

The harms and risks of substance use

Professor David Clark reflects on the ways that drugs, alcohol and solvents can cause harm, and describes various risk factors. He emphasises the importance of providing realistic and objective information about the risks of substance use.

There is much discussion about the harms and risks of drug use, particularly in the popular press. The relative harms of different drugs are compared, and the law tries to operate a control system with drugs purportedly graded by their dangers, albeit with alcohol and tobacco forgotten.

Heroin and cocaine are considered to be particularly dangerous. And yet, there are people that have taken cocaine or clean, prescribed heroin for many years and have suffered no physical harm. There is no given in the world of drugs – except that all substances (even water) can kill if given in sufficient quantity.

In his excellent book *Matters of Substance: Drugs – and why everyone's a user*, Griffith Edwards points out:

'With drugs nothing is always. Their use does not carry a guarantee of danger, but neither is their safety guaranteed. What one needs to ask about any substance is not whether in absolute terms it is safe, but rather the degree of risk which may attach to its use.'

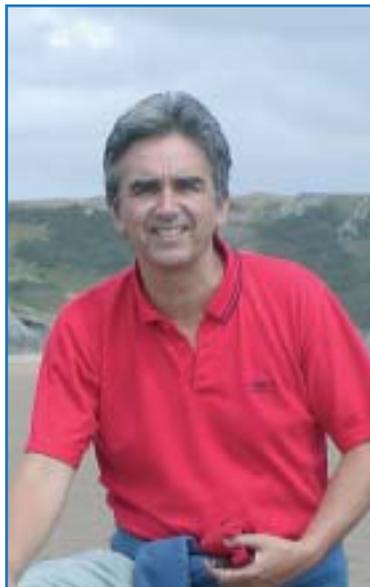
The harm caused by substance use needs to be considered in a variety of ways. Use of drugs, alcohol and solvents can carry risk to different aspects of life. They may threaten physical or mental health, social circumstances, educational and employment status, and may put a person at risk with the criminal justice system.

Substance use may also affect the safety and welfare of others. Other people may be affected negatively by the transmission of blood borne viruses through sexual contact with an infected drug user, through violence committed by a person who is drunk, or by someone who is driving while under the influence of a sedative prescription drug. The harmony and happiness of families can be disrupted, and in the extreme whole

communities can be affected.

Harm done by substance use can be major or minor. It can also be a one-off or chronic. Harm may be caused directly by the drug itself, and/or by the lifestyle associated with use of the drug, for example, with street heroin.

For some harm, an increasing risk is associated with longer-term and heavier substance use. However, for other types of problems, the risk can



be much more random: the twentieth experience with ecstasy or a solvent may trigger some reaction leading to death; the first injection of heroin may lead to infection with Hepatitis C which kills the person years later; the heavy drinking session may lead to the person tripping on the pavement into the path of an approaching vehicle.

With illicit drugs, there is the possibility of contaminants in the drug

which can cause illness and even death. In one example, heroin users in California injected unknowingly a synthetic drug known as MPTP, which produced symptoms of Parkinson's disease.

This movement disorder, caused by a massive depletion of dopamine neurons in the brain, mostly occurs in people over 60 years old. In this case, young heroin users developed the symptoms within 24 hours of taking

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the drug. The condition was irreversible and could only be alleviated by L-dopa.

The particular harm caused by substances is also dependent on the route by which they are administered. Injecting drugs can lead to the transmission of blood borne viruses, smoking to lung damage, drinking of alcohol to cancer of the gullet. Accidental overdose is more likely to

occur following injection than ingestion of tablets. Users of illicit heroin are also unaware of the purity of the substance they purchase – an unusually pure, or contaminated, batch of heroin can cause overdose.

One of the dangers of drugs and alcohol is their propensity to cause addiction or dependence. In simple terms, dependence can be seen as an impairment in a person's ability or power to choose. The drug becomes more important to the person than other aspects of their life, which the majority of people would consider as essential. Dependence drives forward heavy and persistent drug use, ultimately increasing the likelihood of self-harm.

The particular effects of a drug, and the development of dependence, are influenced not only by the intrinsic properties of the drug and its route of administration, but also by the previous drug experience of the user, their physical and psychological characteristics, and the setting in which the drug is taken. Therefore, these factors can influence the harm caused by drugs.

Overdoses are more likely when a heroin user leaves prison, since he is likely to forget or not understand that his body has lost its tolerance to the drug. Amphetamine psychosis will be more likely to occur in an individual with a propensity to schizophrenic symptoms. Alcohol-induced violence is more likely to occur in certain environments than in others.

Finally, and not least, is that the dangers of many substances can be exacerbated by taking another at the same time. For example, the likelihood of overdose after heroin is increased if the person is also drinking alcohol.

Psychoactive substances have been used in society for thousands of years. They will remain with us for as long as mankind wishes to change his state of consciousness, for whatever reason. These substances – be they legal or illegal – will always have harm and risks associated with them.

What is important in today's society is to keep people well-informed about the potential harms of drugs, alcohol and solvents and the circumstances in which they can be dangerous. We do not need media hype or campaigns that over-exaggerate the risks. We need to be objective and realistic.