



Department of Social Protection

Alcohol Dependency





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1. Overview and Definition of Alcohol Related Disorders

1.1 Overview

Alcohol related disorders are one of the leading causes of mortality and morbidity worldwide, and are ranked in the top 5 causes of disease burden by the Word Health Organisation (World Health Organisation, 2009), and the second highest cause of disability when expressed in terms of years lost to disability (YLD). Recent literature based on 2004 figures indicates that misuse of alcohol contributes to the cause of 1 in 10 deaths in Europe, higher than the 1 in 25 deaths average worldwide – an alarmingly high figure considering that 50% of the population worldwide do not drink alcohol for religious or cultural reasons. Figures for Eastern Europe indicate deaths could be as high as 1 in 7 (Rehms, 2009)

More people die from alcohol related conditions than from breast or cervical cancer, or MRSA combined (Cancer Research UK, 2004). The most common alcohol-related causes of death were cancer, cardiovascular disease, cirrhosis and other liver disorders, and injuries following accidents and violent crime.

In terms of economic cost, the burden globally is considerable, amounting to billions of dollars worldwide. In the UK in 2001, alcohol related disorders were estimated to cost the economy £15.4 billion in terms of health, crime and work costs (Prime Minister's Strategy Unit, 2004).

Worldwide, more than 1% of the gross national product in high-income and middle-income countries is spent on alcohol each year. It is important to note that alcohol related disorders do not only harm the individual but harm those associated with the individual also. It is estimated that the costs of social harm constitute a major proportion of economic costs of alcohol related disorders, in addition to the costs of healthcare provision (Rehms, 2009).

The pattern of alcohol misuse varies globally. Alcohol misuse is declining in developed countries but rising in developing countries and in Eastern Europe (WHO, 2004). 2007 figures have indicated that alcohol consumption has risen substantially more in Ireland compared to other European countries (Hope, 2007).

Alcohol related disorders result in a wide range of social problems – accidents, traffic deaths, injuries, violence, domestic violence, abuse, crime, suicide. Alcohol is also linked to poor performance at work, high unemployment rates, debt, housing problems etc.

1.2 Types of Alcohol Related Disorders

Alcohol Related Disorders are diverse (Marshall, 2009). They can be generalised into several groups, however; there are several factors that make the categorisation of alcohol related disorders difficult. For example, what is considered to be harmful or hazardous levels of alcohol consumption varies by country and culture. Also the





pattern of drinking by an individual can lead to the individual experiencing different problems – a binge drinker may suffer an acute injury whilst drunk, for example, whilst a chronic drinker may suffer from more long term illness.

Alcohol related disorders are not necessarily caused by dependence - Individuals who suffer from alcohol related conditions or disabilities may not be dependent on alcohol in the form of an addiction. Binge drinkers in particular may not be dependent but can be at a high risk of suffering harm from heavy alcohol consumption.

Hazardous alcohol consumption: Defined as the consumption of alcohol by an individual to the extent that the individual is at risk of alcohol related harm.

Harmful alcohol consumption: Alcohol consumption that results in actual harm to the psychological, physical or social well being of the individual.

Alcohol Dependence: The key features of alcohol dependence are:

- Increased tolerance larger doses are required
- Withdrawal symptoms
- Cravings
- Obtaining the next drink becomes the most important part of a person's life
- The pattern of consumption (timing, place and substance) becomes rigid

Alcohol can cause dependence because drinking is perceived as a pleasurable activity by the individual, whilst withdrawal feels distressing. In time, tolerance develops, so a greater quantity of alcohol is needed to obtain the same effect. Together, these factors encourage the development of dependence.

1.3 Quantifying Alcohol Intake

In the United Kingdom and Ireland, the recommended safe limits of weekly alcohol intake are **21 units for men** and **14 units for women**, with at least 2 drink free days (Royal College of Physicians, 2005; Health Services Executive Ireland, 2008). Binge drinking is defined as drinking over twice the recommended units of alcohol per day in one session. This is considered more than 8 units for men or more than 6 units for women.

Health is considered to be at serious risk when weekly alcohol intake exceeds these limits. Consumption of 15-35 units per week for women, 22-50 units for men is defined as hazardous and consumption of more than 35 and 50 units per week for women and men respectively as definitely harmful (Royal College of Physicians, 2005). One of the contributing factors to the rise in alcohol consumption is thought to be the fact that larger measures of alcohol are now commonly served, with alcohol often sold in non-standard strengths and volumes. A unit of alcohol (10ml) is approximately equivalent to: a small glass of wine, a pub single measure of spirits or half a pint of ordinary strength beer.





- A standard bottle of spirits contains 32 units.
- A standard bottle of wine contains 8 units.
- A standard can of lager contains 1.5 units.
- A bottle of alco-pop contains 1.5 units.
- Each can of extra-strong lager or cider contains 4 units.

1.4 Diagnostic Classification

1.4.1 DSM-IV Dependence (American Psychiatric Association, 2000)

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring within a 12-month period:

- 1. **Tolerance**, as defined by either of the following:
 - a) A need for markedly increased amounts of the substance to achieve intoxication or desired effect.
 - b) Markedly diminished effect with continued use of the same amount of the substance.
- 2. **Withdrawal**, as manifested by either of the following:
 - a) The characteristic withdrawal syndrome for the substance.
 - b) The same (or a closely related) substance is taken to relieve or avoid **withdrawal symptoms.**
- 3. The substance is often taken in **larger amounts** or over a longer period than was intended.
- 4. There is a persistent desire or unsuccessful **efforts to cut down** or control substance use.
- 5. A great deal of **time** is spent in activities necessary to obtain the substance (e.g. visiting multiple doctors or driving long distances), use the substance (e.g. chain-smoking), or recover from its effects.
- 6. Important social, occupational, or recreational **activities are given up** or reduced because of substance use.
- 7. The substance use is continued despite knowledge of having a persistent or recurrent **physical or psychological problem** that is likely to have been caused or exacerbated by the substance (e.g. current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption.)

DMS-IV classification requires the clinician to specify either:





- With physiological dependence:
 - Evidence of tolerance or withdrawal (i.e., either Item 1 or 2 is present.)
- Without physiological dependence:
 - No evidence of tolerance or withdrawal (i.e., neither Item 1 nor 2 is present.)

1.4.2 DSM-IV Abuse (American Psychiatric Association, 2000)

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period

- 1. Recurrent substance use resulting in inability to fulfil major role obligations at work, school, or home.
- 2. Recurrent substance-related legal problems.
- Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.
- 4. Recurrent substance use in situations in which it is physically hazardous.

1.4.3 ICD-10 Dependence (World Health Organisation, 2007)

A definite diagnosis of dependence should usually be made only if **three or more** of the following have been present together at some time **during the previous year**:

- 1. A strong desire or sense of compulsion to use a substance or substances.
- 2. Evidence of impaired capacity to control the use of a substance or substances. This may relate to difficulties in avoiding initial use, difficulties in terminating use, or problems about controlling levels of use.
- A withdrawal state or use of the substance to relieve or avoid withdrawal symptoms, and subjective awareness of the effectiveness of such behaviour.
- 4. Evidence of tolerance to the effects of the substance.
- 5. Progressive neglect of alternative pleasures, behaviours, or interests in favour of substance use.
- 6. Persisting with substance use despite clear evidence of harmful consequences.

1.4.4 ICD-10 Harmful Use (World Health Organisation, 2007)

Clear evidence that the use of a substance or substances was





responsible for causing actual psychological or physical harm to the user.





2. Epidemiology

2.1 Prevalence

There is a considerable amount of available information regarding the specific harm that alcohol related conditions have in Ireland. Much of this material originates from European Commission surveys regarding alcohol consumption across the EU, along with publications from the Health Research Board in Ireland. (see www.ec.europa.eu/health/ph_determinants/life_style/alcohol/Forum/docs/alcohol_lib_1_en.pdf and

http://www.hrb.ie/uploads/tx_hrbpublications/2007_NDTRS_treated_alcohol.pdf).

It has been commented by a number of authorities that the figures may not actually represent the true extent of issues with alcohol consumption in Ireland. For example, whilst Ireland has a higher than average consumption of alcohol than most other European countries but it also has the highest proportion of abstainers; therefore the true extent of alcohol issues presented by the statistics below will be masked by this high abstinence figure.

Reported figures show:

- Ireland continues to rank among the highest consumers of alcohol in the 26 countries in the enlarged EU
- On average, an Irish individual consumes 20% more alcohol than the average European
- Consumption levels have increased 20% in the last 20 years
- Although overall consumption has been falling slightly in the last few years from a peak in 2001, the trend in binge drinking has been rapidly growing with Ireland now leading the trend across Europe by a considerable margin where 37% of the alcohol consuming population have more than 5 drinks on one occasion per week.
- The trend for high alcohol consumption is equal in the genders in Ireland – unlike the rest of Europe where men usually consume a greater amount of alcohol than women
- The proportion of problem drinkers presenting for treatment who are under the age for 18 is small but has been rapidly increasing in recent years. More than half of under 18 year olds have reported being drunk more than once. Binge drinking in under 18 year olds is a bigger problem in girls than boys.
- One in five of individuals treated for alcohol related disorders in Ireland also reported misusing at least one other substance such as cannabis, cocaine or ecstasy
- Socio-demographically, those with high levels of alcohol consumption





in Ireland are likely to have low levels of employment

- One third of all vehicular deaths in Ireland are alcohol related
- Alcohol related disorders were the third most common reason for admission to Irish psychiatric hospitals between 1996 and 2005
- One in four Accident and Emergency attendances in Ireland is for alcohol related injuries
- Hospital discharges for alcohol related liver disease increased 147% in the period 1995 to 2004, whilst deaths from alcohol related disorders doubled in the same period.

(Mongan, D. et al, 2007; European Commission, 2007; Hope, 2008; Alcohol and Drug Research Unit of the Health Research Board, 2009; Alcohol Action in Ireland, 2009)

2.2 Age and Gender Patterns

- There is no longer a marked gender pattern in Ireland, with equal numbers of Men and Women drinking to excess. This pattern has changed over the last decade as the number of men drinking to excess has remained static but proportion of women drinking to excess has risen dramatically in recent years – doubling in the age 16-24 group
- The prevalence of binge drinking is higher in people aged 16 to 24 years
- Men from management/professional backgrounds are likely to drink more than men from manual backgrounds. This pattern is now being reflected in women.
- Alcohol abuse decreases with age (Thompson, 2004)





3. Aetiology

The aetiology of alcohol abuse is often multifactorial, and may be influenced by a person's physical, psychological, genetic and social characteristics.

Some of the most important factors include:

- Alcohol is easily available and relatively inexpensive.
- Alcohol consumption is widely seen as socially acceptable behaviour and therefore peer-pressure provides an influence.
- Twin and adoption studies show that genetic and environmental factors each contribute to the development of alcohol dependence. Alcohol related conditions are more common in individuals who have an alcoholic parent or first degree relative (Negrete and Gill, 2009)
- Some occupations carry a high risk of alcohol abuse. Barmen, publicans and caterers are at highest risk, while members of the armed forces, journalists, commercial travellers, airline pilots and doctors are at above average risk.
- Psychiatric co-morbidity is one of the most significant risk factors in alcohol related disorders. This may occur with a psychiatric disorder preceding the alcohol related disorder, but also may occur inversely, with a psychiatric disorder (for example panic disorder, anxiety or social phobia) becoming clinically symptomatic following a pattern of alcohol abuse (Negrete and Gill, 2009). The table below summarises psychiatric problems which are associated with high levels of alcohol abuse (Ross et al, 1988):

Mental Health Problem	Prevalence of Alcohol Abuse		
Generalised Anxiety Disorder	51.6%		
Antisocial Personality Disorder	46.9%		
Drug Abuse	38%		
Affective Disorders	33.7%		
Phobias	33.7%		
Panic Disorder	10%		
Schizophrenia	7.7%		





4. Diagnosis

4.1 Overview

With the exception of individuals who seek help directly from care services, detecting individuals who are at risk of, or who are suffering from, hazardous, harmful or dependent alcohol misuse is difficult. Evidence from the UK indicates that General Practitioners may be missing 98% of the harmful or hazardous drinkers who present to their practice, despite the fact that individuals in this group are twice as likely to make use of primary care services as other patient groups (Raistrick et al, 2006).

It is unlikely that informal assessment will detect excess alcohol intake in most individuals (Raistrick et al, 2006), as many individuals who drink to excess will underestimate how much their intake is. However, targeted screening performed during consultations, new patient medicals etc. using validated screening tools has been shown to be effective.

It is likely that the first signs of excess alcohol in an individual will be on their presentation to primary or emergency care services with injuries, physical and psychiatric illnesses, frequent sickness absence or social problems.

4.2 Clinical Features of Alcohol Related Disorders

Excess alcohol consumption has toxic effects on every body system. As well as the specific conditions listed below, alcohol-dependent patients often have nutritional deficiencies, multiple physical illnesses and social problems, which predispose them to further diseases such as pneumonia and tuberculosis.

Physiological factors render women more susceptible to the effects of alcohol than men. This puts them at risk of the complications of alcohol at lower levels of intake.

A high proportion of patients referred for treatment of alcohol abuse have physical complications.

4.2.1 Acute Neurological Syndromes

Acute intoxication with alcohol is associated with symptoms of neurological impairment that escalate from euphoria and in-coordination to confusion, nystagmus, ataxia, stupor and coma. When alcohol dependence is established, withdrawal symptoms are one of the cardinal features. These are most common in the first 24 – 48 hours of abstinence, although they can occur up to 10 days later. Typical features of withdrawal include tremor, nausea and sweating, with seizures and hallucinations in severe cases. Delirium tremens ('the DTs') is the most serious manifestation of alcohol withdrawal, with a mortality rate of about 5%. The syndrome occurs in 5% of all patients admitted to hospital with physical complications of alcoholism. The patient becomes disorientated and experiences hallucinations, fear, paranoid delusions, extreme tremor and agitation. The





symptoms typically resolve after several days.

Wernicke - Korsakoff Syndromes

The Wernicke - Korsakoff syndromes are caused by thiamine deficiency, and may persist even after abstinence from alcohol and vitamin replacement. Wernicke's disease comprises ophthalmoplegia, ataxia and a chronic confusional state, however, this triad of signs is not present in all cases and treatment should be initiated if any signs are present. Korsakoff syndrome describes dense antegrade and retrograde amnesia with confabulation, and is developed by about 80% of patients recovering from Wernicke's syndrome (Mann and Keifer, 2009).

Miscellaneous Neurological Conditions

- Excess alcohol may cause myopathy, which is associated with muscle pain and proximal muscle wasting.
- Alcohol's direct toxic effect on neurones can result in cortical atrophy, which
 may become evident through failure of memory, deterioration of personality
 and loss of intellectual ability.
- Alcohol can cause amnesic episodes, which are often described as "blackouts."
- Head injury and sub-dural haematoma are significantly more common amongst heavy drinkers.
- Fetal alcohol syndrome is a cluster of developmental abnormalities present in children born to alcohol dependent mothers.
- · Retinal amlolyopia also encountered in alcohol toxicity

(Paton and Touget, 2005)

4.2.2 Gastrointestinal Conditions

Alcohol is absorbed from the oral cavity, stomach and small intestine, and the rate of absorption is most rapid on an empty stomach.

Alcohol is predominantly eliminated (75%) by the liver at the rate of about 1 unit per hour (Paton and Touqet, 2005). The metabolism of alcohol is accelerated in heavy drinkers (tolerance), however, the onset of liver failure reverses this process, and the rate of metabolism then falls to less than normal.

The structure and function of the liver remains normal in 50% of patients dependent on alcohol. The first stage of liver damage is alcoholic fatty liver, which is an acute but reversible event. Continued drinking may lead to alcoholic hepatitis, which causes jaundice, fever and vomiting, and 80% of hepatitis cases eventually develop cirrhosis. Alcoholic cirrhosis is irreversible fibrotic scarring of the liver and is associated with a 5-year survival of 48% if drinking continues, and 77% if it stops (Hope, 1998; Mann and Keifer, 2009).





Peptic ulcers, gastritis, pancreatitis, oesophageal varices and carcinoma of the oropharynx and oesophagus are all more common amongst patients dependent on alcohol, although it should be noted that Oesophagitis and Antral Gastritis can also be encountered in consumers who are not dependent.

4.2.3 Cardiovascular Conditions

Alcohol related folate deficiency is an important cause of macrocytic anaemia. Cardiac function may be impaired by alcohol related cardiomyopathy and arrhythmias such as atrial fibrillation. One third of all cardiomyopathies result from excess alcohol consumption (Mann and Keifer, 2009).

Although recent literature appears to suggest there is a beneficial effect of moderate alcohol consumption (Mann and Keifer, 2009), at the population level, the incidence of ischaemic heart disease, hypertension and stroke is increased by alcohol excess.

4.2.4 Rheumatological Conditions

Gout is commonly associated with alcohol excess. Unfortunately, the NSAID used to treat the symptoms of gout can further worsen the gastrointestinal complications of alcohol excess.

4.2.5 Peripheral Neuropathy

Alcohol is the commonest cause of peripheral neuropathy after diabetes. Peripheral neuropathy occurs in 10% of dependent drinkers, and affects motor and sensory nerves, especially in the lower limbs. The condition is symmetrical. Symptoms and signs include a burning sensation in the feet, a patchy loss of pain sensation, and absent ankle jerks. There may also be distal weakness and wasting of the muscles.

4.3 Alcohol Induced Mood and Anxiety Disorders

Alcohol induced mood disorders, along with alcohol induced anxiety disorders can develop not only whilst the individual is consuming excess amounts of alcohol, but up to 4 weeks following cessation (Mann and Keifer, 2009).

Approximately 30% of male individuals and 50% of female individuals who have high alcohol consumption suffer from longer periods of severe depression (Brown and Schuckit, 1988). Alcohol has a direct depressant effect on the brain. Alcohol dependency can lead to social problems including unemployment, divorce and debt, and depression may follow. In turn, depression may lead to deliberate self-harm. More than 20% of alcoholics have attempted suicide and around 15% are successful (Mann and Kiefer, 2009).

Anxiety disorders in the general population are the most common groups of psychiatric problems, with 20-45 percent of those affected also having histories of alcohol misuse (Kushner et al, 1990). Alcohol is often used to self-medicate symptoms of stress and anxiety. Up to 70% of individuals who consume excess amounts of alcohol also have anxiety disorders (Kessler, 1994). The initial relief that





is achieved is a powerful spur to develop alcohol dependence. Anxiety symptoms increase during the withdrawal from alcohol, so a vicious circle of increasing consumption can develop.

4.3.1 Psychosis

Alcoholic hallucinosis is a rare condition, separate from the acute effects of withdrawal. Auditory hallucinations occur in a setting of clear consciousness. These often take the form of a derogatory conversation about the patient. The phenomenon occurs when alcohol intake ceases or is reduced after a period of heavy drinking, and it usually lasts for a few days.

4.4 Social Complications of Excess Alcohol Consumption

Marital problems may occur because the alcohol abuser is late coming home, is abusive or violent when drunk, becomes indebted or unemployed. Work problems may occur if the alcohol abuser has a poor attendance record and performs poorly. Legal problems may develop when an alcohol abuser encounters the police because of "drink driving" or violence. 50% of those sleeping rough are alcohol dependent.

4.5 **Diagnosis**

A number of screening tools are available which may aid in the diagnosis of an individual who has an alcohol related disorder.

4.5.1 **AUDIT Questionnaire**

The Alcohol Use Disorder Identification Test (AUDIT) is a 10-item questionnaire developed by the World Health Organisation which has shown to be effective within within primary care, A&E, pre- and antenatal settings (SIGN, 2003).

This questionnaire addresses quantity and frequency of alcohol use, alcohol-related problems, and symptoms of mild alcohol dependence (Babor, 1989). Evidence indicates this questionnaire is highly sensitive (Saunders et al, 1993), however it can take time to complete.

Several shorter versions of the AUDIT are in common use, such as AUDIT-C which has also been shown to be sensitive. Some of the shortened tools are more suitable in emergency settings than primary care e.g. the FAST alcohol screening test. Other short screening instruments based on the AUDIT tool include the Michigan Alcohol Screening Test, and the Paddington Alcohol Test (PAT) (SIGN, 2003).

4.5.2 CAGE Questionnaire

The four-item CAGE questionnaire is commonly used, although evidence shows this is less effective at identifying individuals at risk of alcohol misuse than the AUDIT questionnaire (SIGN, 2006). Within this screening tool each of the letters CAGE is a





letter from a key word. Two or more positive replies suggest that the patient has a drink problem.

- Have you ever felt you ought to Cut down on your drinking?
- Have people Annoyed you by criticising your drinking?
- Have you ever felt bad or Guilty about your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (Eye opener)?

4.6 Clinical Assessment of Alcohol Use

There is reluctance on the part of some people to talk about their alcohol problem and so a sensitive, non-confrontational and non-judgemental approach is needed.

4.6.1 Typical <u>Drinking</u> Day

A detailed picture of a typical day gives a good indication of how alcohol affects the claimant's life.

4.6.2 Alcohol history

- a) Typical alcohol consumption (units) in a week.
- b) Are there withdrawal symptoms?
 - Anxiety.
 - Tremor.
 - Night sweats or morning nausea.
 - Convulsions.
 - Delirium tremens.
- c) Are there other features of dependence?
 - Tolerance.
 - Compulsion to drink, and drink-seeking behaviour.
 - Rapid reinstatement of heavy drinking after abstinence.
- d) Are there alcohol related problems?
 - Physical, e.g. gastritis, hepatitis, cirrhosis, pancreatitis, neuropathy, and accidental injuries.
 - Psychological, e.g. anxiety, depression, delusions, hallucinations, and paranoid ideation.
 - Social, e.g. marital, accommodation, occupational, legal or financial.
- e) Are other drugs being used?
- f) Previous treatment history: medication, GP or specialist alcohol treatment service.





4.7 Clinical Signs of Alcohol Excess and Liver Damage

- There may be no symptoms or signs.
- Alcohol excess is associated with diseases of every organ system, and the signs of any of them may be detected. Some of the commonest features are described below.
- Acute intoxication may be evident from slurred speech, impaired coordination or a labile or inappropriate manner.

4.7.1 Appearance

 Stigmata of chronic alcohol abuse include unkempt appearance, the smell of alcohol on the breath, a plethoric face, bloodshot conjunctivae, acne rosacea, tremor, potbelly. Dupuytren's contracture has previously been related to alcohol abuse however there is some doubt as to the extent of the association (Gudmundsson, 2001).

4.7.2 Gastrointestinal Disease

- In compensated liver disease: hepatomegaly, palmar erythema, gynaecomastia, clubbing, xanthelasmata and spider naevi.
- In portal hypertension: ascites, caput medusae, and splenomegaly.
- In decompensated liver disease: jaundice, pruritus, hepatic encephalopathy, leuconychia, oedema.
- There may be evidence of previous surgery for oesophageal conditions, peptic ulceration or pancreatitis. Abdominal tenderness may indicate that these conditions are active.

4.7.3 Cardiovascular Disease

 Cardiovascular examination may show evidence of bounding pulse, arrhythmia, hypertension, heart failure (associated with cardiomyopathy), or peripheral vascular disease.

4.7.4 Neurological Disease

- Peripheral neuropathy is a frequent complication of alcohol dependence, and may cause impaired sensation in a "glove and stocking" distribution with distal muscle weakness and wasting.
- Alcoholic myopathy may cause proximal muscle wasting or muscle tenderness.
- Wernicke's disease and cerebellar atrophy may produce signs of incoordination and ophthalmoplegia.





4.7.5 The Mental State Examination

It is important that where excess alcohol consumption is suspected, any examination includes assessment of both physical and mental systems.

Appearance and Behaviour

A person who is appropriately dressed, clean, able to make good eye contact, and who behaves appropriately during the assessment is likely to be functioning relatively well. However, it is important to consider the history and variability of their condition, avoiding a potentially misleading "snapshot" assessment.

Cognitive Function

A person's ability to conduct a conversation and provide information is a test of their concentration and memory. However, those with severe cognitive impairment may be able to mask their disability by confabulating. Sometimes this can be detected by noting inconsistencies between the claimant's account and other sources of information.

Mood

Anxiety and depression are frequently associated with alcohol abuse. An anxious person may appear ill at ease, and they may be tearful, sweating or shaky. A person who is depressed may look sad, speak in a monotone, and have a flat affect and a downcast gaze. They may be tearful and preoccupied with guilt or hopelessness about the future. In people who abuse alcohol, the risk of suicide is relatively high. Risk factors for self-harm are described in the protocol about **Depression**.

Thoughts and Perceptions

Alcohol abuse is associated with psychotic mental illness. Signs such as suspiciousness, pressure of speech, thought blocking, distractibility, or the experience of hallucinations would suggest psychosis.

Insight and Motivation

Does the person acknowledge that there is a problem, and are they realistic about the impact that it is having on their health and lifestyle? Are they motivated to control their drinking? These factors have a major impact on prognosis. A lack of insight and motivation strongly suggest a poor outlook.

4.8 Investigations

Biological markers may be useful in situations where it is believed an individual may be minimising their estimate of alcohol intake, and useful as motivating factors when





a patient is reducing their intake, but in general their sensitivity is lower than self reported assessments of alcohol excess (Coulton, 2006).

- Laboratory markers of alcohol excess may be normal, or may show raised MCV (Mean Corpuscular Volume), elevated γ-GT (Gamma Glutaryl Transpeptidase), raised transaminases (AST and ALT) or raised alkaline phosphatase. The MCV and γ-GT are sometimes used as markers for excess alcohol consumption, although there are a number of possible confounding factors which may make them unreliable on their own. In advanced disease, the liver's ability to metabolise and excrete is compromised, so there will be low albumin, raised INR, raised bilirubin, and low glucose and sodium.
- Ultrasound scanning is useful for assessing the size and texture of the liver.
- Liver biopsy can help to identify the cause of liver disease.





5. Differential Diagnosis

5.1 **Differential Diagnosis**

A number of conditions exist which result in similar symptoms to excess alcohol intake – for example as disorientation, inability to converse, shortened attention span, walking or balancing difficulties or unconsciousness. These include:

- Brain trauma
- Hypoglycaemia
- Electrolyte imbalance
- · Diabetic acidosis and ketoacidosis
- Meningitis
- · Neurological conditions such as multiple sclerosis
- Pneumonia
- Transient Ischemic Episodes
- Stroke
- Vestibular dysfunction

5.2 Co-Morbidities

In addition to the numerous physical conditions described above, there are three important psychiatric conditions which are commonly co-morbid with alcohol-related disorders. These are:

- Depression
- Anxiety disorders
- Substance abuse e.g. benzodiazepines and barbiturates.

It should be remembered that the degree of disability experienced by a patient with co-morbid pathologies is often greater than the sum of each of the conditions on its own.





6. Treatment

The long-term goals of treatment for patients who drink to excess include abstinence or reduction in use, relapse prevention, and rehabilitation. Current approaches are based on the concept that excessive alcohol dependence should be treated as a long term relapsing disorder (such as diabetes or asthma) in combining long term monitoring with intermittent or continuous interventions in terms of treatment (Edwards et al, 2003, Chick, 2009).

Although a number of harmful and hazardous drinkers will be able to reduce their consumption to acceptable limits either with no or minimal interventions, 16% of drinkers will progress to become more dependent on alcohol without appropriate interventions (Drummond, 2005).

Treatment interventions should aim to achieve a reduction in drinking to a safe level with minimal adverse treatment effects.

6.1 Pharmacotherapies and Medical Assistance for Withdrawal

6.1.1 Withdrawal Management

Withdrawal or "de-tox" from alcohol can often be achieved at home or on an outpatient basis under daily supervision (Chick, 2009), especially in cases of harmful or hazardous drinkers. A phase of 'controlled drinking' may be the first step in this process, with a goal to achieve abstinence after a short period of time. The process may be more severe in individuals with more dependent drinking patterns where care should be taken to avoid life threatening complications such as convulsions or delirium tremens. In these cases admittance to hospital or residential care may be more appropriate.

Relief from the symptoms of withdrawal and reduction of the risk of convulsions or delirium can be achieved by tapering doses of benzodiazepines over about a week. Chlordiazepoxide is commonly prescribed in an outpatient setting due to the fact it is less likely to be used or sold on as a recreational drug (Raistrick, 2006; Chick, 2009).

Patients with delirium tremens require emergency treatment in hospital.

6.1.2 Pharmacotherapies for Maintaining Abstinence

Disulfiram (Antabuse) may be used as an aid to help to prevent drinking. The combination of alcohol and Antabuse causes a potentially dangerous reaction of nausea, vomiting, breathlessness, headache, flushing, and tachycardia to develop 15-20 minutes after drinking alcohol. Although supervised administration of Disulfiram has shown positive results in terms of abstinence (Heather, 1993) Disulfiram requires sufficient doses to act as a deterrent, and does not reduce the cravings associated with alcohol withdrawal (Chick, 2009). Disulfiram may have potentially fatal side effects and should not be used in an outpatient setting (SIGN, 2007)





Acamprosate (Campral) acts to reduce the craving for alcohol, and in combination with counselling, may be helpful in maintaining abstinence. It should be initiated as soon as possible after abstinence is achieved, and continued if the patient relapses. Acamprosate has been recommended when the individual is seeking to be abstinent from alcohol (rather than controlled drinking) and was found to be effective in Cochrane Review in 2005 (Srisurapanont and Jarusuraisin, 2005)

Naltrexone is an opioid antagonist that was originally developed to aid abstinence from opiate drugs, but has been shown to be effective in the treatment of alcohol abuse. Research trials have indicated Naltrexone has a greater effect in individuals seeking to control drinking rather than achieve abstinence (Chick, 2009). Naltrexone has been shown to be less effective than supervised Disulfiram but more effective than Acamprosate in clinical trials (Chick, 2009).

6.1.3 Thiamine

Adequate nutrition and vitamin B₁ (thiamine) supplements are necessary to replace inadequate stores and prevent the serious consequences of alcohol related nutritional deficiency

A Cochrane review in 2005 recommended Thiamine to be used in individuals dependent on alcohol to avoid the consequences of severe malnutrition, in particular Wernicke–Korsakoff syndrome. The literature did not find any evidence to indicate the efficacy or optimum dosage of Thiamine however (CKS, 2007).

6.2 Psycho-Social Interventions

6.2.1 Brief Interventions

Brief Interventions have a considerable evidence base but are the subject of some confusion as the term is not consistently used or applied (Raistrick, 2006). Brief Interventions can therefore be taken to be an 'umbrella' term to cover a number of different types of short therapeutic interventions which are generally undertaken in a general medical setting. A Cochrane review identified that individuals who were receiving brief interventions reduced their alcohol consumption by 4-5 units per week (Kaner et al, 2007).

Evidence indicates that brief interventions are beneficial in helping harmful or hazardous alcohol users compared with no intervention or treatment. Longer interventions, behavioural self control training or motivational interventions are effective in those individuals who are more excessive alcohol consumers (Coulton, 2008)

SIGN (2007) uses the acronym FRAMES to describe brief interventions:

- Feedback: about personal risk or impairment
- Responsibility: emphasis on personal responsibility for change
- Advice: to cut down or abstain if indicated because of severe dependence or





harm

- **M**enu: of alternative options for changing drinking pattern and, jointly with the patient, setting a target; intermediate goals of reduction can be a start
- Empathic interviewing: listening reflectively without cajoling or confronting; exploring with patients the reasons for change as they see their situation
- **S**elf efficacy: an interviewing style which enhances peoples' belief in their ability to change.

Brief interventions have been shown to have effects up to two to four years later. Booster sessions can prolong effects further (Raistrick, 2006).

Brief intervention sessions usually last 5-10 minutes but can be extended to include motivational interview techniques which use empathetic rather than confrontational techniques and other skills based counselling therapies which may have more effect on those resistant to change. However, evidence is inconclusive as to the effectiveness of extended sessions over brief intervention sessions (SIGN, 2007).

6.2.2 Intensive Psychosocial Interventions

These types of interventions are normally offered by secondary or tertiary care specialists but can be carried out in community care settings. They are appropriate to individuals with moderate-to-severe alcohol dependence. The majority of these therapies are based on cognitive behavioural principles.

A detailed discussion on the types and relative efficacies of intensive psychosocial treatments for excess alcohol consumption can be found in the Mesa Grande Project (Miller et al, 2003). See

http://www.cks.nhs.uk/alcohol_problem_drinking/evidence/supporting_evidence/the_mesa_grande_project.

6.3 **Controlled Drinking**

Where abstinence is not feasible, controlled drinking may be an appropriate goal. This can be achieved by setting a limit on drinking, and facilitated by tactics such as choosing low alcohol drinks and drinking only at certain times of the day. Collaboration between medical staff and an individual to agree and monitor targets contributes to the success of this tactic. However, evidence suggests that the goal of abstinence is more achievable by many as the percentage of individuals who can sustain controlled drinking levels is low – typically around 5% (Chick, 2009).

6.4 Peer Support

Various organisations such as Alcoholics Anonymous provide peer support services to individuals who suffer from alcohol misuse. Evidence as to the successfulness of peer support in reducing alcohol consumption is inconsistent. Whilst the Mesa Grande review rated alcoholics anonymous as being the least effective intervention





(Miller et al, 2003), other studies have suggested that peer-support groups of this kind can be effective in helping those with harmful or hazardous alcohol consumption (Raistrick, 2006). The difference in evidential support is probably explained by the motivation of individuals to attend meetings.

6.5 **Self Help Activities**

Self help information has been shown to be effective in helping individuals with harmful or hazardous alcohol consumption, but not dependent alcohol consumption (Miller et al, 2003).

Other techniques and activities may be useful to individuals who are reducing alcohol intake including stress reducing techniques such as relaxation therapies, physical and occupational therapies.

Evidence indicates that self help techniques can be as effective as one to one or group therapy in people with low levels of dependence (CKS, 2009)





7. Prognosis

7.1 Overview

Individuals who consume excessive amounts of alcohol will move through different patterns of drinking throughout their lifetime, sometimes without engaging with medical services regarding their condition (Fillmore, 1988, Raistrick, 2006).

Approximately one fifth of all harmful and hazardous drinkers will recover without any professional help (Klingemann and Schibli, 2004).

Approximately 16% of all harmful and hazardous drinkers will progress to patterns of dependent drinking (Drummond, 2005)

Alcohol dependency is thought to have a more chronic and relapsing course than less dependent patterns of alcohol consumption.

A significant proportion of individuals will have at least one relapse after treatment is initiated. One fifth of individuals who consume excessive amounts of alcohol may never seek help or comply with medication or therapy but manage to stay sober (American Psychiatric Association, 2000).

The Alcohol Harm Reduction Strategy for England estimates that up to 22,000 premature deaths per year are associated in some way with alcohol misuse (Information Centre, 2006). This includes 1700 accidental deaths (Coulton, 2008). In Ireland, an insurance company has reported one in five claims for accidental and sudden deaths to involve alcohol (Irish Medical Times, 2009)

The prognosis is poorer when comorbid psychiatric conditions exist.

7.2 Complications

Excess alcohol intake is associated with a number of physical, mental and social complications. These include:

Physical:

- Cancer increased risk of squamous carcinoma of the oropharynx, larynx, and oesophagus, carcinoma of the liver, stomach, colon, rectum, lung, pancreas, and breast
- **Liver Damage** 90% of persistently excessive drinkers will have asymptomatic fatty liver. 40% of excessive drinkers will have alcoholic hepatitis. 8-30% of long term excessive drinkers will develop cirrhosis.
- **Cardiovascular Disease** hypertension (especially related to binge drinking) coronary heart disease, cardiomyopathy, and arrhythmias.
- Neurological Problems coronary heart disease, cardiomyopathy, and





arrhythmias.

- Accidents Falls, vehicular accidents, occupational injury
- Fertility Issues both male and female infertility are affected by excessive alcohol consumption
- **Social Problems** Increased crime, domestic violence, child abuse and unprotected sex are all linked with excessive alcohol consumption
- Occupational Issues unemployment, poor performance at work
- Fetal Alcohol Syndrome

(Health Education Authority, 1997; Raistrick et al, 1999; SIGN, 2003; Raistrick et al 2006)

7.3 **Summary**

There are a number of factors which may indicate a good prognosis for an individual's recovery from alcohol related disorders. These include:

- Early intervention in individuals who are developing alcohol related disorders
- An individual who has a healthy premorbid personality: Evidence suggests
 that individuals who have personality disorders such as antisocial personality
 disorder can have prolonged or failed recovery (MD Guidelines, 2010)
- · An individual who has insight into their dependency
- An individual who is motivated to abstain or cease to be dependent on alcohol
- effective family and social support systems in place, however alternative social support such as half-way houses or rehabilitation centres may also provide support for a good prognosis.





8. Information Gathering at the In Person Assessment

Alcohol excess is a chronic and variable condition with possible consequences affecting the physical, mental and social functioning of the sufferer. Both the full range of problems and their variability must be assessed to arrive at a true picture of a claimant's disability.

8.1 Assessing the Claimant

Claimants with alcohol related disability must always have their mental state assessed.

The assessment should be made using all the information available. This includes information from the claimant's file, informal observations, medical history, alcohol history, typical day, and examination. When it is available, information from family or carers accompanying the claimant may also be valuable. A focused physical examination should assess any areas of physical disability reported, or which become apparent during the interview.

If a claimant is in a state of intoxication, then consideration should be given to aborting the examination, as it will be impossible to complete a full assessment. It may, however, still be possible to provide a useful report containing advice on their degree of disability and functional impairment.

Intoxication may increase the risk of aggressive or violent behaviour, and this must be borne in mind.

If severe alcohol abuse or the complications of alcohol abuse are unexpectedly discovered, then you should consider seeking the claimant's informed consent to notify their GP.

To take account of the variability of alcohol dependence, remission and relapse, it is important to ask about the claimant's condition over time. Considering events in the last 2 years will give a representative impression.

There is a wide range of severity amongst claimants with alcohol related disability:

8.1.1 Mild Alcohol Related Disability

Claimants who drink to excess and are suffering some of the milder acute consequences such as gastritis or problems in their home life are likely to have little or no restriction in their Activities of Daily Living. They should be able to live independently and continue with their usual interests and hobbies. **NB:** Amnesic "blackouts" that may be associated with heavy drinking are not a form of epileptic fit.





8.1.2 Moderate Alcohol Related Disability

Claimants who have been drinking heavily for several years and have developed dependence or chronic consequences such as peripheral neuropathy or epileptic fits are likely to have significant difficulties with their Activities of Daily Living. Their disabilities may be physical, mental or a combination of both.

These claimants are likely to have attempted detoxification and abstinence with the support of their GP or the local alcohol services. They may have had hospital referrals for investigation of alcohol related physical or mental illness, or been admitted for emergencies such as fits, delirium tremens, pancreatitis or haematemesis. They may be unkempt, and may have early features of cognitive impairment. They are likely to have a history of alcohol related social problems such as marital break-up or loss of their home.

8.1.3 Severe Alcohol Related Disability

Claimants who have been drinking heavily for many years are likely to eventually develop severe, chronic and life threatening complications such as cirrhosis, cardiomyopathy and cognitive impairment. This group will have very poor general health and social function.

8.2 Informal Observation

The claimant's appearance will give clues about their general state of health and nutrition. Is the claimant unkempt? Do they smell of alcohol? Are they jaundiced? Observe their gait and balance for signs of neuropathy and ataxia.

8.3 Physical Assessment

When a claimant has a history of frank or suspected alcohol abuse, it is important to consider the full range of conditions to which they may be susceptible. In particular, their nutritional status, and the possible presence of gastrointestinal, cardiovascular, and neurological complications should be considered.

The absence of physical signs does not reliably exclude significant alcohol related physical disease.

8.4 Psychological Assessment

Claimants with alcohol related disabilities are sometimes difficult to assess. It is especially important to attempt to develop a rapport in order to maximise the information that can be obtained at interview. A sensitive non-judgemental approach is more likely to elicit the necessary data about alcohol consumption.

The loss of friends, social isolation, the avoidance of people, poor interpersonal skills, negativism, poor self-care and a chaotic lifestyle are a cluster of features found in some claimants with alcohol related disability. These claimants function very poorly, and are highly disabled. Questions about social activities such as going





to the pub or seeing their family may provide useful clues.

8.5 Assessment of Alcohol Use

The most important discriminating factor in assessing the impact of alcohol excess on a claimant is to determine whether they are <u>dependent</u> on alcohol. (See section 1.2.)

Alcohol use should be assessed by taking a drinking history, including a typical drinking day. A standard typical day history and a mental state examination complete the assessment of the claimant's mental health functioning.

8.6 How to Assess Prognosis

8.6.1 Physical Prognostic Factors

- The presence of any symptom or sign of alcohol related disease shows that the claimant's alcohol consumption is already at a harmful level.
- The burden of multi-system dysfunction may progressively reduce exercise tolerance. This is particularly likely to affect the activities 'Walking' and 'Climbing Stairs.' Evidence of this can be elicited by asking about the claimant's ability to manage shopping or travelling, for example.
- Neurological complications may cause balance problems that could affect the
 activities 'Walking', 'Climbing Stairs', 'Standing' and 'Balance / Coordination.'
 Establishing whether the claimant can get in and out of the bath, manage the
 stairs, or use public transport will provide useful information.
- The onset of chronic complications of alcohol predicts a poor prognosis.

8.6.2 Mental Prognostic Factors

- Does the claimant have another mental illness? The combined disabling effects
 of multiple illnesses are likely to be severe. The assessment should focus on
 the most significant condition.
- Is the claimant using other drugs, and are they dependent on them? This is a
 relatively common scenario in our work as disability analysts, and is likely to
 increase their level of disability. (See the protocol about *Substance Use Disorders.*)
- Does the claimant have insight into their condition? Insight into dependence is associated with a better prognosis.
- What is their motivation for change, taking account of their medical and behavioural history? Is the claimant attending a self-help group such as Alcoholics Anonymous? A motivated claimant has a better prognosis.
- What treatment have they received in the past, and is the claimant currently receiving treatment for their alcohol abuse? Rapidly returning to excess alcohol consumption after attempts at rehabilitation suggests a poor prognosis.





 Has the claimant been able to abstain from alcohol? Claimants with a history of long periods of successful abstinence have a better prognosis.

8.6.3 Social Prognostic Factors

- Where is the claimant living? Do they have a home of their own, or are they
 living in a hostel, at home with their parents, or of no fixed abode? The lack of a
 safe home may indicate the claimant's life has disintegrated because of their
 dependence on alcohol.
- The claimant's employment history is often useful. Frequent job changes, or losing a job because of the effects of alcohol suggest a significant alcohol problem.
- Does the claimant have an effective social support network? If so, it improves their prognosis.

8.7 **Profound Disability**

The presence of profound disability should be considered if marked physical or mental symptoms and signs relating to the abuse of alcohol are found

Features suggesting short term profound disability

- Claimants undergoing residential detoxification and rehabilitation
- Younger claimants who are dependent on alcohol and have suffered a loss of personality and self-regard leading involuntarily to extreme poverty and neglect and an inability to function socially

Features suggesting long term profound disability

- Claimants with evidence of severe chronic physical complications of alcohol abuse such as liver failure, portal hypertension, a history of bleeding oesophageal varices, recurrent pancreatitis, cardiomyopathy, and Wernicke

 Korsakoff syndrome
- Claimants over 50 years old with a long history of alcohol dependence who
 have suffered a loss of personality and self-regard leading involuntarily to
 extreme poverty and neglect and an inability to function socially
- Claimants, who are habitually intoxicated and would pose a threat to themselves or others in the workplace
- Claimants who have developed severe cognitive impairment, characterised by failure of memory, loss of intellectual ability and deterioration of personality





9. Analysis of Effect on Functional Ability

Eligibility to the Department of Social and Family Affairs various Illness-related schemes and Activation Programme, is determined primarily by the degree of Ability/Disability and its expected duration.

The degree of Ability/Disability assessed, using the following Indicators, can be depicted on the Ability/Disability Profile illustrated below.

9.1 Indicators of Ability/Disability

Normal

- Claimants who are able to continue with their usual interests and hobbies
- Enjoy social contact with friends or family
- Minor physical problems, e.g. gastritis
- In remission following treatment
- Absence of abnormal findings on mental state examination

Mild

- 'Blackouts' due to heavy drinking (do not constitute epileptic fits)
- Family problems whilst living at home
- Short history of alcohol related problems

Moderate

- Claimants who have developed dependence on alcohol
- Under the care of a specialist alcohol treatment service
- Taking disulfiram or acamprosate treatment
- Chronic physical consequences such as peripheral neuropathy or atrial fibrillation
- Hospital referrals for investigation of alcohol related physical or mental illness
- Emergency admissions for fits, delirium tremens, pancreatitis of haematemesis
- Co-morbidity with another psychiatric illness
- Alcohol-related social problems such as debt, divorce or homelessness





- Social isolation and the avoidance of people
- Early features of cognitive impairment or tremor
- Unkempt appearance, the smell of alcohol on the breath
- Plethoric face, bloodshot conjunctivae, acne rosacea

Severe

- Claimants who are habitually intoxicated and would pose a threat to themselves or others in the workplace
- Claimants undergoing detoxification and rehabilitation
- Poor self-care and a chaotic lifestyle
- Signs indicative of the chronic physical complications of alcohol excess

Profound

- Failure of memory, loss of intellectual ability and deterioration of personality
- Claimants whose dependence on alcohol has led to extreme poverty and neglect and an inability to function socially
- Severe chronic physical complications e.g. liver failure, portal hypertension, bleeding oesophageal varices, recurrent pancreatitis, cardiomyopathy and Wernicke-Korsakoff syndrome





9.2 **Ability/Disability Profile**

Indicate the degree to which the Claimant's condition has affected their ability in ALL of the following areas.								
	Normal	Mild	Moderate	Severe	Profound			
Mental health/Behaviour								
Learning/Intelligence								
Consciousness/Seizures								
Balance/Co-ordination								
Vision								
Hearing								
Speech								
Continence								
Reaching								
Manual dexterity								
Lifting/Carrying								
Bending/Kneeling/Squatting								
Sitting								
Standing								
Climbing stairs/Ladders								
Walking								





10. Summary of Scheme Criteria

10.1





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