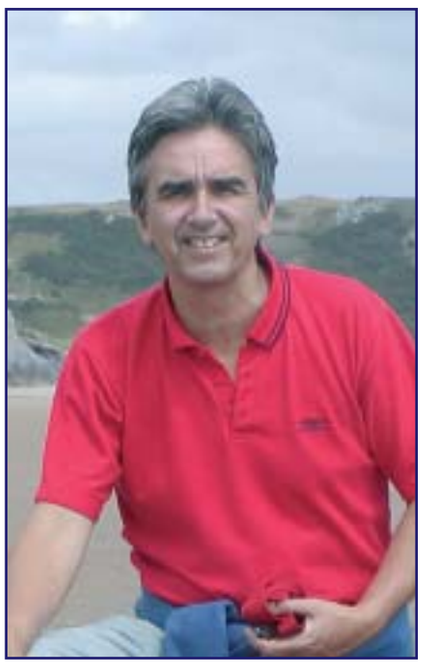
Alcohol dependence

In the latest of his background briefings, Professor David Clark looks at the nature of alcohol dependence



There has been a considerable scientific effort over the past three decades in to identifying and understanding the core features of alcohol and drug dependence. This work really began in 1976 when the British psychiatrist Griffith Edwards and his American colleague Milton M. Gross collaborated to produce a formulation of what had previously been understood as 'alcoholism' – the alcohol dependence syndrome.

The alcohol dependence syndrome was seen as a cluster of seven elements that concur. It was argued that not all elements may be present in every case, but the picture is sufficiently regular and coherent to permit clinical recognition. The syndrome was also considered to exist in degrees of severity rather than as a categorical absolute. Thus, the proper question is not 'whether a person is dependent on alcohol', but 'how far along the path of dependence has a person progressed'.

The following elements are the template for which the degree of dependence is judged:

Narrowing of the drinking repertoire. A normal drinker's consumption and choice of drink varies from day to day and week to week, with the drinking being patterned by varying internal cues and external circumstances. The dependent person may drink to the same extent whether it is workday, weekend or holiday, irrespective of whether he is alone or in company, and whatever his mood. With advanced dependency, the drinking may become timetabled to maintain high alcohol levels.

Increased salience of the need for alcohol over competing needs and responsibilities. As dependence advances, the person gives priority to maintaining their intake. Their partner's distressed complaints are ignored, income is used to support their drinking rather than provide for the family, and the need for drink may become more important for the person with liver damage than consideration of survival. A person who used to have moral standards now begs, borrows and steals to pay for drinking.

An acquired tolerance to alcohol. A given amount of alcohol will have a smaller effect on the dependent person than on a naïve drinker due to changes in brain function arising from repeated consumption of alcohol. Tolerance is also shown by the dependent person being able to sustain an alcohol intake and go about their business at blood alcohol levels that would incapacitate the non-tolerant individual. However, in later stages of dependence this tolerance declines and the drinker is incapacitated by quantities of alcohol that he could previously hold easily.

Withdrawal symptoms. These vary from a mild shaking of the hands in the morning through to convulsions and the life-threatening illness of delirium tremens (confusion, hallucinations, tremor). As dependence increases, so does the frequency and severity of the symptoms. Symptoms of withdrawal may occur during the day as blood alcohol levels drop. The four key symptoms are tremor, nausea, sweating and mood disturbance. A person may wake in the morning with soaking sweats, or they may vomit in the morning. In the early stages, a person may feel a 'bit edgy', but as dependence develops, they may experience terrible agitation and depression, or may show phobic reactions. Other symptoms include muscle cramps, sleep disturbance, hallucinations, and grand mal seizures.

Relief or avoidance of withdrawal symptoms by further drinking. In the earlier stages of dependence, the person may feel at lunchtime that the first drink of the day 'will help me straighten up a bit'. At the other extreme, a person may require a drink every morning before they can get out of bed. They may try to maintain steady alcohol level which they may have learnt to recognise as being comfortable above the danger level for withdrawal.

Subjective awareness of compulsion to drink. The person may become aware of their ability to lose control: 'If I have one or two, I won't stop'. They may start to experience and express their craving for alcohol. Cues for craving include the feeling of intoxication, incipient withdrawal, mood or situational cues (e.g. seeing a drinking friend). They may constantly think about alcohol when experiencing withdrawal.

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Reinstatement after abstinence. If a severely dependent drinker is abstinent for a year and then attempts to return to social drinking, it is likely that within a few days they will be back to an intensity of withdrawal experience which had previously taken many years of drinking to develop. Dependence has a memory.

There is no signpost to a person becoming dependent. Whilst a severely dependent person is easy to recognise, it can be difficult to detect a problem in the early stages. Clearly, it is essential to be able to diagnose early problems, before drinking gets out of hand and there is a precipitous decline in the quality of life that accompanies increasing dependence.

In the latter stages of dependence, there may be a rapidly mounting intensity of morning distress, appalling shakes, suicidal thoughts, and delirium tremens. Gross and incapacitating intoxication becomes common. The person is intoxicated after a couple of drinks, there is a gross and repeated amnesia (they may disappear for several days but not remember where), and there are desperate attempts to avoid withdrawal by topping up. Drinking makes the person very ill – this is partly due to mounting intensity of morning distress, but also due to various alcohol-induced physical problems (e.g. liver disease). Psychiatric disorders may become common at this stage.