- 1. Various attempts have been made to formally classify psychiatric disorders, the two major systems being:
  - 1.1. The ICD-10 Classification of Mental and Behavioural Disorders (World Health Organisation, Geneva) is part of the 10th edition of the International Classification of Disease. This Appendix follows the common abbreviation of ICD-10. It is the international system used by the majority of clinical psychiatrists in Great Britain.
  - 1.2. The Diagnostic and Statistical Manual of Mental Disorders (fourth edition) (American Psychiatric Association Washington DC). References to it in this Appendix follow the common abbreviation of DSM-IV. It is a system devised mainly by and for workers in the USA; however, UK psychiatrists were consulted in its formulation.
- 2. The two systems above have been in existence for many years but only in their current editions have they been closely comparable. Other systems of diagnostic criteria exist; however, they are less widely used. The function of the classification systems is primarily to aid communication between psychiatrists, especially in the research field; however, they do not fully reflect the full picture of mental disorders.
- 3. DSM-IV defines the term substance as a drug of abuse, a medication or a toxin. However, disorders of alcohol use are discussed separately in the medical appendix relating to Disorders of Alcohol Use. This Appendix covers the psychoactive substances, i.e. opioids (such as morphine, heroin, fentanyl, methadone), amphetamines and related compounds (such as dextro-amphetamine, methamphetamine [and compounds with an amphetamine-like action such as methylphenidate and phentermine]), caffeine, cannabis, cocaine, hallucinogens, nicotine, phencyclidine, "inhalants" (including petrol, glue, paint thinners, correction fluid, spray-can propellants), and the sedatives and anxiolytics (such as barbiturates, benzodiazepines, glutethimide and methaqualone). Individual drug profiles are not listed in this Appendix.

### **ACUTE INTOXICATION**

4. This is a transient condition which occurs when a sufficient quantity of a drug has been consumed to produce disturbed levels of consciousness, cognition, perception or behaviour. Acute intoxication is closely related to dose levels. The effects of acute intoxication gradually disappear and recovery is complete unless quantities of the toxic type of drugs consumed have been so high so as to be fatal (e.g. heroin). The symptoms may be classified as delirium, perceptual distortions or coma, depending on the specific drug taken.

#### HARMFUL USE

5. This diagnosis is used when the pattern of drug use causes damage to physical or mental health, although the individual shows none of the features of dependence.

### **DEPENDENCE SYNDROME**

- 6. This is a cluster of physiological, behavioural and cognitive phenomena in which use of the drug takes on a much higher priority than other behaviours which had once had a greater value to the individual. There is a pattern of repeated use that results in tolerance, withdrawal and compulsive drug-taking behaviour. Dependence can be induced by any class of substance except, possibly, caffeine, and the symptoms vary widely.
- 7. The three varying aspects of dependence are:
  - 7.1. **Tolerance**. This is the situation which occurs when the same quantity of drug produces a smaller effect with continued use. The individual would then have to take increasing quantities to achieve the customary effect. In some cases the opposite occurs, i.e. sensitisation, in which smaller quantities produce marked effects. Tolerance varies greatly between the drugs. Individuals with very heavy use of opioids or stimulants can develop tolerance levels of ten times the amount which would be a fatal dose to a non-user. Tolerance to cigarettes is also high, for example someone who regularly smokes more than 20 a day would have had toxic effects if they had consumed this quantity when they first started smoking. Tolerance to cannabis has been shown consistently only in animal studies and it is uncertain whether any tolerance to phencyclidine occurs.
  - 7.2. **Compulsive use**. "Craving" (the strong subjective desire or drive to use the substance) is likely to be experienced by most, if not all, individuals with substance dependence.
  - 7.3. **Withdrawal** is a maladaptive behavioural change, with physiological and cognitive concomitants, that occurs when the usual level of intake falls or is stopped in someone who has been a heavy user. Marked symptoms and signs occur in withdrawal from opioids and sedatives, hypnotics and anxiolytics, such as barbiturates and benzodiazepines. They are less marked but still present in withdrawal from amphetamines, cocaine and nicotine, but no signs have been noted in humans with hallucinogens or phencyclidine.
  - 7.4. Neither tolerance nor withdrawal is necessary or sufficient for dependence on a drug to be diagnosed. For example, craving can occur alone in cannabis dependence with no signs of either tolerance or withdrawal. Conversely in certain circumstances, such as post-operative patients, tolerance and withdrawal relating to opioids may occur without any signs of compulsive use.
- 8. The criteria for dependence are for three of the following to have been present simultaneously for at least a month or, if present for less than one month, for them to have occurred together repeatedly within the past 12 months.
  - 8.1. The strong and often overpowering desire to take the psychoactive substance.
  - 8.2. There are difficulties in controlling the amount consumed, the situation in which it is taken, and difficulties in ceasing consumption, or the substance is taken in increasing amounts.

- 8.3. A physiological withdrawal state, when the usual quantity of drug is reduced or stopped.
- 8.4. The development of tolerance such that the quantity of the drug consumed needs to be increased to achieve the same effect.
- 8.5. A reduction in the amount of time spent on other interests or occupation owing to the time spent intoxicated or recovering.
- 8.6. Persisting drug use despite clear evidence of obvious harmful consequences.

### ABUSE OF NON-DEPENDENCE PRODUCING SUBSTANCES F55.0-6

- 9. Certain drugs, medicaments and herbal remedies may become abused through their persistent and unjustified use. Such substances include laxatives, non-psychoactive analgesics (such as aspirin and paracetamol), antacids, vitamins, steroids, hormones, diuretics and antidepressants.
- 10. Attempts to discourage use of the substance is met with resistance and, in the case of laxatives and diuretics, this may be in spite of the development of physical problems such as renal dysfunction or electrolyte disturbance. Although the patient has a strong motivation to take the substance, there is no development of dependence or withdrawal symptoms.

## **PSYCHOTIC DISORDER DUE TO PSYCHOACTIVE SUBSTANCE ABUSE**

11. A psychotic syndrome may occur following the use of certain psychoactive substances. It is usually characterised by vivid hallucinations, mainly auditory and visual, although the other senses may be affected. Delusions or ideas of reference may also occur, which are often persecutory. An abnormal affect, such as intense fear or ecstasy, may be present. There may be an element of clouding of consciousness. Psychotic disorders following stimulants such as cocaine and amphetamine are closely related to high dose levels and/or prolonged use. The disorder typically resolves partially within a month and recovers fully within six months, but this is not inevitable. It should be differentiated from drug intoxication or the delirium which may accompany a withdrawal state. It should also be differentiated from the abuse of psychoactive substances by a patient with a pre-existing functional psychotic illness.

# AETIOLOGY

12. There is no single cause of drug abuse and the various substances tend to be more prevalent in certain subcultures. Rates of drug abuse are high in disadvantaged areas of large cities. Use of illicit drugs has been shown to be particularly high in people aged between 18 and 25, particularly the unemployed.

### Genetics

13. There is no evidence that genetics have any great part to play in drug abuse, although there is some evidence that certain inherited personality traits may render a person more vulnerable.

#### **Personality factors**

14. Personality factors render some individuals more susceptible to drug use. Especially in the younger drug takers, poor coping mechanisms may be seen, with critical attitudes towards authority and society in general, as shown by a poor school or work record, truancy or delinquency. Some personality traits may be protective; for example, those individuals who are unwilling to lose control are less likely to try drugs.

#### **Social factors**

- 15. Social and cultural pressures have a strong effect, drug use being rare in certain religious groups where it is strongly disapproved of. In some cultures stimulants such as caffeine are also included. The risk of drug abuse is stronger in those societies which condone drug taking. Many drugs are also subject to legal restrictions and thus have a scarcity value. The high cost involved may lead to criminal activity to finance the habit. Drug abusers often keep company with one another, and those with previously stable behaviour may be under pressure to conform to the group ethos of antisocial or criminal behaviour.
- 16. The decision to initiate the use of drugs, which may then lead to abuse and dependence, is a personal choice for the individual concerned. The only exception is in cases where the initial use has been therapeutic (e.g. morphine for extreme pain, leading to dependence).

#### CONCLUSION

17. Psychoactive substances have specific individual profiles in their effects, in their propensity to produce tolerance and withdrawal, and in their capacity to produce physical, social and occupational problems. Drug dependence is dependent on the availability of the substance, social attitudes to the use of the substance concerned, and the personality of the individual. The decision to initiate use of drugs or other substances, other than when initial use has been therapeutic, depends on the individual concerned.

#### REFERENCES

The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. 1992. Geneva. World Health Organisation. Pages 70-83.

Diagnostic and Statistical Manual of Mental Disorders. 4<sup>th</sup> Ed. 1994. Washington DC. American Psychiatric Association. Pages 175-194, 204-272.

Gelder M, Gath D, Mayou R and Cowan P. Oxford Textbook of Psychiatry. 3<sup>rd</sup> Ed. 1996. Oxford. Oxford University Press. Pages 461-481.

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