crystal) seized, were impounded in Saxony and Bavaria. As in the previous year, Thuringia recorded numerous seizures with however much smaller individual quantities seized. Alongside numerous cases of smuggling small quantities at a high frequency from the Czech Republic to Germany which was already registered in previous years, crystal production in kitchen labs in Germany was found to increase in 2008 (cf. 10.3.3).

Ecstasy

The large majority of the seized ecstasy tablets whose origin could be traced back, came from the Netherlands. In a few individual cases, it was found that larger quantities of ecstasy tablets seized in Germany were destined for further transport to Southeast and Western Europe (BKA 2009a).

A detailed presentation of the data on cannabis is to be found in chapter 11.

10.3 Seizures

10.3.1 Quantities and numbers of seizures of illicit drugs

Table 10.1 gives an overview of the quantities of illicit drugs seized in Germany in the years 2007 and 2008. A detailed presentation of the cannabis seizures follows in chapter 11.

Table 10.1 Seized quantities of illicit drugs in Germany 2007 and 2008

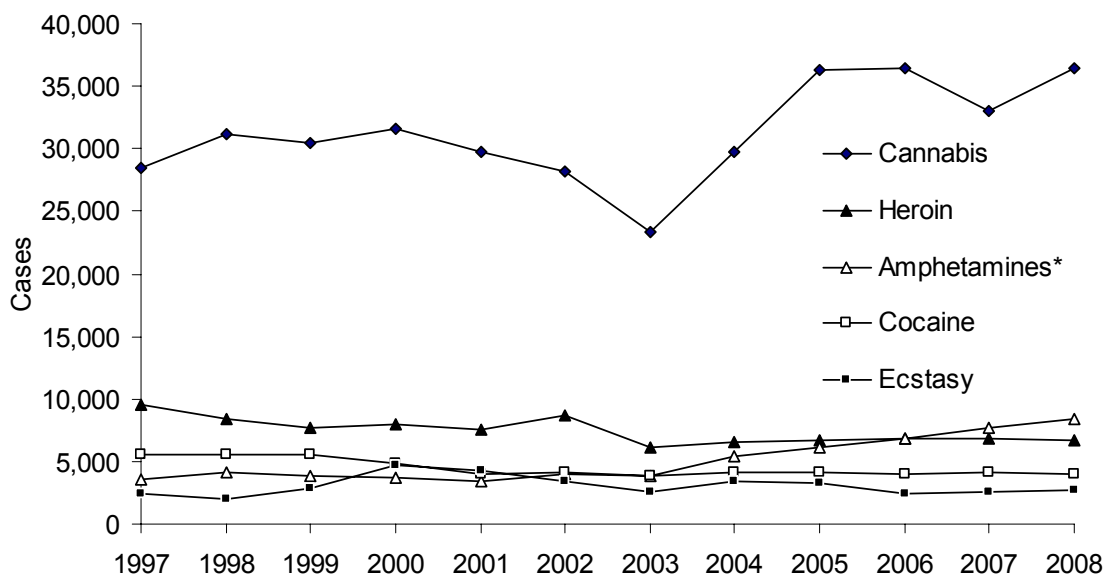
Substance	2007	2008	Change
Heroin	1,073.5 kg	502.8 kg	-53.2%
Cocaine	1,877.5 kg	1,068.6 kg	-43.4%
Crack	4.8 kg	8.2 kg	+70.8%
Amphetamines (thereof Crystal)	820.1 kg (10.0 kg)	1283.2 kg (4.2 kg)	+56.5% (-58.0%)
Ecstasy	985,218 units	751,431 units	-23.7%
Hashish	3,677.5 kg	7,632.3 kg	+107.5%
Marijuana	3,769.8 kg	8,932.2 kg	+136.9%
LSD	10,525 units	12,875 units	+22.1%
Khat	13,485.3 kg	29,488.6 kg	+118.7%
Mushrooms	55.8 kg	17.6 kg	-68.5%

BKA 2009a.

In the comparison between 2007 and 2008, the quantities of cannabis, khat, crack (the latter at a relatively small total amount), amphetamines and LSD in part strongly increased, while the seizures of mushrooms, methamphetamines (crystal), heroin, cocaine and ecstasy (very) considerably declined. The main reason for these variations are large individual seizures. While on the one hand, the largest individual quantities of hashish (approx. 4,000 kg) and marijuana (5,470 kg) for more than eight years have been seized in 2008 as well as the largest quantity of amphetamines ever (284 kg), 2008 did not see large individual seizures of heroin (two cases in 2007, in which a total of 450 kg were seized) and cocaine (in 2007 one container load 400 kg) in the dimensions of the previous year.

A precise indicator for (short-term) trends is the number of seizure cases (fig. 10.1). The overall number of seizures of heroin, opium, cocaine, crack, amphetamines, crystal, ecstasy,

cannabis and LSD was in 2008 (58,567 cases) 6.7% up on 2007 (54,914). This increase is mainly attributable to the increased case figure for cannabis seizures (marijuana: +12.7%). Furthermore, the number of seizures of amphetamines increased significantly between 2007 and 2008 to 8,425 cases (+10.0%) and of ecstasy to 2,698 cases (+8.1%) while the number of seizures of heroin (-3.1%) and cocaine (-5.8%) declined only slightly.



* The category amphetamines also contains seizures of "crystal" which was presented separately for the first time in 2006.

BKA 2009a.

Figure 10.1 Number of seizures of narcotic drugs in the Federal Republic of Germany from 1997 to 2008

When looking at the seized quantities and the number of seizures, one can see that figures have increased since 2000 especially for amphetamines (+373% and +126% respectively) and declined for ecstasy (-42% and -54% respectively) (table 10.2).

Despite the strong decrease found in the quantities seized, the case figures recorded for heroin and cocaine in 2008 hardly differ from the ones of the year 2007 (see above) and rather tend to decline in respect of the year 2000.

Table 10.2 Changes in number and quantity of illicit drugs seized since 2000

	2008 vs.	Heroin	Cocaine	Amphetamines	Ecstasy	Cannabis	Mushrooms	Khat
Cases	2007	-3%	-6%	+10%	+8%	+10%	-17%	-5%
Amount	2007	-53%	-43%	+56%	-24%	+122%	-68%	+119%
Cases	2000	-17%	-18%	+126%	-42%	+15%		
Amount	2000	-37%	+17%	+373%	-54%	+15%		

Note: Increases >10% framed, declines >10% shaded.

BKA 2009a.

On 10 February 2009, the medical journal "Deutsche Ärzteblatt" reported on the detection of a case of medical drugs trafficking in Schleswig-Holstein. The customs investigation office Hamburg searched the living and business premises of a 43-year old business man in October 2008 and seized 1.7 tons of illicit medical and narcotic drugs. Among the almost 300 different preparations were also psychotropic drugs. The business man is moreover said to have offered illicit medical drugs and various herbs like for example salvia divinorum (magic mint) over the Internet. Among the seized narcotic drugs were also "spice" products packed in bags labelled "Almdröhner" ("Alp thunder") or "Alpendröhner" ("Alpine roar") and "Spice Egypt" (see also chapter 1.2.2).

10.3.2 Quantities and numbers of seizures of precursor chemicals used in the manufacture of illicit drugs

Data on seizures of cannabis plants and plantations can be found in chapter 11. Information on seizures of precursor chemicals used for the manufacture of other illicit drugs is not available.

10.3.3 Number of illicit laboratories and other production sites dismantled; type of illicit drugs manufactured there

In the year 2008, a total of 25 illicit drug laboratories were uncovered – more than double as many as in 2007 (10 laboratories). 22 laboratories produced ATS (amphetamine-type-stimulants). Among them was one that synthesized mainly DOB (2.5-dimethoxy-4-bromamphetamine). Three produced GHB (gamma hydroxybutyrate, "liquid ecstasy"). All laboratories had production capacities sufficient to meet the operators' private demands and to supply a limited circle of buyers. Large laboratories were not detected.

An overview of recent seizures can be found in standard table 13.

10.4 Price / purity

10.4.1 Prices of illicit drugs at retail level

The drug prices reported by the BKA only changed little from 2007 to 2008 (for ascertaining prices see also chapter 11.1.5). Retail prices for cocaine (-3%), crack (-3%), amphetamines (-2%), marijuana (-2%), heroin (+2%), LSD (+2%) and hashish (+2%) remained stable. Average prices of ecstasy at national level went slightly up (+8%). Marijuana (+6%), ecstasy (+5%), cocaine (+4%) and hashish (+4%) were a bit more expensive at wholesale level. The price of amphetamines remained quasi-stable while heroin prices slightly declined (-7%). At 59.3 €, the average street price for one gram crystal was in 2008 17% up on the previous year (50.6 €).

That price developments at retail and wholesale level do not necessarily correlate can be seen very well from the example of heroin. While the wholesale price of heroin slightly decreased from 2007 to 2008, the street price of heroin slightly increased. Between 2006 and 2007 the development was reversed (table 10.4).

The overview of current drug prices is contained in standard table 16.

Table 10.3 Drug prices between 2007 and 2008 (all prices in €)

		Heroin	Cocaine	Crack	Ecstasy	Amphetamines	Marijuana	Cannabis raisin	LSD
Small quantities ¹⁾	2008	36.2	61.6	53.3	6.7	12.3	7.9	5.9	9.0
	2007	35.6	63.3	55	6.2	12.6	8.1	5.8	8.8
Change		+2%	-3%	-3%	+8%	-2%	-2%	+2%	+2%
Large quantities ²⁾	2008	18,011	36,818	--	1,909	4,307	3,400	2,453	--
	2007	19,465	35,483	--	1,826	4,303	3,200	2,367	--
Change		-7%	+4%	--	+5%	0%	+6%	+4%	

1) Price per gram.

2) Price per kilogram.

BKA SO 51, 2009, personal communication.

The retail prices of some illicit drugs offered in various Frankfurt scenes (table 10.4) can be gleaned from the trend scout panel of MoSyD (Werse et al. 2009). In comparison with 2007, amphetamines (+14%) and marijuana (+7%) became a bit more expensive in 2008. Since the massive decline in the year 2004, the heroin price in the open drug scene has slightly increased again reaching 40 €/g. The price of crack whose quality was reported to have improved, doubled between 2006 (50 €/g) and 2008 (100 €/g). The street prices in Frankfurt/M. correspond to the average prices recorded by the BKA, only heroin and cocaine are a bit more expensive.

Table 10.4 Drug retail prices (in €/g) 2007-2008 in Frankfurt/M.

Year	Heroin ¹⁾	Cocaine	Crack ¹⁾	Amphetamines	Marijuana	Cannabis raisin	Ecstasy	MDMA powder	Ketamin
2008	40 ²⁾	65	100	12.5	8	6	7	55	50
2007	--	65		11	7.5	6	6	--	--

1) Data from the (open) drug scene survey carried out in Frankfurt/M.

2) According to Frankfurt police records approx. 20 €.

Werse et al. 2009.

10.4.2 Purity/potency of illicit drugs

Composition of illicit drugs and drug tablets

The figures presented on the active substances contained in amphetamines, cannabis, ecstasy, heroin and cocaine are based on the forensic data provided by the BKA upon request by the DBDD. Table 10.5 gives an overview of the development of the levels of active substances in amphetamines, cocaine and heroin since 1998. After having been on a continual decline since 2003, the potency of amphetamines hardly reaches half the value found in 1997 (10.0%). While the potency of cocaine at wholesale level has been relatively stable for

the last ten years, the one of street cocaine continually declined till 2006. In the comparison between 2006 and 2007 (+30%) and between 2007 and 2008 (+28%), the concentration of active substance in cocaine rose precipitously reaching the highest value since 2001. The purity of heroin at retail level has – even more than at wholesale level – increased significantly since 1998, apart from a few outliers, reaching in 2008 almost the level of the year 2007 (-10%).

The current figures are presented in standard tables 15 and 16.

Table 10.5 Levels of active ingredient - various drugs 1998 - 2007 (median) in percent

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Amphetamines	9.4	7.0	3.3	5.0	6.0	7.5	7.9	7.7	7.1	6.2	5.4
Cocaine street trafficking	40.2	49.4	35.5	42.6	38.5	32.0	34.5	34.2	24.6	32.0	41.1
Cocaine wholesale	74.3	69.1	69.1	73.0	73.9	76.7	75.0	68.8	72.2	75.3	70.7
Heroin street trafficking	9.0	9.4	11.1	12.0	9.9	17.0	19.9	15.0	15.6	20.3	18.2
Heroin wholesale	20.0	29.2	35.1	45.8	27.0	7.3	48.8	36.5	38.1	46.5	51.1

BKA KT 34 2009, personal communication.

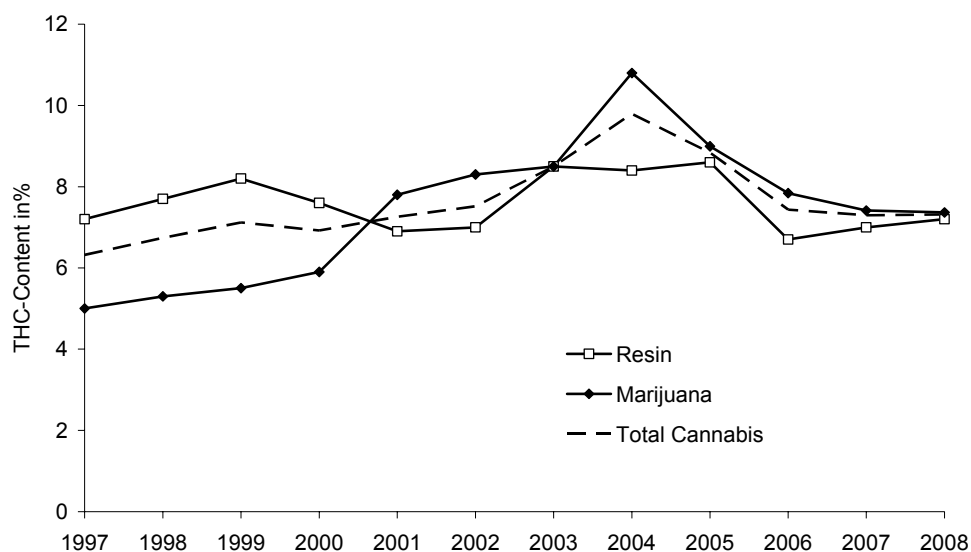
Cannabis

The contents of active substance³⁷ are separately recorded and evaluated for each cannabis preparation. In 2008, the THC-content was established on the basis of the seizures of 2,762 samples of herbal cannabis, 4,727 samples of sinsemilla and 2,762 samples of hashish resin by the BKA, LKÄ and customs authorities' laboratories. Since 2006, all participating laboratories have been reporting their data differentiating between herbal cannabis and sinsemilla, since the more potent flowering tops without the leaves have increasingly been emerging on the illicit drug market.

In 2008, the content of active ingredient in sinsemilla was 10.5% (2007: 10.0%) and in herbal cannabis 2.0% (2007: 2.4%). For the calculation of the concentration of active substances in marijuana, the percentages found for herbal cannabis and sinsemilla were taken into account in relation to the respective number of samples. The median THC-content of marijuana continually declined from 2004 (10.8%) to 2007 (7.4%). No changes were found between 2007 and 2008. After having strongly declined between 2005 (8.4%) and 2006, falling to the lowest level of the last ten years at 6.7%, the median THC-content of hashish increased again in the last two years reaching 7.2% in 2008 (figure 10.2). In the comparison with the data of 1997 only minor changes are to be found with slight declines in the potency of cannabis resin and

³⁷ In the reported concentrations of active substances, tetrahydrocannabinol (THC) additionally formed under thermal load is also taken account of.

slight increases of the concentration of active substance in marijuana (BKA KT 34 2009, personal communication).



BKA KT 34 2009, personal communication

Figure 10.2 Concentration of active substance in marijuana

Ecstasy

In the year 2008, a total of 541,727 tablets and capsules (2007: 960,602) – in the following referred to as consumption units – were analyzed. Out of these, 99.65% (2007: 99.97%) were monopreparations (539,848 consumption units) while in 0.35% (2007: 0.03%) two or three addictive substances were detected. With this, the portion of combination preparations slightly increased with respect to the previous year – albeit at very low overall figures.

96.8% (2007: 98.6%) of the analyzed monopreparations contained MDMA. The remaining 3.2% contained 1-(3-chlorophenyl)-piperazine (m-CPP), amphetamines, metamphetamine and 3.4-methylenedioxyamphetamine (MDA).

As described above, combination preparations accounted for only a very small portion of the overall volume. The concentrations of active substances calculated as base for the individual substances of the monopreparations is shown in table 10.6. As can be seen from the table, the median potency of MDMA slightly decreased again in 2008 (51mg/consumption unit) after having increased from 2006 (48 mg/consumption unit) to 2007 (55 mg/consumption unit).

The most commonly used diluents were lactose, cellulose as well as saccharose; caffeine was the most commonly admixed adulterant.

Table 10.6 Concentration of active substance in ecstasy in mg/consumption unit

Substance	Quantity				Median			
	2005	2006	2007	2008	2005	2006	2007	2008
MDA	13-47	0.6-30	27 ¹⁾	9.9 ¹⁾	22	17	27 ¹⁾	9.9 ¹⁾
MDE	1-50	11 ¹⁾			11	11 ¹⁾		
2-C-I								
MDMA	1-441	0.8-141	0.5-215	0.2 - 168	57	48	55	51
Amphetamines	1-45	0.6-51	3-33	0.5 - 20	14	15	13	0.8
Methamphetamine	5-14		27 ¹⁾	0.4 - 26	10		27 ¹⁾	13
m-CPP			26-76	0.7 - 43			39	28

1) Only one seizure.

Note: Concentrations of active substance were calculated as base.

It needs to be noted especially for ecstasy tablets that the data collection within the framework of the Drugs Data File (Falldatei Rauschgift, FDR) does not necessarily prescribe the recording of the active ingredient (as a result, active ingredients can only be researched via a search item which can be optionally entered into a non-obligatory field). It needs moreover to be taken into account that the results of forensic analyses are often recorded with some delay or not all. Therefore it cannot be excluded that the data presented in the table only reflect parts of the actual case figures.

BKA KT 34 2009, personal communication.

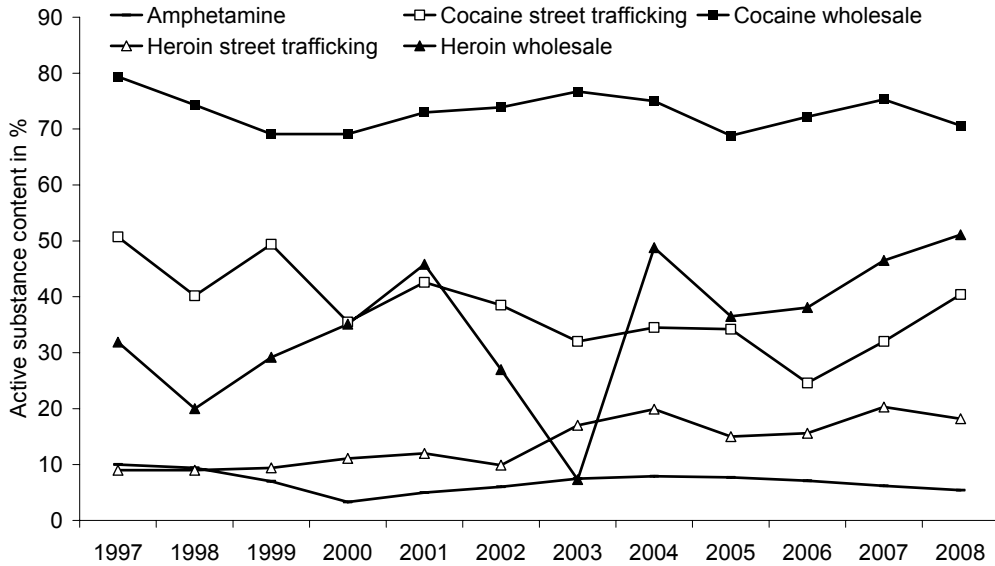
Heroin, cocaine and amphetamines

For 2008, 4,364 (2007: 5,099) heroin samples were analyzed for their content of active substance (figure 10.3). While the concentration of active ingredient in seizures at wholesale level considerably fluctuated between 1999 and 2004 (with the min. 7.3% in 2003 and max. 48.8% in 2004), it has been on a continual rise since 2005 reaching the highest level ever in 2008 at 51.1%. At street level, the concentration of active ingredient has been ranging between 15% and 20% since 1999 (2008: 18.2%). As in previous years, caffeine and paracetamol were the most commonly found adulterants and lactose was the most commonly added diluent.

In the year 2008, 3,256 (2007: 3,608) cocaine samples were analyzed for their concentration of active substance. Cocaine is mainly offered as hydrochloride on the market. In the following, no differentiation is made between cocaine hydrochloride and cocaine base. At street level, the concentration of active ingredient was at 40% in the period from 2000 to 2005 with a slightly declining tendency. After the median had reached its lowest value since 1997 at 24.6% in 2006, the median concentration of active substance increased again to 40.4% in 2008. At wholesale level, there have been only slight changes since 1997. The concentration of active ingredient amounted to 70.6% in 2008 (2007: 75.8%) (figure 10.3). The most common adulterants found in 2008 were phenacetin, lidocaine and tetramisol/levamisol. Lactose was the most commonly admixed diluent.

In the year 2008, a total of 2,866 (2007: 2,497) amphetamine samples were analyzed for their concentration of active substance which on average was at 5.4% (figure 10.3). Since the level of active ingredients in amphetamines does not depend on the size of the seized quantity, no differentiation is made between street and wholesale level. The most commonly

admixed adulterant was caffeine; lactose and creatinine were the most commonly found diluents. Methamphetamine was mainly mixed with ephedrine and glutamic acid. Magnesium sulfate and lactose were the most commonly identified diluents.



BKA KT 34 2009, personal communication.

Figure 10.3 Concentration of active substance in heroin, cocaine and amphetamines

PART B: SELECTED ISSUES

11 Cannabis markets and production

Data sources

The information provided in the following on the trade, origin, prices and seizures of cannabis products and on cannabis plantations stem from the written answers given by the Federal Criminal Police Office (BKA) and some Land Criminal Police Offices (LKÄ) upon request by the DBDD and the Annual Report 2008 (abridged version) – Narcotic Drugs (BKA 2009a). The Survey on cannabis-related disorders (CARED) conducted by Simon and colleagues (2004) and a non-representative survey conducted by the DBDD among patients with cannabis problems in drug aid facilities (DBDD consumer survey 2009, a detailed description can be found under 11.1.1) were tapped for information on cannabis markets seen from the consumers' perspective. The information presented on grow/head shops is the result of an Internet research carried out by the DBDD.

11.1 Markets

11.1.1 Contextual information: brief history of cannabis domestic production

Production

In Germany, cannabis production is categorically subject to authorization. Taking effect as of 16 April 1996, hemp cultivation, which had been generally banned under the Narcotics Act since 1982, has been approved again for limited commercial use in Germany. An exception is formed by some certified industrial hemp varieties (used for fibre production) with a maximum of 0.2% THC, which may be legally cultivated without license. The cultivation is however subject to registration.

Moreover, possession of seeds free of tetrahydrocannabinol (THC) is punishable since 1998 if it can be assumed from the circumstances that the seeds were intended to be used for illicit cultivation. The cultivation of varieties rich in THC for the production of medical preparations is also forbidden.

According to police and other experts, illicit cannabis cultivation and production of hashish and marijuana has been increasing since the nineties. The strongest available indicator for the development of illicit cannabis cultivation in Germany is the number of seizures. The seizures of cultivation sites are presented in the following, the ones of cannabis (11.1.3) and cannabis plants (11.2.2) in later chapters. The Federal Criminal Police Office distinguishes first between indoor and outdoor plantations, then between cultivation capacities – a cultivation site with capacities from 20 to 99 plants is classified as small, from 100 to 999 plants as large and from ≥ 1000 plants as professional. The number of plantations uncovered in 2008 was 20% up on the previous year. In total, two professional outdoor plantations, 15 large

outdoor plantations, 85 small outdoor plantations, 18 professional indoor plantations, 112 large indoor plantations and 285 small indoor plantations were impounded. Most of the outdoor plantations were in Bavaria (28%), most of the indoor plantations in North Rhine-Westphalia (19%), followed by Lower Saxony (14%) and Bavaria (12%) (BKA 2009a). Reports on systematic cannabis cultivation beyond police sources are scarce. An interview conducted by Werse (2008) with a cannabis farmer from Frankfurt/M gives an impression of the operation of a small indoor plantation.

From the cannabis plants cultivated in Germany the dried flowering tops and dried leaves are used for consumption or passed on; further processing to gain hashish is an exception. Cannabis in the form of oil does practically not exist on the German market as can also be seen from the seizures (11.1.3).

DBDD consumer survey 2009

The DBDD conducted a non-representative survey among patients with cannabis problems in drug aid facilities (seven outpatient and one inpatient facility as well as the drugcom portal of the BZgA) with a view to gain information on (a possible change of) cannabis markets in Germany seen from the perspective of the user. To this purpose, questions were asked on the preferences of the consumers, the perceived availability of cannabis products, on supply sources and home growing. The questionnaires were filled in and returned by N=178 persons. Since some interviewees did not answer most of the items, the number of the valid answers given respectively is indicated in brackets in the following. Indicated percentages refer only to the available values. 76 questionnaires were handed in from outpatient and 34 questionnaires from inpatient drug aid facilities. 68 questionnaires were filled in online. Data on the age are available for 119 persons: the youngest person is 15 years of age, the oldest 50, the mean is M=23.6 years, the median Med=20.0 years. The major part of the interviewees is male (N=101), only N=19 are female (N=120 valid answers).

Out of the 178 interviewees 24 stated to be engaged in home growing. Nine reported to have their technical knowledge from books/journals, eight from friends/acquaintances and seven from the Internet. Home growing equipment (20 valid answers) was purchased by ten interviewees in the Internet (see also Saxon Ministry for Social Affairs 2009), by nine in grow/head shops and by one in a do-it-yourself store. The seeds and slips (21 valid answers) were ordered in the Internet or imported from abroad (7 answers each), purchased from friends/acquaintances (4) or grow/head shops (3). 14 interviewees made statements on the number of flowering plants per year. 9 persons had between one to six flowering plants. One person reported about ten, another about 20-30, one about 90, one about 200 and one about 300-400 flowering plants per year. Proceeding on the unlikely assumption, that all plants flower at the same time, only two plantations of the DBDD consumer survey 2009 would be classified as a small plantation according to the BKA criteria, another two as large plantations and the remaining 10 would not be classified as a plantation at all, but would fall under the category "seized plants" in the BKA statistics.

Ten interviewees reported that the plants were cultivated indoors (basement, attic, balcony) and six that the plants were grown outdoors (16 valid answers).

11.1.2 Grow shops

An Internet research³⁸ conducted by the DBDD on the number and the product range of head and grow shops (status: 15.03.2009) showed that there are 246 head and grow shops operating in Germany. Out of these, 171 have their own website that is mostly also used as a sales platform. Data on the offered products are available from the websites of the head and grow shops (table 11.1). The sale of cannabis products (hashish, marijuana, seeds and slips) is categorically forbidden (see also 11.1.1). Apart from offering application aids (pipes, rolling paper, cooking and baking recipes), the shops also sell various products related to hemp, among others for example instructions for cultivation and consumption. Their product range includes articles for gardening which are not only suitable for cannabis cultivation (lamps, fertilizers, fertile soil etc.) as well as teas and herbal mixtures for smoking and incense burning.

Table 11.1 Product range of head/grow shops

	Growshop	Fertilizer	Irrigation	Lamps	Air & Climate	Measuring gauges	Soil & Substrates	Cultivation instructions	Sale of other psychotropic drugs
Yes	92	88	56	88	73	70	66	55	34 ¹⁾
No	42	48	76	47	61	63	67	72	92
Not obvious from website	37	35	39	36	37	38	38	44	45

1) Among these 21x herbal/smoking mixtures, 7x seeds (among others Dutchman's pipe), 6x Mormon tea and similar products.

³⁸ In a first step, the terms "grow shop" or respectively "head shop" and "Germany" were entered in the Google search engine. This search yielded lists of head and grow shops (like for example www.Donnergurgler.com, www.hemplinks.net, www.callunapark.nl). In a second step, the up-to-dateness of these lists was tested. In the case of online shops, the websites were visited. Stores with walk-in customers were searched among others with the address search function of google maps or via the yellow pages at www.gelbeseiten.de or www.telefonbuch.de.

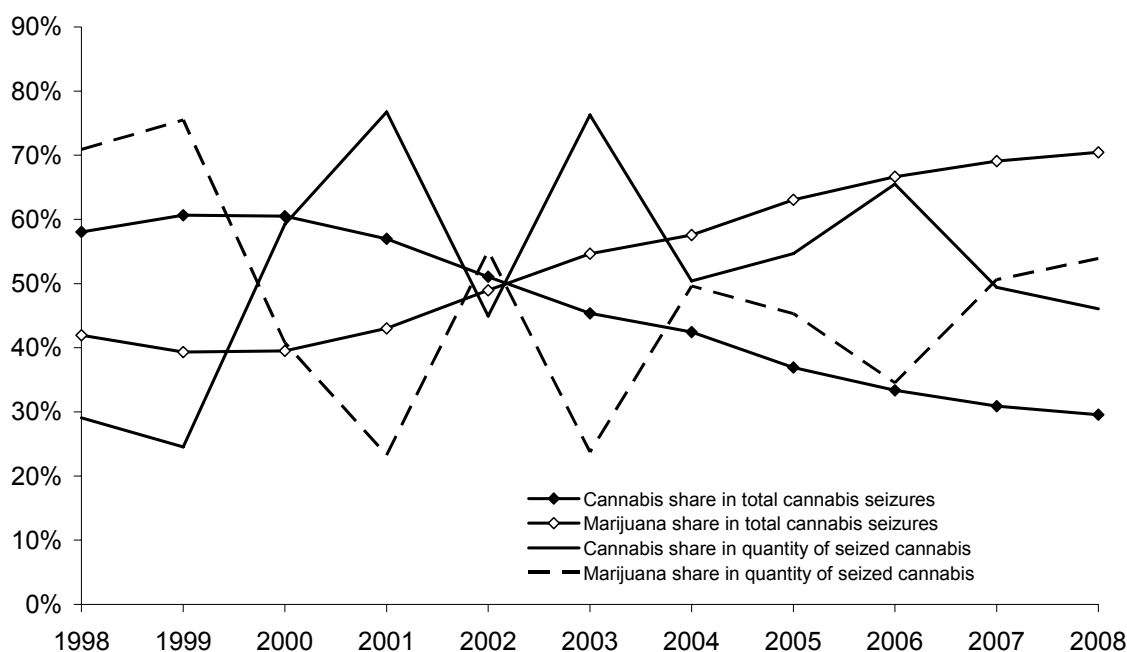
Since this search often also led to shops with no or small internet presence, the function "shopping basket" was used in google search and it was verified whether the websites found were really from online head/grow shops.

Online shops exclusively domiciled abroad were excluded from the Internet research.

11.1.3 Consumer market

Indicators available for establishing the shares of the different cannabis products – herbal cannabis, sinsemilla, resin and oil - on the German market together with their popularity among consumers are the figures provided by the BKA on the seizures of cannabis products, the data of the Epidemiological Survey on Substance Abuse, the CARED Report (Simon et al. 2004) and the answers given within the framework of the DBDD consumer survey 2009.

As can be seen from figure 11.1, the share of hashish in the total number of seizures of cannabis products practically shrunk by half in 2008 (29.5%) compared to 1998 (58.0%). The share of hashish in the overall quantity (in kg) of the seized cannabis, by contrast, fluctuated very strongly since 1998, but seems to have somewhat stabilized ranging below the level of 50% of the overall amount. According to figures provided by the BKA, it seems that hashish was impounded in larger quantities than marijuana in the individual seizures conducted over the last two years. However, since the share of both products in the overall quantity is relatively equal and was subject to substantial fluctuations, this indicator does not allow inferences to be drawn on preferences of the consumers.



BKA KT 34 2009, personal communication.

Figure 11.1 Share of marijuana and cannabis in the overall number of cannabis seizures and quantities seized

In the Epidemiological Survey on Substance Abuse (ESA) 2006 (special evaluation for the REITOX Report 2009) cannabis users who used cannabis in the previous twelve months (367 out of 7,887 interviewees between 18 and 64 years) were asked about their type of

cannabis use (table 11.2). From the answers given, it can be seen that marijuana (27.5% “often”) is clearly preferred over hashish (12.0%). Consumption of cannabis oil is negligible.

Table 11.2 Type of cannabis use in the last 12 months - ESA 2006

	Valid answers	never	rarely	sometimes	frequently
Marijuana	330	34 (9.4%)	116 (31.6%)	78 (21.3%)	101 (27.5%)
Hashish	312	97 (26.4%)	115 (31.4%)	56 (15.1%)	44 (12.0%)
Oil	275	259 (94.2%)	11 (4.0%)	4 (1.5%)	1 (0.4%)

ESA 2006, special calculations.

Simon and colleagues (2004) investigated the “access to drugs”, the “consumption prevalences of various types of cannabis” as well as the “spatial and social context” of cannabis users based on the data from ESA 2004 and a partial random sample of clients with primary cannabis-related disorders from the German Statistical Report on Treatment Centres for Substance Use Disorders (Deutschen Suchthilfestatistik, DSHS) (CARED Report). It showed that marijuana is somewhat more difficult to procure within 24 hours for both groups than hashish and that – not surprisingly – access to both types is more difficult for the user group from ESA than for the drug-experienced clients of the DSHS partial sample.

Consumption and preference of cannabis oil hardly play a role neither in the partial ESA 2004 random sample nor among clients interviewed within the framework of the DSHS. Use of hashish is slightly higher than the one of marijuana although users of both groups stated to prefer marijuana over hashish. Both groups interviewed prefer to use (water)pipes for consuming cannabis, followed by joints and shillums. The higher the consumption, the more the order of the consumption preferences manifests itself. Oral use (e.g. in cookies, teas and milk) is comparatively less popular and is often avoided especially by the low-risk group³⁹.

The most common location where cannabis consumption takes place is the private environment, e.g. at the place of friends, at home or at private parties. Apart from in the open, consumption relatively seldom takes place in public spaces. More seldom is the consumption in the car or at the work place.

Cannabis consumption among the group of clients takes mostly place in the presence of friends. At a great distance follows in second place consumption alone, followed again at a great distance by communal consumption with acquaintances, strangers or partners. Communal consumption with brothers and sisters does practically not take place at all.

Each person of the client group reported on average to have 15 friends (in the following multiple mentions were possible), out of whom only 2.34 did not use any cannabis at all. 6.31 used cannabis without having any problems and 4.40 regularly used cannabis having problems which were not further specified.

³⁹ Group of clients who were found by a cluster analysis to represent a low-risk group in terms of extent and type of cannabis consumption

The DBDD consumer survey 2009 shows even more clearly than the abovementioned surveys that marijuana is clearly preferred by users. Out of 151 users who gave a valid answer, 108 (71.6%) consume “for the most part herbal cannabis/hardly resin” or “only herbal cannabis/no resin“, while only 23 (15.3%) reported that they mostly or solely used resin.

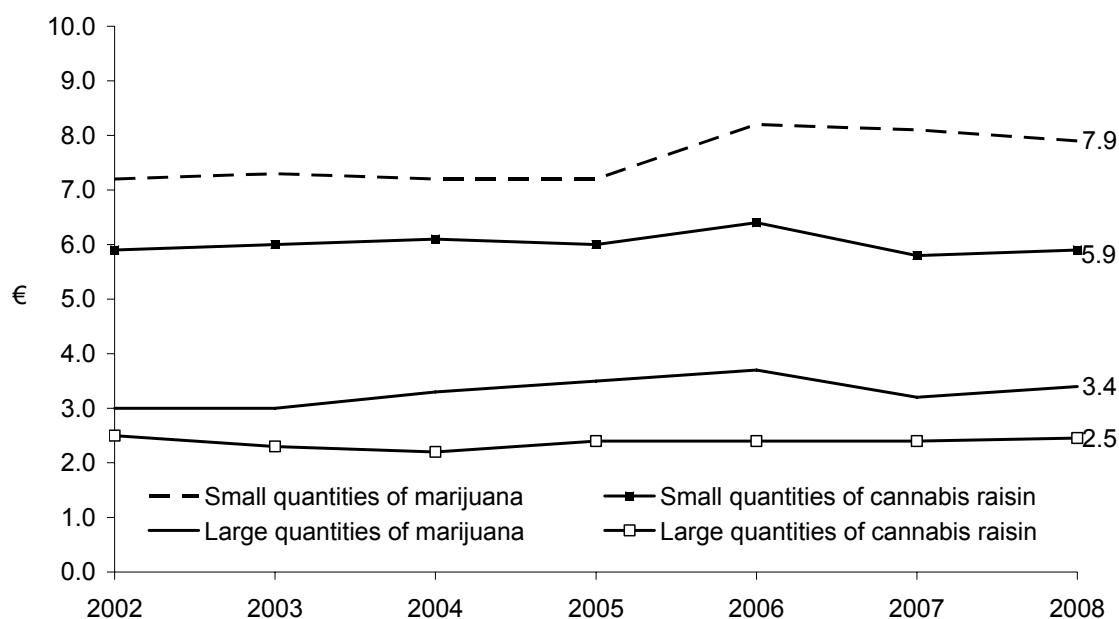
11.1.4 Consumer market shares of different cannabis products

No valid data are available on the shares of different cannabis products on the national market.

11.1.5 Market prices of cannabis

The market prices presented in the following are based on the data provided by the BKA on cannabis seized but cannot be put in direct relation with the purity of the cannabis (for the methodology and purity see chapter 10). Generally, the BKA differentiates between large quantities (prices in 1,000€/kg) and small quantities (prices in €/g). Since 2002, marijuana has been 30% more expensive than hashish both with regard to large and small quantities (figure 11.2). All in all, the prices of hashish in small and large quantities (approx. 6.0€/g or 2.5€/g respectively) and of marijuana in large quantities (between 3.0€/g and 3.5€/g) remained very stable between 2002 and 2008. An exception is formed by the retail price of marijuana which was at 7.2€/g until 2005, increased to 8.2€/g in 2006 and has stagnated since around 8.0€/g.

The street prices reported from Frankfurt/M. (Werse et al. 2009) for hashish (approx. 6€/g) and marijuana (approx. 8€/g) correspond to the national average figures.



1) The BKA indicates the prices for small quantities in €/g and for large quantities in 1.000 €/kg. In the presentation wholesale prices were divided by 1000.

BKA 2009, personal communication.

Figure 11.2 Market prices of cannabis

11.1.6 Typology of retail outlets for cannabis sale

In the DBDD consumer survey 2009 (N=178) carried out among clients of drug aid centres (cf. 11.1.3) it was also asked, where the cannabis was obtained from (multiple answers possible) and whether the cannabis sources also supplied other illicit drugs and if so, which.

“Known dealers” was the most commonly reported supply source (N=82 mentions) followed by “purchased from friends” (N=78) and at a larger distance by “given by friends” (N=42), “purchased from unknown dealer” (N=34), “self-imported from abroad” and “from home cultivation” (N=24 mentions each). These figures show just like the description of the consumption behaviour in the CARED Report (Simon et al. 2004) (cf. 11.1.3) that cannabis is used and passed on for the most part in a private environment among friends.

The question as to whether the “cannabis sources also supply other illicit drugs”, was answered 42 times in the affirmative out of 102 valid answers. The most frequently mentioned drugs also available were ecstasy, amphetamines (22.7% each) and cocaine (18.2%). Hallucinogens like LSD, mushrooms and meskalin account together for 16.7%; opioids (4.5%), sedatives and other synthetic drugs (1.5% each) are rather an exception. These figures seem to be an indication of a relatively strict separation between the markets for cannabis, cannabis + club drugs on the one hand and drugs of the open drug scene (opioids, crack, benzodiazepines) on the other.

11.1.7 Cannabis sources and transaction sizes

Information on prices and transaction sizes is presented in chapter 11.1.5.

As was presented in chapter 11.1.6, clients interviewed within the framework of the DBDD consumer survey 2009 prefer to procure their cannabis (especially marijuana) from friends and acquaintances and almost 14% cultivate their cannabis themselves. The main reasons for home growing or purchasing directly from a home grower (n=115 valid data sets; several answers possible) are “less impurities” (41.7%) and the “lower price” (41.4%). Further reasons mentioned were the avoidance of “exposure to hard drugs” (18.3%), “higher potency” (15.7%), “lower risk of criminal prosecution” (11.3%) “absence of other sources” (8.7%). Summarizing, it can be said that the perceived knowledge of the origin of the cannabis product is the most important precondition for the purchase of drugs in this group of regular cannabis users.

11.2 Seizures

11.2.1 Contextual information: supply reduction – organisation and activities

Police organisation

The execution of the Narcotics Act in the sense of supply reduction is the duty of police. German police is based on a federal structure with the organisation of the “substructure” (i.e. the local police offices) falling under the responsibility of the Federal States. Some of the Land Criminal Police Offices (Landeskriminalämter LKÄ) and local police offices have special departments and units dedicated to the prevention and prosecution of drug-related crime in general but not specifically to cannabis-related offences which are dealt with on a case-by-case basis. An exception is the special department Referat SO22/Sachgebiet Cannabis of the BKA, in which five permanent staff are mainly tasked with the reporting on cannabis-related crime in Germany. Another exception are the Common Investigation Groups – Narcotic Drugs, in which police and customs authorities cooperate on a case-by-case basis especially in the case of cross-border traffic of narcotic drugs. Just like the LKÄ (organized in a different form) the customs authorities also have a special department dedicated to drug-related crime in general, but not specifically to cannabis offences which are also only dealt with by a case-by-case approach (BKA 2009, personal communication).

An example of the prosecution of cannabis-specific crime at *Laender*-level is the project “Cannabis plantations” initiated by the LKA North Rhine-Westphalia (NRW) in cooperation with all police offices of the Land NRW⁴⁰ to combat cannabis indoor plantations. The project led to an enhanced awareness of the investigation authorities which was probably the reason for the two-digit increase rates of the detection of illicit cultivation sites of narcotic drugs (illicit cultivation of narcotic drugs: +43.8%; cultivation, production and trafficking in a gang: +25.0%) in NRW until 2007 (Landeskriminalamt Nordrhein-Westfalen 2008).

⁴⁰ Information at: <http://pol.duesseldorf-lka.polizei.nrw.de/cannabis.htm>.

Technology

North Rhine-Westphalia was the first Land in 2003/2004 to use helicopters with infrared cameras to track down sites suspected of being indoor plantations. Meanwhile, this method is established countrywide. In 2005/2006, Lower Saxony arbitrarily monitored larger areas close to the Dutch border with infrared cameras. Due to the high expense of resources associated with this method, this measure has however been stopped again.

Accidents in the form of short circuits or water damages as well as reports by the population help investigators in tracking down cannabis cultivation sites. Therefore, police in North Rhine-Westphalia organizes information events with model plantations to enhance public awareness for cannabis cultivation (BKA 2009, personal communication).

11.2.2 Seizures of cannabis plantations

Table 11.3 shows the seizures of cannabis plants from 1998 to 2008. In the year 2008, seizures totalled 1,526 cases with 121,663 hemp plants impounded (BKA 2009a). Between 2002 and 2006, the number of seizures grew continually. The total number of yearly seized plants, by contrast, is subject to substantial fluctuations. This is for example illustrated by the figure recorded for the year 2006, which comprises 75,000 plants which were grown from 5kg hemp seed which was probably intended for licit commercial use. In comparison with the year 2007, the number of seized plants declined by 10% in 2008.

Table 11.3 Seizures of cannabis plants

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Quantity ¹⁾	81,097	168,833	25,277	68,698	29,352	35,863	68,133	93,936	190,241	135,252	121,663
Cases	1,661	1,254	1,048	785	887	750	1,008	1,035	1,121	1,463	1,526

1) In plants

BKA 2009a.

Upon request by the DBDD, the Land Criminal Police Office (LKA) in North Rhine-Westphalia (NRW) provided the information that it has been monitoring cannabis cultivation, especially indoor cultivation, in NRW and in other *Laender*. The LKA estimates that cannabis cultivation has continually increased in NRW and countrywide since 2004. While in the first years the plantations in NRW were exclusively located close with the border to the Netherlands and were very often run together Dutch nationals (especially the professional farms), cultivations sites have started to move east in 2007 into the Eastern *Laender*. According to the investigative data gathered by the LKA, plantations in NRW are increasingly run by German individuals or groups with mixed nationalities which before were involved in trafficking with other narcotic drugs (heroin, cocaine, amphetamines). There are moreover concrete indications of Dutch cannabis farmers moving their plantations away from the border into the German hinterland as a result of the increased seizures of plantations close to the Dutch border. The increased number of seizures may be attributed to the investigation and prosecution concept developed by the Land Criminal Police Office NRW in 2006/2007 and implemented in all

police offices in North Rhine-Westphalia (see also chapter 11.2.1). According to the information provided by the special reporting service for drug-related crime, it is to be expected that cannabis cultivation in NRW is to increase both in terms of quantity and quality in 2009.

11.2.3 Origin of the cannabis products

As in previous years, the Netherlands was also in 2008 by far the most important country of origin and departure for cannabis products seized in Germany. Larger quantities of hashish entered Germany also via Belgium and France. Moreover, marijuana was smuggled mostly in smaller quantities but at a high frequency from Austria and Switzerland into Germany (BKA 2009a). Especially hashish has been smuggled in large quantities from Morocco to Western Europe for many years. In the recent past, individual large deliveries of hashish from South-West Asia have been seized by which also Germany has been affected.

According to the information provided by the Bavarian LKA upon request of the DBDD, the main cultivation area for cannabis is still Morocco. It is estimated that approx. 70% to 80% of the European market is supplied with cannabis from Morocco. Within the framework of a current investigation in Würzburg it was made known that at least 100kg hashish were smuggled from Nepal to Bavaria to cover regional demand.

According to the information provided by the BKA upon request by the DBDD, the cannabis products traded on the German illicit market are for the most part imported from abroad. Especially the Netherlands is the destination of numerous drugs runs made by users and small traders from Germany. Apart from being frequently smuggled into the country from abroad, cannabis is also extensively cultivated outdoors and to an increasing extent also indoors in Germany, as has already been described in chapters 11.1.1 and 11.2.2. These indoor plantations are located for example in greenhouses, warehouses, barns or residential objects that are professionally equipped for cultivating plants with relatively high contents of tetrahydrocannabinol (THC). Although operators of indoor plantations have increasingly moved their business further to the east, many of the detected professional and large plantations were relatively closely situated to the Dutch border. The cannabis plants cultivated in these plantations are not seldom destined as end products for distribution to Dutch coffee shops. Generally, the phenomenon of cannabis cultivation in indoor plantations has however gained in importance in nearly all regions of Germany. Furthermore, there were several cases detected in 2008 in which the yields of plantations in NRW were delivered to bulk buyers in Southern Germany.

According to the Bavarian LKA, cannabis products with high THC-contents (in parts above 40%) produced in the Netherlands, Germany (mainly in NRW and Lower Saxony) as well as in Great Britain still make their way to the illicit drug market. So far, no indoor plantation with a cultivation capacity of more than 1,000 plants has been discovered in Bavaria. At the same time however it is to be observed that illicit cannabis cultivation, especially for private consumption, is on the rise. The statistical figures show an increase in illicit cannabis cultivation from 524 cases in 2007 to 602 offences registered in 2008.

The cannabis users interviewed within the framework of the DBDD consumer survey 2009 were also asked about the origin of the cannabis used by them (several answers possible). Most frequently mentioned was the Netherlands (74 times), followed at a large distance by Germany (41 times home growing and 35 times professional plantation). Morocco was mentioned 20 times, Afghanistan and Nepal twice each, eight further countries were mentioned once. 77 interviewees reported that the origin of the cannabis was unknown to them.

11.2.4 Breakdown of cannabis seizures

Table 11.4 shows the seizures of hashish and marijuana made in Germany from 1998 to 2008. The number of cases and quantities seized has fluctuated in part considerably over the years. Changes in the control behaviour of police and customs authorities as well as seizures of larger individual quantities can have a large influence on the development of the situation. Therefore, when interpreting the changes observed between 2007 and 2008, it needs to be taken into account that the largest individual quantity of hashish (approx. 4,000kg) and of marijuana respectively (5,470kg) in eight years were seized in 2008 (BKA 2009a). The number of seizure cases has increased over the last ten years from about 30,000 to around 35,000. An important role in this development was played by the increase in cases in which marijuana was seized while the number of seizures of hashish strongly declined in the same period. Currently, it seems like that the quantities of marijuana detected in the individual seizures are smaller than the ones of hashish impounded in individual seizures (see also 11.1.3).

Table 11.4 Quantities of cannabis seized in Germany from 1998 to 2008

	1998	2002	2006	2007	2008	Change 2007-2008
Hashish (cases)	17,166	13,953	11,764	9,762	10,313	+6%
Marijuana (cases)	12,406	13,380	23,506	21,831	24,594	+13%
Total	29,572	27,333	35,270	31,593	34,907	+10%
Hashish (quant.)	6,110	5,003	5,606	3,678	7,632	+108%
Marijuana (quant.)	14,897	6,130	2,954	3,770	8,932	+137%
Total	21,007	11,133	8,560	7,448	16,564	+122%

BKA 2009a.

11.3 Offences

While for trafficking and consumption-related offences (see chapter 9) it is possible to discriminate between substances, the data available on convictions rendered in respect of the Narcotics Act (§29 para.1, 29a para.1 no.2 and §30 para.1 no.4) do not allow any discrimination.

The term “consumption-related offences“ is used to designate general offences committed against the Narcotics Act (Betäubungsmittelgesetz, BtMG). These are offences related to the possession, purchase and distribution of narcotic drugs or similar offences falling under § 29 BtMG. With a share of little less than 60%, cannabis ranks first among this type of offence. While the absolute figure of offences continually increased from 27,000 to above 130,000 between 1982 and 2004, it has been on a steady decline since. In the year 2008, 100,652 (2007: 102,931) consumption-related offences involving cannabis were registered (BMI 2009).

The term “trafficking crimes“ is taken as referring to offences of illicit trade with and smuggling of narcotic drugs in respect of § 29 BtMG as well as offences of illicit import of narcotic drugs in respect of §30 para.1 no. 4 BtMG. The development of the trafficking crimes is similar to the one of the consumption-related offences albeit at low overall figures. From 1998 onwards, the number of trafficking crimes continually increased from 25,543 to reach its peak in 2004 at 43,062. From 2004 onwards, the number of trafficking crimes continually declined to 31,868 (2007: 38,460) in 2008, which corresponds to levels observed in the nineties (BMI 2009).

12 Treatment and care for older drug users

12.1 Introduction

Verifiable data on the topic Treatment and care of older drug users are mainly available for opioid users in Germany. Therefore, this selected issue will mainly look at this group of users. Taking the last ten years as the period of reference, it shows that current surveys and statistics contain data on a larger portion of older opioid users than ten years ago and that the average age of these users has increased over this period of time. This is attributed, on the one hand, to substance-using people surviving longer these days and, on the other, to less young people using opioids.

The introduction of harm reduction strategies is regarded as one of the major causes for survival despite continuance of drug use. Since the mid-eighties, addiction treatment facilities have been offering survival aids that are not strictly abstinence-oriented and that reach a larger number of addicts. The expansion of substitution therapy has made a crucial contribution to the survival of many drug addicts. The professionalization of low-threshold offers has led to a reduction of the infection risk with hepatitis and HIV and of fatal overdoses and to a general increase in life expectancy.

Despite the progress made, the social and health situation of older drug users is very problematic. They are affected by exclusion from society and from the drug scene and display serious physical and psychological health problems.

Legal regulations referring to the specific needs of senior drug dependents do not exist as of yet. The complicated German social law with different institutions being responsible for treatment and care, require considerable efforts to be undertaken by social workers to for example set up ambulatorily-supervised living communities for older (ex) drug users. Drug aid experts and charity organizations recommend a close cooperation between drug aid and eldercare based on a legal framework regulating care and responsibilities.

Data analysis and data sources

By “older drug users”, this selected issue is supposed to refer to users of 40 years of age or older. With the study designs differing very much from each other, an evaluation based on this qualification is subject to great restrictions – some studies set the cut off point at “35 years and older” others “at 45 years”. Therefore, surveys and literature that do not correspond to the abovementioned age definition of the EMCDDA are also taken into account in the following presentation insofar as they describe relevant tendencies or phenomena.

To describe the profile of older drug users in treatment, a special evaluation of the German Statistical Report on Treatment Centres for Substance Use Disorders (DSHS) of the year 2008 was analyzed. Furthermore, the yearly published data of the DSHS were compared with each other to identify trends and data from the hospital statistics of the Federal Health Report evaluated. The data on drug-related deaths were taken from the Drugs Data File (Falldatei Rauschgift, FDR) kept by the Federal Criminal Police Office.

The project SDDCARE which is currently carried out in the four European countries Germany, Austria, Poland and Scotland was also tapped for information. The project runs until the middle of 2010 and is to provide basic knowledge about the life situation and the health conditions of senior drug dependents and their care needs. The age limit set by the project for “older drug users” is > 35 years of age. There are interim results available for the first six months of the year 2009. Within the framework of the project, an analysis of the national data situation on the topic of senior drug dependents (Vogt et al. 2009) and an overview work of the legal framework for the treatment of older drug users (Lenski & Wichelmann-Werth 2009) were carried out.

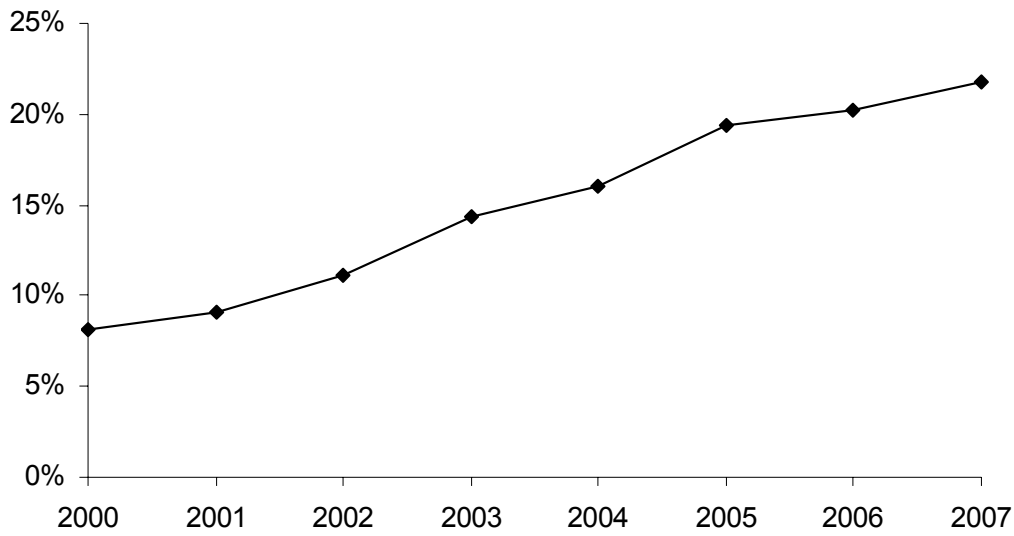
The German Centre for Addiction Issues (DHS) which forms part of the “National Focal Point of the Reitox Network” in the DBDD - the German Reference Centre for the EMCDDA, has asked drug aid specialists to give a brief statement or a personal report on the health and social situation of senior drug dependents. In these reports, the experts generally refer to patients in substitution treatment and psychosocial counselling therapy who are 40 years of age or older.

12.2 Aging of problem drug users

12.2.1 Age trends in drug users

German Statistical Report on Treatment Centres for Substance Use Disorders (DSHS)

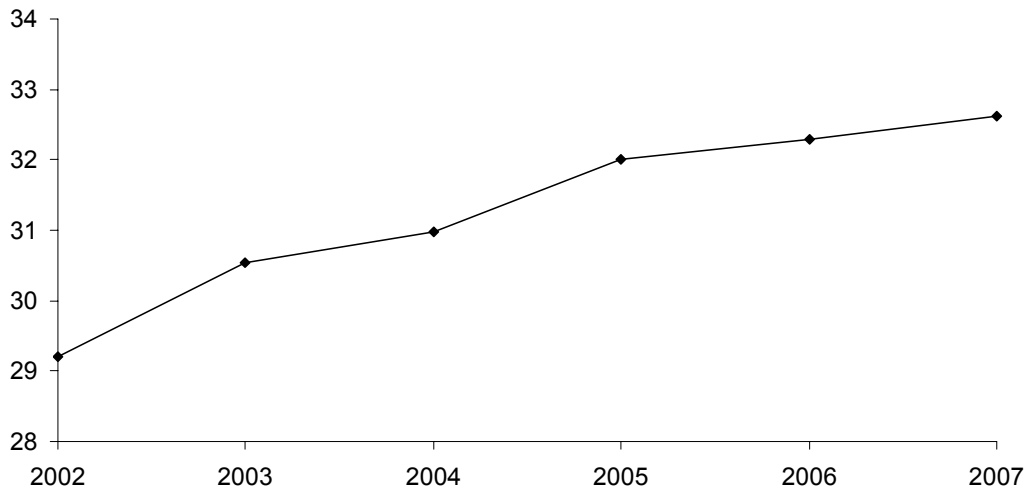
The data from the DSHS on the persons in outpatient treatment with the main diagnosis opioid dependence (broken down by below 40-year olds and above 40-year olds) show a clear age trend between the years 2000 and 2007. The portion of documented treatments/therapies of the above 40-year-olds continually increased from 8.2% in the year 2000 to 21.8% in the year 2007.



DSHS 2001-2007.

Figure 12.1 Share of persons above 40 years of age in all patients with an opioid main diagnosis in outpatient addiction treatment 2000-2007

Comparing the average age of persons with an opioid main diagnosis at the start of treatment in the period from 2002-2007, one finds the age trend increasing from 29.2 years to 32.6 years.



DSHS 2001-2007.

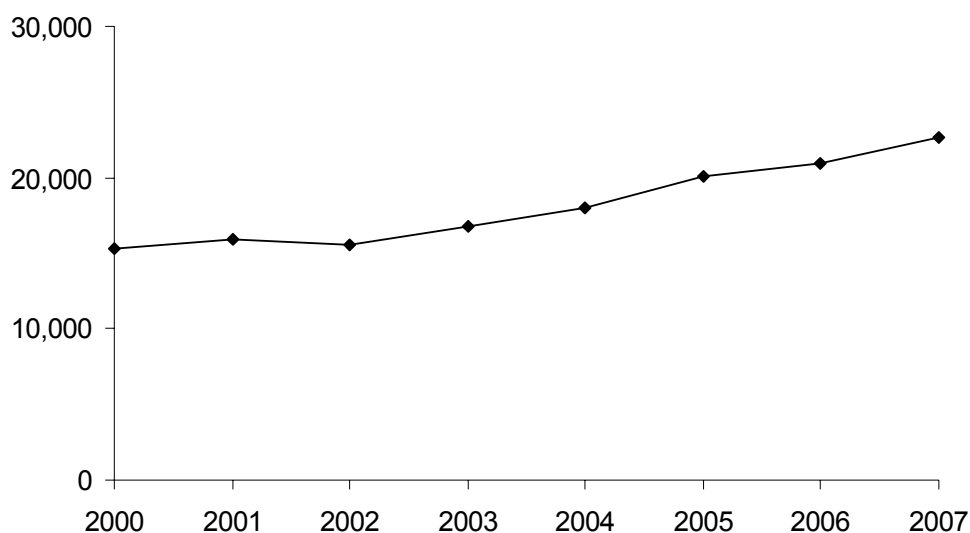
Figure 12.2 Average age of persons with an opioid main diagnosis in outpatient treatment 2002-2007

Hamburg Base Documentation

In the reporting year 2007, a special evaluation on the topic “Age and Addiction“ was carried out based on the data of the status report 2007 of the Hamburg Base Documentation on Outpatient Treatment Centres for Substance Use Disorders in the city of Hamburg. In the special evaluation, clients above 45 years of age were defined as older drug users. Here too, it showed that the average age of the opioid addicts clearly increased in the period between 1997 and 2007, namely from 32.0 years (1997) to 38.1 years (2007) (Verthein et al. 2008).

Federal Health Report (Gesundheitsberichterstattung des Bundes, GBE)

Diagnostic data of persons in inpatient hospital treatment can be gleaned from the Federal Health Report (see also the data sources presented in chapter 5). A comparison of the data between 2000 and 2007 also indicates an increasing age trend in the treated drug users (ICD-10 Codes F11-F16, F18-F19).



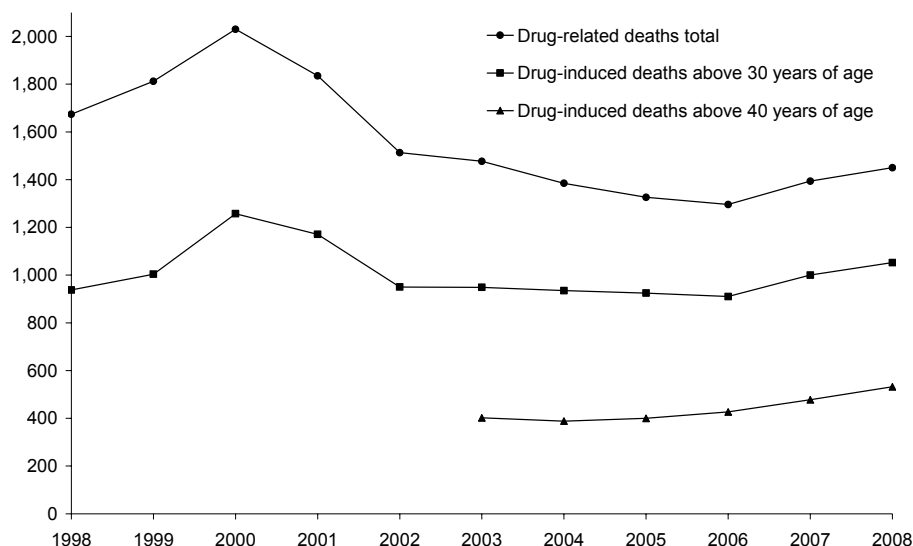
Krankenhausdiagnosestatistik 2000-2007.

Figure 12.3 Number of persons in inpatient treatment above 40 years of age (diagnoses: F11-F16, F18-F19; 2000-2007)

Figure 12.3 shows the changes in the absolute figures of persons above 40 years of age with substance use disorders (without alcohol) in inpatient hospital treatment in the period between 2000 and 2007. Except for 2002, a continual increase of patient figures was to be observed from 2000 to 2007 (2000: 15.263; 2007: 22.600). At the same time, the share of the above-40-year olds in all patients increased from 18% (2000) to 25% (2007).

Drug-induced deaths

Data on drug-induced deaths may be gleaned from the reports of the Federal Criminal Police Office. Age trends for the category “above 30 years” have been recorded since 1998. For the category “above 40 years”, data have been available since 2003.⁴¹



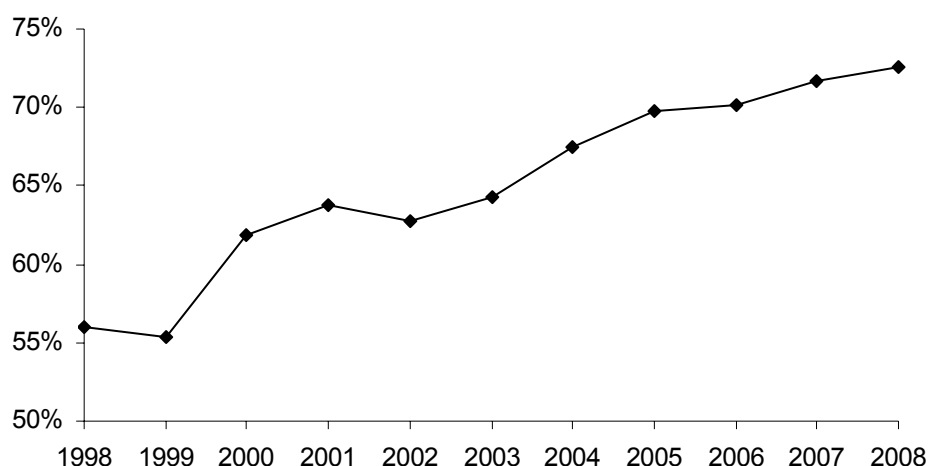
BKA 2008.

Figure 12.4: Drug-related deaths total, drug-induced deaths above 30 years of age, drug-induced deaths above 40 years of age

The BKA-figures show a clear decline in the overall number of drug-induced deaths between 2000 and 2002 (from 2,030 to 1,513). The number of the drug-induced deaths above 30 years of age also strongly declined between the years 2000 and 2002 (from 1,257 to 950). But then, the declining curve flattens out more strongly than the one of the total number of drug-related deaths. The share of drug-induced deaths above 30 years of age in the overall number of drug-induced deaths increased between 1998 and 2008 from 56% to 72.6% (figure 12.4).

In the same period, the average age of the drug-induced deaths increased from 31 to 36 years. Given the age structures of heroin addicts, it is to be expected that the absolute figure of older drug-related deaths is going to further increase in the future and to remain at a high level (Die Drogenbeauftragte der Bundesregierung 2009; Vogt 2009b).

⁴¹ The data on the drug-induced deaths that are based on the evaluations of the General Mortality Registry of the Federal Statistical Office form part of the standard reporting within the framework of the REITOX Report. Age trends for drug-induced deaths are shown in figure 6.2 in this Report. As can be seen from this figure, drug-induced deaths tend to occur in older drug users.



BKA 2008.

Figure 12.5 Share of the drug-induced deaths above 30 years of age in the overall figure of drug-induced deaths

12.2.2 Factors related to the aging and increasing life expectancy of drug users

Since the middle of the eighties, the drug aid concept, which was mainly abstinence-oriented, has been complemented by a stronger focus on harm reduction approaches. Structure and organization of the drug aid system were transformed by the introduction of substitution treatment at a broad scale, the set-up of low-threshold help offers and the promotion of self-help initiatives (Ebert & Sturm 2006; 2009). Among the low-threshold measures it was in particular the introduction of syringe exchange programmes, consumption rooms and distribution of condoms which has brought about a continual decline in new HIV-infections over the last 15 years (Vogt 2009b).

Thanks to the stronger integration of the medical care system into drug aid work it has also become possible to have concomitant diseases (e.g. infectious diseases) treated by the substituting physicians (Verthein et al. 2008; Vogt 2009b). As a result, the health situation of opioid addicts has improved, morbidity and mortality have declined and life quality and life expectancy have increased. Survival despite addiction and continued substance use over years, in some part over decades, has become possible (Ebert & Sturm 2006; 2009; Verthein et al. 2008). Drug aid experts, too, see in the restructuring of the aid system – in particular in the expansion of substitution offers – a substantial contribution to the survival of drug users (Wagner, personal communication). The decline in the number of drug-related deaths between 2000 and 2006 by 36% is presumably to be explained by the introduction and the expansion of harm reduction measures (Lenski & Wichelmann-Werth 2009). Another contribution to the increase in the average age of drug users has been made by the decline in first-

time users of opioids. While in the year 2000, 33% of the clients with an opioid main diagnosis were below 25 years of age, the figure was only at 17.8% in 2007 (DSHS 2000, 2007)⁴².

12.3 Drug use, health and social characteristics of current older drug users

12.3.1 Characteristics of older drug users

For the year 2008, a special evaluation of the DSHS data was carried out on the reference group “40 years of age and older“ (Pfeiffer-Gerschel et al. 2009a). The following descriptive evaluation comprises sociodemographic data like living and housing conditions, employment situation and other relevant characteristics. The focus of this description is on older opioid users. Older users of cocaine, cannabis and stimulants are referred to for comparison.

Age at the start of therapy and age at first use

At the start of therapy the majority of older drug users were between 40 and 50 years old. More than 80% form part of this age group for all presented substances. In the following age categories, the percentages decline substantially. Opioid and cocaine users who start treatment as late as at the age of above 60 years account for less than 1% of the persons under review. As for use of cannabis and stimulants, percentages range between 1.7% and 2.1% respectively (table 12.1).

Table 12.1 Main diagnosis and age at the start of treatment

Main diagnosis	Age at treatment start		
	40-49	50-59	60+
Opioides	83.3%	15.8%	0.9%
Cannabinoides	83.6%	14.7%	1.7%
Cocaine	87.3%	12.1%	0.5%
Stimulants	86.0%	11.9%	2.1%

Pfeiffer-Gerschel et al. 2009a.

Current older opioid addicts started using opioids at the age of 24.4 years on average. Little less than 75% of the population have used opioids for the first time before they were 30 years of age. Thus, at the age of 40, their drug career is already at least 10 years old.

Above-40-year old cannabis users have on average started earlier to use drugs. On average, the age at first use was here 18.4 years. Older cocaine users started using drugs at 27.6 years on average – almost a decade later. While only very few cannabis users started use at the age between 30 and 40 years, this is the case for every third cocaine user (table 12.2).

⁴² Homepage of the German Statistical Report on Treatment Centres for Substance Use Disorders: www.suchthilfestatistik.de; the table volumes of inpatient and outpatient treatments, “admissions/discharges” and “all treatment” of the years 2002, 2003, 2004, 2005, 2006, 2007 as of 11.08.2009.

Table 12.2 Age at first use

Main diagnosis	Age at first use								Median
	-14	15 - 17	18 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	
Opioides	5.0%	17.0%	14.2%	23.6%	14.8%	10.5%	7.5%	7.5%	24.4
Cannabinoides	22.1%	40.2%	12.3%	11.9%	5.5%	3.2%	3.9%	0.9%	18.4
Cocaine	3.6%	9.8%	8.6%	19.3%	13.1%	20.2%	15.7%	9.8%	27.6
Stimulants	8.7%	24.4%	14.2%	12.6%	11.0%	10.2%	9.4%	9.4%	24.1

Pfeiffer-Gerschel et al. 2009a.

Employment and life situation, housing conditions

Older opioid users in particular are affected by unemployment (table 12.3). On the day of the start of the treatment, more than three quarters are out of work. But among the users of other drugs more than every second is also out of work when he is older.

Table 12.3 Employment situation on the day of the start of treatment

Main diagnosis	Employment situation on treatment start			
	Employed	Self-employed	Unemployed	Other
Opioides	13.6%	1.1%	77.1%	8.3%
Cannabinoides	26.3%	5.3%	58.7%	9.7%
Cocaine	24.8%	9.5%	60.5%	5.2%
Stimulants	21.7%	4.5%	62.1%	11.6%

Pfeiffer-Gerschel et al. 2009a.

A bit more than half of the opioid users over 40 years of age live alone. The same holds true for the cannabis users. More than 50% of the users of cocaine and stimulants do not live alone.

Users of all drug categories who do not live alone, live most commonly together with a partner, often with one or several children. More than a quarter of the older users of all drug categories live in other social constellations (e.g. friends) (table 12.4).

Tabelle 12.4 Life situation

Main diagnosis	Life situation					
	Living alone	Living not alone	partner	child/ren	parent/s	other person/s
Opioids	52.5%	47.5%	53.0%	28.7%	9.5%	26.3%
Cannabinoids	50.5%	49.5%	51.5%	37.9%	8.5%	24.3%
Cocaine	45.4%	54.6%	56.9%	30.5%	7.4%	29.8%
Stimulants	41.0%	59.0%	48.3%	38.1%	11.9%	30.5%

Pfeiffer-Gerschel et al. 2009a.

The large majority of opioid users live under stable housing conditions (table 12.5). This applies also to the users of other substances. However, opioid users live more often under “non-stable housing conditions” (without apartment or in emergency shelters) than the consumers of other drugs.

About every fourth user of cocaine and stimulants is accommodated in a penal institution.

Table 12.5 Housing conditions on the day of the start of treatment

Main diagnosis	Housing conditions on the day of treatment start				
	Stable housing conditions	Non-stable housing conditions	Spec. hospital / inpatient drug-rehab	Youth penal inst. / hospital treatment order / detention	Other
Opioids	81.0%	5.7%	2.3%	8.6%	2.4%
Cannabinoids	84.9%	2.0%	1.5%	10.5%	1.0%
Cocaine	70.8%	1.7%	3.2%	23.7%	0.6%
Stimulants	70.9%	0.5%	2.4%	25.2%	1.0%

Pfeiffer-Gerschel et al. 2009a.

Referral to treatment

Older drug users often start treatment on their own account (respectively 40% of the people affected) (table 12.6). In comparison with the other client groups, opioid users are more seldom referred to treatment or care by their own families. About a third of the opioid users – and with this significantly more than for other substances – are referred to the respective treatment centres by doctors/psychotherapists. Strikingly, judicial authorities act more often as the referring institution in the case of users of cannabis, cocaine and stimulants than in the case of opioid users.

Table 12.6 Referral to care

Referral partners	Main diagnosis			
	Opioids	Cannainoids	Cocaine	Stimulants
None / self-referral	39.0%	40.5%	41.1%	41.4%
Family	2.7%	5.1%	7.0%	7.0%
Doctors, psychotherapists, hospitals, outpatient medical centres	31.0%	8.6%	6.4%	8.4%
Drug counselling centres, treatment facilities for substance-use disorders, rehab centres	13.8%	15.5%	18.3%	17.7%
Judical authorities	6.4%	12.9%	16.1%	18.6%
Other	6.9%	17.2%	11.1%	5.6%

Pfeiffer-Gerschel et al. 2009a.

Social situation

Long-term drug use often leads to a consolidation of behaviours that are typical for the scene. Exposed to the permanent stress of procuring drugs and living a life in illegality often results in the loss of social contacts beyond the scene. The drug scenes that have formed in the larger cities are in this way a strongly isolated group. It appears that older drug users are more strongly affected by exclusion and stigmatization than their younger counterparts since they display less variable use and behavioural patterns and are less flexible in adapting to different situations (Vogt 2009a; 2009b). All contact with family members and relatives is also often broken off. Older drug users possibly also break ties with their own children (Ebert & Sturm 2006; 2009).

Rules and rituals are subject to frequent changes in drug scenes; sometimes they are intentionally altered by younger users to dissociate themselves from others. At increasing age, drug users find it increasingly difficult to procure drugs and they are more likely to become the victim of acts of violence or robberies within the scene. This leads to a displacement by younger scene members and to a retreat of older drug users. This, in turn, results in a double exclusion: exclusion from society and from the drug scene. At increasing age, it shows that social exclusion and loneliness increase in opioid users. This also applies to couples living together. Existing partnerships are often marked by common addiction-related problems. This is decreasing the chance of overcoming addiction and substance use problems (Verthein et al. 2008). Lacking possibilities of participation in the working world and recreational activities exacerbate the problem of isolation (Wessel, personal communication). Lack of prospects and isolation often impact the psychological condition of the people affected and aggravate for example depressive disorders (Vogt 2009a; 2009b) (Claas, personal communication).

Physical health

Especially older drug users with year-long substance use often suffer - in addition to their addiction – from concomitant acute and chronic diseases.

Infectious diseases like hepatitis and HIV are the main problem here. Despite the 15-year decline in the overall number of new HIV-infections, it is to be noted that the risk of a new infection slightly increases again with increasing age; this applies also to older drug users. At 10%, the infection risk of drug users of above 50 years of age is higher than average according to a survey carried out by Goordroad (2003; quoted from Vogt 2009b). The DSHS-data for the populations of the above-40-year olds identify 3.6% of the older opioid users as HIV-positive and 57.0% as negative. When interpreting these data it is however to be taken into account that the HIV status in 39.9% of the people attended to is unknown (Pfeiffer-Gerschel et al. 2009a).

Hepatitis C is the most common health problem of older drug users. In 42.2% of the older opioid users, hepatitis C is chronic, in 3.7% the disease is acute. However, here as well, the infection status is unknown in almost every third client (29.9%) (Pfeiffer-Gerschel et al. 2009a).

Year-long co-consumption of other licit and illicit drugs often leads to damage of the organs or exacerbates existing ailments. Liver and lung diseases are widely spread health issues among senior drug dependents (Ebert & Sturm 2006; Vogt 2009b).

Drug aid experts moreover report about circulatory disturbances, hypertension and renal insufficiencies that are typically prevalent in older patients undergoing substitution treatment (Meyer-Thompson, personal communication). Various types of cancer (Wessel, personal communication), damages of the blood vessels caused by year-long intravenous use, abscesses, thromboses and embolism are also reported. In the worst case, the harm done makes the amputation of limbs inevitable (Hoffmann, personal communication). It is furthermore reported that about half of the patients suffer from chronic pancreatitis (Müller, personal communication). Dental diseases are a widely spread problem among drug users. Insufficient dental hygiene and malnutrition often lead to dental diseases that remain untreated over years and decades. As a result, complete loss of all teeth between the ages of 25 and 35 is not uncommon (Vogt 2009b).

Year-long drug users aged above 40 years display an early and accelerated aging process. Aging processes in the human organism are accelerated by drug-use. Age-related diseases like diabetes mellitus type 2, osteoporosis and senile dementia occur earlier in drug users. This is attributable to various factors which go hand in hand with drug use and lifestyle: (temporary) homelessness, experiences of violence, prostitution, lacking hygiene, lacking possibilities of regeneration, malnutrition as well as sequelae and concomitant diseases. As a result, at the age of 40, drug users have a need of care that corresponds to the one of non-substance using elderly people (Lenski & Wichelmann-Werth 2009; Vogt 2009b). Drug aid experts also point to the early senescence of year-long drug users. Most of the clients are 15 years and more ahead in their aging process, both physically and mentally (Hoffmann, per-

sonal communication). It was also observed in some clients that the aging process sets in very suddenly and progresses at an accelerated speed (Wagner, personal communication).

It is important to recognize the sequelae of addiction as such at older age⁴³ and not to attribute them to the aging process. Symptoms are frequent falls, malnutrition, declining physical performance, cerebral dysfunction, lack of drive and interest, mood swings, social reclusion and decreasing physical hygiene to dilapidation (Diakonie 2008).

Mental health

In many cases, drug addicts suffer from multiple dependence on various psychoactive substances. Dependence on opioids is often paired with other dependencies on licit and illicit drugs. Politoxicomania is widely spread among older drug users (Vogt 2009b).

Among long-term opioid users, psychiatric comorbidity is a common problem. Affective disorders in particular like schizophrenic disorders are widely spread. Various authors are of the opinion that depressions, anxiety disorders and psychoses occur more frequently with increasing age and duration of addiction (Ebert & Sturm 2006; Vogt 2009b). On the other hand, the authors of the BADO report conclude that the mental state deteriorates at older age and report about psychological disorders that are in their extent comparable to the ones affecting already younger drug users. From this it may be concluded that the abovementioned psychological disorders seem to develop already in the early years of a drug use career and then seem to persist (Verthein et al. 2008).

Age-related changes of the metabolism

So far, surveys conducted on substance abuse at old age, have mainly been preoccupied with alcohol and prescription medications than with the abuse of illicit drugs. Some surveys investigated in particular the aspect of abuse of psychotropic substances taken at a constant dosage in relation with age-induced metabolic changes.

When taking prescription medications, it needs to be taken into account that, as a result of physiological changes, resorption and distribution of the substance in the metabolic system can lead to a relative increase in dosage despite compliance with a constant prescription dosis. When taking medical drugs, patients are often not aware of the risks of abuse or dependence because the medical preparations have been prescribed by a doctor. However, the changing metabolism requires from doctors to permanently monitor the indicators of the prescription and, if necessary, to adapt the dosage. If this is not taken into account, this can lead to addiction without anyone noticing (Förster & Thomas 2009). Pharmacokinetic changes at old age are also investigated in connection with alcohol abuse. Here too, an increasing sensitivity paired with a declining tolerance is to be observed with increasing age. The same drinking quantity has a stronger physical impact at old age (Schäufele 2009).

⁴³ The source mainly refers to dependence on alcohol and prescription medications but also to drug addicts in general.

Age-induced physical changes also affect users of other psychotropic substances. It would be nevertheless necessary to carry out special examinations for example for the use of opioids. The question as to whether a relative increase in dosage as observed in connection with alcohol and medical drugs also occurs in connection with the consumption of opioids is indeed relevant for the substitution treatment of older drug users.

12.4 Treatment, management and care of older drug users

12.4.1 Policies

The German Basic Law (article 20 alinea 1 GG) stipulates that socially deprived and needy persons have a right to social welfare assistance. Senior drug dependents are entitled to all services under the social law that address the treatment of addiction on the one hand but also the need of care on the other.

The various requirements of older drug users show clearly that there is need for concepts specifically tailored to this group of persons. They need to take into account both the treatment of addiction but also the need of care that differentiates this group from other drug users. Special legal regulations addressing the needs of senior drug dependents do not exist as of yet.

The parts of the social law relevant for the care, treatment and housing etc. of senior drug dependents are especially the social insurance scheme (SGB IV) that comprises the statutory health insurance scheme (SGB V), the pension insurance scheme (SGB VI) and the nursing insurance scheme (SGB XI). Of relevance are moreover the stipulations of the unemployment insurance scheme (SGB III), the rehabilitation and participation of disabled people (SGB IX), basic social care for job-seekers (SGB II) and in particular public assistance (SGB XII) (Lenski & Wichelmann-Werth 2009).

Senior drug dependents are, depending on their needs (e.g. nursing care or health rehabilitation), entitled to different services to be rendered by the health, pension and nursing care insurance schemes. Each individual has different constellations that require a case-by-case evaluation. Standard regulations specifically dedicated to senior drug dependents do however not exist.

The costs of treatment of addiction in the sense of a disease devolve upon the statutory health insurance scheme. Anyone entitled to the basic social assistance for job-seekers is mandatorily health insured (according to SGB II). But this is problematic especially for drug users since the assistance is only granted to clients fit for work. However, this is often not the case with senior drug dependents. In the case of lacking insurance protection, the social insurance scheme (sickness benefits or respectively integration aids for disabled people in respect of SGB XII) provides the lowest social safety net (Lenski & Wichelmann-Werth 2009).

The service spectrum of addiction treatment under the German social law comprises outpatient and inpatient medical care including rehabilitation and substitution treatment with accompanying psychosocial care. It is to be supposed that measures aiming at restoring the working capacity in older drugs users tend to be rare, rather the question arises here if there

is a need for nursing care. Nursing care services are provided by outpatient care services or by in- or day-patient facilities. Older (and also prematurely aged) drug users are entitled to make use of these social services, but especially residential eldercare facilities are not suited to meet the specific needs of these clients (Lenski & Wichelmann-Werth 2009).

12.4.2 Health and social responses

Harm reduction strategies

Harm reduction strategies start with information about possible risks of infection and measures to prevent infection. As part of the strategies, low-threshold access to help facilities is provided and pharmacologically-assisted treatment expanded. Harm reduction strategies comprise furthermore syringe exchange programs, emergency shelters, drug consumption rooms, safer use campaigns, distribution of condoms and also vaccination campaigns for hepatitis A and B and substitution treatments (Die Drogenbeauftragte der Bundesregierung 2009; Vogt 2009a).

Homes for senior citizens

In view of the special needs of senior drug dependents, the pros and cons of the concept of homes specialized for older drug users on the one hand and the accommodation of older drug users in ordinary homes for senior citizens on the other are currently discussed. At present, such homes only exist within the framework of demonstration projects. However, both forms of accommodation are regarded only as a compromise solution that cannot meet all the requirements of this group of persons.

In the discussion it is stated as an argument against the set-up of special homes for senior drug dependents that a reduction of the (re-) integration chances of the residents and a possibly increasing stigmatization and exclusion by the home environment is to be expected. As an argument for setting up special homes it is put forward that this concept would offer the possibility to have both care (psychosocial care and substitution treatment) and medical treatment for the residents provided by specifically trained staff. Speaking against accommodating older drug users in ordinary homes for senior citizens would be the fact that eldercare staff is not trained and prepared for the counselling and psychosocial care of this special group (Ebert & Sturm 2006; 2009). The older drug addicts themselves tend to disapprove of being accommodated in ordinary homes for senior citizens because they have every day routines and firmly established behavioural patterns which they find hard to change and difficult to reconcile with the operational processes of ordinary homes for senior citizens. They rather fear to be confronted with prejudices and stigmatization (Vogt 2009b).

Ambulatorily-assisted living

Within the framework of drug aid, ambulatorily-assisted living programs serve to stabilize the life situation of drug users after inpatient treatment. This type of outreach work makes it possible to profit from a high degree of independence in a private environment in combination with assistance tailored to the individual needs. For senior drug dependents, this type of

program allows to combine the advantages of eldercare and drug aid (Ebert & Sturm 2006; 2009).

In practice, ambulatorily-assisted living groups can be formed for example for long-term substitution patients to overcome isolation of older drug users (Hoffmann, personal communication).

Substitution

In the medical treatment of opioid addicts, substitution treatment is the most important and most common treatment option. The average age of the substituted patients is – according to a study conducted on the care practice of substitution treatment for opioid addicts – at about 35 years (Vogt 2009b; Wittchen et al. 2004).

Psychosocial care forms part of the pharmacologically-assisted treatment of opioid addicts. It is to be assumed that senior drug dependents have, due to their special situation (i.e. double exclusion) an increased need for psychosocial care offering them possibilities of reintegration into society.

Social reintegration of older drug users

Concepts for the reintegration of drug users that are specifically dedicated to older persons do not exist as of yet. So far, reintegration mainly aims at restoring the working capacity (to enable reintegration into the labour market). The development of concepts that look at reintegration also from the perspective of nursing care needs and forms of accommodation is missing. At present, such concepts are only sporadically developed within the framework of projects and demonstrations projects.

When discussing possible types of accommodation for persons in need of care, the preferences of the drug users themselves ought to be, last but not least, be taken account of. In a non-representative survey Furhmann interviewed drug users aged above 40 about their ideas and wishes with regard to the future. Reintegration into society, social reintegration, restoration of the working capacity and return to a regular every day life were the wishes expressed by the interviewees (cited from Vogt 2009b). Treatment and care of older drug users can integrate such requests formulated by people affected in the conception of help offers in so far as they contribute to a successful reintegration. The request of setting up special forms of accommodation dedicated to older (ex) drug users corresponds for example to the opinion of drug aid experts who underline the necessity of the creation of specialized facilities.

Quality assurance and best practice

Cross linking eldercare and drug aid

The number and the portion of elderly people among drug users are presumably going to increase further in the future. These people are going to need, to an increasing extent, not only drug aid services and medical treatment of their addiction but also eldercare services.

An important role will also be played by the question as to find appropriate accommodation in in eldercare or health care facilities. Cooperation networks between eldercare and drug aid are desirable since eldercare staff are generally not trained for catering for the special needs of drug addicts and, vice versa, drug aid personnel are not trained for catering for the needs of elderly people and those in need of nursing care (Kämper 2009; Vogt 2009b).

The need for specific offers that take account of the social and health situation of the target group is clearly noticeable in the practical work with the elderly drug users. However, there is no legal framework as of yet to guarantee care for this target group and to combine offers in a structured way to reach the group of the elderly with addiction problems and provide them with specific help services. Special attention is to be attached to the networking of existing services, case management and the expansion of ambulatory care services (Diakonie 2008). Drug aid experts also report about being increasingly confronted with older patients and people in need of nursing care calling for the expansion of cooperation structures of the nursing care services and drug aid (Hoffmann, personal communication).

Housing of older drug users: demonstration project LÜSA

There are sporadic facilities that have oriented their help services to the special situation of senior drug dependents or that have expanded their original help offer for this target group. These are however run as demonstration projects and do not form part of the regular care offers.

The first project of this type was launched in 1997 under the name “Long-term transitional support offer” (*Langzeit Übergangs- und Stützungs-Angebot, LÜSA*). Within the framework of this project, the concept of a “permanent residential facility for aging and severely ill chronic drug addicts” has been implemented since 2002. The services provided within the project comprise long-term residential care for older addicted people but also ambulatory forms of assisted living. Housed in living communities, older drug addicts can make use of outpatient drug aid services and eldercare. It is up to the project leader to decide on a case-by-case basis whether the services should be primarily geared to the need of the treatment of addiction or to aspects of nursing care (LÜSA 2007). The homepage of the facility can be viewed at: www.luesa.de in the Internet.

Specialized facilities

Facilities providing special offers for senior drug dependents can be researched under the search category *facilities* on the homepage of the DHS. More than 230 facilities (counselling, outpatient and inpatient treatment facilities) in Germany state to cater to the needs of older drug users (<http://www.dhs.de/web/einrichtungssuche/index.php>).

PART C: BIBLIOGRAPHY AND ANNEXES

13 Bibliography

13.1 Literature

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13.2 Websites

Apart from the websites of the most important bodies and organizations, the table contains a selection of some innovative initiatives carried out in the area of demand reduction. The list is an extract of the myriad of addresses which exist in this field.

Important institutions

Website	Content
www.bmg.bund.de	Bundesministerium für Gesundheit (BMG) Federal Ministry for Health
www.bzga.de	Bundeszentrale für gesundheitliche Aufklärung (BZgA) Federal Centre for Health Education (FCHE)
www.dbdd.de	Deutsche Referenzstelle für die Europäische Beobachtungsstelle für Drogen und Drogensucht (DBDD) German Reference Centre for the European Monitoring Centre for Drugs and Drug Addiction
www.dhs.de	Deutsche Hauptstelle für Suchtfragen (DHS) German Centre for Addiction Issues
www.drogenbeauftragte.de	Drogenbeauftragte der Bundesregierung Commissioner of the Federal Government on Narcotic Drugs
www.drugcom.de/	BZgA Informationen für junge Leute und Partygänger FCHE information for young people and party goers
www.drugscouts.de	Landesprojekt in Sachsen für junge Leute Land project from Saxony for young people
www.emcdda.europa.eu	Europäische Beobachtungsstelle für Drogen und Drogensucht (EBDD) European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)
www.uni-frankfurt.de/fb/fb04/forschung/cdr/index.html	Goethe Universität Frankfurt am Main Centre For Drug Research (CDR)
www.prevnet.de	Das Fachportal „PrevNet“ dient der Vernetzung zwischen den Beteiligten im Feld Prävention und erleichtert den Zugang zu vielen Informationen und Materialien “PrevNet“ serves as a network between persons involved in drug prevention and facilitates access to information and material
www.psychologie.tu-dresden.de	Technische Universität Dresden Institut für Klinische Psychologie und Psychotherapie Technical University Dresden Institute for Clinical Psychology and Psychotherapy <ul style="list-style-type: none"> • Allocated substance abuse treatments to patient heterogeneity • Deutsches Suchtforschungsnetz German Addiction Research Network
www.rki.de	Robert Koch-Institut (RKI), Berlin

Website	Content
www.suchthh.de	Hamburgische Landesstelle für Suchtfragen e.V. Büro für Suchtprävention Hamburg Land Centre for Addiction Issues
www.uke.de/zentren/suchtfragen-kinder-jugend/index.php	Universitätsklinikum Hamburg Eppendorf Deutsches Zentrum für Suchtfragen des Kindes- und Jugendalters (DZSKJ) University Clinic Hamburg Eppendorf German Centre for Addiction Research in Childhood and Adolscence

Websites of research institutions

Further information on individual research projects, network structures and cooperation partners as well as research reports and literature references can be found at the websites of the research associations:

Website	Content
www.bw-suchtweb.de/	Suchtforschungsverbund Baden-Württemberg Addiction Research Association of Baden-Württemberg
www.psychologie.tu-dresden.de/asat/	Suchtforschungsverbund Bayern/Sachsen Addiction Research Association of Bavaria/Saxony
www.suchtforschungsverbund-nrw.de/	Suchtforschungsverbund Nordrhein-Westfalen Addiction Research Association of North Rhine-Westphalia
www.medizin.uni-greifwald.de/epidem/forschung/intervention/earlint_koord.html	Suchtforschungsverbund Nord-Ost, "Frühintervention bei substanzbezogenen Störungen" (EARLINT) Addiction Research Association North-East, "Early intervention on substance-related disorders" (EARLINT)
www.dg-sucht.de	Deutsche Gesellschaft für Sucht German Association for Addiction
www.heroinstudie.de	Deutsche Heroinstudie German Heroin Study
www.premos-studie.de	Premos-Studie Premos-Study
www.gesundheitsforschung-bmbf.de/en/137.php?PHPSESSID=d0a4c0911d2d3f8182463a3536a75789	Suchtforschung gefördert vom Ministerium für Erziehung und Wissenschaften Addiction Research funded by the Ministry of Education and Science

Websites of other relevant institutions/working groups

Website	Content
www.fachstelle-faire.de	Fachstelle für Arbeitsmarktintegration und Reintegration Suchtkranker Department for Working Integration and Reintegration of Addicts
www.zis-hamburg.de	Zentrum für interdisziplinäre Suchtforschung Hamburg Centre for Interdisciplinary Addiction Research in Hamburg
www.uni-frankfurt.de/fb/fb04/forschung/cdr/index.html	Zentrum für Drogenforschung der Johann Wolfgang von Goethe-Universität Frankfurt/M. Centre for Drug Research at the Johann Wolfgang von Goethe-University in Frankfurt/M.
www.indro-online.de	Institut zur Förderung qualitativer Drogenforschung, akzeptierender Drogenarbeit und rationaler Drogenpolitik Münster Institute for the Promotion of High Quality Drug Research, Addiction Work and Rational Drug Policy in Muenster
www.zi-mannheim.de	Zentralinstitut für seelische Gesundheit Mannheim Central Institute for Mental Health in Mannheim
www.fh-frankfurt.de/de/forschung	Institut für Suchtforschung der Fachhochschule Frankfurt/Main Institute of Addiction Research at the University of Applied Sciences in Frankfurt/Main
www.iss-ffm.de	Institut für Sozialarbeit und Sozialpädagogik Frankfurt/Main Institute for Social Work and Social Education in Frankfurt/Main
www.psychologie.tu-dresden.de/klinische/	Institut für Klinische Psychologie und Psychotherapie der Technischen Universität Dresden Institute of Clinical Psychology and Psychotherapy of the University of Dresden
www.addiction.de	Kompetenzplattform Suchtforschung an der katholischen Fachhochschule NRW Competence Platform for Addiction Research at the Catholic University of Applied Sciences in North Rhine-Westphalia
www.suchtforschungsverbund.de	Suchtforschungsverbund an Fachhochschulen (SFFH) mit den Standorten Frankfurt/Main, Köln, Aachen und Mainz Addiction Research Association at Universities of Applied Sciences (SFFH) in Frankfurt/Main, Cologne, Aachen and Mainz
www.ift.de	Institut für Therapieforschung, München Institute for Therapy Research, Munich

Cannabis-specific projects

Website	Content
www.dhs.de/web/projekte/cannabis.php	<p>Projekt „AVerCa“, das sich den Aufbau einer effektiven Versorgungsstruktur zur Früherkennung und Frühintervention jugendlichen Cannabismissbrauchs zum Ziel gesetzt hat</p> <p>The project „AVerCa“ is targeting at the installation of an effective care service for early warning and intervention of cannabis misuse among young people</p>
www.candis-project.de	<p>Modulare Therapie von cannabisbedingten Störungen</p> <p>Modular therapy of cannabis-related disorders</p>
www.bmg.bund.de/clin_160/nn_1351270/SharedDocs/Standardartikel/DE/AZ/D/Glossar-Drogenbeauftragte/Projekt_20Can_20Stop.html	<p>Gruppentraining „Can Stop“ wurde im Auftrag des BMG vom Deutschen Zentrum für Suchtfragen des Kindes- und Jugendalters (DZSKJ) entwickelt. Hierbei handelt es sich um ein manualisiertes Behandlungsprogramm für junge Menschen mit Cannabiskonsum</p> <p>The group training programme „Can Stop“ was developed on behalf of the German Ministry of Health by the German Centre for Addiction among Children and Young People (DZSKJ). This is a manual treatment programme for young people with cannabis disorders</p>
www.drugcom.de	<p>Das Cannabisausstiegsprogramm „Quit the Shit“ ist seit 2004 online unter www.drugcom.de. nutzbar und richtet sich an Menschen mit regelmäßigem Cannabiskonsum</p> <p>This programme for terminating cannabis use „Quit the Shit“ is available online since the year 2004 online under www.drugcom.de. It aims at people with a regular cannabis use</p>
www.incant.de	International Cannabis Need of Treatment Study
www.realize-it.org	<p>Beratungsobjekt bei Cannabiskonsum, durchgeführt in Deutschland und der Schweiz</p> <p>Advisory service for cannabis use, carried out in Germany and Switzerland</p>
www.be-u-online.de	<p>Cannabiskampagne der Stadt Frankfurt</p> <p>Cannabis campaign of the city of Frankfurt</p>

Party projects

Website	Content
www.partyack.de	<p>Drogenhilfe Köln e.V.</p> <p>Drug aid in Cologne</p>
www.drugscouts.de	<p>SZL Suchtzentrum gGmbH Leipzig</p> <p>SZL Addiction Centre in Leipzig</p>

Website	Content
www.eve-rave.net	Verein zur Förderung der Partykultur und Minderung der Drogenproblematik e.V. Berlin Association for the promotion of party culture and the reduction of drug problems in Berlin
www.party-project.de	Party Project e.V. Bremen Party project in Bremen
www.chill-out.de	chill-out - gemeinnütziger Verein zur Förderung der Kommunikationskultur e.V. Aachen chill-out – non-profit making association for the promotion of communication culture in Aachen
www.alice-project.de	Alice Projekt - Frankfurt Alice Project in Frankfurt
www.drobs-hannover.de	Jugend- und Suchtberatungszentrum/ Psychosoziale Beratungs- und Behandlungsstelle Hannover Centre for young people with addiction problems / psycho-social counselling and treatment centre in Hanover

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