In fact and fiction the history of humanity is replete with what Davenport-Hines (2001; 2004) has called the ‘pursuit of oblivion’. In fiction Robert Graves (1992: 9) talks about the drunken God Dionysus and his followers the Maenads and the Centaurs who washed down copious amounts of hallucinogenic mushrooms with wine and ivy ale thus inducing ‘hallucinations, senseless rioting (involving running around the countryside tearing animals or children in pieces) prophetic insight, erotic energy and remarkable physical strength’. The use of psychoactive substances is a key feature in religious ceremonies from the Jewish Shabbat to the Christian Eucharist, and where alcohol has been proscribed, for example in Islamic countries, then coffee houses and the smoking of tobacco have assumed significance (Weinberg and Bealer, 2001). Conan Doyle’s Sherlock Holmes is a frequenter of opium dens, and there is evidence to suggest that some of the most significant leaders in history, such as Alexander the Great (see Liappas et al., 2003), Stalin (see Sebag-Montefiori, 2003) and Churchill (Storr, 2008) (and also who was never seen in public without a Havana cigar) had alcohol problems.

Although there has been a presence of psychoactive drugs in virtually all human cultures it has been the development of the industrial state over
the last 300 years, and its commensurate colonial expansion (Gately 2001) that have given rise to the concern with addiction and drug related problems. Drug epidemics are nothing new, and we can consider two separated by 250 years. The gin epidemics of the eighteenth century and the heroin epidemics of the 1980s are strikingly similar, in that the contributing factors included urban poverty, and the technology to mass produce the drugs and thus to improve the route of entry into the body. The invention of the distilling process to produce spirits allows higher concentrations of alcohol to be consumed and faster, so making drunkenness easier and more likely. Likewise the development of the hypodermic syringe allows heroin more rapidly into the blood stream for a quicker and bigger ‘hit’. During the 1980s heroin use was found to be ‘widespread’ amongst predominantly socially excluded young people in cities and nearby towns, with estimated numbers between 100 and 150 thousand users (Parker, 2005). Within the context of economic decline, and the lack of funding available to health and social services, heroin use had a major impact upon already disadvantaged communities. But compare these numbers with the gin epidemics. The eighteenth century was an age of prodigious drinking with 1750 seeing 6 million people (including children) drink 11 million gallons of gin (Heather and Robertson, 1997). Within the current context of concerns over the increasing consumption of alcohol within western industrialised societies, the situation is not seen as a drug epidemic in the same ways that increasing heroin use was and is seen to be. This is because of the social acceptability of alcohol and the part that it plays in our cultural and social life.

**Should we see alcohol as just another drug?**

**What is a drug?**

Take a few moments to jot down what you think a drug is, what drugs you use, what you see as the pleasurable and not so pleasurable consequences of that use, and any experiences you have of trying to change that use.

Goldstein (2001: 4) argues that:

A drug is any chemical agent that affects biologic function... A psychoactive drug is one that acts in the brain to alter mood, thought processes or behaviour. Nothing about drugs as such, even psychoactive ones, makes people like them
or try to secure them. On the contrary when physicians prescribe drugs a major difficulty is getting patients to take them regularly…this ‘compliance problem’ is just as troublesome with many psychoactive drugs (such as those used to treat mental illness) as it is with drugs of other kinds.

We all use drugs of one kind or another usually because we have an expectation of the effects of those drugs, whether it is to get high, to relax or to find some energy. This psychological expectation plays an important role in combination with the biological effects and crucially social and environmental context as well. We can say that drugs act on the basis of a combination of physical effects on the brain and body, the psychological expectation that the individual has of the effects of the drug, as well as the influence of the peer group and the social norms of the individual.

For a drug to work it has to be ingested (see below for different routes of entry to the body). The human brain then sends signals across nerve tracts via a system of chemical messengers which are called neurotransmitters, and which Goldstein (2001) refers to as the brain’s own drugs. Different psychoactive drugs have their own ways of working with these neurotransmitters and can act on the nerve pathways as a mimic of those natural drugs, or to selectively block the activity of the natural drugs, or to enhance the natural action of a neurotransmitter.

The neurotransmitters are described as a kind of ‘chemical key’ which fit into designated ‘keyholes’ which are essentially receptor sites found on the surface of nerve cells. The psychoactive drug may be able to key into and unlock one or more kinds of receptor site and thus have its effect. The role of the brain and its evolutionary development will be discussed in detail in Chapter 6, but at this stage we need to know that particular neurotransmitters are implicated in a reward system that regulates behaviour such as eating, sex and drugs. (The neurobiology of drug use will be discussed in detail in Chapter 6.)

**Drug classification**

Usually drugs are classified according to the major mode of impact that they have on the mind (Edwards, 2004) and thus the following classifications are used by academics and practitioners:

- sedatives
- stimulants
- opiates
• hallucinogens
• mixed effects
• volatiles.

You will see from Table 1 that there are both immediate and longer term effects from using drugs (the Table is not intended as a definitive guide to all problems experienced) and it is usually the desired immediate effect that is the reason for taking the drug. For example, someone attending a rave might use amphetamines or ecstasy to keep dancing all night, whereas a person wanting to relax may use alcohol or cannabis. However, none of these categories are clearly delineated in the sense that the effects of a particular drug will be mediated by the biology of the individual, the environment in which the drug is used (including other people in attendance) and the expectations that the individual has of the effects of that drug. In addition, of course, people may use a combination of drugs (poly drug use) at the same time, for differing effects. At this stage we are only considering the biological and psychological effects of some drugs. Issues of social control (in the form of legal sanctions based upon notions of relative harms) have not been raised, but will be discussed further in Chapter 2, and neither have the social consequences of drug use, which we will come to later in this chapter.

The worldwide prevalence of drugs

The United Nations Office of Drugs and Crime Prevention produced a World Drug Report (UNODC, 2006). The UNODC estimates that 200 million people worldwide (out of a population of 6,389 million) (4.9% of the population between the ages of 15 and 64) use illicit drugs. Of these 3.9% use cannabis, 0.5% amphetamines, 0.4% opiates, 0.2% ecstasy, 0.4% opiates (of which heroin is 0.3%) and cocaine 0.30%. Within this total population it is estimated that 25 million people (ages 15-64) are involved in problem drug use.

Adult drug use in the UK

In the UK the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2006), utilising the figures from the British Crime Survey (BCS) to monitor drug use, estimates that approximately one third of the adult population between the ages of 16 and 64 acknowledge having used some kind of illicit drug during their lifetime. People under the age of 35 are far more likely to use illicit drugs, with prevalence of use highest for those under 25 years of age. There is evidence to suggest that the
<table>
<thead>
<tr>
<th>Name</th>
<th>Method of ingestion</th>
<th>Immediate effects</th>
<th>Longer term effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barbiturates</td>
<td>Oral</td>
<td>Calmness/muscular relaxation/sleep. Large doses cause unconsciousness and death. Prescribed for anxiety, sleeplessness and sedation.</td>
<td>Physical dependence/tolerance. Withdrawal symptoms such as anxiety, insomnia, irritability, convulsions and hallucinations and vomiting. As for barbiturates.</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Oral</td>
<td>Low dose can act as a stimulant but becomes a depressant as dose increases. Precise behavioural effects influenced by cognitive and social factors. Impairs judgement, visual motor performance, memory and concentration.</td>
<td>Heavy prolonged use leads to anxiety, depression, memory loss and physical illness. Liver damage and affects all major organs. Patterns of tolerance and dependence depend upon amount, pattern and extent of ingestion. Severe withdrawal symptoms include vomiting, sweating, hallucinations, convulsions and possibly death.</td>
</tr>
<tr>
<td>Stimulants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amphetamines</td>
<td>Oral or injection</td>
<td>User feels energetic, sometimes euphoric and capable of prolonged concentration. At higher doses causes restlessness, irritability and aggression.</td>
<td>Psychosis, impulsive violence, depression. Suppression of appetite can cause malnutrition. Risk of hepatitis/HIV infection through sharing needles.</td>
</tr>
<tr>
<td>Cocaine</td>
<td>Snorting/eating or injecting</td>
<td>Euphoria, increased energy, enhanced mental alertness. Increased blood pressure, respiration and body temperature.</td>
<td>Restlessness, insomnia, paranoia, psychosis.</td>
</tr>
<tr>
<td>Name</td>
<td>Method of ingestion</td>
<td>Immediate effects</td>
<td>Longer term effects</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Caffeine</strong></td>
<td>Tea, coffee, soft drinks or chocolate</td>
<td>Delays onset of sleep. Increased performance at simple intellectual tasks.</td>
<td>Insomnia, anxiety and depression. Withdrawal symptoms such as headache and irritability.</td>
</tr>
<tr>
<td><strong>Opiates</strong></td>
<td>Oral, smoking or injection</td>
<td>Brief stimulation of the brain then depression of the central nervous system.</td>
<td>Tolerance develops to many of the desired effects. Withdrawal symptoms may include cramps, sweats and diarrhoea. Risk of HIV/hepatitis infection through shared needles.</td>
</tr>
<tr>
<td>(includes opium, heroin and methadone)</td>
<td></td>
<td>Feelings of euphoria, possible restlessness, nausea and vomiting. At higher doses respiratory failure and possibly death.</td>
<td></td>
</tr>
<tr>
<td><strong>Hallucinogens</strong></td>
<td></td>
<td>Increased behavioural activity and hallucinations. Increased blood pressure, pulse and body temperature.</td>
<td>Psychotic reaction and unpredictable flashbacks of the original experience.</td>
</tr>
<tr>
<td>Mescaline</td>
<td>Eating or injection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Datura (magic mushrooms)</td>
<td>Eating</td>
<td>As for mescaline.</td>
<td>As for mescaline.</td>
</tr>
<tr>
<td>Lysergic acid diethylamide (LSD)</td>
<td>Oral, snorting or injection</td>
<td>Changes perception, thought and mood. Hallucination.</td>
<td>Flashbacks and psychosis.</td>
</tr>
<tr>
<td><strong>Volatiles</strong></td>
<td></td>
<td></td>
<td>Weight loss, nosebleeds, kidney, liver and brain damage.</td>
</tr>
<tr>
<td>Solvents</td>
<td>Sniffing</td>
<td>Euphoria and excitement. Muscular uncoordination and depressed reflexes.</td>
<td></td>
</tr>
<tr>
<td><strong>Drugs with mixed effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecstasy</td>
<td>Oral or injection</td>
<td>Altered perception, pleasant feelings, stimulation, hallucinations, vomiting and agitation.</td>
<td>Not yet known.</td>
</tr>
<tr>
<td><strong>Cannabis</strong></td>
<td>Smoking or eating</td>
<td>Euphoria, sedation and impairment of short term memory and psychomotor skills. Large doses cause hallucinations, delusions and anxiety</td>
<td>Loss of energy, impaired memory and concentration and respiratory disorders through smoking.</td>
</tr>
<tr>
<td>Nicotine</td>
<td>Smoking, chewing or snorting (snuff)</td>
<td>Stimulation of central nervous system. Increased heart rate and respiration. Used for relaxation and avoidance of withdrawal</td>
<td>Cancers (particularly of the lung), respiratory disease, restlessness and anxiety.</td>
</tr>
</tbody>
</table>

Source: adapted from Edwards, 2004; Barber, 1995
prevalence of use and particularly first time use is declining. Males are more likely to report drug use than females, with those differences tending to become more significant with age. The EMCDDA argues that in 2005/6 based upon the results of 29,631 respondents cannabis was the most widely used illicit drug across all age groups at 8.7%, which was very close to the figure of 10.5% for any drug used. All other drug use was much lower with cocaine at 2.4%, ecstasy at 1.6%, amphetamines at 1.3%, magic mushrooms at 1%, LSD at 0.3% and crack at 0.2%. Opiate use is not included in these figures but the EMCCDA estimates the prevalence of opioid use at national level to range roughly between one and six cases per 1,000 population aged 15–64.

**Poly drug use**

Evidence from major studies across the developed world indicates that poly drug use is the norm for many people, and not necessarily those who have a dependency problem. For example, there is an acceptance that a key feature of the club and dance scene is young people experimenting with a variety of substances (Parker et al., 1998). However, within the literature there is disagreement over what the term ‘poly drug use’ should actually entail in terms of substances (whether legal or illegal) and the timings of their ingestion (Hunt et al., 2007). Studies such as the National Treatment Outcome Study, the Drug and Alcohol Outcome Treatment Study (see below) show that within the ‘clinical’ population this is a major issue in relation to detoxification and rehabilitation.

The European School Survey Project on Alcohol and Other Drugs (ESPAD) (see www.espad.org) was set up in 1994 to study adolescent substance use in Europe from a comparative and longitudinal perspective. Four data collections have taken place from the participating countries in 1995, 1999, 2003 and 2007, with new countries joining for each survey point.

The ESPAD findings clearly demonstrate a strong emphasis on poly drug use amongst those people turning 16 years of age in the year that the data is collected. In the UK drinking of alcohol by adolescents and drunkenness are above the average for the ESPAD countries as a whole, and have stayed relatively stable since 1995. In 1995 90% of adolescents had consumed alcohol in the last 12 months, and 91% in 1999 and 2003 respectively. This compares to the ESPAD average of 80% for 1995, 82% for 1999 and 81% for 2003. Of even more concern are the figures for drunkenness over the same period, with the UK figures being 70%, 69% and 68% for the respective years as compared to the ESPAD averages of 47%, 51% and
50%. Although alcohol consumption has remained much the same over the same period the use of alcohol and pills in combination has declined from 20% to the ESPAD average of 7%.

By 2003 cigarette smoking amongst adolescents in the UK had fallen below the ESPAD average of 63% to 58%, and also tranquilliser and sedative use standing at 2% as compared to the ESPAD average of 7%. In addition, the use of inhalants which was at 20% in 1995 (compared to the ESPAD average of 9%) had dropped to 12% in 1995, slightly below the ESPAD average of 10%. However, any drug but cannabis stood at 9% compared to the ESPAD average of 6% and cannabis use was at 38% as compared to the 20% ESPAD average.

The early and increased use of combinations of substances are important factors in the increased risk, not only of drug dependency (Li et al., 2007b), but also the concurrence of mental health problems (see Chapter 5) as well as the associated problems of poverty and social exclusion.

The UNODC (2006) argues that the demand for drug treatment tends to mirror the availability of particular drugs, with the exception of cannabis. Given the extent of cannabis use across the world only a small proportion of users seek treatment although this number is growing in line with use. In Africa most treatment sought is for cannabis, in Asia and Europe it is for opiates, and in South America for cocaine. For the use of amphetamines treatment demand is highest in Asia followed by Oceania, North America, Europe and Africa.

The social context of substance misuse in the UK

The UK Government (Home Office, 2002) estimate that there are 250,000 Class A drug users (see Chapter 2 for the system of classification) who account for 99% of the costs of drug misuse in England and Wales. The National Drug Strategy (Home Office 1998; 2002) was largely based on the National Treatment Outcome Research Study (NTORS) (see Gossop et al., 2003). NTORS was the first large scale, prospective and multi-site treatment outcome study of substance misusers carried out in the UK. It provides a useful source of information about the problems that service users arrive at treatment with, the operational characteristics of the programmes themselves, and the outcomes from those programmes. A sample of 1075 people was established from 54 different agencies (Drug Dependency Units, Rehabilitation Centres, and Methadone Maintenance and Methadone Reduction programmes). Of particular concern to New Labour was the perceived link between drug use and crime, and mainly acquisitive crime.
NTORS researched four problem domains including substance use, health risk behaviour, physical psychological health and personal/social functioning. Since that study was started in 1995 and with the implementation of the National Drug Strategy changing the context of drug service provision (particularly with the expansion of criminal justice interventions) combined with changing patterns of drug use the Drug Treatment Outcomes Research Study (DTORS) has been developed (Jones et al., 2007). DTORS is to run for three years following 1,796 adults through treatment and is researching similar problem domains to NTORS.

Age, ethnicity and gender

The baseline information at intake shows that the gender and age profile for DTORS was 73% male and 27% female with 20% being between 16 and 24 years of age, 45% 25 to 34 years of age, 27% 35 to 44 years of age and 7% 45 years and over. Of these 89% were White in terms of their ethnicity, 4% of mixed ethnicity, 3% Black, 3% Asian and 2% ‘Other’ including Chinese. Those people with crack as their main problem were more likely to be Black, with heroin the main drug for White treatment seekers.

Family context

The partners of 38% of those seeking treatment also used drugs and women were more likely to have a drug using partner. About half of the cohort had children under 16, but only about 25% lived with their children. That problematic drug use has the potential to impact negatively upon children and families has become an increasing concern for policy makers as well as practitioners with over a million children in the UK having parents with substance misuse problems (Forrester et al., 2008). Within the UK ‘Every Child Matters’ (www.dcsf.gov.uk/everychildmatters) is the key government policy to ensure that all areas of government are working together in addressing the needs of children; this includes in working with substance use and misuse. The Advisory Council on the Misuse of Drugs (2003 cited in Barnard and McKeganey, 2004) estimate that 2-3% of all children under the age of 16 have parents with drug problems.

In their review of the published research (which has mainly come from America) looking into the impact of parental drug use on children Barnard and McKeganey (2004) identified three key areas:

1. The impact on the home environment and child care
2. Parent-child relationships
Due to the relapsing nature of addiction (see Chapter 3) followed by periods of recovery and then relapse, household stability can vary. This means that when a parent is increasingly involved in drug use then child care and the home can become secondary considerations. This can then lead to a lack of care towards the child in the form of food, clothing and hygiene, and put the child substantially at risk of harm. Barnard and McKeganey (2004) cite a study by Shulman, Shapira and Hirschfield (2000) that showed that 83% (n=100) of assessed children of parents attending methadone clinics in New York had medical or nutritional disorders of varying degrees. Studies in the USA have shown that it is neglect rather than physical or sexual abuse that is the main reason for social workers to intervene with drug using parents and the main reason for children to be taken into care.

Barnard and McKeganey’s review also demonstrates that a preoccupation with drug use is likely to impair a parent’s ability to be warm, consistent and emotionally responsive to a child’s needs. The children of drug using parents are also more likely to be separated from their families, and there would appear to be an increasing negative relationship between the severity of the drug problem and quality of the relationships. In particular increasing drug involvement was significantly associated with less supervision of the child, a more punitive approach to discipline, and disagreement between partners over disciplinary issues and less positive involvement with the child.

As a consequence of these levels of deprivation then there is an increased likelihood of problematic patterns of behaviour by children of drug dependent parents. Studies reviewed demonstrate heightened levels of anxiety and depression amongst these groups of children as well as hyperactivity, impulsivity and aggression and behaviours consonant with attention deficit hyperactivity disorder.

These issues have the potential to lead to other problems for the individuals and the communities in which they live, one of which is the potential for the child themselves to develop drug problems as they grow up. This debate concerning nature versus nurture is a complex one, and will be discussed in Chapter 6 when we look at the importance of genetic influences on addiction. However a systematic review by Beckett et al. (2004) of studies into an understanding of problem drug use amongst young people argued that poor parental control is possibly the main determinant of the level of problematic drug use due to the internalisation of parental attitudes to drug use.

A study by Forrester et al. (2008) evaluated a programme called ‘Option 2’ which was commissioned by the Welsh Assembly Government to work
with families of parents with substance misuse problems. The aims of the programme were to safeguard children at risk of harm, to improve family functioning and reduce the need for the children to be taken into care. The intervention is short and intensive, lasting between four to six weeks but with a social worker available 24 hours a day and with workers utilising motivational and solution focused approaches. Parents felt that they got a better service from Option 2 in comparison with social services, and were appreciative of the excellent listening and communication skills of the workers, and their commitment to and knowledge of the family situation. The result was that, by the end of 2006, 24% of Option 2 children were still in care as opposed to 33% of children not using this service, and 68% were still living at home from the Option 2 group in comparison to 56% of the others.

This study found that, with the families with fewer and less complex problems, these changes were lasting, but for more complex issues the problems resurfaced once the Option 2 support had been withdrawn. This research demonstrates a number of key issues including the importance of motivational working (see Chapter 7), and the importance of concurrent, continuous and aftercare services (see Chapters 8 and 9).

**Accommodation**

DTORS shows that 40% of dependent drug users were living in unstable accommodation which is very similar to the previous NTORS findings of 7% rough sleepers, 5% living in squats, 8% temporary hostel accommodation and 17% in more than one type of accommodation.

An assessment of the international literature on effective substance misuse services for homeless people was conducted by Pleace (2008) on behalf of the Scottish Government. There is evidence that substance misuse amongst rough sleeping young people is at a higher rate than in the general population. Pleace found that the relationship between substance misuse and homelessness is complex and mutually reinforcing, with becoming homeless leading to an increased risk of substance misuse, and substance misuse leading to an increased risk of homelessness. As will be seen when we discuss complexity theory (see Chapter 8) these interaction effects are crucial in our understanding of the ways in which a system of addiction is perpetuated. In addition, Pleace found a strong correlation between mental health problems, substance misuse and homelessness, with similar patterns across the European Union, North America and Japan (see Chapter 5 for a discussion on dual diagnosis). There is a recognition amongst practitioners and policy makers that ‘Appropriate and sustainable

**Education and employment**

The DTORS research shows that 38% had left school before 16 and 77% reported being unemployed with NTORS demonstrating that 28% were self-supporting with a wage or casual work and 12% had a job. In their review of the literature McSweeney and Hough (2006) found again that there are mutually reinforcing and complex barriers to drug users accessing the labour market. These include the following:

- limited academic qualifications and work experience
- poor literacy skills couple with dyslexia
- skills and training deficits coupled with low confidence, self-esteem and motivation
- poor job seeking skills
- relationship problems and fractured social networks
- criminal records and employer attitudes
- only offered temporary, low paid jobs
- mental health problems.

These issues were also often coupled with high levels of temporary or inadequate accommodation.

**Health issues and treatment contact**

Given this evidence for multiple interacting and mutually reinforcing problems and needs it is not surprising that 23% of the DTORS cohort had a mental health diagnosis, with 43% having had lifetime contact with mental health services. This will be discussed in detail, but at this stage we need to acknowledge that if you have a drug and or alcohol problem you are far more likely to have a mental health problem and vice versa. In the NTORS cohort feelings of hopelessness was experienced by 62%, terror and panic 41%, suicidal thoughts 29%, chest pains 38%, sleep disturbance 81%, weight loss 68% and dental problems 54%.

**Drug use**

In the four weeks prior to interview 62% reported using heroin, 44% crack, 25% benzodiazepines and 50% alcohol. Injecting drug use was reported by 37% and 48% of injectors admitted to sharing equipment in the past four weeks. Of the opiate users 76% reported poly drug use in
combinations with other opiates, benzodiazepines or alcohol. Thirty-seven per cent reported poly drug use in combination with injecting and 9% reported overdosing in the last three months.

**Criminal activity**

DTORS shows that over 39% had committed acquisitive crime in the four weeks prior to interview and 22% reported offending to support a drug habit with 18% reporting that they had offended under the influence of drugs. Of all the people interviewed on DTORS, whether they were referred through the criminal justice system or not, 73% reported having committed a crime in the last 12 months. This would seem to support the basis of the National Drug Strategy (Home Office, 1998; 2002) of a substantial link between drug use and crime. However non-criminal justice referrals reported their proceeds from crime over the last four weeks at an average of £130, with criminal justice referrals at an average of £200, which would seem to indicate relatively low levels of crime. The crimes in order of frequency in NTORS are shoplifting 38%, selling drugs 29%, fraud 15%, burglary 12%, robbery 5% and other theft 5%. A key feature of the National Drugs Strategy (Home Office, 1998; 2002) has been the expansion of criminal justice interventions to address particularly the relationship between drug use and acquisitive crime (see Chapter 2).

This expansion in criminal justice activity can be seen by the fact that 55% of the DTORS cohort receiving treatment were subject to a court mandated Drug Rehabilitation Requirement. The referrals that came via the criminal justice system had more complex offending patterns, were more likely to be using crack, more likely to be in unstable accommodation, more likely to be separated from their children and more likely to be from black and minority ethnic communities. In addition 71% of all referrals had previously had structured day or residential treatment and likewise in research on drug use amongst newly sentenced prisoners Stewart (2009) found 51% had previous treatment in the community and 17% in a previous prison term. This not only supports the relapsing nature of addiction (see Chapters 3,5,6 and 7) but in the case of prison demonstrates that despite most prisoners entering custody (either sentenced or on remand) with a history of drug and alcohol misuse, many have not previously received any help with their problems (Social Exclusion Unit, 2002).

The findings from NTORS and DTORS are broadly in line with other longitudinal studies carried out in Ireland, Australia and the USA (see further resources). The key issues arising from these studies are the importance of the multiple interacting needs that individuals experience
in relation to their substance use, and the ways in which agencies respond and try to address those needs.

**Alcohol**

The two studies also demonstrate that alcohol is a major issue which is not only implicated in the risk of drug overdose (see Chapter 4), but was something that NTORS found was not being addressed in drug treatment centres. NTORS show major improvements across all of the problem domains with the exception of alcohol consumption. This may reflect the acceptability and availability of alcohol as a legal substance, and one which drug treatment centres had not thought was their primary concern. This problem is also not reflected in funding mechanisms for organisations which have very different budgets for alcohol and illicit drugs.

The figures for illicit drug use stands in stark contrast to those for alcohol, with the estimate that (at 2003 figures) 90% of the world population have exposure to alcohol (Rehm et al., 2003). Illicit drug use also stands in contrast to the estimated 28% of the world adult population using tobacco (UNODC, 2006). Despite this disparity in the numbers using alcohol and those using illicit drugs, there is far more of a concerted focus on dealing with the latter, from the International Conventions of the United Nations through to domestic legislations (see Chapter 2).

The statistics on world alcohol consumption and drinking patterns has been reviewed by Babor et al. (2003) and shows some interesting features. Firstly that across all areas there are more male drinkers than female drinkers, but also that the level of alcohol dependence within a population is directly correlated with the total consumption of alcohol per person. For example in the World Health Organisation (WHO) designation of the ‘Americas’ (USA, Canada and Cuba) the total consumption (measured in litres of absolute alcohol per person aged 15 years and over per year) is 9.3 litres, with a rate of alcohol dependence standing at 5.1%. Likewise in the parts of Europe that are constituted by Germany, France and the UK the total consumption is 12.9 litres per person with an alcohol dependence rate of 3.4%. When these figures are compared with areas that are largely made up of Islamic countries where alcohol is largely proscribed we find for example that in areas that contain Iran and Saudi Arabia the total consumption is 1.3 litres per person, and for Afghanistan and Pakistan 0.6 litres, with both regions having alcohol dependence rates of 0%.

This relationship between the amount of alcohol consumed, and the increased risk of problems is a significant issue, and is not one that for example the UK Government has accepted in its review of the licensing
laws (see Chapter 2). It will also be discussed further in relation to disease and the Alcohol Dependence Syndrome in Chapter 3.

**Safe levels of drinking**

In the UK, because alcohol is a legal commodity, notions of harmful use are judged against the guidelines that are given by the Department of Health on safe drinking, which in turn are predicated upon the measurement of units. One unit equals a standard measure of one standard strength drink, (half a pint of beer, a glass of wine, a single spirit, etc.) the NHS recommends that men drink no more than three or four units per day and women no more than two to three.

**Binge drinking**

Binge drinking is defined as drinking eight or more units of alcohol in one session if you are a man, and more than six units in one session, if you are a woman. There is evidence to suggest that binge drinking can be far more harmful both physically and mentally than slow steady drinking.

**Adult alcohol use in the UK**

In 2004 the Alcohol Needs Assessment Research Project (ANARP) conducted the first national alcohol needs assessment in England (Department of Health, 2004). This survey found that between the ages of 16–64, 38% of men and 16% of women have an Alcohol Use Disorder (AUD) (ranging between problems and dependence, see the discussion on the Alcohol Dependence Syndrome in Chapter 3). This equates to 8.2 million people, or just over one quarter of the population. Additionally, there are 1.1 million people nationally (6% of men and 2% of women) who are alcohol dependent, and there are 21% of men and 9% of women who are binge drinkers. The survey found that all AUDs decline with age and that black and minority ethnic groups have a lower prevalence of hazardous/harmful alcohol use, but a similar prevalence of alcohol dependence compared with the white population. Importantly the survey found that there are extremely low levels of formal identification, treatment and referral of patients with Alcohol Use Disorders by GPs and that there was a tendency to over identify younger patients with AUD compared with older patients. Of the patients who were identified by GPs as having an AUD and requiring specialist treatment (71%) many were not referred because of perceived difficulties in accessing services due to waiting lists, and patients choosing
not to engage in specialist treatment. The consumption of alcohol at problematic levels has huge implications for personal health, and health services. Gossop et al. (2007) carried out a review of the health problems amongst problem drinkers across six European cities, and their findings can be seen in Table 2. It is interesting to note that alcohol use affects every part of the human organism, and that 60% of problematic alcohol users require some kind of treatment.

**Table 2. Prevalence of health problems amongst drinkers**

<table>
<thead>
<tr>
<th>Health domain</th>
<th>Disorder present</th>
<th>Moderate/severe disorder</th>
<th>Requires treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>28%</td>
<td>11%</td>
<td>24%</td>
</tr>
<tr>
<td>Neurological</td>
<td>26%</td>
<td>11%</td>
<td>18%</td>
</tr>
<tr>
<td>Gastrointestinal and liver</td>
<td>48%</td>
<td>17%</td>
<td>28%</td>
</tr>
<tr>
<td>Respiratory</td>
<td>14%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Endocrine and metabolic</td>
<td>10%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>20%</td>
<td>8%</td>
<td>14%</td>
</tr>
<tr>
<td>Dermatological</td>
<td>10%</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>Dental</td>
<td>29%</td>
<td>12%</td>
<td>25%</td>
</tr>
<tr>
<td>Genitourinary</td>
<td>10%</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>Any health problem</td>
<td>79%</td>
<td>40%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Source: Gossop et al., 2007

**Multiple interacting needs**

The issue of multiple needs has been and continues to be the major challenge for substance misuse, welfare and criminal justice agencies. Identifying what the individual’s primary problem is, whether housing as opposed to drug use or mental health problems as opposed to withdrawal symptoms, raises real problems in responding to those needs through public services. This is because public services are usually funded to provide a specific service, for specific categories of people. The issue of ‘dual diagnosis’ will be discussed in Chapter 5, but this is an area where separate services have developed to address either substance misuse or mental health problems. For an individual who has both sets of problems concurrently the substance misuse service may ask them to resolve their mental health problem before working with them, and the mental health service wants the substance misuse problem resolved before they work with them. This is also an area that has been under-researched and under-theorised (with the possible exception of ‘dual diagnosis’ and working with survivors of childhood sexual misuse) despite presenting some of the most significant challenges to the provision of public services in terms of assessment and intervention.

In the academic and professional literature the concept of multiple needs is often described in multiple ways that reflects the theoretical,
political and professional orientation of those doing the describing. Some of the labels used are: complex needs, poly problem individuals, criminogenic need, distal needs, dual diagnosis, social exclusion, alcohol/drug related problems. There has been an important debate, notably instigated by Fiorentine (1998) as to whether within substance misuse treatment settings it is necessary to address other needs as well, or whether the focus should be on the addiction. Fiorentine looks particularly at these ‘distal needs’ in relation to Post Traumatic Stress Disorder (PTSD) of which there is a high prevalence in treatment settings. He argues that the addressing of wider issues is largely a humanistic response, and particularly as needs may emerge during the course of treatment, with a good example being the disclosure of experiencing sexual abuse as a child. However, his evidence suggests that resolving the abuse issues is not necessarily related to overcoming the substance misuse issues.

**CASE EXAMPLE**

Kath is a 32-year-old woman, who is referred by her General Practitioner for residential detoxification from alcohol. Kath lives in a privately rented bedsit, and works night shifts in a factory. The scars on her arms indicate that she self-harms, she has medication to help her sleep and she also take antidepressants, and smokes tobacco. Kath is invited to attend a six-week residential aftercare programme on completion of her detox and she declines, choosing to go back to her flat. Within one month she is admitted for another alcohol detox, and again declines the offer of aftercare. Within six months she is detoxed again and this time chooses aftercare, partly on the basis that she is being evicted from her flat; but she does not complete the programme. Within the next few months she is detoxed again and asks for aftercare, but this time disclosing that she was seriously sexually abused as a child by her Grandfather. Kath then states that she has been seeing a Clinical Nurse Specialist for adult survivors of abuse, and asks for a three-way meeting between a member of staff from the aftercare programme, the Nurse Specialist and herself. The meeting is held and a course of action is agreed in terms of assessing need and establishing a care plan.

In working through issues of disclosure with her Nurse, Kath would start drinking again and/or self-harm, and she would experience significant nightmares (this is why she had worked night shifts). The Nurse Specialist would work with the disclosure, and the aftercare programme would address relapse prevention and relapse management techniques. It was a requirement of the programme that Kath remain abstinent, and so they had to find ways of managing her relapse situation, and getting her back onto the programme as quickly as possible. During the work with Kath a shifting levels approach was used through the Transtheoretical Model of Change (see Chapter 5) which allowed for
periods of stability to do more ‘in depth’ work on trauma, followed by relapse work and so forth. Over time the periods of relapse decreased and Kate was able to lead a more settled life.

When we consider the case of Kate is it possible to say that the issues of childhood abuse, substance misuse, depression and self-harm are not all intrinsically linked?

If substance misuse, and particularly addiction, is seen within a biopsychosocial paradigm, then it is to be expected that problems will occur across all three areas, and all of which interact with each other. The example of Kath although described in a very superficial way is not untypical of people presenting to services with multiple needs, many of them apparently intractable. In an era of ‘managed care’, and performance management within public services, these organisations are now focused more than ever on prioritising their work. Within the UK, for example the National Probation Service will only work with needs that are ‘criminogenic’, that is those issues which are related to offending behaviour.

Conclusion

In the history of mankind, and indeed in the experience of our evolutionary forebears (see Chapter 6) the use of psychoactive substances has been a constant feature of our human experience. Over the course of that time the types of drugs used have changed as they have moved in and out of social acceptability. All drug use whether legal or illegal carries the risk of harm which is mediated by biological, psychological and social circumstances but the use of a substance in itself, whether that is cocaine, heroin, alcohol or tobacco, is not necessarily problematic. The risks are escalated by the severity, duration, frequency and mode of ingestion, and one of the difficulties here is that because some drugs are illegal, their use is seen as ‘problematic’ whereas some people may be using illicit substances but not experiencing any negative consequences, unless they are caught and convicted of possessing and using drugs. The harms of drug use become a part of the overall problem as we will see in the following chapters, and this will ultimately lead us to a discussion concerning multi-agented systems and complexity theory (see Chapter 8).
Useful resources

Drug Treatment Outcome Research Study – www.dtors.org.uk
Drug and Alcohol Treatment Outcome Study (USA) – www.datos.org/
European Monitoring Centre on Drugs and Drug Addiction – www.emcdda.europa.eu/
Research Outcome Study (Ireland) – www.nacd.ie/activities/rosie.html