

Double, double, toil and trouble.

Our approach to alcohol

The title.....

- Double, double.....

How readily we will have a drink, and be ready for more

- Toil and trouble.....

And yet to us as individuals, to our work, and to society in general, alcohol brings a huge burden

Alcohol's benefit



Alcohol's benefit



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An alcohol
induced herbal
moment.....

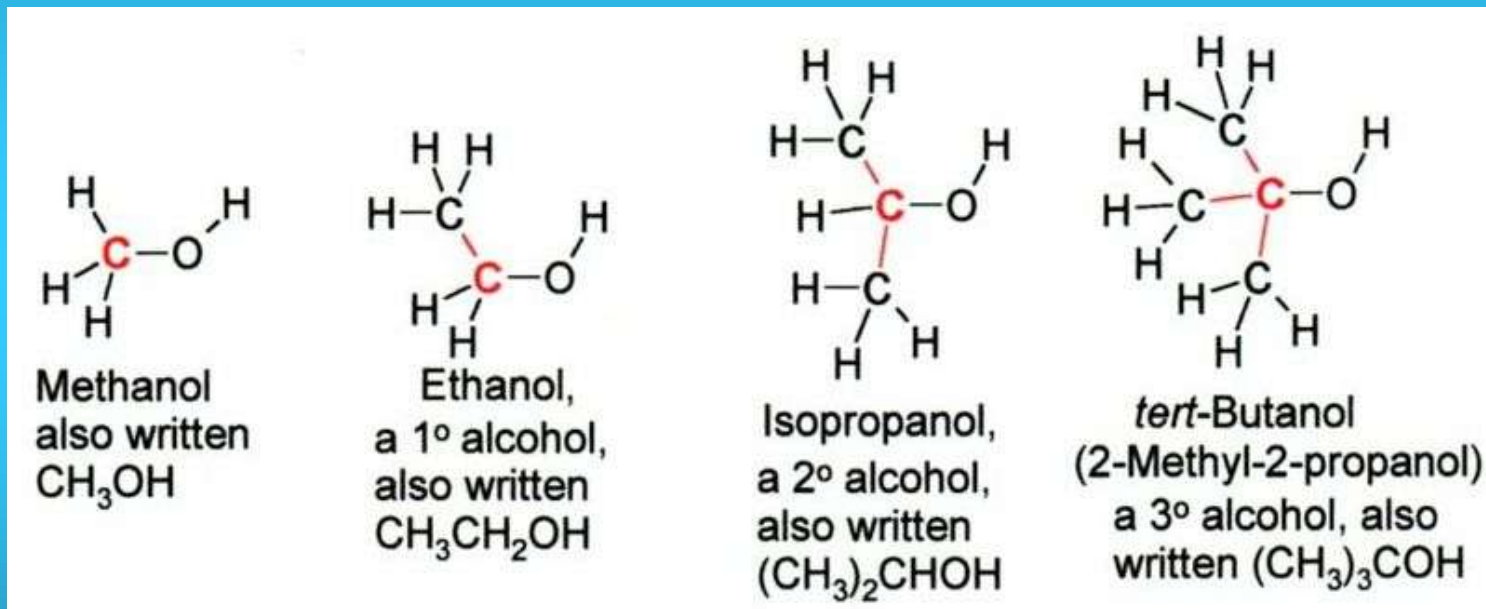


Alcohol's benefit

- Social lubricant
- Moderate alcohol consumption (2-3 units/day) reduces the risk of cardiovascular disease in men and women by approximately 30%. But....
- Drinking with meals may reduce the risk, while binge drinking increases risk.
- Overall, lowest mortality appears to be with 2 drinks per day in men and 1 drink or fewer per day in women

Alcohol

- Any chemical made up of a hydroxyl group (OH) joined to a hydrocarbon grouping (CH)



- Usually refers to ethanol which is formed by the partial oxidation of glucose and similar sugars

Alcohol

- It is a drug, with short term and long term consequences.....
- Some effects are desirable, others not so.
- The short term effects include.....

Effects of alcohol

CNS depression, which in.....

- low doses suppresses the inhibitory centres, hence disinhibited or reckless behaviour.
- in medium doses, suppresses excitatory centres, hence sleepiness, and slow reactions
- in higher doses, leads to impairment of co-ordination, rational thinking.
- in very high doses, inhibits respiratory and circulatory centres, suppresses gag reflex.

Effects of alcohol

- Stimulation of endorphin release
 - leading to a sense of euphoria, but in long term use, to dependence.
- Inhibition of the stimulatory effects of GABA and Glutamate
 - leading to reduced anxiety and to sedation.
- But cessation of alcohol then leads to rebound anxiety and arousal.

Effects of alcohol

- It can affect the heart – “Holiday Heart Syndrome”
- It has Glucose-like activity
 - It stimulates insulin production with consequent hypoglycaemia and coma
- It is a source of calories
 - Reduced appetite,
 - Nutritional imbalance,
 - Increase in BMI.
- It alters metabolic pathways
 - Gout,
 - Porphyria,
 - Altered reaction to other drugs

Alcohol

Its chronic effects include.....

- **Gastrointestinal**
 - Cirrhosis of the liver, peptic ulcer disease, gastritis, pancreatitis, and carcinoma
- **Cardiovascular**
 - Hypertension and cardiomyopathy
- **Neurological**
 - Peripheral neuropathy leading to ataxia, Wernicke encephalopathy, Korsakoff psychosis, and structural changes in the brain leading to dementia

Effects of alcohol

- Wernicke encephalopathy is ataxia, ophthalmoplegia (usually lateral gaze palsy), and confusion.
- Korsakoff syndrome is anterograde and retrograde amnesia, often with confabulation and preceded by Wernicke encephalopathy.

Effects of alcohol

- Immunologic
 - Suppression of neutrophil function and cell-mediated immunity, hence increased TB, cancers
- Endocrine
 - In males, increase in oestrogen and decrease in testosterone, leading to impotence, testicular atrophy, and gynaecomastia

Effects of alcohol

- Obstetric
 - Foetal alcohol syndrome (i.e. mental retardation, facial deformity, other neurologic problems)
- Psychiatric
 - Depression or anxiety disorders, behavioural problems, criminal behaviour
- Bones
 - A significant risk factor for developing Osteoporosis

Alcohol Use

- Frequency in a US survey
 - Current drinkers - 44%
 - Former drinkers - 22%
 - Lifetime abstainers - 34%
 - Abuse and dependency in the past year - 7.5-9.5%
 - Lifetime prevalence of abuse - 13.5 to 23.5%

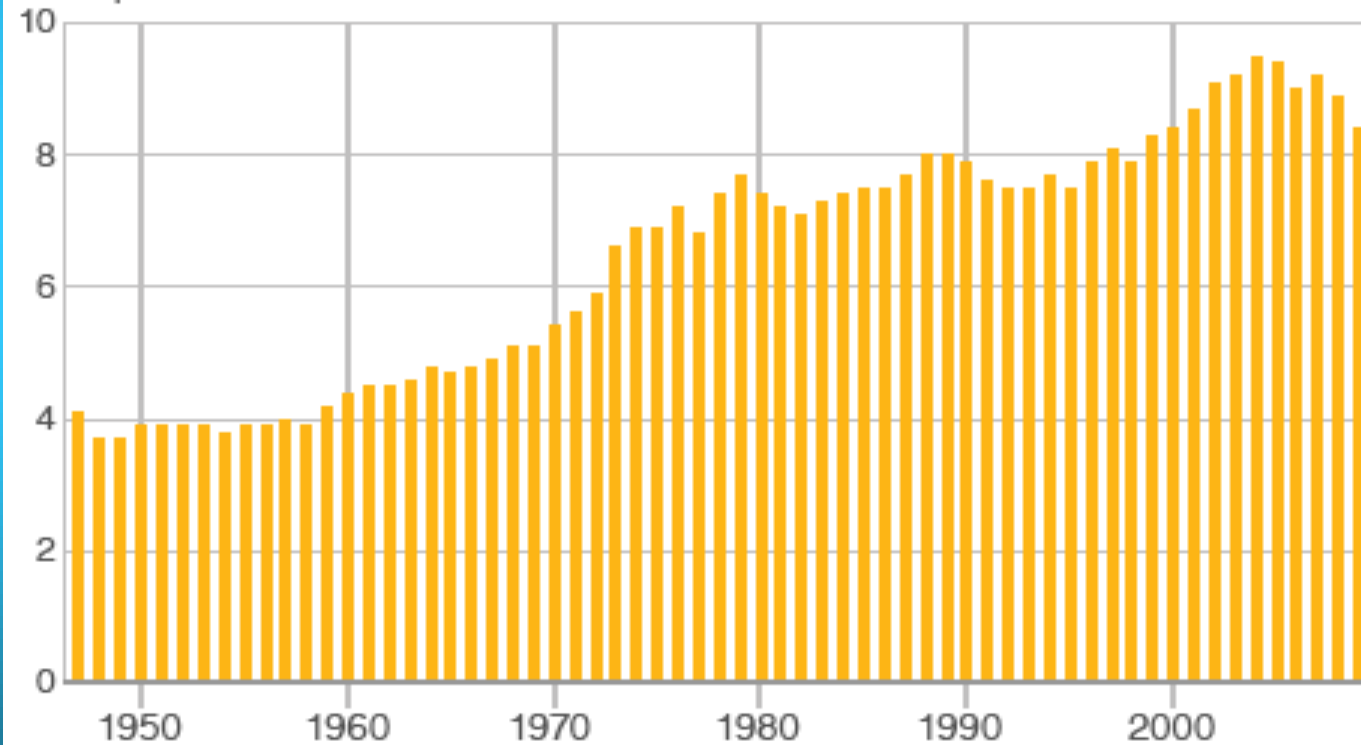
Alcohol Abuse

- Long term follow up of (male) problem drinkers
 - Inner city v. College graduates
 - Start earlier - age 25-30 v. age 40-45.
 - More likely to be abstinent - 30% v. 10%.
 - More likely to die from drinking - 30% v 15%.
 - Mortality in both groups was related strongly to smoking. Almost half of these deaths are attributable to alcohol-related injury.
 - Abstinence for less than 5-6 years did not predict continued abstinence (41% of men abstinent for 2 years relapsed)

Alcohol use in the UK

Alcohol consumption in the UK - 1947-2009

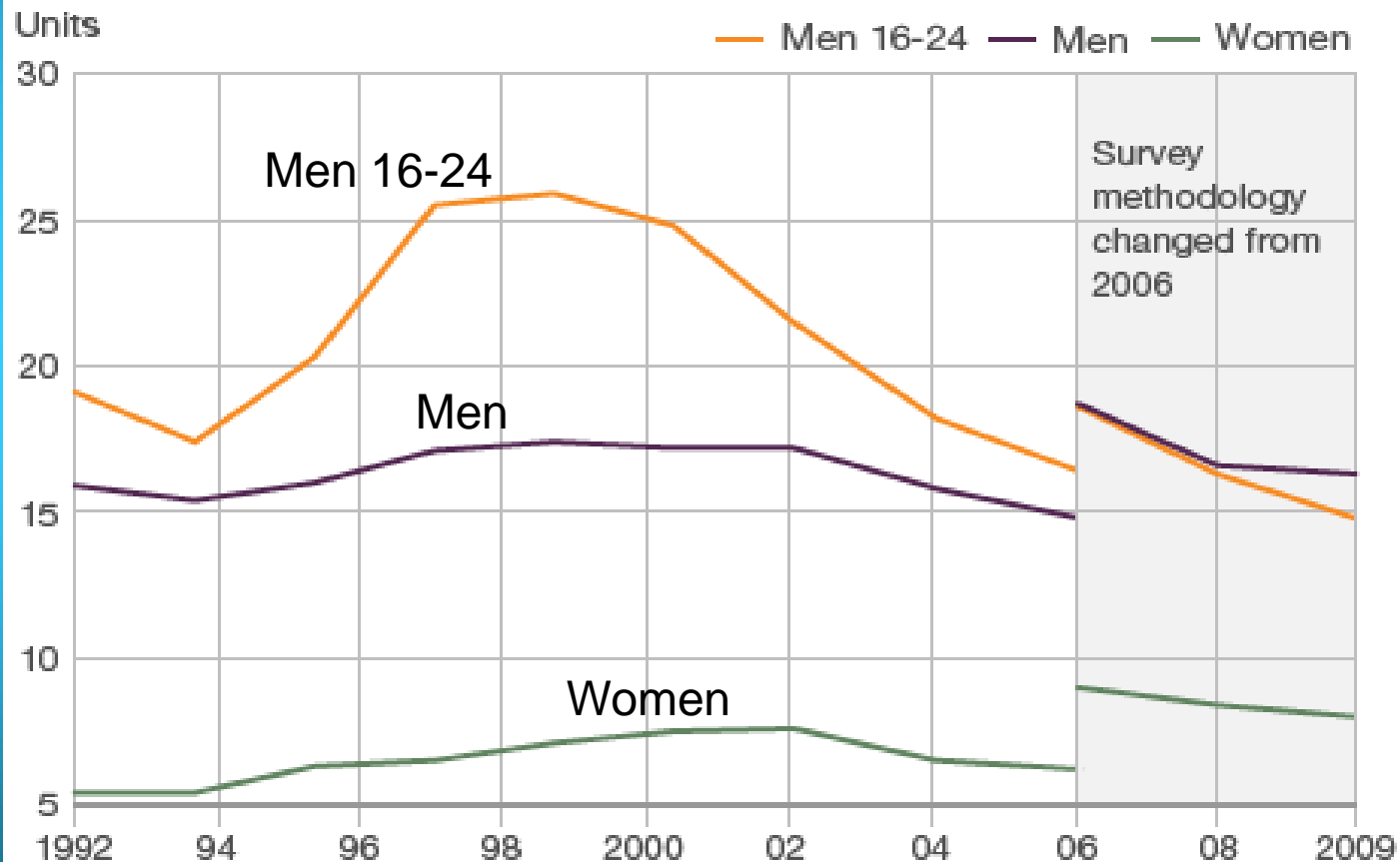
Litres per head - 100% alcohol



Source: British Beer and Pub Association Statistical Handbook 2010

Alcohol use in the UK

Average weekly alcohol consumption



Source: ONS

Alcohol's burden

- Hospital admissions 0.5 million in 2002
- And were 1.0 million in 2010
 - costing 2.7 billion per year
- Expected to be 1.5 million in 2015
 - costing 3.7 billion per year
- 15000 alcohol related deaths per year
- 1.2 million incidents of violent crime per year

Alcohol's burden

Alcohol contributes to a number of conditions, as follows:

- Cirrhosis - 32%
 - Oesophageal cancer - 29%
 - Liver cancer - 25%
 - Mouth and oropharyngeal cancers - 19%
 - Haemorrhagic stroke - 10%
 - Breast cancer - 7%
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- Murders - 24%
 - Motor vehicle accidents - 20%
 - Suicides - 11%

How do we measure the use of alcohol?

- Drinks
- Grams of alcohol
- Millilitres of alcohol
- Units

What is a “Drink”

Country	Weight	Volume
Japan	19.75 g	25 mL
Portugal	14 g	17.7 mL
Spain	10 g	12.7 mL
UK	7.9 g	10 mL
USA	14 g	17.7 mL

What is a unit?

- A Unit is 10ml of alcohol.
- Alcoholic drinks use % - by VOLUME – “ABV”
- The percentage is the same as the number of units in one litre
- Thus 10% wine will have 10 units in one litre
- A litre bottle of 40% whisky containing 400ml of alcohol, is 40 units
- For pints, multiply % by 6, divide by 10

Alcohol Abuse

- Twice as common in men
- Women do not metabolise alcohol as efficiently, so lower threshold of damage
- Women's problem drinking progresses more rapidly
- Women more likely to co-abuse prescription drugs
- Women's problem drinking less likely to be recognised

Alcohol abuse - diagnosis

- Examination rarely of use.
- Investigations have only 50% accuracy.
- As with most diagnoses, the history is the key.
- Unlike most diagnoses, the history is often lacking, due to a “conspiracy” between doctor and patient.
- Less than 50% of people who had an alcohol related problem were asked about alcohol.
- ***Therefore low recognition rate in hospitals and family practice.***

Alcohol abuse - unrecognised

- But why?
 - Patients frequently deny they have a problem. They might not link alcohol with its consequences. Fear it on their record.
 - Many doctors have a negative attitude toward alcoholic persons, viewing alcoholic patients as demanding and time consuming with little reward
 - Some patients tend to have an antisocial personality disorder, not engaging, no warmth.

Alcohol abuse - unrecognised

- During training, doctors will tend to have negative experiences with alcohol abuse patients.
- Doctors might hesitate to label a patient as alcoholic because of negative consequences.
- Doctors who have a problem with alcohol are less likely to discuss alcoholism and its consequences with patients.

Alcohol abuse - diagnosis

- When doctors try to diagnose, they are poor at it.
- “How much do you drink?” has <50% sensitivity for picking up alcohol problems
- Gamma glutamyl transferase has a sensitivity of only 50%.

Diagnosis - two useful tools

- CAGE questions – face to face
 - **C**ut down, **A**nnoyed, **G**uilty, **E**ye-opener.
 - Have you ever felt the need to **C**ut down on your drinking?
 - Have people **A**nnoyed you by criticizing your drinking?
 - Have you ever felt bad or **G**uilty about your drinking?
 - Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover – an **E**ye -opener?

Diagnosis - two useful tools

- AUDIT
 - **Alcohol Use Disorders Identification Test**
 - Ten questions scoring 0-4 points each
 - Probably 5 questions almost as good
 - *How do you score?*

AUDIT Results

- Scores between 8- 15 most appropriate for simple advice on the reduction of hazardous drinking. Medium level of alcohol problems.
- Scores between 16-19 suggest brief counselling and continued monitoring. High level of alcohol problems.
- Scores above 20 clearly indicate further evaluation for alcohol dependence.

So how do we assess?

- Ideally we should have.....
 - past and present levels of consumption including the drinking pattern (regular v binge drinking)
 - results of all investigations, particularly any liver enzyme or alcohol marker tests
 - information on any medical complications

....and

- past history of treatment for alcoholism, alcohol abuse/harmful use or alcohol dependence
- any history of other substance abuse
- any associated psychiatric disorders
- any history of marital or job instability
- other increased risks for accidents such as history of driving offences or participation in a hazardous sport or occupation

But are we given this
information?

Do we even try to obtain it?

And then we grade..

- Low risk use
 - Social or benign solitary drinking
 - No evidence of current harmful or hazardous use
 - No evidence of present or past dependence
 - Intake <60g men, <40g women,
ie <7units, <5 units
 - No binges of >60g, >40g, >2x/month

And into..

– Hazardous use

- Daily Intake >7units men, > 5 units women.
- Binges of > 7units, > 5 units, not more than 1x /week.
- One driving conviction but no other adverse indications.

And harmful use.....

- With adverse social consequences, damage to health
 - Alcohol use resulting in failure to fulfil major role obligations at work, school, or home
 - Recurrent alcohol use in situations in which it is physically hazardous (e.g., driving an automobile).
 - Recurrent alcohol-related legal problems.
 - Continued alcohol use despite persistent or recurrent social or interpersonal problems (e.g, arguments with spouse about consequences of intoxication or physical fights).
 - Evidence of harm to health

Alcohol dependence

- A strong desire or compulsion to take alcohol
- Difficulties in controlling alcohol-taking behaviour
- A physiological alcohol withdrawal state
- Tolerance to alcohol
- Neglect of alternative pleasures or interests because of alcohol use
- Persisting with alcohol use despite clear evidence of harmful consequences such as alcoholic liver disease or even abnormal GGT, gastritis

May be drinking >100g (men) or >80g (women) per day

But.....

- From where do we get the information to accurately grade the degree of disorder?
 - The client's declaration
 - The GPR
 - MER and Ix
 - A Patient Questionnaire?

Or.....

- Do we do what so many doctors do...
 - Hide our head in the sand
 - Pretend that we don't have the time
 - Leave the problem for someone else to deal with

Our approach to alcohol

.....is ambivalent

On the one hand we enjoy it, we may boast about it.

And yet we may be ashamed of it, hide it, and be embarrassed about it.

**As a consequence, individuals, doctors, insurers
and society in general,
all ignore the real risks of alcohol.**

