1. Various attempts have been made to formally classify psychiatric disorders, the two major systems being:

2. 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.

3. 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.

4. The two systems above have been in existence for many years but only in their current editions have they been closely comparable.

5. Disorders of alcohol use are a subset of the Substance Related Disorders. Disorders related to other drug and substance use are discussed separately in the medical appendix Disorders related to Drug or Substance Use. This Appendix discusses the clinical features and aetiology of alcohol-related disorders. It is generally based on the ICD-10 system, with any major comparisons and distinctions with DSM-IV being discussed where relevant. The ICD-10 codes (numbers usually prefixed with F) are also provided.

DEFINITIONS AND CLINICAL MANIFESTATIONS

Acute alcohol intoxication F10.0

6. This is a transient condition which occurs when a sufficient quantity of alcohol has been consumed to produce disturbed levels of consciousness, cognition, perception or behaviour. Acute intoxication is closely related to dose levels. However in certain individuals, for example, those with renal or hepatic insufficiency, these levels may be small. Different effects may be seen at different dose levels, with alcohol having an apparently stimulant effect at low dose, loss of inhibition and aggression at moderate levels and clear sedation at high levels, proceeding to coma at very high levels. Memory lapses for the period whilst intoxicated often occur, although the individual is fully conscious during the forgotten period. The effects of acute alcohol intoxication gradually disappear and recovery is complete unless quantities consumed have been so high as to be fatal.

Harmful use of alcohol F10.1

7. This diagnosis is used when the pattern of alcohol use causes damage to physical or mental health, for example liver disease or a depressive disorder. This category is used when the individual shows none of the features of dependence.

Dependence syndrome **F10.2**

8. This is a cluster of physiological, behavioural and cognitive phenomena in which the use of alcohol takes on a much higher priority than other behaviours which had once had a greater value to the individual. It is characterised by:

    8.1. the strong and often overpowering desire to take alcohol

    8.2. difficulties in controlling the amount consumed, the situation in which it is taken and difficulties in ceasing

    8.3. a physiological withdrawal state when the usual quantity of alcohol is reduced or stopped.

    8.4. the development of tolerance such that the quantity of alcohol consumed needs to be increased to achieve the same effect

    8.5. a reduction in the amount of time spent on other interests or occupations owing to the time spent intoxicated or recovering

    8.6. persisting drinking of alcohol despite clear evidence of obvious harmful consequences

    8.7. there is a stereotyped pattern to drinking commonly to prevent withdrawal (whereas the non-dependent drinker's pattern of drinking is very variable and more influenced by social factors).

9. The use of alcohol may be episodic, with uncontrolled binges ("dipsomania") followed by periods of abstinence, or may be more or less continuous. There are often occupational and marital problems associated with dependence. However this is not necessary for the diagnosis to be made.

10. When the above syndrome is not fully met but the individual has social or occupational difficulties as a result of alcohol, this state is often referred to as "problem drinking".

Withdrawal state **F10.3**

11. This occurs in regular heavy drinkers when the usual quantity of alcohol consumed is considerably reduced or stopped. The spectrum of symptoms is wide, including tremor, nausea, retching, sweating, hyperacusis, tinnitus, itching, muscle cramps, sleep disturbance, perceptual distortions, hallucinations and convulsions. Fits may continue after the acute withdrawal phase despite continued abstinence.

Withdrawal state with delirium **F10.4**

12. In those whose consumption has been very high and prolonged, delirium tremens may occur, this being characterised by vivid hallucinations (often of animals), delusions, profound confusion, agitation and fearfulness, restlessness and sleeplessness.

Amnesic syndrome **(or** amnestic syndrome**)** F10.6

13. This condition arises in those whose alcohol consumption has been prolonged, and is characterised by a marked impairment of recent memory. Remote memory is sometimes impaired but immediate recall is preserved. There is a disturbance of the sense of time and the individual often becomes confused about the chronological sequence of past events. They are often aware of the defects in their memory and may produce an imaginary story to fill in the gaps (confabulation). Memory which does not involve a verbal component is preserved, for example, visuospatial and geographical memory.

Wernicke's encephalopathy

14. The main symptoms are impairment of consciousness, memory defect, disorientation, ataxia and ophthalmoplegia. At post mortem, haemorrhagic lesions are found in the grey matter around the third and fourth ventricles. It is associated with thiamine deficiency related to excess alcohol intake and vomiting.

Korsakoff's syndrome

15. This was originally described as the presence of a peripheral neuropathy accompanied by memory deficit, confabulation and irritability. It is often referred to as Wernicke-Korsakoff syndrome as it follows the acute neurological syndrome of Wernicke's encephalopathy in over 90% of cases. It is fatal in about 20% of cases but, if there is a short history and it is treated early with thiamine replacement, the prognosis is improved. Once established, there is complete recovery in 25%, no improvement in 50%, and partial recovery in 25%.

Alcoholic Psychosis **F10.5**

16. This condition may be indistinguishable from schizophrenia, being characterised by auditory hallucinations, thought disorder, delusions (often persecutory) and incongruous affect. The psychosis frequently remits on abstinence; however, this is not invariable. It often recurs on resumption of drinking.

AETIOLOGY

17. Factors associated with alcohol abuse are varied; however, the decision to initiate the use of alcohol, which may then lead to abuse and dependence, is a personal choice for the individual concerned.

18. Genetic studies show that the condition is much more common in identical than in non-identical twins. Furthermore, studies have shown that sons of alcoholic fathers who are adopted away are four times more likely to become alcoholics than are controls with non-alcoholic fathers.

19. Males more frequently develop alcoholism than females: whether this is genetic or subcultural is not known.

20. Psychological factors including learned behaviour, with children following parental patterns, are of importance. The incidence of alcohol abuse in children with alcoholic parents is two and a half times that of the general population.

21. Personality traits such as anti-social, aggressive and hyperactive traits in childhood, may be associated with later alcoholism. Some individuals with a poor self-image may feel the need to drink heavily, and vulnerable personalities who are unable to cope effectively with the challenges of everyday life may resort to alcohol.

22. Social and cultural influences have a strong effect, alcoholism being rare in certain religions where it is strongly disapproved of. Surveys conducted in England show that "going out for a drink" is the most popular leisure activity, and consumption of alcohol (in the form of wine) is greatest in the grape growing regions of Europe. Deaths from cirrhosis are highest in France, which has an annual per capita consumption of 19 litres of pure alcohol compared to 9 litres in the UK. Other social factors associated with a high risk for developing alcohol dependence are being a divorced or separated male over 40.

23. Certain occupations are associated with alcohol abuse and dependence, this being related mainly to opportunity, ready availability and/or the lack of supervision. It is particularly associated with the availability of alcohol at work, such as occurs in the licensed trade, entertainers, publicans and cooks. It may also be associated with the business environment, where there may be a subculture of drinking during "expense account" lunches. Heavy manual work (in particular hot work, such as the steel industry) is associated with heavy consumption, which often produces physical consequences rather than psychological effects similar to the pattern seen in France, etc.

24. Anxiety disorders may occur in conjunction with alcohol problems and this has led to suggestions that anxiety disorders may be of aetiological significance in the maintenance of heavy drinking, it being a commonly held belief that alcohol reduces anxiety. However, experimental and clinical evidence has failed to support this theory of alcoholism, showing rather that anxiety is a result of heavy drinking.

CONCLUSION

25. Excessive consumption of alcohol may result in intoxication, harmful use, dependence, withdrawal symptoms and organic brain disorders including psychoses. Aetiological factors in alcohol dependence are availability of alcohol, personality, genetic and cultural influences. However, the decision to initiate the use of alcohol, which may then lead to abuse and dependence, is a personal choice for the individual concerned.

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