

Cheers?

Understanding the relationship
between alcohol and mental health

Mental Health Foundation



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While much debate has taken place recently about **alcohol**, we have *failed* to draw out the **reasons** why so many **people** have **troubled** relationships with it. The reasons we drink and the **consequences** of excessive drinking are intimately *linked* with our **mental health**, and this holds the key to dealing with growing **worries** about alcohol misuse.

FOREWORD

Each year the Mental Health Foundation uses mental health action week to highlight an area of concern about the mental health of the general population.

For too long mental health has been mysterious to 'ordinary' people, and is seldom talked about in comparison to many areas of physical health. Yet one in four of us will experience a mental health problem each year. The need for mental health to be demystified is urgent.

We have been working for many years to give ordinary people the information they need to better understand their own – and others' mental health. Recently we have covered practical topics such as the importance of diet and exercise to mental health, and the suffering caused to ordinary people with mental health problems because of the prejudice and ignorance surrounding mental illness.

The message is clear – mental health is everyone's business, just like physical health. As a society we must get better at understanding mental health, if we are to tackle some of the major health, economic and social burdens that face current and future generations.

One of the least explored but most fundamentally important factors in the mental health of the general population is our use of alcohol. While much debate has taken place recently about alcohol, we have failed to draw out the reasons why so many people have troubled relationships with alcohol. The reasons we drink and the consequences of excessive drinking are intimately linked with our mental health, and this holds the key to dealing with growing worries about alcohol misuse. But once again, mental health is swept under the carpet while debate focuses on the physical consequences of alcohol misuse.

While this is just one example of how mental health is a crucial factor that is omitted from virtually every national debate, it is a vitally important one, and I am pleased that our research will add to the evidence. We hope it will spark and inform further debate, and offer useful directions to those who are rightly concerned.



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"I was a carer for my mother and an elderly relative. I found I was not able to deal with all the emotions around that and drank to help me block the emotions out, to be normal, not to feel anxious, not to have a million different worries going around my head. It's partly to do with the way I learnt to deal with things. I drank to medicate myself."

Elizabeth, in her mid-thirties, was placed on suicide watch in a psychiatric hospital after her long-term drinking habit spiralled out of control.

EXECUTIVE SUMMARY

How and why we use alcohol

Alcohol has been an important part of our society and culture for many centuries. People of all ages across the UK have an intimate relationship with alcohol, with positive as well as negative effects in the short and longer term.

Alcohol is tied up with many areas of our lives, and we use it in a plethora of ways: to help us relax, feel brave, introduce ourselves, seal business deals, celebrate life events, drown our sorrows, remember, forget, welcome people, say goodbye to people, get to know people, manipulate people, because we feel like it, because we need it, to numb ourselves, to feel grown up, to feel young, to belong, to distinguish ourselves, and sometimes, because we've forgotten how to do anything without alcohol.

Over the past fifty years alcohol consumption has doubled in the UK. Recent figures show that 38% of men and 16% of women are drinking above recommended limits and can be classed according to World Health Organisation standards as having an alcohol use disorder. This is equivalent to 8.2 million people in England alone. And 1.1 million people nationally are alcohol dependent. Young people in the UK drink more than in nearly all other countries in Europe.

Concerns about these facts are reflected in recent policy developments. These are largely focused on reducing harm such as damage to physical health, violence and anti-social behaviour. Much media debate about the growth in alcohol consumption, especially among young people, has centred on binge drinking, anti-social behaviour, and serious physical alcohol-related complaints such as liver disease.

Far less attention has been paid to the links between alcohol and mental health, and there has been comparatively little public exploration of why we drink. The Prime Minister recently described binge drinking as "the new British disease", but is alcohol misuse more like a symptom of other problems?

Research outlined in this report shows that many people in the UK drink alcohol in order to help them cope with emotions or situations that they would otherwise find difficult to manage.

At the simplest level, we often drink because we wish to alter our mood – or change our mental state. This may involve the desire to quell feelings of anxiety or depression, or other low-lying mental health or mood problems, for want of a better way of dealing with them.

There is much research that indicates that people who consume high amounts of alcohol are vulnerable to higher levels of mental ill health. According to the World Health Organisation: "Sufficient evidence now exists to assume alcohol's contributory role in depression⁶."

Severe mental illness and alcohol

At the more severe end of the spectrum, the co-existence of alcohol problems and mental ill-health is very common, and often referred to as "dual diagnosis". The idea that people 'self-medicate' their mental health problems using alcohol is also very well known and documented. The basic premise is that the psychopharmacological properties of alcohol help individuals deal with negative effects of mental ill-health by altering the chemistry of the brain, which in turn counters the negative feelings. The prevalence of alcohol dependence among people with psychiatric disorders is almost twice as high as in the general population. People with severe and enduring mental illnesses such as schizophrenia, are at least three times as likely to be alcohol dependant as the general population.

Mood, mental health and alcohol

Self-medication is not a concept that can only be applied to people with diagnosed mental health problems, and is in fact a useful way to describe many of the reasons we drink. Little has been said in public policy documents about the way the general population relies on alcohol – a legally available drug – as a mood-altering substance that is used to mask other problems, or to deal with emotions.

Alcohol is a toxic substance in terms of its direct and indirect effects on the chemistry of the brain and other body organs and systems. The initial impact of a drink – that “winding down” or relaxing feeling – is a reflection of almost immediate chemical changes occurring in the brain’s nerve cells (neurons) in response to alcohol. As more alcohol is consumed, increasingly sensitive parts of the brain become affected and behaviour changes accordingly. The first drink for many people (although not all) depresses the parts of the brain that are associated with inhibition, increasing talking and self-confidence and reducing social anxiety. As more alcohol enters the bloodstream, the areas of the brain associated with emotions and movement are affected, often resulting in exaggerated states of emotion (anger, withdrawal, depression or aggressiveness) and uncoordinated muscle movements. Alcohol then depresses the nerve centres in the area that controls sexual arousal (which increases) and performance (which doesn’t).

Drinking to relieve anxiety and depression

There is much evidence to show that many people drink to help deal with anxiety and depressive thoughts. It reveals that alcohol can be a favourite coping mechanism. When the results of a recent survey were extrapolated to the general population, researchers found that up to 12 million adults in the UK drink to help them relax or overcome feelings of depression.

There are two potential problems in using this coping mechanism. Firstly, self-medicating with alcohol can become self-perpetuating. Underlying anxiety leads to increased alcohol use, which changes the physiology of the brain and leads to a depletion of the neurotransmitters (the brain’s ‘messengers’) that it needs to reduce anxiety naturally. Therefore, the individual feels more anxious and needs more alcohol to ‘numb’ their anxiety. In the long term, this can lead to an individual becoming tolerant of alcohol – that is, they need increasingly large amounts of drink to experience the same reduction in their anxiety.

The second problem with using alcohol to self-medicate is that it is difficult to maintain exactly the amount of alcohol needed to reduce the negative feelings. Keeping the optimum balance of alcohol to reduce anxiety is almost impossible because the effect of alcohol on the brain is such that after the initial ‘euphoria’ or stimulation from the first drink, alcohol acts as a depressant and the feelings of anxiety may rapidly return. Increased drinking to cope with those feelings leads to a rapid increase in the levels of alcohol in the blood and may become counter-productive.

The problem with drinking to relieve depression is similar to the problems described above with anxiety. Regular drinking changes the chemistry of the brain and, of particular relevance here, depletes the levels of the neurotransmitter serotonin. This is a brain chemical implicated in depression. This leads to the cyclical process of drinking to relieve depression, becoming more depressed as levels of serotonin become more depleted, thus needing more alcohol to medicate the depression. Increased alcohol consumption can also affect social relationships and work life, which in turn can contribute to depression³.

Alcohol depresses the Central Nervous System, and this can have a disinhibiting effect which can reveal or amplify our underlying feelings. This is one of the reasons that many people become angry or aggressive when drinking. If our underlying feelings are of anxiety and low mood then alcohol can also exaggerate them.

In short, drinking to mask anxiety, depressed mood or general unease has the opposite effect either when blood alcohol levels increase or once the drink wears off. This is why a physical hangover is very often accompanied by anxiety or low mood.

"I don't really know when I started drinking. I should say I have had various breakdowns due to depression and with those I have always tended to drink alcohol. I was drinking enough to stay numb."

Susan, 53, retired nurse

What the evidence shows

Evidence outlined in this report has shown that:

- there are significant connections between reported alcohol use and depressive symptoms
- people report using alcohol to help them sleep
- people drink more when experiencing moderate to high levels of shyness or fear
- anxious people use drinking 'to cope' and are more likely to avoid social situations where alcohol is not available
- as many as 65% of suicides have been linked to excessive drinking
- 70% of men who kill themselves have drunk alcohol before doing so
- almost a third of suicides amongst young people are committed while the person is intoxicated
- anxiety and depressive symptoms are more common in heavy drinkers
- heavy drinking is more common in those with anxiety and depression
- there is a significant relationship between job stress and alcohol consumption
- Many GPs believe that alcohol is a cause of mental health problems.

Implications

The consumption of alcohol can have positive as well as negative effects. There is some evidence associating light drinking with improved emotional, mental and physical health.

But there is an emerging picture of alcohol use as a way of masking problems, and helping us cope with emotions we would otherwise find it too difficult to deal with. Many of the personal stories outlined in this report paint a picture of loss caused by over-consumption of alcohol – from the loss of important memories linked with important occasions; to the loss of work, relationships and self-esteem.

While we are keen to deplore publicly the phenomenon of binge drinking among young people, it must be noted that binge drinking is not new, and beliefs and attitudes to alcohol are not unique to younger generations. They have learned how to use alcohol from a very young age in a society where alcohol is medicine, *Dutch Courage*, a relaxant, proof of friendship and the lubricant for all celebrations.

As concern about alcohol use grows, so will Government policy and guidance, as well as advice about tackling problem alcohol use in health services, schools and families. It is crucial that research, policy and attitudes do not focus on pricing, availability and treatment at the expense of risk factors and triggers for problem alcohol use, emotional health and alternative coping strategies.

Methods of dealing with alcohol misuse must be linked very closely to emotional wellbeing programmes in schools, parenting initiatives, mental health promotion, public health policy and the identification and treatment of underlying causes.

The Government's public health White Paper Choosing Health made 'encouraging and supporting sensible drinking' one of its six overarching priorities along with smoking, diet, exercise, sexual health and mental health. Because of the close link between alcohol and mental health, it would not be advisable for the Government to formulate any further policy or guidance on drinking without serious exploration of the mental and emotional health causes and effects.

1.1 Key Statistics from NOP survey conducted for this report

Q. How does drinking alcohol make you feel...?

Relaxed

- 77% of the sample reported that drinking makes them feel relaxed
- 85% of 25-44 year olds reported this, compared with 63% of over 65s
- 88% of those in full time employment reported this, compared with 61% of those not working

Happy

- 63% of the sample said alcohol makes them feel happy

More confident

- 41% of the sample said alcohol makes them feel more confident
- 66% of 18-24 year olds reported this, compared with 18% of over 65s

Able to fit in socially

- 44% of the sample said alcohol makes them able to fit in socially
- 50% of males reported this, compared with 37% of females
- 50% of those in full time employment reported this, compared with 35% of those not working

Less anxious

- 40% of the sample said alcohol makes them feel less anxious
- 48% of those aged 35-44, compared with 25% of over 65s
- 46% of those in full time work, compared with 31% of those not working

Less depressed

- 26% reported that alcohol makes them feel less depressed
- 30% of those aged 25-44 reported this, compared with only 19% of those over 65

Less inhibited

- 51% of the sample reported that alcohol makes them feel less inhibited
- 53% of males reported this, compared with 48% of females
- 63% of 25-44 year olds, compared with only 27% of over 65s
- 63% of those in full time work, compared with only 33% of those not working

Able to make friends more easily

- 31% of the sample reported that drinking makes them able to make friends more easily

1.2 Other significant statistics from the NOP survey

- Nearly one tenth of the sample report that they have a drink every day, which equates to approximately 5 million people in the UK. Of these, a larger proportion are older adults (over 55), 15% of whom drink every day, compared to 3% of those aged 18-34.
- Younger people more often reported drinking alcohol to feel relaxed - 85% of people aged between 25 and 44 report that alcohol relaxes them, compared to 63% of people over 65
- 88% of people who said they would find it difficult to give up drinking completely say that it helps them relax
- Nearly half of the sample say that alcohol helps them to feel more confident and less inhibited. This is consistent with the pharmacological properties of alcohol, which initially suppress the parts of the brain that are associated with social inhibition.
- Approximately one third of the sample report that drinking makes them feel less anxious (40%), less depressed (26%) and more able to forget problems (30%). This is consistent with the theory that people use alcohol to medicate low levels of stress, anxiety and depression.
- Those who say alcohol helps them feel less anxious or less depressed are also those who are drinking nearly every day and those who think they would have difficulty giving up

1.3 Key findings from other research for this report

- Over the past fifty years, alcohol consumption has doubled² meaning that over 90% of adults aged 16-64 drink at least occasionally³.
- Alcohol is associated with a range mental health problems and consequences. These include depression, anxiety, suicide, risk-taking behaviours, personality disorders and schizophrenia.
- Regular drinking changes the chemistry of the brain and leads to a depletion of the neurotransmitters it needs to reduce anxiety naturally, and also the levels of the neurotransmitter serotonin, which is implicated in depression
- Stressed mood leads to increased alcohol consumption.
- The number of UK hospital admissions with a primary or secondary diagnosis of "mental and behavioural disorders due to alcohol" rose from 71,900 in 1995/96 to over 90,000 in 2002/03⁵.
- Research shows that people with alcohol dependency are more at risk of suicide⁴⁴, have higher levels of depressive and affective problems, schizophrenia and personality disorders³⁹
- Among those in the general population who drink alcohol, higher volume of consumption is associated with more symptoms of depression⁶²
- As many as 65% of suicides have been linked to excessive drinking⁴⁴

- Young people in the UK drink more than nearly all the other countries in Europe⁸⁹. In 2004, just under a quarter of 11-15 year olds drank alcohol in the last week⁸⁸ and the proportions rise sharply with age.
- Despite increased consumption of alcohol in most age groups and an increasing burden of mental health problems across the board, the association between the two tends to get overlooked in policy, practice and research

Laura, 31, Mother to 2 year old.

Laura started drinking around the clock soon after having her first child. Consumed by severe post-natal depression and anxiety, she let her social drinking habit escalate into 24-hour drinking. Whilst her family and friends looked after the baby, Laura, 31, used drink as a crutch to drown out feelings of anxiety and fear.

"It was like a cycle," she said. "I drank, slept, and drank, with very little in between. I found the drinking stopped my anxiety and acted as medication."

It became a lonely and depressing spiral of abuse. When her partner pressured her to cut back, Laura began to limit her drinking to the evenings. But she soon found she was just drinking the same quantities squeezed into a shorter period.

She recognised she had a problem and turned to her doctor who gave her medication for her depression, and offered her counselling and a psychiatrist. But Laura could not stop drinking and her problems persisted. She went back to her GP, and asked for anything to repress her desire to drink. She was referred to an alcohol problems unit who told her if she wanted treatment she must stop drinking immediately. She said: "It all seemed a bit much, I was going to a wedding in a few days which I just could not imagine doing without drink. But I went home and thought about it for a week and then decided I needed their help."

Nurses at the unit prescribed her medication which helped block the desire for a drink. Though Laura stopped, she also needed help to deal with the underlying emotional problems that she feels are linked to her problem.

She turned to LIBRA, a support organisation for women with alcohol problems. "I found this support fantastic," she said. "They didn't just provide support for the alcohol problem but talked about all the issues around it and helped with everything. I also found it really helpful to meet and chat to women who were experiencing the same difficulties."

Laura firmly believes her alcohol problem is linked to her mental health problems. Negative thoughts and anxiety turn her to drink, she believes. "It has been a tough and slow process but I finally feel I am on the right path to tackling my problems."

Recommendations

1. All alcohol-related public health materials, training and teaching should cover mental health aspects of alcohol misuse/use.
2. Government should invest more in treatment services, especially specialist services for people with dual diagnosis and generally in services treating alcohol dependency. The latter should have clearly defined pathways to mental health services for support and treatment.
3. Psychology treatment centres should have staff trained in delivering CBT to people with alcohol dependency and concurrent anxiety or depression.
4. Government should consider the mental health consequences of policies surrounding alcohol as part of the impact assessment process.
5. Health warnings should be introduced on alcohol packaging and include the warning "Excessive use of alcohol can damage your mental health."
6. Government should target people with mental health problems with health promotion advice and active support in managing issues such as alcohol use.
7. In primary care settings, identified individuals who are using alcohol to 'treat' underlying problems such as stress, depression or anxiety should be able to benefit from alternative approaches to managing mental health problems. These include talking therapies⁹⁷, exercise¹⁵, diet¹⁶, self-help groups and spirituality¹⁴.
8. Increased education about the association between alcohol use and mental health in schools should be used to alert people to the potential risks of using alcohol to self-medicate. Education about the complex reasons for alcohol use and misuse is also vital.

2 INTRODUCTION

For centuries, people in the United Kingdom have shared an intimate relationship with alcohol¹. Over the past fifty years, alcohol consumption has doubled² meaning that over 90% of adults aged 16-64 drink at least occasionally³. Over half the population drink regularly and 38% of men and 16% of women (or 8.2 million people) drink more than the recommended daily intake at least once a week⁴.

According to lists published by the World Health Organisation (WHO), the UK ranks 22nd out of 185 countries in alcohol consumption⁶. On average, 10.39 litres of pure alcohol are consumed per capita (aged over 15), and over half of this is beer or lager. An estimated further 2 litres of alcohol is consumed although not recorded in official statistics because it is produced at home, smuggled into the country or imported during travel.

The reasons for alcohol consumption are complex and some of these will be explored in the next section. Despite the reported benefits for some groups, under some circumstances, much of the research has focused on its negative consequences for physical health and behaviour.

The Institute for Alcohol Studies (IAS) argues that the link between intoxication and adverse consequences is clear and strong. It, amongst others, cites violence, traffic casualties and other injuries as direct consequences of alcohol use (or misuse)^{5,7-9}.

In the UK alone, the cost to the NHS of alcohol misuse has been estimated at £1.7 billion each year and the World Health Organisation suggests that alcohol accounts for about the same amount of disease as tobacco⁷.

As well as the short- and long-term physical effects of alcohol use, there is a growing body of evidence on the effect of alcohol use on our mental health. Alongside the increase in alcohol consumption over the past 50 years is a large rise in mental health problems in the UK. Recent figures show that at any one time, approximately 10% of adults are experiencing a psychological or behavioural problem¹³, and prescriptions for antidepressant medications have been rising every year for the past decade¹³.

Although we know that mental health and wellbeing are affected by many factors, including relationships with friends, family members and professionals, medication, spirituality, exercise and diet¹⁴⁻¹⁶, this report examines some of the evidence associating mental health problems with alcohol.

Firstly, it explores the underlying reasons that people use alcohol, including the hypothesis that many people in the general population drink to cope with different types of stress, feelings of depression or anxiety or simply "to cope" with life. It then looks at the association of alcohol consumption with mental health problems that are not alcohol-specific, including depression and anxiety, suicide, personality disorder and schizophrenia.

Changing trends in drinking habits for men, women and young people are subsequently examined before the Government's recent responses to those trends are described. The final section summarises the gaps in policy and practice and explores what can be done by individuals, the Government and those in the voluntary sector to ensure that the relationship between alcohol and mental health is not overlooked.

* Mental health problems that are generally considered to be a direct result of prolonged alcohol misuse (e.g. Wernicke-Korsakoff Syndrome or WKS) are beyond the scope of this report, for further information see http://www.alcoholconcern.org.uk/files/20030808_114420_Wernicke-Korsakoff.pdf

3 WHY DO PEOPLE DRINK ALCOHOL?

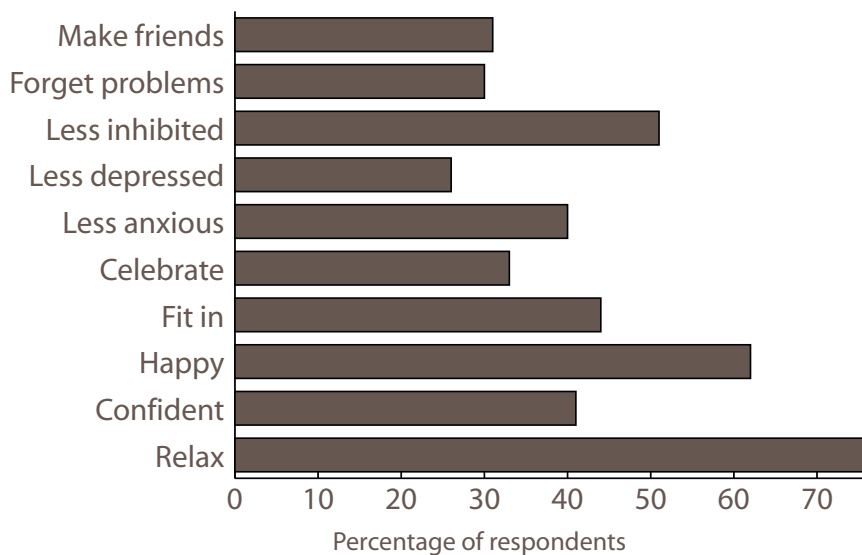
3.1 NOP survey conducted for this report

The Mental Health Foundation carried out an omnibus survey of 1,000 people to explore public attitudes and drinking habits. We asked a series of questions about how much and how often people drink, and how they believe it makes them feel.

Why do people drink alcohol?

More than two thirds of the survey sample drink alcohol and the results showed that they drink for a number of reasons, many of which correspond to the idea of 'self-medication' - i.e. that people believe alcohol alters their mood and feelings, and helps them to cope with situations or feelings that they find difficult. These reasons include: to relax; to make friends more easily; to feel more confident or less inhibited; to fit in socially; to reduce anxiety; to forget about problems or feel less depressed; to celebrate or simply to feel happy (see Figure 1).

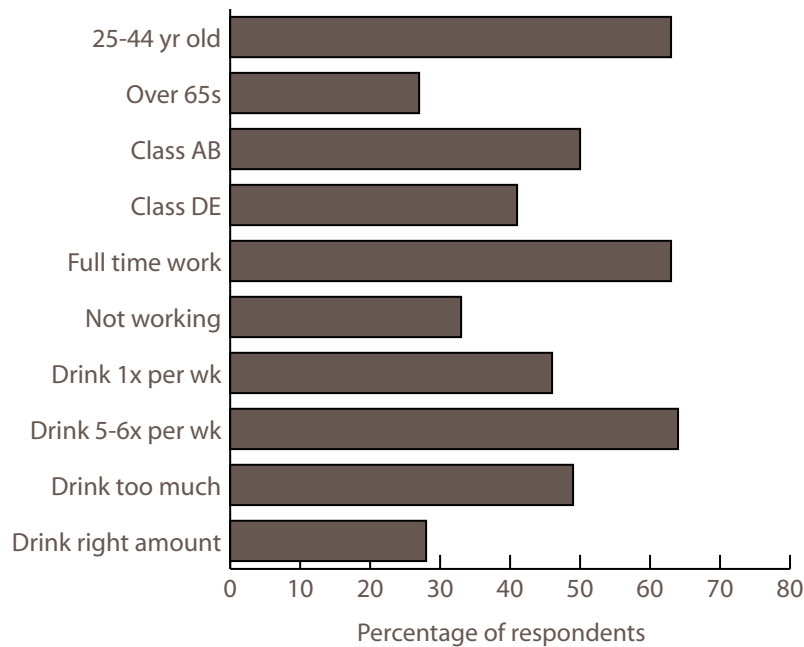
FIGURE 1: WHY DO PEOPLE DRINK ALCOHOL?



Although all of these reasons were fairly common, they varied according to a person's age, social class, marital status, working status and whether or not they had children. For example, younger people more often report drinking alcohol to feel relaxed, 85% of people aged between 25 and 44 report that alcohol relaxes them, compared to 63% of people over 65. In some cases, it seems that people rely on alcohol to help them relax – 88% of people who would find it difficult to give up drinking completely say that it helps them relax.

Nearly half of the sample say that alcohol helps them to feel more confident and less inhibited. This is consistent with the pharmacological properties of alcohol, which initially suppress the parts of the brain that are associated with social inhibition. As shown in Figure 2, those who say that alcohol helps them feel less inhibited tend to be younger, in class AB, in full time work, drink 5-6 times per week, and report that they drink too much.

FIGURE 2: CHARACTERISTICS OF PEOPLE REPORTING THAT ALCOHOL MAKES THEM FEEL LESS INHIBITED



Approximately one third of the sample report that drinking makes them feel less anxious (40%), less depressed (26%) and more able to forget problems (30%). This is consistent with the theory that people use alcohol to medicate low levels of stress, anxiety and depression. It is also consistent with the argument that using alcohol to self-medicate can lead to cyclical patterns of drinking – those who report using alcohol to cope with anxiety and depression are those who are drinking nearly every day and also think they would have difficulty giving up (see Figures 3 & 4).

FIGURE 3: THOSE REPORTING THAT ALCOHOL MAKES THEM FEEL LESS DEPRESSED

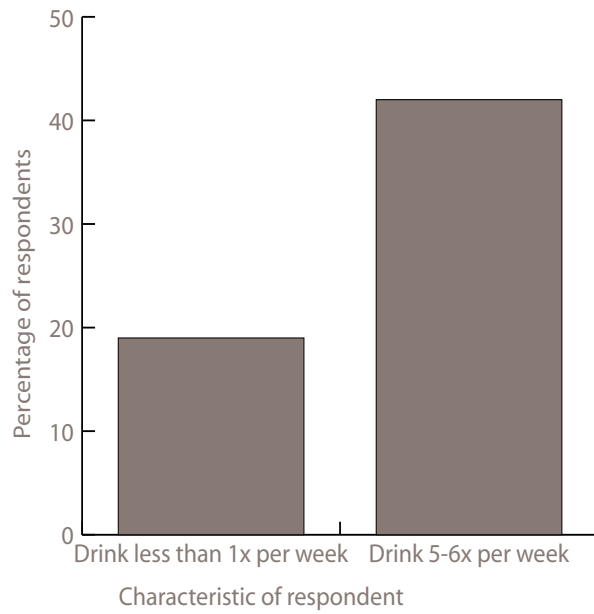
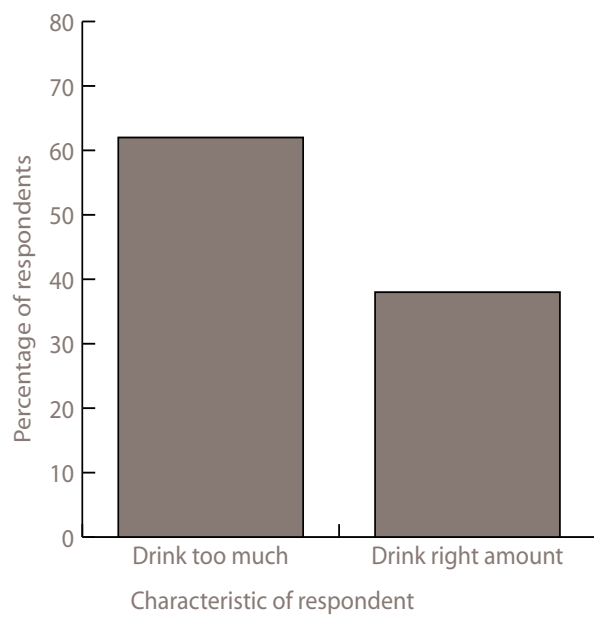


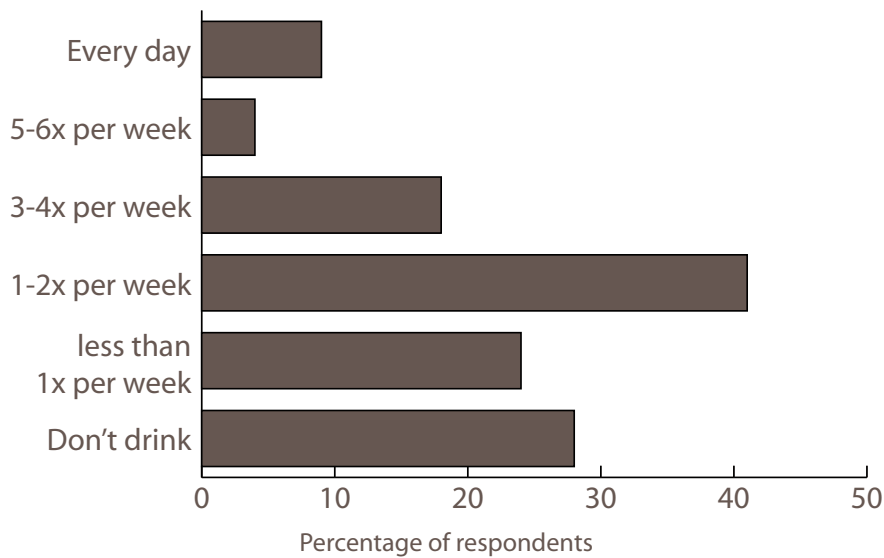
FIGURE 4: THOSE REPORTING THAT ALCOHOL MAKES THEM FEEL LESS ANXIOUS



Drinking patterns in the UK population

Respondents to the NOP survey were asked how often they drank alcohol and the results are summarised in Figure 5. Just over a quarter of the sample reported that they did not drink alcohol at all, a higher percentage of whom were females (34%, compared to 22% of males) and those over 65 (45%, compared to 26% of those under 24). Of those who did drink, most people (65%) drink less than three times per week, and this is particularly true for females, those who are not working and those aged under 45. Conversely, nearly one tenth of the adult population report that they have a drink every day, which equates to approximately 5 million people in the UK. Of these, a larger proportion are older adults (over 55), 15% of whom drink every day, compared to 3% of those aged 18-34.

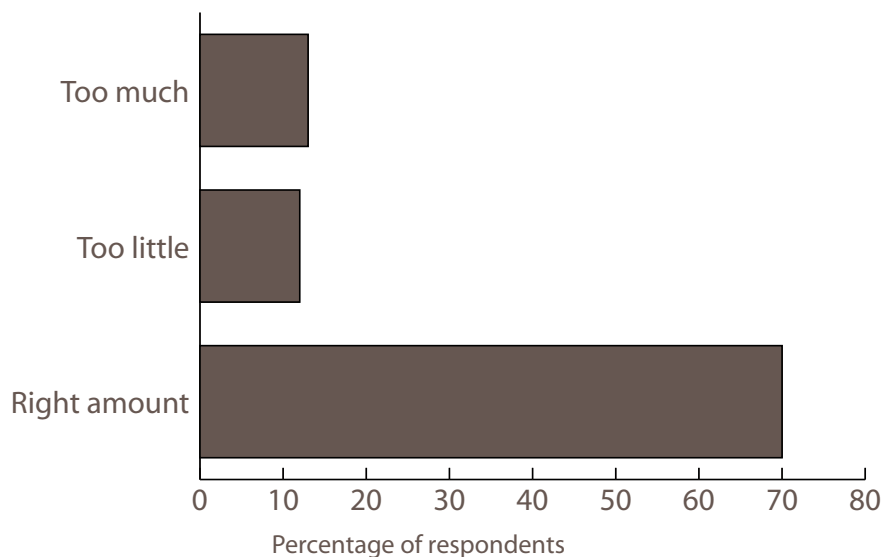
FIGURE 5: HOW OFTEN RESPONDENTS DRINK ALCOHOL



Respondents were asked if they thought they drank too much, too little or about the right amount. Roughly equal numbers of people reported that they drank too much or too little, whilst the remaining two thirds considered that they drank about the right amount (see Figure 6). Those who thought they drank too much tended to be male (17% of males, compared to 10% of females), younger (25% of 18-24 year olds, compared with 2% of over 65s), single (20% of single people, compared to 11% of married people) and in full time work (15%, compared to 8% of those not working).

Nearly half of those drinking 5-6 times each week reported that they were drinking too much (compared to under 5% of those drinking less than once a week) and over one third of those who thought they were drinking too much say they would find it difficult to give up.

FIGURE 6: RESPONDENTS' PERCEPTIONS ABOUT THE AMOUNT OF ALCOHOL



This data supports the evidence found in the literature. Older people tend to drink more frequently, but drink smaller amounts, which they don't think they would find difficult to give up, whereas younger people tend to drink less often but consume more, recognise they drink too much and report that they would find it difficult to give up. Because respondents weren't asked about the amount they drank, it is hard to determine the number of people drinking above the recommended daily benchmarks of 3 units for women and 4 units for men. However, one quarter of those aged 18-24 and nearly half of those drinking 5-6 times per week say that they are drinking too much (and people tend to underestimate the amount they drink). This points to the need for effective and accessible alternatives to drinking, especially where it is being used to alleviate symptoms of anxiety, depression or social inhibition.

3.2 Perceived benefits of alcohol

Although many individuals in the UK may not report health benefits as the primary reason for enjoying a drink or two, there is some evidence associating light drinking (less than 7 units a week) with improved physical, emotional and mental health in some adults^{17,18}. Others, however, have argued that apparent instances of beneficial effects of alcohol most typically result from poorly conducted experiments and a lack of control for other influential factors such as pre-existing mental health status, income, age and/or educational level¹⁹.

Regardless of whether, when or why alcohol is beneficial, there are many other reasons why people drink. In the UK in particular, drinking alcohol is associated with a range of emotional situations throughout life, from births (“wetting the baby’s head”) to weddings (“toasting the happy couple”) to funerals. It is also one of the nation’s most powerful lubricants in social activities, as many of the nation’s football, rugby or cricket fans would testify. Put simply, our use of alcohol is associated with times of emotion – we drink when we feel sad; we drink when we feel happy. We drink when we feel lonely; we drink when we feel sociable. Recent research confirms this observation and takes the argument one step further – that many adults in the UK drink alcohol in order to help them cope with emotions or situations that they would otherwise find difficult to manage²⁰.

3.3 Alcohol as a coping mechanism in the general population

The Priory Group’s survey of 2000 adults²⁰ found that one third of adults relied on drinking to “get through” Christmas – a time that is traditionally considered to be one of goodwill and cheer. Extrapolating their data to the general population, their survey suggested that up to 12 million adults in the UK report drinking to help them to relax or overcome feeling depressed.

The proposition that people use alcohol to cope with feelings of depression, stress and/or social anxiety is not new. The ‘self-medication’ hypothesis has been extensively documented over the past 20 years in both clinical and epidemiological samples²¹⁻²³ and is well documented in those with diagnosed mental health problems (see next section). However, not everyone with a mental health problem receives a formal diagnosis. Where individuals are not managing their mental health needs using medication, talking therapies, complementary therapies and/or lifestyle interventions, they may be using alcohol to self-medicate feelings of stress, depression or anxiety.

The self-medication hypothesis proposes that people unknowingly or knowingly use alcohol to “treat” undiagnosed and underlying emotions because of the effect it has on the brain in alleviating negative symptoms²⁴⁻²⁶. For example, if someone experiences anxiety at the thought of certain social situations, a drink will affect the part of the brain that is associated with inhibition and will (initially) help them feel more relaxed.

There are two potential problems in using this coping mechanism. Firstly, self-medicating with alcohol can become cyclical and self-perpetuating. Underlying anxiety leads to increased alcohol use, which changes the physiology of the brain and leads to a depletion of the neurotransmitters it needs to reduce anxiety naturally. Therefore, the individual feels more anxious and requires more alcohol to ‘numb’ the feelings associated with their anxiety.

In the long term, this can lead to an individual becoming tolerant of alcohol – that is, they need increasingly large amounts of drink to experience the same reduction in their anxiety. The second problem with using alcohol to medicate is that it is difficult to maintain the amount of alcohol required to reduce the negative feelings. Keeping the optimum balance of alcohol to reduce anxiety is almost impossible because the effect of alcohol on the brain is such that after the initial ‘euphoria’ or stimulation from the first drink, alcohol acts as a depressant and the feelings of anxiety may rapidly return. Increased drinking to cope with those feelings leads to a rapid increase in the levels of alcohol in the blood and may become counter-productive.

There are a number of studies that support the self-medication hypothesis. These have been conducted with individuals who are not formally diagnosed with any given mental health problem, but who nonetheless recognise that at times they struggle with feelings of anxiety, depression or stress.

One study compared a group of socially anxious individuals with a non-anxious group who were similar on demographic variables and alcohol use²⁷. All participants were asked to report on whether they used alcohol "to cope", whether they would avoid a social situation if alcohol was not available and the degree of relief they attained through drinking in various social situations. The anxious individuals did use drinking to cope and were more likely to avoid social situations where alcohol was not available. The authors concluded "that people with high social anxiety who use alcohol repeatedly to relieve their stress may come to rely on it as their primary coping strategy, and research suggests that such people are at risk for alcoholism."²⁸

Other studies have found similar results. One study tested the self-medication hypothesis using a prospective design that allowed them to determine whether the negative emotion precipitates the alcohol consumption or whether the alcohol causes the negative emotion²⁹. They found that nervous mood state did predict increases in alcohol consumption later in the course of the day and that the effect of alcohol on reducing nervousness was positively correlated with its severity (i.e. the more nervous you are, the greater the effect of alcohol in reducing anxiety). This was particularly true for men. Cross-sectional analyses also confirmed that nervousness decreased with alcohol consumption, even when controlling for other related factors. A more recent study in the USA examined whether college students used drinking to cope with emotions including sadness, fear, hostility, shyness and boredom³⁰. They assessed daily mood and alcohol use over the course of a month and concluded that when experiencing moderate to high levels of shyness or fear, individuals were likely to drink more.

A recent review of the literature concluded that individuals with social phobia drink to reduce anxiety and that individuals high in social anxiety deliberately drink alcohol to cope with their fears²⁵. However, the extent to which alcohol is actually an effective inhibitor of social anxiety is less conclusive (see above)²⁵, which points to the need for alternative techniques for helping individuals overcome their anxiety in difficult social situations (see page 33).

Similar studies have also been conducted looking at alcohol consumption and depressive symptoms. There are many factors that can contribute to depression, including diet, genes, inactivity, physical illness, poverty, social exclusion and family background³¹. Depression is the most common mental health problem in the UK⁶ and many people who have some of the symptoms may not seek help or treatment from a statutory source.

The self-medication hypothesis proposes that drinking alcohol is a common strategy for dealing with one or more of these symptoms, and again, much of the research that supports the hypothesis uses samples that are not receiving treatment for depression. One study surveyed students for alcohol intake and depression³². Over a fifth of the sample reported high alcohol use and/or problems associated with drinking and given that most people tend to under-report their alcohol consumption³³, this may be an underestimation. Furthermore, there were significant correlations between reported alcohol use and depressive symptoms. Similar results have been found in other populations^{34:35}.

The problem with drinking to relieve depression is similar to the problems described above with anxiety. Regular drinking changes the chemistry of the brain and, of particular relevance here, depletes the levels of the neurotransmitter serotonin. This is a brain chemical implicated in depression. This leads to the cyclical process of drinking to relieve depression, becoming more depressed as levels of serotonin become more depleted, thus needing more alcohol to medicate the depression. Increased alcohol consumption can also affect social relationships and work life, which in turn can contribute to depression³.

Stress is another common problem usually involving a number of physical, emotional and/or relational symptoms, including fatigue; nervousness; “butterflies”; irritability; trouble thinking clearly; over-reactions; increased arguments and isolation from social activities. It is possible that many people drink to cope with stress experienced in their workplace. The Whitehall II study collected data from over 7000 civil servants at three time points over the course of eight years³⁶. After controlling for other factors relating to alcohol use (such as health, smoking habits, baseline mental health status and social support), the study showed that job stress led to increased drinking. Specifically, a job where effort and reward are imbalanced increased the risk of alcohol use in men, and higher occupational grade or limited decision authority did the same for women. The study provides evidence for what many of us might intuitively suspect: a stressful work environment leaves you ‘needing a drink or two’ to unwind at the end of the day. Survey data from the USA has drawn similar conclusions, showing a linear relationship between job stress and alcohol consumption³⁷.

Other types of stress also increase the likelihood of drinking. For example, stress relating to legal issues, health concerns or social constraints are associated with drinking more. In one study, different life stressors were measured, including divorce, moving house, having a child and death of a family member or close friend. Stress was highly associated with drinking. Specifically, frequency of drinking increased by 24% in men and by 13% in women with each additional life stressor measured³⁷.

Stress also contributes to disturbed sleep patterns and insomnia³⁸, which itself is associated with increased alcohol use²⁴. People dependent on alcohol often report using alcohol to medicate insomnia²⁴. Whether insomnia leads to an increase in drinking directly or whether the sleep-disrupting effects of alcohol cause insomnia is unclear, and the likelihood is that they interact with each other, creating a cyclical process of alcohol use and sleep disruption. What is certain is that sustained sleep deprivation is associated with increased levels of stress and has a negative impact on an individual's work, physical and social performance as well as overall quality of life, and these consequences are often associated with increased alcohol use³⁸.

Although all of these studies use research populations who have neither clinically diagnosed mental health problems, they highlight an important issue. If people are using alcohol as their primary coping strategy for anxiety, depression and stress, are those mental health problems likely to worsen over time? As people become more tolerant to alcohol and require increasing amounts to self-medicate, are they more at risk of becoming alcohol-dependent and if so, what are the implications for their mental health? We know that there are mental health problems that are specifically associated with sustained alcohol misuse (such as Wernicke-Korsakoff syndrome) and these are not the focus of this report. However, there is much research that indicates that people who consume high amounts of alcohol are vulnerable to higher levels of mental ill health that are not alcohol-specific. This is the focus of the next section.

George is in his fifties and is a Client Co-ordinator at an addiction centre

George drank heavily on most days for 30 years whilst holding down a job as a Customs and Excise Officer.

When he took up an offer of early retirement, his drinking began to spiral out of control. With so much time on his hands and away from a daily routine, he began to feel a pervading sense of anxiety, and found drink calmed his nerves. He wanted to get back to work but needed shots of vodka to gain the confidence to attend interviews and afterwards would spend long afternoons in the pub to regain his composure. "It gradually crept up on me and looking back upon that period I just couldn't function," he said.

Before long George found himself drinking litres of vodka in a day and his self-esteem evaporated. "I suppose for 30 years I was drinking heavily but I was in employment and that helps you avoid the fact you have a problem, but this just felt so much more traumatic." He swapped pubs for drinking full-time at home, living on the couch, leaving mail unopened, and never answering the phone.

George knew he was in a dark place but said constant drinking ensured he never had to face up to his anxiety. "You are so topped up with alcohol, you are not dealing with anything or feeling anything, you are just numb and in some ways it feels very comforting," he said. "As well as being a dark place it's also a very warm place."

Then one day, George, for a reason he still cannot explain, experienced a 'spark of self-preservation.' "I had no relationship, no kids and had been slowly killing myself but something changed and I realised I could not go on like this," he explained.

He made a telephone call to a colleague who - two years before - had told him that he had a drinking problem. She suggested he visit his doctor and within weeks George was attending a day programme for alcoholics.

He said: "The physical act of giving up was not that bad, but addressing the dark areas that you had never looked at was much harder. It was very much linked to my emotions. I had been unable to address my feelings, and I had low self-esteem throughout my life."

George began to learn to live his life without alcohol. He gutted the neglected flat, opened his mail, and began to eat properly. Two years ago he took up work as a volunteer in an alcohol advice centre and was soon offered a salaried position.

He said: "Through all this I learned my alcohol problems were far more emotional than physical. You can't take a pill to get better but you can unlearn your patterns of problem behaviour. For me, it's a wonderful life without alcohol."

THE ASSOCIATION BETWEEN ALCOHOL USE AND SPECIFIC MENTAL HEALTH PROBLEMS

4.1 Co-existence of mental health problems and alcohol use

That some people experience problems both with their mental health and with their use of alcohol is not a new phenomenon. The concept of 'dual-diagnosis' has gained prominence in the last couple of decades, due in part to the closure of large psychiatric hospitals and to the increasing prevalence of alcohol and drug misuse and dependency in the population³⁹. The terminology is debated amongst researchers and practitioners because of its implications that there are only two diagnoses involved, when in fact individuals often have a cluster of complex and inter-related needs^{40,41}. This is reflected in the different ways the problems may occur³⁹:

- alcohol use (even small amounts for some people) may lead to psychiatric symptoms
- dependence on alcohol ("needing" a drink to get through an occasion or to relieve a negative emotional state) may produce psychological symptoms
- intoxication may result in short-term behavioural or psychological problems
- withdrawal or detoxification from alcohol may lead to psychological or psychiatric symptoms
- alcohol use may exacerbate a pre-existing mental health problem
- pre-existing mental health problems may lead to increased alcohol use

There are many factors that contribute to a person's mental health and wellbeing and few research studies try to offer a simple causal relationship between alcohol use and mental health. Instead, much of the research has focused on the extent of the overlap between mental ill health and problem drinking, and the data is striking. The number of UK hospital admissions with a primary or secondary diagnosis of "mental and behavioural disorders due to alcohol" rose from 71,900 in 1995/96 to over 90,000 in 2002/03⁵ and many GPs believe that alcohol is a causal factor in mental health problems⁴².

Research in the USA has suggested that the prevalence of alcohol dependence in those with psychiatric disorders is almost twice as high as in the general population and similar levels are reported for the UK⁴³. Similarly, research shows that people with alcohol dependency are more at risk of suicide⁴⁴, have higher levels of depressive and affective problems, schizophrenia and personality disorders³⁹. There has been much research exploring the association between alcohol use and these specific mental health issues and some of the findings are summarised below.

4.2 Suicide

In 1995, there were 5,095 suicides in the UK⁴¹ and although there has been a small overall decline in the last decade, suicide still accounts for about 18 deaths per 100,000 men and about 6 deaths per 100,000 women⁴⁵. The estimated risk of suicide in the presence of current alcohol misuse or dependence is eight times greater than in the absence of current alcohol misuse or dependence⁶. As many as 65% of suicides have been linked to excessive drinking⁴⁴ and alcohol problems are one of the highest risk factors for suicides, especially amongst males. Up to 40% of men who try to kill themselves have had a long-standing problem with alcohol and as many as 70% of those who succeed have drunk alcohol before doing so³. In one Northern Ireland suicide study, it was found that the prevalence of alcohol use disorders among people who committed suicide was 43%⁴⁶. A further study of 104 gunshot suicides in Northern Ireland over a 5-year period found that alcohol consumption was involved in 41 of the suicides⁴⁷. A study conducted among women in a general hospital ward found that excessive alcohol consumption was significantly associated with attempted suicide by drug overdose⁴⁸.

Young people are also particularly vulnerable and there is a strong empirical link between alcohol use and suicidal ideation, suicidal attempts and completed suicides amongst people under the age of 24⁴⁹. In 2002, 716 15-24 year olds in the UK committed suicide, with many thousands more contemplating or attempting it⁵⁰ and it is estimated that one third of suicides amongst young people are committed whilst the young person is intoxicated⁵¹. Young men are particularly at risk: suicide is the biggest single killer of young men aged under 35 in the United Kingdom⁵². In 2002 there were 5,882 suicides of which 1,515 were young men between the ages of 15 and 34, as opposed to 380 women between the same ages⁵².

One explanation for this difference in rates between young men and women is that whilst risk factors such as unemployment, homelessness, family background and substance abuse affect both men and women, men may not reach out for help or support in the same way that women might⁵².

Alcohol use has also been associated with increased risk of unintentional injury and increased risk taking behaviours, which can have negative consequences for physical and mental health. These include drink-driving, violence, increased vulnerability to assault, falls, fires, domestic violence and traffic accidents (vehicles, bicycles, and pedestrians)⁶. This may be a consequence of the effect of alcohol on the serotonin (5HT) and GABA brain receptors that may reduce fear and anxiety about social, physical or legal consequences of one's actions. Alcohol also affects cognitive functioning⁵³, leading to impaired problem solving in conflict situations⁵⁴ and overly emotional responses or emotional ability⁵⁵.

Both suicide and risk-taking behaviours are correlated with other risk factors. In particular, they have been associated with other psychological and psychiatric conditions, including depression, anxiety and personality disorders^{49;56-58}.

4.3 Depression & Anxiety

At least two thirds of alcohol-dependent individuals entering treatment show evidence of anxiety, sadness, depression and/or manic-like symptoms³⁹. Over a 12-month and lifetime basis, alcohol dependence and major depression co-occur in the general population at levels higher than chance⁵⁹⁻⁶¹. Similarly, amongst those in the general population who drink alcohol, higher volume of consumption is associated with more symptoms of depression⁶². Among patients in treatment for alcohol abuse and dependence, the prevalence of major depression is higher than in the general population^{60;63-66}. Higher prevalence of alcohol use disorders has been documented for patients in treatment for depression^{67,68}.

Collectively, this evidence base suggests that alcohol use disorders are linked to depressive symptoms, and that alcohol dependence and depressive disorders co-occur to a larger degree than expected by chance. However, it is not clear in the individual case whether the depression causes alcohol problems, whether the alcohol consumption or alcohol problems caused depression, or whether both could be attributed to a third cause⁶⁹. Because depression is a multi-faceted experience, it is likely that alcohol problems and depression interact with a number of other factors that maintain or worsen depressive symptoms. It is also likely that risk factors for poor mental health are also risk factors for alcohol misuse.

As we saw earlier, self-medication has been proposed as an explanation for alcohol consumption in people with non-clinical levels of anxiety and depression. It can also offer an explanation for people with more severe levels of depression. As increased tolerance leads to increased drinking, the individual is left needing more alcohol to achieve the same effect. The pharmacological actions of alcohol can also interact with an individual's pre-existing mood or personality, the drinker's beliefs and expectations about the effect of the alcohol and the context in which it is being consumed⁴³. Thus drinking may intensify and reinforce the feelings of the person drinking alcohol, exacerbating the cyclical pattern described earlier.

Sufficient evidence now exists to assume alcohol's contributory role in depression⁶. For example, in some countries, onset of depression follows onset of alcohol misuse, pointing to the likelihood that alcohol exacerbates underlying or previously undetected depression⁷⁰. In addition, there is some evidence that abstaining from drinking significantly reduces depressive symptoms in individuals who are dependent on alcohol within a short time frame, again highlighting the impact of alcohol on depression^{66,71}. Research has also been conducted with families to try to establish whether a genetic model may explain the co-occurrence of alcohol misuse and depression. The Collaborative Study on the Genetics of Alcoholism (COGA)³⁹ interviewed 954 alcohol-dependent men and women, their first degree relatives and a control group. Demographics, medical history and experience of mood and anxiety disorders were assessed for each group and analysed for differences. The alcohol-dependent group showed higher lifetime rates of mood and anxiety problems than either their relatives or the controls, and for many, these problems were precipitated by a gradual increase in alcohol consumption. Other research has found similar associations in the UK, with anxiety and depressive symptoms most common in heavy drinkers (over 50 units a week for men and 35 units a week for women) and heavy drinking more common in those with anxiety and depression⁴⁰.

According to the World Health Organisation: "the evidence indicates that a clear and consistent association exists between alcohol dependence and depressive disorders and that chance, confounding variables and other bias can be ruled out with reasonable confidence as factors in this association."⁶

4.4 Personality Disorders

Individuals receiving treatment for alcohol-dependence are often also diagnosed with a personality disorder^{35,72,73}. As well as possibly being a pre-disposing factor to alcohol dependence⁷⁴, a personality disorder can affect the individual's use of alcohol in a number of other ways. For example, it may influence :

- the clinical course of the alcohol-dependence⁷⁵
- their response to treatment⁷⁶
- their risk of relapse⁷⁷

Alternatively, alcohol misuse itself may give rise to behaviour that is "labelled" as personality disorder⁷⁸.

One study in the UK looked at two populations of alcoholics; one being treated in a short-term hospital treatment unit and one in a six-week residential programme based on therapeutic principles⁷⁸. In both groups, approximately 25% of individuals had features of at least one personality disorder, with borderline personality disorder (BPD) being most common in females and anti-social disorder (ASPD) being prevalent amongst males. Given that people with ASPD have 21 times the average population risk of experiencing alcohol abuse or dependence⁴³, these numbers may be an underestimation of the association between the two.

4.5 Schizophrenia

People with severe and enduring mental illnesses, such as schizophrenia, are at least three times as likely to be alcohol-dependent than others in the general population^{43,79} and individuals with alcohol problems are also at increased risk of having schizophrenia⁸⁰. Many of the statistics concerning these co-occurring problems are based on surveys conducted in inner-city populations. One study in the UK interviewed key workers of all NHS inpatient, day-patient and outpatient Adult Mental Health (AMH) and Addictions services in the more rural population of east Dorset⁸¹. Of those with serious mental illness under the care of AMH services, 12% had problems with alcohol, compared to over 40% of those using the Addictions service. However, only half of those with co-occurring disorders in either group recognised the dual nature of their illness and this has implications for their care and the treatment of their needs.

Conclusion

It is clear that drinking more than recommended daily limits of alcohol presents risks for many in the general population. Although in the short-term it may provide people with a relatively easy coping strategy for underlying mental health issues such as stress, depression or anxiety, the research suggests that long-term alcohol misuse is damaging. Not only may it serve to worsen the very symptoms it is being used to dampen, but it is associated with a range of other mental health consequences. These include depression, anxiety, suicide, risk-taking behaviours, personality disorders and schizophrenia. In addition, alcohol misuse is associated with increased levels of stress, relational conflict and physical injury, which in themselves can contribute to poor mental health.

The research also underlines the increased vulnerability faced by individuals as services try to cope with an array of multiple and inter-related issues. It clearly points to the increased level of need encountered by individuals with both mental health and alcohol problems and these may not be the only problems they face. Research shows that risk factors associated with having both a mental health and an alcohol related problem⁴¹, include:

- homelessness
- poverty
- a history of violence or offending
- more than one period of detention under the Mental Health Act (1988)
- failure to respond to mental health services and treatment.

Before examining the implications of the research for treatment, policy and practice, recent trends in alcohol consumption and the Government's response to those trends are explored.

Louise, Teacher, 27

Louise began drinking to excess whilst at University with peers but a year after leaving found herself drinking before work and regularly collapsing at the station after work, as she was drinking vodka in the toilets. This occasionally led to arrests for being drunk and disorderly.

"I drank a lot at University, but so did everyone. It was seen as fun. There were mishaps but there would always be someone who had done something worse so there was no real reflection on any of it. In hindsight, my drinking changed in the last year of University. Just before my final year I ended a three year relationship with someone who had become violent, had an abortion, my grandfather died and I was really let down by a close friend. I was clearly depressed. I found that I was breaking down in tears after a heavy night drinking and people were avoiding me. I had no idea why this was happening and never questioned it."

After University, a relationship ended badly and she had to move to her parents' home. She felt alienated after four years of being surrounded by lots of people. It was at this time she began drinking alone in her room in the evenings. This led to an incident where she turned up to work still intoxicated after a heavy session and was fired, leaving her deeply shocked and ashamed.

"From this point my drinking rapidly spiralled out of control for the next year-and-a-half. I hurt my family deeply and had no friends. It was like it had taken me over, I felt dead inside and terrified about what was happening to me."

Finally, after a period she describes as "hell" she gave up drinking. "I went to visit a rehab place and it scared me so much I just decided to stop, I finished my postgraduate qualification in a short time period, began temp work and within a matter of months, I had passed my course, restored relationships with my family and got a well paid job."

She did see a cognitive therapist which was helpful. "She gave me some positive reinforcement, encouraged me to buy my own house and have goals, which is what I needed." But Louise says the drinking and the feelings behind it were never really discussed.

It was the break up of a relationship that led her to re-examine her drinking. "At the end of that I had such low self-esteem, guilt and pain that I found myself drinking a lot again at home." Although it was really nothing like before, she decided to do something quickly and attended AA meetings.

Louise felt that AA increased her feelings of depression, acknowledging whilst it was helpful to meet people who understood, she found the philosophy very negative. "I found it hard to accept that I was powerless, that I would have to attend meetings every day for the rest of my life, I could not find a higher power and felt like a failure and found I learnt nothing about myself and reasons for drinking."

Since then, Louise has got a psychotherapist. She has learned a lot about her mental health, perfectionism, relationships and depression and believes that in slowly changing these patterns she finally understands herself.

"While I think I may have a genetic predisposition to alcohol addiction, I don't think that's the whole story, my alcohol problems have definitely been a reflection of my emotional state."

5 TRENDS OF ALCOHOL CONSUMPTION

5.1 Guidelines and definitions

In the UK over the past 20 years, household expenditure on alcohol has risen from under £10bn to nearly £40bn⁵. Because household income has increased by 91% in real terms over the same period, alcohol was 54% more affordable in 2003 than in 1980⁸². This is reflected in the amount of alcohol consumed, which has risen by twenty percent in the last decade, from under 10 litres of pure alcohol per adult in the early nineties to approximately 12 litres per adult in 2003/45.

Some years ago, in response to an increasing awareness of the impact of alcohol consumption on health, the Government advised that men drinking no more than 21 units a week and women drinking no more than 14 units a week were unlikely to damage their health. In 1995, they revised this advice in the “Sensible Drinking” report⁸³ and set revised benchmarks of three to four units a day for men and two to three units a day for women. Although these recommendations have not changed for eleven years, many people are not aware that they exist and, of those who are, over two thirds are mistaken or unsure of the daily benchmarks⁵. Even amongst those who are aware of the guidelines, there is confusion about what constitutes a unit (10ml of pure alcohol), with many people underestimating the number of units found in any given drink⁹ (see Table 1).

TABLE 1 WHAT CONSTITUTES A ‘UNIT’ OF ALCOHOL?

Beer, lager and cider	Units
A pint of beer / ordinary strength ale (e.g. John Smith’s, Boddingtons, Guinness)	2.3
A pint of ordinary (4%) strength lager (e.g. Carling Black Label, Fosters)	2.3
A pint of strong lager (e.g. Stella Artois, Kronenbourg 1664)	3
A 440ml can of strong lager (e.g. Stella Artois, Carlsberg Export, Grolsch)	2.2
A pint of ordinary strength cider (e.g. Dry Blackthorn, Strongbow)	3
Wine	
A standard 175ml glass of red or white wine	around 2
A large 250ml glass of red or white wine	around 3
Spirits and alcopops	
A small (25ml) measure of spirits	1
A large (35ml) measure of spirits	1.4
A double measure of spirits	2
A 275ml bottled alcopop (e.g. Smirnoff Ice, Bacardi Breezer, WKD, Reef)	1.5

Used with permission from http://www.howsyourdrink.org.uk/facts.php?fact_id=2

When someone is regularly drinking more than these recommended limits, the World Health Organisation defines them as having an alcohol use disorder. Their definition includes three categories:

- hazardous drinking: people drinking above the recommended limits but not yet experiencing harm
- harmful drinking: people drinking above the recommended limits and experiencing harm
- alcohol dependence: people drinking above the recommended limits and experiencing harm and symptoms of dependence (tolerance, withdrawal, persistent desire or unsuccessful efforts to cut down, etc⁸⁴)

A common method of identifying whether someone falls into one of these categories is to use the Alcohol Use Disorders Identification Test (AUDIT) questionnaire⁸⁵. An AUDIT score of 8-15 demonstrates hazardous or harmful drinking and a score of 16 or over is considered to identify alcohol dependence⁴.

Another trend involving excessive consumption is 'binge' drinking. This is commonly perceived as drinking large amounts of alcohol in a relatively short space of time, often with the intention of getting drunk. The most commonly adopted definition of binge drinking is when someone consumes at least double the recommended daily amount of units in one day (i.e. 6 or more units for women and 8 or more units for men).

5.2 Drinking habits amongst adults

Information from the General Household Survey⁸⁶ shows that in England in 2002, 73% of men (over 16 years old) and 60% of women (over 16 years old) had drunk alcohol at least once in the previous week. As well as being more likely to drink than women, men also drink more often: 23% of men had drunk on five or more days during the previous week, compared with 14% of women⁵.

The frequency of this pattern of drinking increases with age. For example, nearly one third of men aged over 65 had drunk on five or more days in the previous week, compared with only 12% of those aged 16-24. For women, the figures were 16% and 7% respectively⁵. However, although older people drink more often, they tend to drink less on each occasion, tending to drink within the recommended daily limits.

5.3 Alcohol use disorders

Recent figures show that 38% of men and 16% of women (aged 16-64) would be classed by the World Health Organisation as have an alcohol use disorder, which is equivalent to 8.2 million people nationally⁴. Some of those use alcohol in a hazardous or harmful way, and some are alcohol dependent.

Hazardous/harmful use

Estimates of hazardous and harmful drinking were combined in the 2004 national alcohol needs assessment for England⁴. It found that around 32% of men and 15% of women (7.1 million people) are hazardous or harmful alcohol users, drinking more than the recommended daily limits of alcohol on at least one day in the previous week. The proportion who use alcohol in this way varies sharply with age; nearly half young adults aged 16-24 drink more than the recommended daily limits, compared to 15% of men and 5% of women aged over 65⁵.

Alcohol dependence

The overall prevalence of alcohol dependence is 3.6%, with 6% of men and 2% of women scoring 16 or over on the AUDIT questionnaire⁴. This equates to 1.1 million people nationally. As with other alcohol disorders, alcohol dependence was less common in older age groups. Although older people drink more frequently, they drink fewer drinks on each occasion.

Binge drinking

One fifth of men had drunk more than eight units (e.g. three pints of strong lager) on at least one day during the previous week. The proportion ranged from 34% of men aged 16-24, to 4% of men aged 65 and over. Women are less likely to binge drink. Just under one tenth of women had drunk more than 6 units (e.g. three standard size glasses of wine) on at least one day during the previous week. One quarter of those aged 16-24 reported having done so, compared to just 1% of those aged 65 and over.

5.4 Drinking habits amongst young people

Why do young people drink?

Young people's attitudes and behaviours are initially shaped by families, both directly (in that parents and siblings act as role models) and indirectly (in terms of the levels of support and conflict exhibited in families that subsequently affect the young person). However, reasons and motivations for drinking change as they get older⁸⁷. At about age 11 or 12, young people start to experiment with alcohol, often within the family environment. This often expresses a need or desire to be no longer considered as a child. A year or two later, young people prefer to drink outside of the family environment and are more secretive, hiding the behaviour from their parents⁸⁸. This age group tends to drink to get drunk, with the aim of testing their limits and having fun or experimenting. As young people enter adulthood, their drinking is modelled on adults around them or their idea of mature or experienced drinking. Young people may also be drinking to overcome shyness, social inhibition or anxiety (see earlier).

How much do young people drink?

Young people in the UK drink more than nearly all the other countries in Europe⁸⁹. In 2004, just under a quarter of 11-15 year olds drank alcohol in the last week⁸⁸ and the proportions rise sharply with age. A 2002 survey of 14,000 students in secondary schools in England, Scotland and Wales⁹⁰ found that 60% of boys and 50% of girls aged 11-12 had tried at least one alcoholic drink. Of this age group, 9% of boys and 5% of girls described themselves as regular drinkers. Higher proportions of 15-16 year olds drink, with 80% having drunk at least once in the past week. Of those, 39% of boys and 33% of girls described themselves as regular drinkers.

Although the overall proportions of young people drinking have fallen slightly in the past decade, the amount being drunk is increasing year by year. As shown in Table 2, in 1994, the average weekly consumption of a 15 year old was approximately 8 units (male) and 6 units (female). In 1998, it was 13 units (male) and 10 units (female) and by 2002, it was nearly 15 units (male) and 11 units (female). Drinking also increases steadily with age.

TABLE 2: UNITS DRUNK PER WEEK AMONGST YOUNG PEOPLE

Sex and age group	1994	1995	2002
Males aged 11-13	5	6	7
Males aged 14	7	12	11
Males aged 15	8	13	15
Females aged 11-13	3	6	6
Females aged 14	5	8	10
Females aged 15	6	10	11

Source: Statistics on alcohol for England, 2004. Department of Health and Office for National Statistics⁵

Binge drinking

Over half of young people aged 15-16 have consumed more than five alcoholic drinks in a single occasion in the past month. One quarter of this age group have done so 3 or more times in the past month⁸⁹. The numbers are slightly lower for younger age groups, with 43% of 14 year olds binge drinking at least once a month.

Although the consequences of binge drinking are more likely to be related to intoxication, rather than long-term health risks⁸⁸, one survey into adolescent health found that regular heavy or binge drinking behaviours are associated with a whole range of problems. Despite the emphasis in recent years on the impact of alcohol and antisocial behaviour in young people, other consequences include accidents, violence and vulnerability to violence, physical and mental health problems and poor school performance⁹¹. To what extent is Government policy addressing the wider mental health risks associated with alcohol misuse?

6 ALCOHOL POLICIES

The goal of alcohol policy is to prevent or reduce the harm that can be caused through the misuse of alcohol. The Institute of Alcohol Studies identifies six types of alcohol policy⁸:

- controlling the availability of alcohol
- influencing the demand for alcohol
- education and other interventions aimed at specific groups
- policies of treatment and early intervention for problem drinking and alcohol dependence
- counter-measures against drinking and driving
- policies to deal with alcohol-related problems in the workplace

In March 2004, the Government published its long-awaited National Alcohol Harm Reduction Strategy for England (NAHRSE)⁹². It incorporated many of these initiatives and, amongst other things, identified the need for better public education about the harms associated with alcohol; greater enforcement of the law concerning under-age drinking; more education for health professionals; local and national needs assessments and audits; commissioning of new research, and greater 'joined up' thinking amongst the ten Government departments who have an interest in alcohol policy. Although publication of the Strategy was welcomed by those interested in public health (e.g. Alcohol Concern, British Medical Association, Royal College of Psychiatrists), its content has not been entirely without criticism.

6.1 Responses to the National Alcohol Strategy

Despite highlighting the scale of the problem of excessive drinking and alcohol problems in the UK and proposing a number of measures to combat the increasing costs associated with it, the Strategy has a number of shortcomings, not least its over emphasis on anti-social behaviour and binge drinking³¹. Although there is a recognition of the relationship between alcohol and mental health, the Government has missed the opportunity to deliver a strategy that uses effective measures to lower alcohol misuse. These are described in detail in a number of publications^{8,9,93} and are summarised below.

Targets

Unlike the UK drugs strategy⁹⁴, the alcohol strategy has few clear targets against which its effectiveness can be measured. According to one expert in the field, this also means that all stakeholders, including the Home Office and Department of Health, the National Treatment Agency for Substance Misuse (NTA) and the National Health Service, have no specific endpoints to aim towards⁹³.

Funding

Similarly, the alcohol strategy has no new money allocated for its implementation and it is unclear how the Government expects the Strategy to have any impact without specific funding. Although the proposal to extend the role of the NTA to include alcohol is generally regarded as a good idea, this will require a substantial increase in resources and "the strategy is silent on the issue of funding for treatment services."⁹³

Research

The strategy proposes that more research and audit is required before a programme of improvement in treatment services can begin. Some argue that this will create a delay in providing urgently required services and may lead to a reluctance among agencies to begin new initiatives^{88,93}.

6.2 Characterising the alcohol problem

The Strategy places much emphasis on characterising the alcohol problem in England in terms of binge drinking, which the Prime Minister recently described as “the new British disease”⁹⁵. Although this paper has already identified trends concerning binge drinking in the UK, it is neither new, nor a disease. Furthermore, the 8.2 million people with an alcohol use disorder in the UK points to the likelihood that alcohol misuse is not confined to young or underage drinkers in town centres on a Saturday night.

The prevalence of drinking problems is affected by per capita consumption and for this reason, alcohol policy needs to take into account both a population’s general level of drinking as well as its patterns of drinking. There is no doubt that patterns of alcohol consumption are important for alcohol-related harm, but so are societal levels of alcohol consumption. The risk of becoming a hazardous drinker depends, to some extent, upon whether the ambient drinking culture encourages excessive intake³¹ and, as shown earlier, the UK trend is one of increasing alcohol consumption.

Eight months after the Alcohol Strategy, the Government published its White Paper “Choosing Health”⁹⁶. In light of the Alcohol Strategy, it promised to implement a number of measures to “encourage and support sensible drinking”, one of its six overarching priorities (alongside smoking, diet, exercise, mental health and sexual health). These measures include a national audit of the demand for and provision of local treatment for alcohol problems; an improvement on training of health professionals; pilot projects and similar initiatives in criminal justice settings aimed at improving early intervention; a commitment to work in partnership with the industry’s self-regulating body to develop a new and strengthened information campaign to tackle binge drinking; and action on advertising and sale of alcohol through a voluntary social responsibility scheme. Although the White Paper was again cautiously welcomed by those in the field, it again failed to address the complexity of the issues around alcohol misuse and left a number of implications for policy, practice and treatment unexplored.

6.3 Implications for policy, practice and treatment

One commentator argued the Government’s alcohol strategy was “narrow in its scope, lacking in clear objectives or targets, not supported by any funding commitment, that defers any immediate action, and that ignores the extensive evidence base for effective alcohol policies”⁹³. Other criticisms of the Strategy suggest that it ignores much of the evidence around the management, prevention and treatment of alcohol misuse. There are a number of alternative approaches that could be implemented at an individual, local or national level and some of these are summarised below.

Pricing

There is an inverse linear relationship between the price of alcohol and its consumption: the more expensive it is, the less people drink it⁷. Despite this, the Alcohol Strategy rejected the increased taxation and pricing of alcoholic drinks, in favour of policies that have been demonstrated to have a low impact on alcohol misuse.

Availability

Measures to restrict the availability of alcohol through licensing have also not been proposed in the Strategy. Research on limiting alcohol availability demonstrates that lowering the physical access to alcohol, by reducing hours and days of sale and increasing the minimum purchasing age, are associated with reductions in alcohol-related problems⁷. But contrary to this, the Government seems to be pursuing a policy of encouraging round-the-clock access to alcohol.

Drink-driving

Other highly effective strategies have also been rejected by the Alcohol strategy. For example, reducing the maximum permissible blood alcohol level for driving from 80mg% to 50mg% - in line with the rest of Europe – was not considered, despite evidence that it reduces alcohol consumption amongst young drivers^{7,93}.

Education

Although scientific reviews of school-based education programmes have demonstrated positive but modest effects on alcohol consumption, they have a great impact on knowledge and attitudes towards alcohol⁷. Given the significance of alcohol in our culture, society, economy and relationships, it is essential to provide people with realistic, helpful and empowering information about their alcohol use. Alcohol Concern proposes a multi-faceted approach to education that encourages young people and adults to enjoy a healthy attitude towards drinking and other NGOs also endorse an integrated approach to alcohol use^{8,40,43,84,88}.

Education about the complex reasons for alcohol use and misuse is also vital. In UK policy and practice, there appears to be an overemphasis of the impact of alcohol on anti-social behaviour and/or physical health. Increased education about the association between alcohol use and mental health would alert individuals and health professionals to the potential risks of using alcohol to self-medicate. The extent to which professionals and practitioners associate alcohol with mental health depends partly upon an understanding of mental health that sees its origins in social and cultural as well as individual factors. The determinants of good and poor mental health include a complex and interactive array of psychological, social, economic and environmental factors and these may influence and limit people's choices³¹. With this in mind, individuals who are using alcohol to 'treat' underlying problems such as stress, depression or anxiety may benefit from alternative approaches to managing mental health problems. These include talking therapies⁹⁷, exercise¹⁵, diet¹⁶, self-help groups and spirituality¹⁴, to name but a few. Using one or more of these as part of an integrated approach to mental health will be more effective than alcohol in meeting an individual's needs.

Treatment

The first national alcohol needs assessment for England was published in November 2005⁴ and it identified "a very large gap" between the provision of treatment and need or demand for such treatment. Of the 1.1 million people aged between 16 and 64 who are alcohol-dependent, the number accessing treatment per year is approximately 63,000, or 1 in 18. Although the majority of individuals with an alcohol use disorder identified by GPs were felt to need specialist treatment, this is usually not offered because of the perceived difficulty in access of that treatment or individuals' preferences not to engage. This is unfortunate, given the large evidence base for the effectiveness of brief interventions^{93,98} and specialist treatment programmes^{7,99}.

The outlook for people with alcohol and mental health problems is even less promising. People with co-existent problems have traditionally been seen as 'hard to treat' and yet are also recognised as some of the most vulnerable members of society⁴⁰. Despite their high level of need and their disproportionate use of a number of services (e.g. A & E Departments, acute admission wards, housing services and the criminal justice system), the number of services that offer a holistic or integrated treatment plan is minimal. Several reasons have been offered for this in the literature^{39;100-102}. Firstly, alcohol services have often evolved in isolation from mental health services, meaning referrals are made to one or the other. Secondly, there is a tendency on the part of service providers to classify people as having either a primary mental illness and secondary substance misuse problems or vice versa, meaning that the problems are addressed in sequence rather than in tandem. This can also lead to 'falling between services' depending on the nature of the client's disposition upon contact with services. Thirdly, limitations with definitions of mental illness and alcohol dependence mean that many individuals are excluded or overlooked. Fourthly, some clients simply present with problems that seem beyond the scope of either service in isolation. All of these, and other factors, contribute to the likelihood that some aspects of an individual's care have not been addressed appropriately. A number of holistic treatment approaches for people who possess a cluster of interdependent problems have been suggested in the literature. These include integrated treatment settings; staged interventions; assertive outreach; long-term care; more comprehensive care packages and working more closely within families^{40;102-104}.

7 CONCLUSION

Despite increased consumption of alcohol in most age groups and an increasing burden of mental health problems across the board, the association between the two tends to get overlooked in policy, practice and research. The possibility that people drink alcohol to cope with the stresses and strains of everyday life or to self-medicate feelings of anxiety or depression points to the need for integrated and alternative approaches to promoting wellbeing. The well established association between alcohol misuse and more severe or enduring mental health problems also points to the need for holistic approaches to care and treatment packages.

It is clear that there is still a long way to go before the UK has integrated policy that takes into account the association of alcohol with mental health. There is a range of opportunities for individuals, sectors and organisations to work together to promote a responsible approach to alcohol consumption. Those for whom alcohol is a problem, or who have mental health and alcohol problems, require prompt access to appropriate services. As such, cross-agency working that incorporates the statutory and voluntary sectors and the education and criminal justice systems requires prioritisation.

Above all an understanding is required across all sectors that people's motives for alcohol misuse merit far more attention than they have received to date. And the drinking public has a right to information about the hazardous affects that alcohol misuse can have on their mental as well as physical health.

8 RECOMMENDATIONS

1. All alcohol-related public health materials, training and teaching should cover mental health aspects of alcohol misuse/use.
2. Government should invest more in treatment services, especially specialist services for people with dual diagnosis and generally in services treating alcohol dependency. The latter should have clearly defined pathways to mental health services for support and treatment.
3. Psychology treatment centres should have staff trained in delivering CBT to people with alcohol dependency and concurrent anxiety or depression.
4. Government should consider the mental health consequences of policies surrounding alcohol as part of the impact assessment process.
5. Health warnings should be introduced on alcohol packaging and include the warning "Excessive use of alcohol can damage your mental health."
6. Government should target people with mental health problems with health promotion advice and active support in managing issues such as alcohol use.
7. In primary care settings, identified individuals who are using alcohol to 'treat' underlying problems such as stress, depression or anxiety should be able to benefit from alternative approaches to managing mental health problems. These include talking therapies⁹⁷, exercise¹⁵, diet¹⁶, self-help groups and spirituality¹⁴.
8. Increased education about the association between alcohol use and mental health in schools should be used to alert people to the potential risks of using alcohol to self-medicate. Education about the complex reasons for alcohol use and misuse is also vital.

9 REFERENCES

- 1 Chick J. Can light or moderate drinking benefit mental health? *Eur Addict Res* 1999; 5(2):74-81.
- 2 BBC News Website. Half-empty or half-full? www.bbc.co.uk/news [2005 [cited 2006 Jan. 30]; Available from: www.bbc.co.uk/news
- 3 The Royal College of Psychiatrists. Alcohol and Depression - Help is at Hand. 2004. London, The Royal College of Psychiatrists.
- 4 Drummond C. Alcohol Needs Assessment Research Project (ANARP). London: Department of Health; 2004.
- 5 Department of Health, Office for National Statistics. Statistics on alcohol: England 2004. 2004/15. 2004. London, The Stationary Office.
- 6 World Health Organisation. Global status report on alcohol 2004. 2004. Geneva, WHO.
- 7 The Alcohol and Public Policy Group. Alcohol: No Ordinary Commodity. A Summary of the book. www.ias.org.uk/publications/theglobe/03issue3 2003 [cited 2006 Jan. 30]; Available from: www.ias.org.uk
- 8 Institute of Alcohol Studies. Alcohol Policies. 2005. Cambs, Institute of Alcohol Studies.
- 9 Bain F, Lampard R. One too many? A briefing on alcohol misuse, the Licensing Act, and what you can do. 2005. London, The Methodist Church.
- 10 Leon DA, McCambridge J. Liver cirrhosis mortality rates in Britain from 1950 to 2002: an analysis of routine data. *Lancet* 2006; 367(9504):52-56.
- 11 Conway DI. Alcohol consumption and the risk for disease. Is there a dose-risk relationship between alcohol and disease? *Evid Based Dent* 2005; 6(3):76-77.
- 12 Bulpitt CJ. How many alcoholic drinks might benefit an older person with hypertension? *J Hypertens* 2005; 23(11):1947-1951.
- 13 Sainsbury Centre for Mental Health. The Economic and Social Costs of Mental Illness. London: SCMH; 2003.
- 14 Faulkner A, Layzell S. Strategies for Living: a Report of user-led research into People's Strategies for Living with Mental Distress. London: Mental Health Foundation; 2000.
- 15 Mental Health Foundation. Up and Running? Exercise therapy and the treatment of mild or moderate depression in primary care. London: 2005.
- 16 Cornah D. Feeding Minds: The Impact of Food on Mental Health. London: Mental Health Foundation; 2006.
- 17 Baum-Baicker C. The psychological benefits of moderate alcohol consumption: a review of the literature. *Drug Alcohol Depend* 1985; 15(4):305-322.
- 18 Baum-Baicker C. The health benefits of moderate alcohol consumption: a review of the literature. *Drug Alcohol Depend* 1985; 15(3):207-227.
- 19 Miller E. Effect of moderate alcohol intake on cognitive functioning: Does a little bit of what you fancy do you good? *Journal of Mental Health* 1992; 1(1):19-24.
- 20 Priory Healthcare. Drunk and (mentally) disorderly? <http://www.prioryhealthcare.co.uk/news/news-releases/archive-news-releases/drunk-and-mentally-disorderly>. [cited 2006 Jan. 31]; Available from: www.prioryhealthcare.co.uk
- 21 Tomasson K, Vaglum P. Psychiatric co-morbidity and aftercare among alcoholics: a prospective study of a nationwide representative sample. *Addiction* 1998; 93(3):423-431.
- 22 Tomasson K, Vaglum P. Psychopathology and alcohol consumption among treatment-seeking alcoholics: a prospective study. *Addiction* 1996; 91(7):1019-1030.
- 23 Ross HE, Glaser FB, Germanson T. The prevalence of psychiatric disorders in patients with alcohol and other drug problems. *Arch Gen Psychiatry* 1988; 45(11):1023-1031.
- 24 Brower KJ, Aldrich MS, Robinson EA, Zucker RA, Greden JF. Insomnia, self-medication, and relapse to alcoholism. *Am J Psychiatry* 2001; 158(3):399-404.
- 25 Carrigan MH, Randall CL. Self-medication in social phobia: a review of the alcohol literature 55. *Addict Behav* 2003; 28(2):269-284.
- 26 Harris KM, Edlund MJ. Self-medication of mental health problems: new evidence from a national survey. *Health Serv Res* 2005; 40(1):117-134.
- 27 Thomas SE, Randall CL, Carrigan MH. Drinking to cope in socially anxious individuals: a controlled study. *Alcohol Clin Exp Res* 2003; 27(12):1937-1943.
- 28 ACER news release. Self-medication can lead to dependence. [cited 7-3-06]; Available from: <http://alcoholism.about.com/cs/dual/a/blacer031215a.htm>

- 29 Swendsen JD, Tennen H, Carney MA, Affleck G, Willard A, Hromi A. Mood and alcohol consumption: an experience sampling test of the self-medication hypothesis. *J Abnorm Psychol* 2000; 109(2):198-204.
- 30 Hussong AM, Galloway CA, Feagans LA. Coping motives as a moderator of daily mood-drinking covariation. *J Stud Alcohol* 2005; 66(3):344-353.
- 31 Mental Health Foundation. *Choosing Mental Health: A policy agenda for mental health and public health*. 2005. London, MHF.
- 32 Miller BE, Miller MN, Verhegge R, Linville HH, Pumariega AJ. Alcohol misuse among college athletes: self-medication for psychiatric symptoms? *J Drug Educ* 2002; 32(1):41-52.
- 33 Linke S, Harrison R, Wallace P. A Web-based intervention used in general practice for people with excessive alcohol consumption. *J Telemed Telecare* 2005; 11 Suppl 1:39-41.
- 34 Repetto PB, Zimmerman MA, Caldwell CH. A longitudinal study of the relationship between depressive symptoms and alcohol use in a sample of inner-city black youth. *J Stud Alcohol* 2004; 65(2):169-178.
- 35 Chakroun N, Doron J, Swendsen J. Substance use, affective problems and personality traits: test of two association models. *Encephale* 2004; 30(6):564-569.
- 36 Head J, Stansfeld SA, Siegrist J. The psychosocial work environment and alcohol dependence: a prospective study. *Occup Environ Med* 2004; 61(3):219-224.
- 37 Dawson DA, Grant BF, Ruan WJ. The association between stress and drinking: modifying effects of gender and vulnerability. *Alcohol Alcohol* 2005; 40(5):453-460.
- 38 Drake CL, Roehrs T, Roth T. Insomnia causes, consequences, and therapeutics: an overview 41. *Depress Anxiety* 2003; 18(4):163-176.
- 39 Crawford V. *Co-existing problems of mental health and substance misuse ('Dual Diagnosis'): A review of relevant literature*. London: RCP College Research Unit; 2001.
- 40 Alcohol Concern. *Factsheet 17: Alcohol and Mental Health*. 2004. London, Alcohol Concern.
- 41 Mental Health Foundation. *The Fundamental Facts: all the latest facts and figures on mental illness*. London: 1999.
- 42 Williams K. Attitudes of mental health professionals to co-morbidity between mental health problems and substance misuse. *Journal of Mental Health* 1999; 8(6):605-613.
- 43 Institute of Alcohol Studies. *Alcohol and Mental Health*. 2004. Cambs, Institute of Alcohol Studies.
- 44 Department of Health. *Health of the nation key area handbook, mental health*. 1993. London, HMSO.
- 45 Office for National Statistics. *UK suicides reach 30 year low in 2003*. <http://www.statistics.gov.uk/pdfdir/suicide0305.pdf> 2005 [cited 2006 Feb. 2]
- 46 Foster T, Gillespie K, McClelland R. Mental disorders and suicide in Northern Ireland. *Br J Psychiatry* 1997; 170:447-452.
- 47 Armour A. A study of gunshot suicides in Northern Ireland from 1989 to 1993. *Sci Justice* 1996; 36(1):21-25.
- 48 Watson HE, Kershaw PW, Davies JB. Alcohol problems among women in a general hospital ward. *Br J Addict* 1991; 86(7):889-894.
- 49 Crumley FE. Substance abuse and adolescent suicidal behavior. *JAMA* 1990; 263(22):3051-3056.
- 50 Samaritans. *Young people and suicide*. http://www.samaritans.org/know/information sheets/youngpeople/young_people_and_suicide_sheet.shtm 2004 [cited 2006 Feb. 2];
- 51 NHS Advisory Service. *Suicide Prevention: the Challenge Confronted*. 1994. London, HMSO.
- 52 www.bbc.co.uk. *Breakthrough for Bedfordshire Breakout*. 2005 Available from: http://www.bbc.co.uk/threecounties/content/articles/2005/03/18/mental_health_beds_breakout_feature.shtml
- 53 Peterson JB, Pihl RO. Information processing, neuropsychological function, and the inherited predisposition to alcoholism. *Neuropsychol Rev* 1990; 1(4):343-369.
- 54 Sayette MA, Wilson GT, Elias MJ. Alcohol and aggression: a social information processing analysis. *J Stud Alcohol* 1993; 54(4):399-407.
- 55 Pihl RO, Peterson JB, Lau MA. A biosocial model of the alcohol-aggression relationship. *J Stud Alcohol Suppl* 1993; 11:128-139.
- 56 Gould MS, Fisher P, Parides M, Flory M, Shaffer D. Psychosocial risk factors of child and adolescent completed suicide. *Arch Gen Psychiatry* 1996; 53(12):1155-1162.
- 57 Shaffer D, Gould MS, Fisher P, Trautman P, Moreau D, Kleinman M et al. Psychiatric diagnosis in child and adolescent suicide. *Arch Gen Psychiatry* 1996; 53(4):339-348.

- 58 Deykin EY, Buka SL. Suicidal ideation and attempts among chemically dependent adolescents 2. *Am J Public Health* 1994; 84(4):634-639.
- 59 Kessler RC, Nelson CB, McGonagle KA, Liu J, Swartz M, Blazer DG. Comorbidity of DSM-III-R major depressive disorder in the general population: results from the US National Comorbidity Survey. *Br J Psychiatry Suppl* 1996;(30):17-30.
- 60 Lynskey MT. The comorbidity of alcohol dependence and affective disorders: treatment implications. *Drug Alcohol Depend* 1998; 52(3):201-209.
- 61 Kessler RC, Zhao S, Blazer DG, Swartz M. Prevalence, correlates, and course of minor depression and major depression in the National Comorbidity Survey. *J Affect Disord* 1997; 45(1-2):19-30.
- 62 Mehrabian A. General relations among drug use, alcohol use, and major indexes of psychopathology. *J Psychol* 2001; 135(1):71-86.
- 63 Schuckit MA, Tipp JE, Bucholz KK, Nurnberger JI, Jr., Hesselbrock VM, Crowe RR et al. The life-time rates of three major mood disorders and four major anxiety disorders in alcoholics and controls. *Addiction* 1997; 92(10):1289-1304.
- 64 Schuckit MA, Tipp JE, Smith TL, Bucholz KK. Periods of abstinence following the onset of alcohol dependence in 1,853 men and women. *J Stud Alcohol* 1997; 58(6):581-589.
- 65 Schuckit MA, Smith TL, Tipp JE. The Self-Rating of the Effects of alcohol (SRE) form as a retrospective measure of the risk for alcoholism. *Addiction* 1997; 92(8):979-988.
- 66 Schuckit MA, Monteiro MG. Alcoholism, anxiety and depression. *Br J Addict* 1988; 83(12):1373-1380.
- 67 Alpert JE, Fava M, Uebelacker LA, Nierenberg AA, Pava JA, Worthington JJ, III et al. Patterns of axis I comorbidity in early-onset versus late-onset major depressive disorder. *Biol Psychiatry* 1999; 46(2):202-211.
- 68 Blixen CE, McDougall GJ, Suen LJ. Dual diagnosis in elders discharged from a psychiatric hospital. *Int J Geriatr Psychiatry* 1997; 12(3):307-313.
- 69 Valliant PM, Furac CJ. Type of housing and emotional health of senior citizens 1. *Psychol Rep* 1993; 73(3 Pt 2):1347-1353.
- 70 Merikangas KR, Mehta RL, Molnar BE, Walters EE, Swendsen JD, Guilar-Gaziola S et al. Comorbidity of substance use disorders with mood and anxiety disorders: results of the International Consortium in Psychiatric Epidemiology. *Addict Behav* 1998; 23(6):893-907.
- 71 Penick EC, Powell BJ, Liskow BI, Jackson JO, Nickel EJ. The stability of coexisting psychiatric syndromes in alcoholic men after one year. *J Stud Alcohol* 1988; 49(5):395-405.
- 72 Allan CA. Psychological symptoms, psychiatric disorder and alcohol dependence amongst men and women attending a community-based voluntary agency and an Alcohol Treatment Unit. *Br J Addict* 1991; 86(4):419-427.
- 73 Bowden-Jones O, Iqbal MZ, Tyrer P, Seivewright N, Cooper S, Judd A et al. Prevalence of personality disorder in alcohol and drug services and associated comorbidity. *Addiction* 2004; 99(10):1306-1314.
- 74 Cadoret RJ, O'Gorman TW, Troughton E, Heywood E. Alcoholism and antisocial personality. Interrelationships, genetic and environmental factors. *Arch Gen Psychiatry* 1985; 42(2):161-167.
- 75 Nordstrom G, Berglund M. Type 1 and type 2 alcoholics (Cloninger & Bohman) have different patterns of successful long-term adjustment. *Br J Addict* 1987; 82(7):761-769.
- 76 Hesselbrock VM, Hesselbrock MN, Workman-Daniels KL. Effect of major depression and antisocial personality on alcoholism: course and motivational patterns. *J Stud Alcohol* 1986; 47(3):207-212.
- 77 Nace EP, Saxon JJ, Jr., Shore N. Borderline personality disorder and alcoholism treatment: a one-year follow-up study. *J Stud Alcohol* 1986; 47(3):196-200.
- 78 Powell G, Peveler R. Nature and prevalence of personality disorders amongst patients receiving treatment for alcohol dependence. *Journal of Mental Health* 1996; 5(3):305-314.
- 79 Phillips P, Johnson S. How does drug and alcohol misuse develop among people with psychotic illness? A literature review. *Soc Psychiatry Psychiatr Epidemiol* 2001; 36(6):269-276.
- 80 Graham HL, Maslin J, Copello A, Birchwood M, Mueser K, McGovern D et al. Drug and alcohol problems amongst individuals with severe mental health problems in an inner city area of the UK. *Soc Psychiatry Psychiatr Epidemiol* 2001; 36(9):448-455.
- 81 Virgo N, Bennett G, Higgins D, Bennett L, Thomas P. The prevalence and characteristics of co-occurring serious mental illness (SMI) and substance abuse or dependence in the patients of adult mental health and addictions services in eastern Dorset. *Journal of Mental Health* 2001; 10(2):175-188.
- 82 Office for National Statistics. Economic Trends. <http://www.statistics.gov.uk> 2003

- 83 Department of Health. Sensible Drinking: the report of an inter-departmental working group. London:DH 1995
- 84 Foxcroft DR, Ireland D, Lister-Sharp DJ, Lowe G, Breen R. Primary prevention for alcohol misuse in young people. *Cochrane Database Syst Rev* 2002;(3):CD003024.
- 85 Saunders JB, Aasland OG, Babor TF, de IF, Jr., Grant M. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption--II. *Addiction* 1993; 88(6):791-804.
- 86 Office for National Statistics. Living in Britain: Results from the 2002 General Household Survey. <http://www.statistics.gov.uk> 2004
- 87 Newburn T, Shiner M. Teenage Kicks? Young people and alcohol: a review of the literature. York: Joseph Rowntree Foundation; 2001.
- 88 Alcohol Concern. Young people's drinking Factsheet. 2005. London, Alcohol Concern.
- 89 Hibell Bea. The 2003 European School SURvey Project on Alcohol and other Drugs (ESPAD). Swedish Council for Information and other drugs, CAN council of Europe, Cooperation group to combat drug abuse and illicit trafficking in drugs.; 2004.
- 90 Beinert S. Youth at risk? A national survey of risk factors, protective factors and problem behaviours among young people in England, Scotland and Wales. London: Communities that Care; 2002.
- 91 British Medical Association. Adolescent Health. London: BMA British Board of Science and Education; 2003.
- 92 Prime Minister's Strategy Unit CO. Alcohol Harm Reduction Strategy for England. 2004. London, UK, Cabinet Office.
- 93 Drummond DC. An alcohol strategy for England: the good, the bad and the ugly. *Alcohol Alcohol* 2004; 39(5):377-379.
- 94 Home Office. Updated Drug Strategy 2002. 2002. London, UK, Home Office.
- 95 Blair T. Alcohol: the 'new British disease'. *BBC News*: <http://news.bbc.co.uk/1/ni/uk-politics/3731025.st> 2004
- 96 Department of Health. Choosing Health: making healthy choices easier. 2004. London, Department of Health.
- 97 The Royal College of Psychiatrists. Changing Minds: Drugs and Alcohol - Whose problem is it anyway? www.rcpsych.ac.uk/campaigns/cminds/alcohol.htm 2006 Available from: www.rcpsych.ac.uk
- 98 UKATT Research Team. Cost effectiveness of treatment for alcohol problems: findings of the randomised UK alcohol treatment trial (UKATT). *BMJ* 2005; 331(7516):544.
- 99 UKATT Research Team. Effectiveness of treatment for alcohol problems: findings of the randomised UK alcohol treatment trial (UKATT). *BMJ* 2005; 331(7516):541.
- 100 Goldsmith RJ, Garlapati V. Behavioral interventions for dual-diagnosis patients. *Psychiatr Clin North Am* 2004; 27(4):709-725.
- 101 Manley D. Dual diagnosis: co-existence of drug, alcohol and mental health problems. *Br J Nurs* 2005; 14(2):100-106.
- 102 Murphy S. Dual Diagnosis: Collaboration and Good Practice for Services. 2003. London, Alcohol Concern.
- 103 Project MATCH Research Group. Matching patients with alcohol disorders to treatments: Clinical implications from project MATCH. *Journal of Mental Health* 1998; 7(6):589-602.
- 104 Orford J, Dalton S. A four-year follow-up of close family members of Birmingham untreated heavy drinkers. *Addiction Research & Theory* 2005; 13(2):155-170.

Mental Health Foundation

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Founded in 1949, the Mental Health Foundation is the leading UK charity working in mental health and learning disabilities.

We are unique in the way we work. We bring together teams that undertake research, develop services, design training, influence policy and raise public awareness within one organisation. We are keen to tackle difficult issues and try different approaches, many of them led by service users themselves. We use our findings to promote survival, recovery and prevention. We do this by working with statutory and voluntary organisations, from GP practices to primary schools. We enable them to provide better help for people with mental health problems or learning disabilities, and promote mental well-being.

We also work to influence policy, including Government at the highest levels. We use our knowledge to raise awareness and to help tackle stigma attached to mental illness and learning disabilities. We reach millions of people every year through our media work, information booklets and online services.

If you would like to find out more about our work, please contact us.

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