



Suicide and suicidal behaviour in alcohol use disorders

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Overview

Suicide and suicidal behaviour

- **Definitions**
- **Context:**
 - UK rates
 - Risk factors
 - Life course

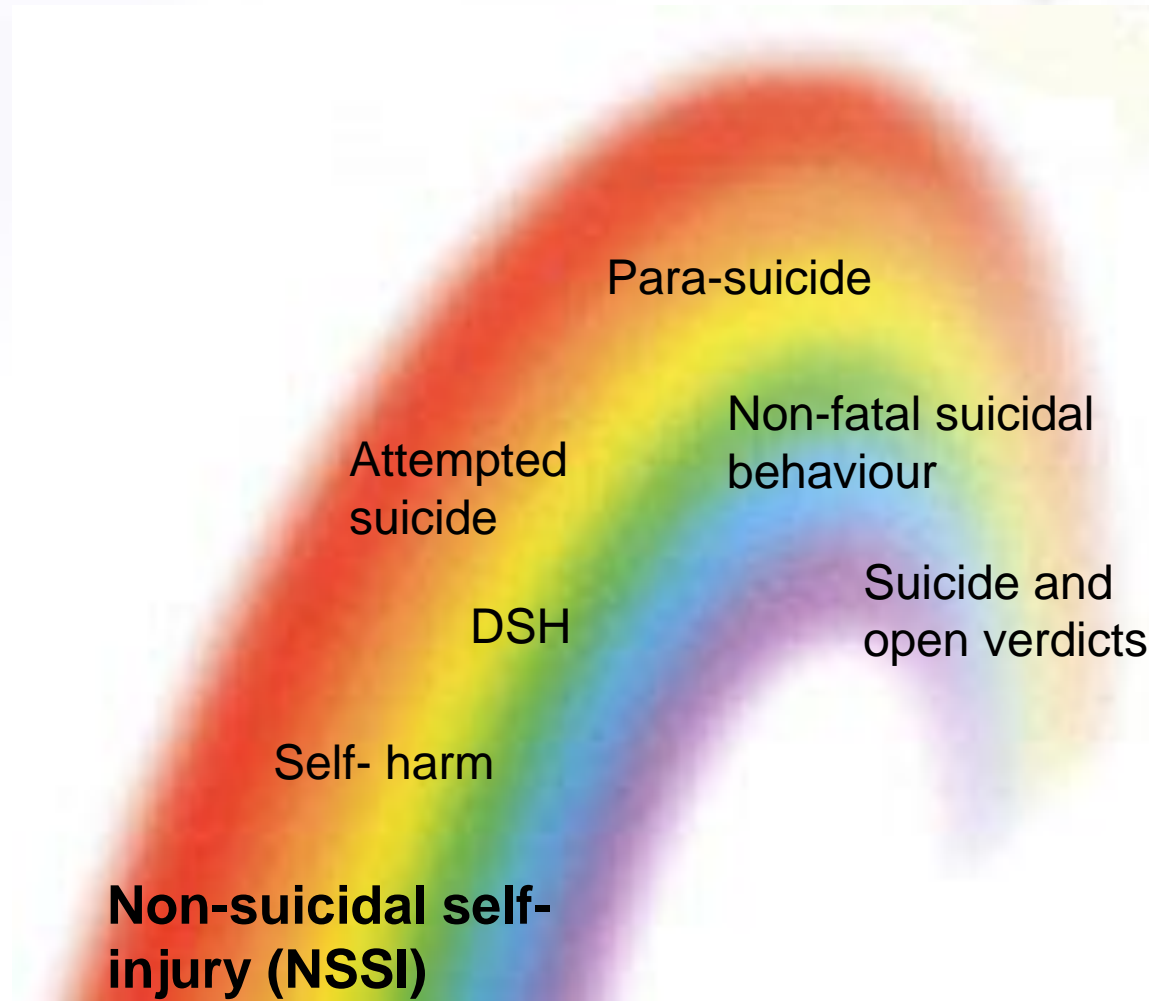
Alcohol

- UK mortality rates
- availability

Interaction of alcohol and suicide on life course

- Theoretical
- Evidential
- Prevention strategies

Spectrum of suicidal behaviour



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Suicidal behaviour -definitions

Suicide

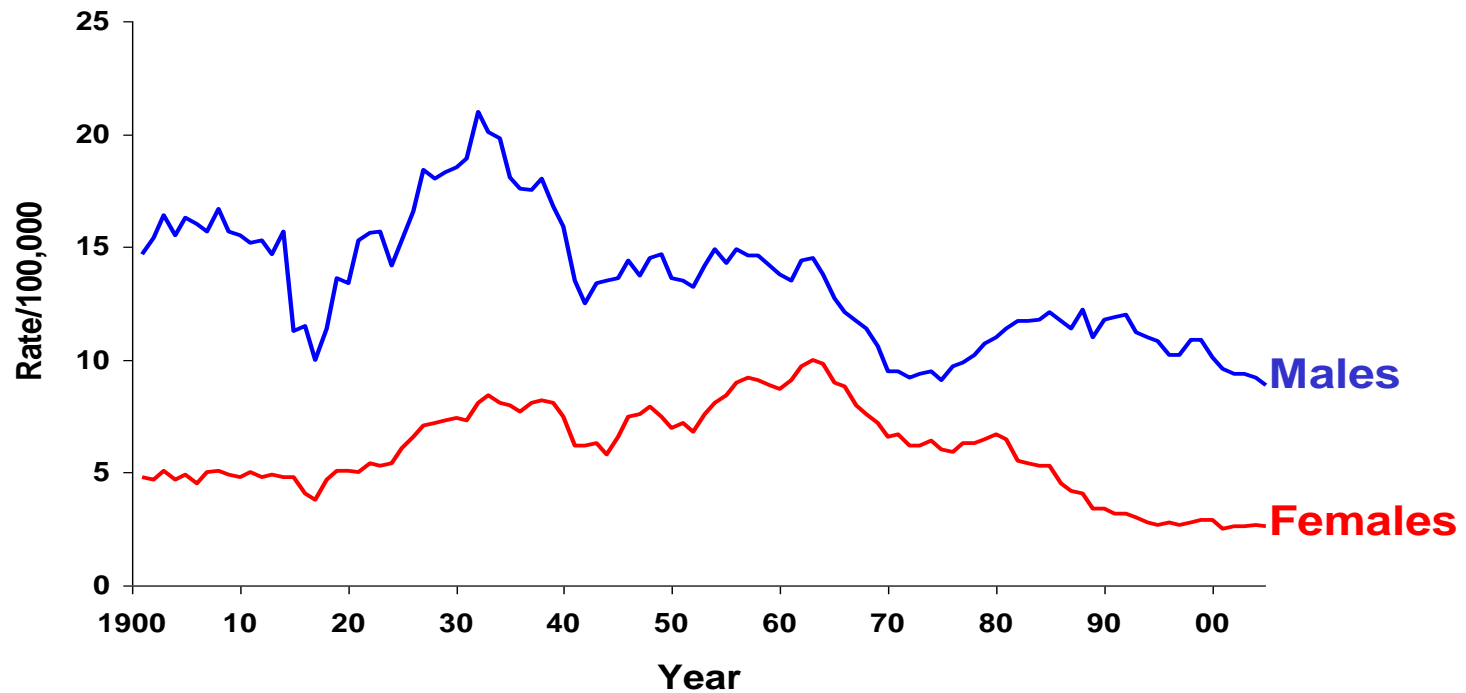
- Suicide is defined as a self-destructive act, with an intended, fatal outcome.

Self Harm

- should have two components:
 - Acute damage to self i.e. excludes smoking.
 - Damage is intentional i.e. excludes self harm behaviours which are motivated by other reasons *e.g. self-induced vomiting to control weight.*
- Therefore includes:
 - Cutting, or jumping from a height
and/or
 - taken a medication overdose or ingested an illicit drug with the intent to cause self-harm
and/or
 - ingested a non-ingestible substance or object e.g. batteries, razor blades.



Suicide in England & Wales 1901-2005



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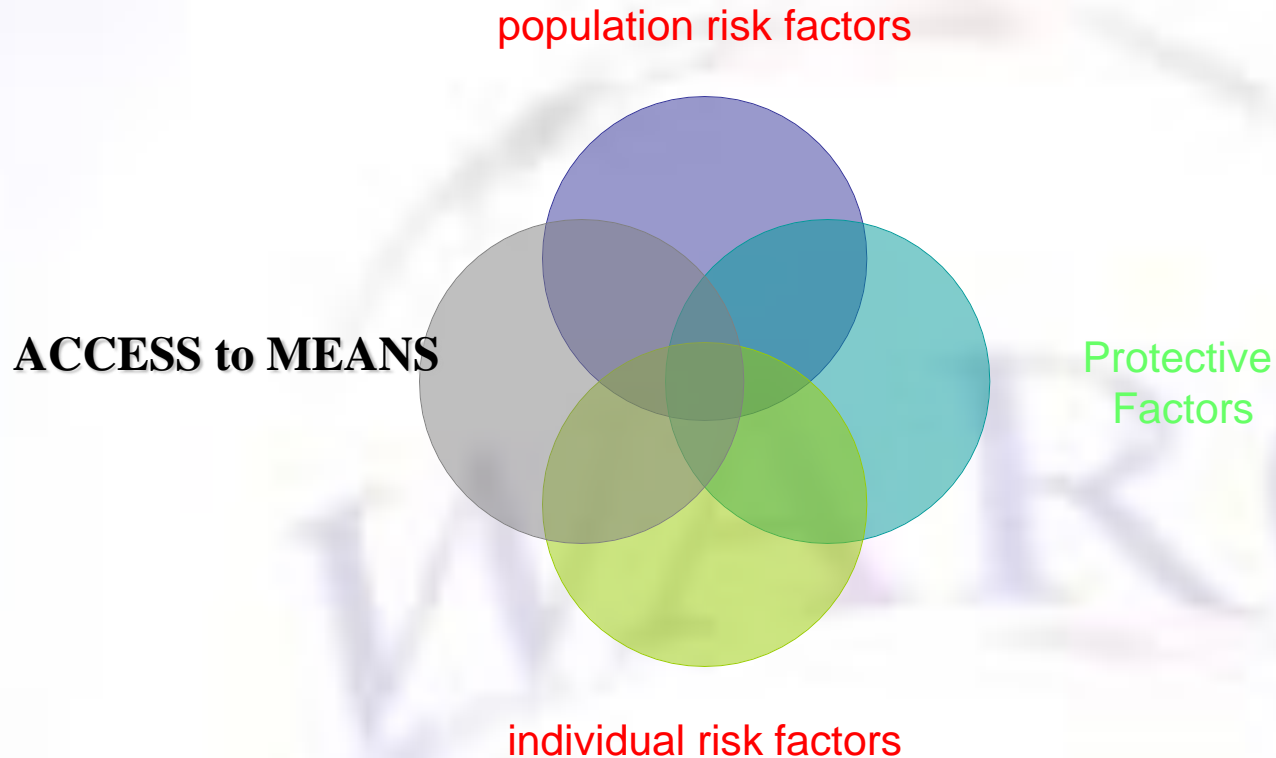
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Prevention paradox

- “A large number of people at a small risk may give rise to more cases (of disease) than the small number who are at high risk”
- “A preventive measure which brings much benefit to the population offers little to each participating individual”

Rose 1985

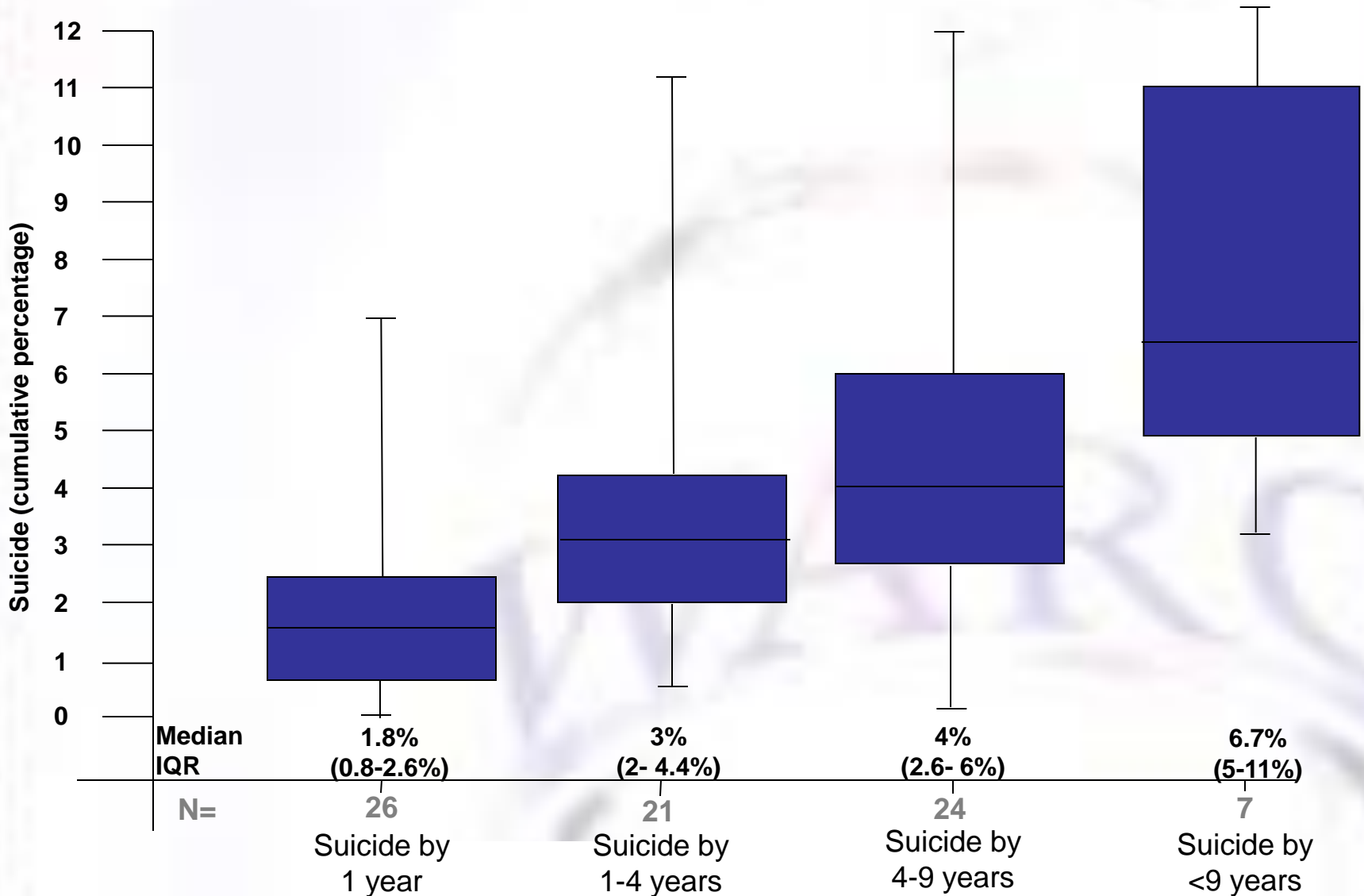
Cross sectional individual risk...



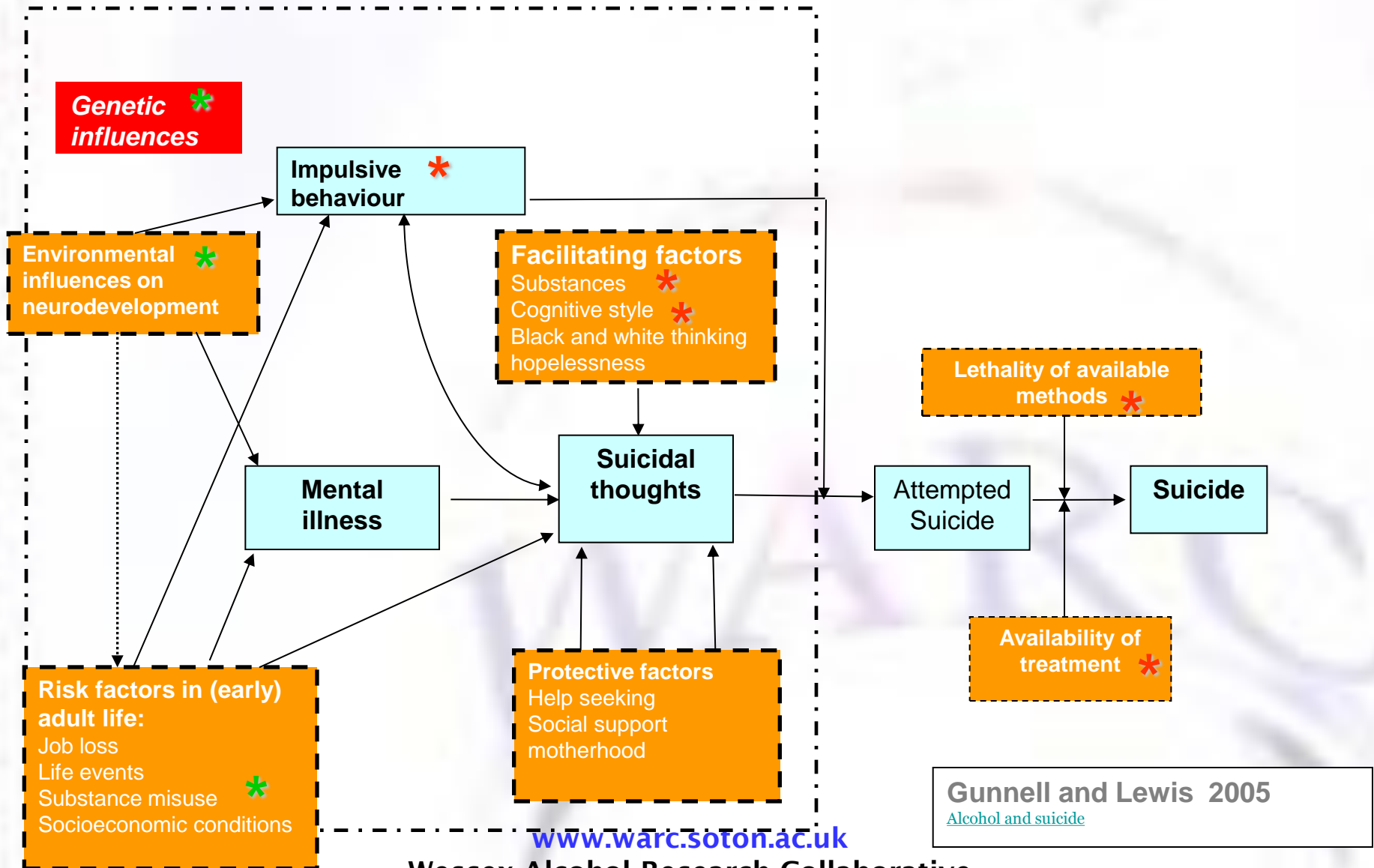
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Suicidal behaviour and Suicide



Life-course influences on suicide



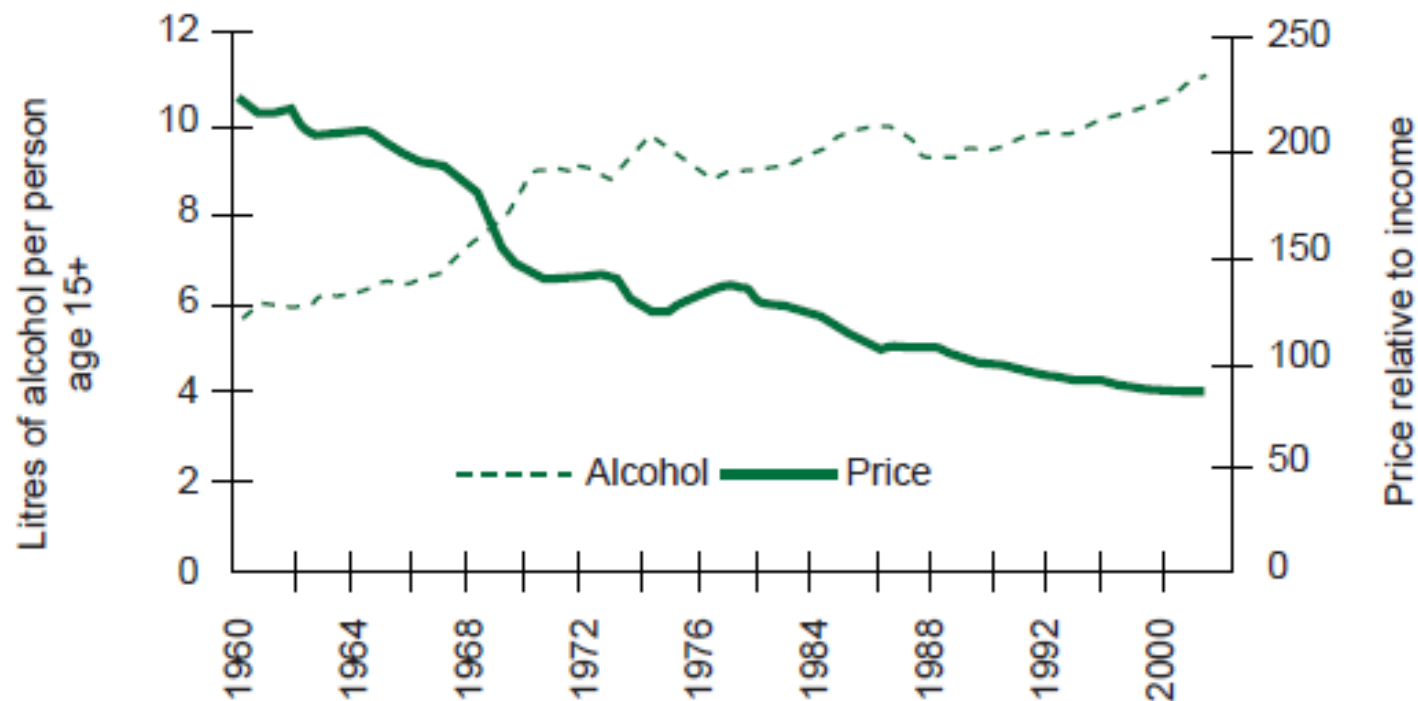


Alcohol



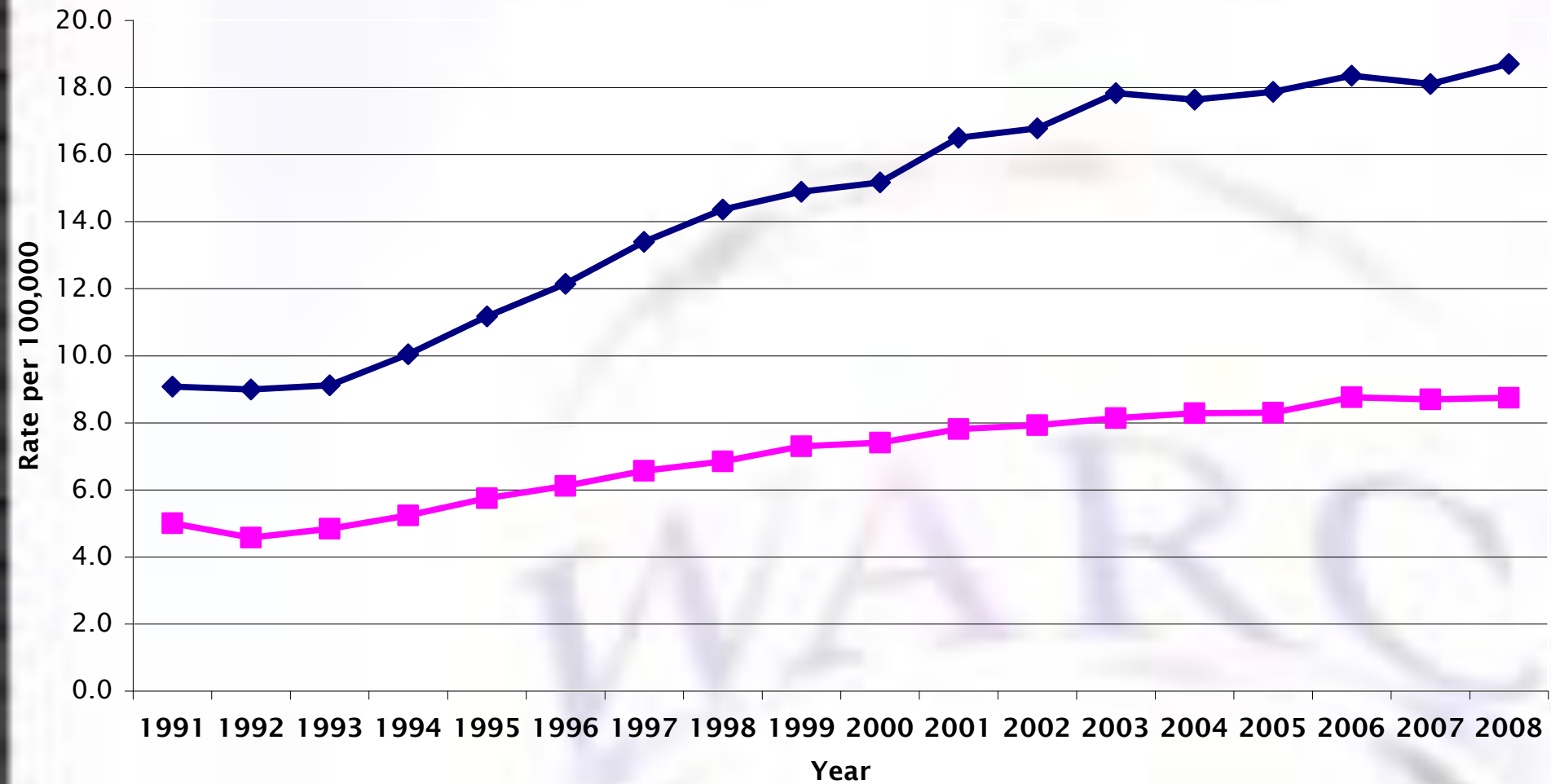
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Source: Academy of Medical Sciences. *Calling time. The nation's drinking as a major health issue.* London: Academy of Medical Sciences, 2004.

Alcohol Related Deaths UK 1991- 2008



◆ Males ■ Females

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Alcohol and suicide

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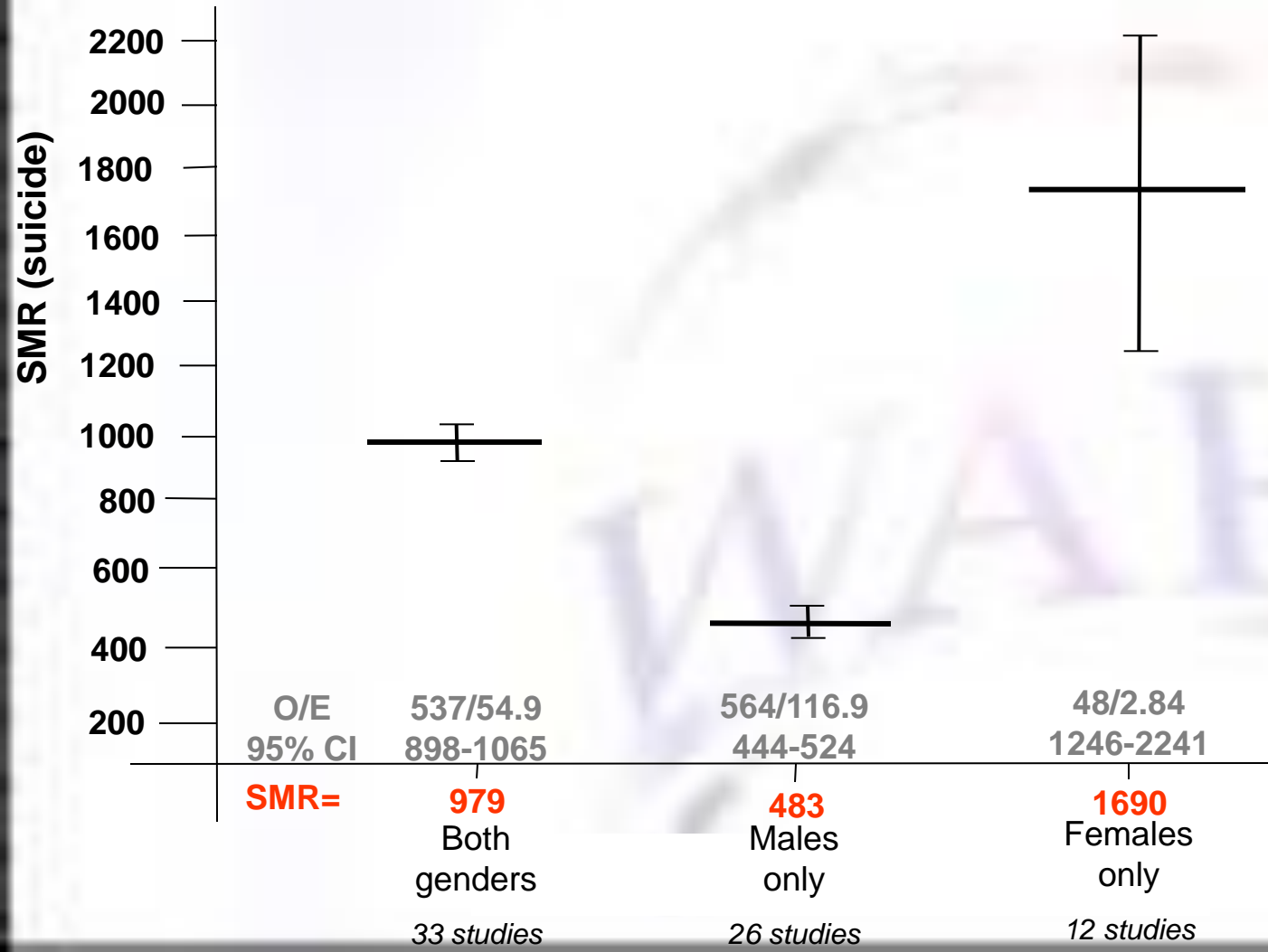
Alcohol and suicide

Putative mechanisms

- Alcohol increases behavioural disinhibition and impulsivity
- Pharmacological effects on respiratory depression
- Alcohol promotes depressive symptoms
- Chronic alcohol use associated with personal and social failures → low self-esteem and hopelessness
- Increase loss events and social isolation
- Lack of treatment options for alcohol dependency

[Life-course influences on suicide](#)

Alcohol use disorders and suicide



Wilcox et al Drug and Alcohol Dependence 2004

Risk factors for suicide in alcohol dependence

- Increased age
- Male
- Living alone
- Unemployment
- Poor social support
- Interpersonal losses
- Family history of major depression
- Previous DSH
- Previous alcohol treatment
- Continued drinking

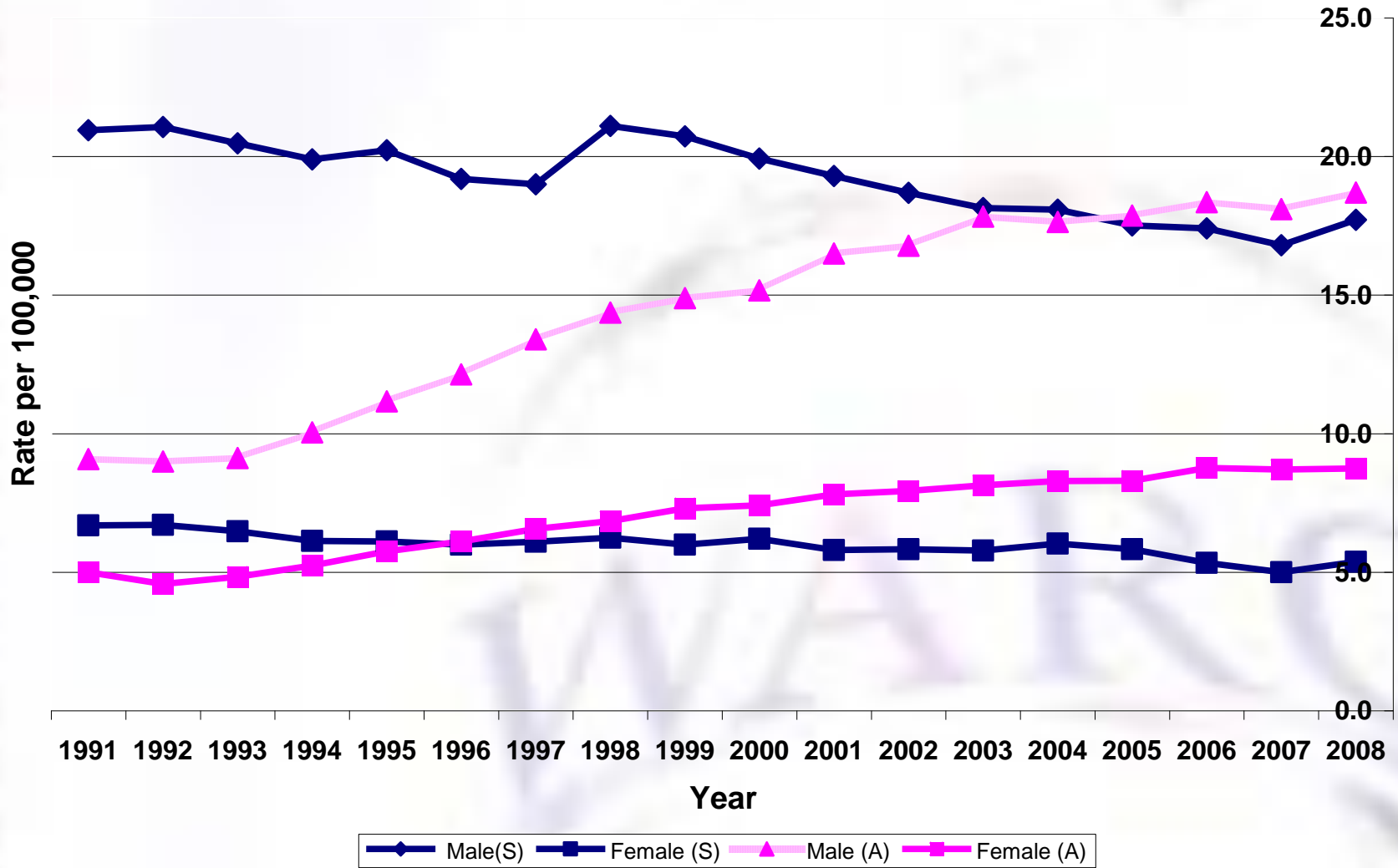


Therefore as AUDs
increase so too will
suicide rates?

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Alcohol and Suicide Deaths UK 1991-2008



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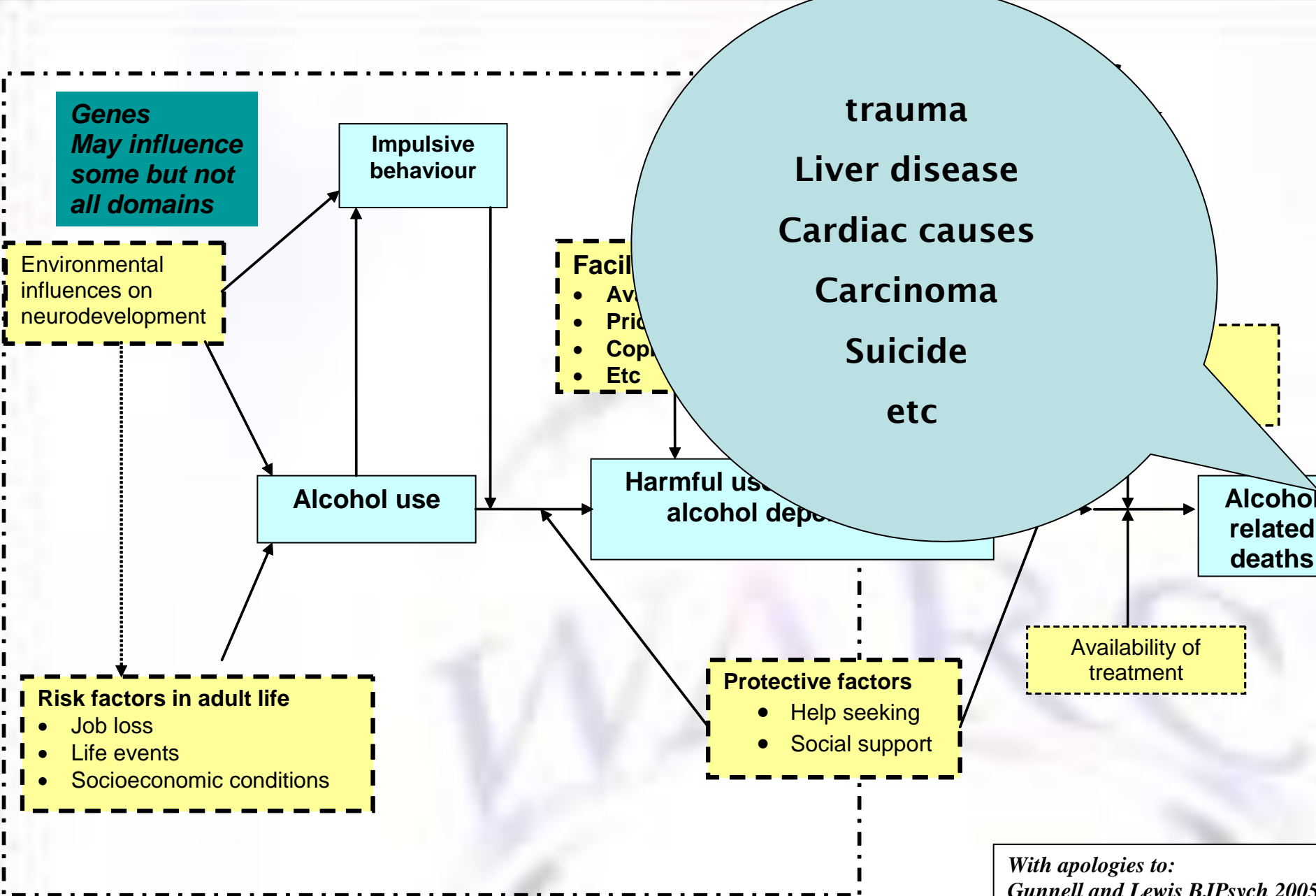
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Why might this be happening?

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*With apologies to:
Gunnell and Lewis BJPsych 2005*



Some prospective longitudinal data

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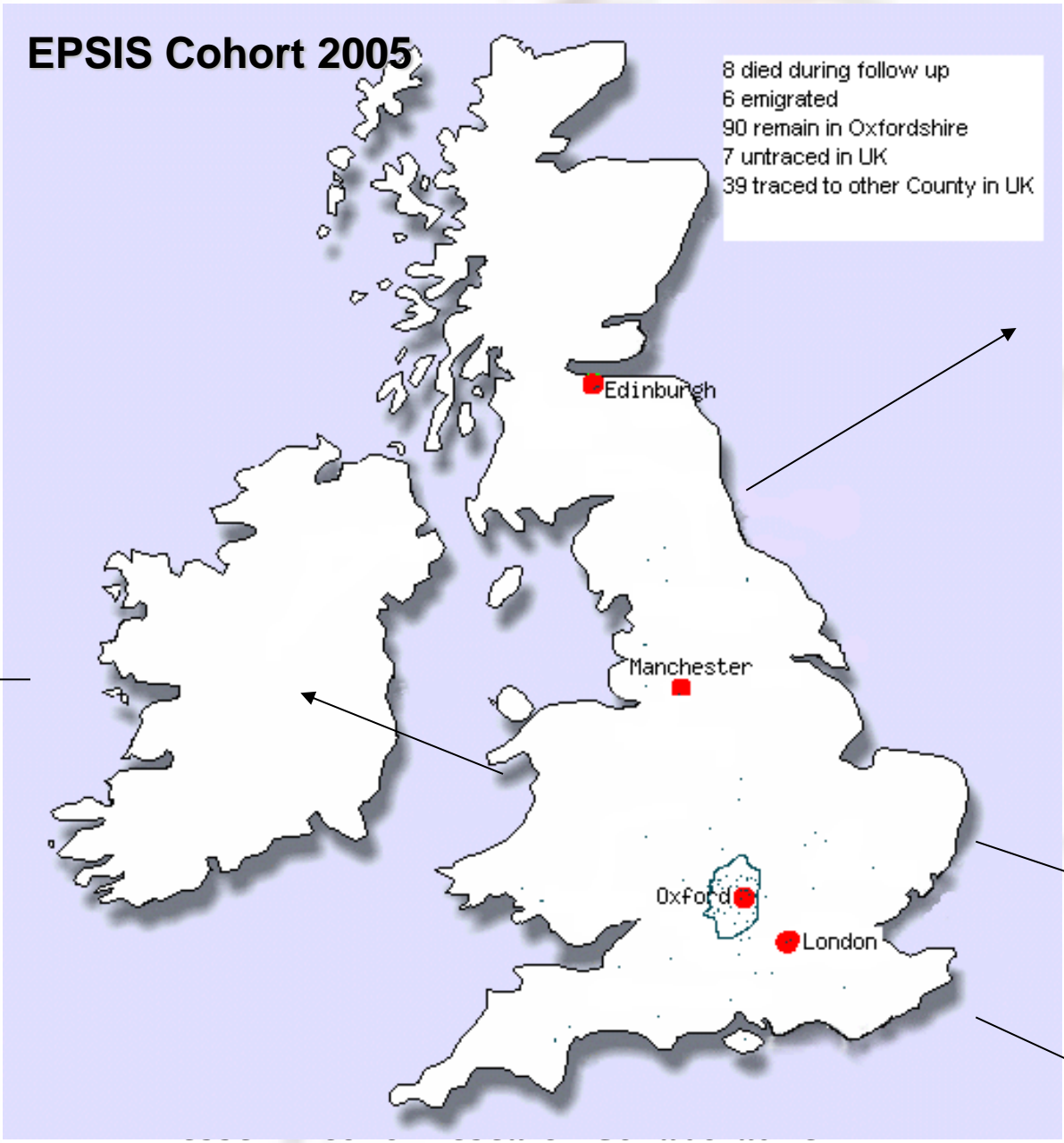
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EPSIS Cohort 1997



EPSIS Cohort 2005

8 died during follow up
6 emigrated
90 remain in Oxfordshire
7 untraced in UK
39 traced to other County in UK



USA

Finland

Germany

NZ

Mortality following DSH

Mortality

- Mean time in follow up (N=143) = 6.2yrs (0.93-8.4yrs)
- 8 deaths (5.6%): 5 men (9.2%), 3 women (3.4%)
- 13:1 (M) and 9:1 (F) mortality for matched population rate
- Suicide/ open verdicts in 2.8% (M:F ratio 3:1)
- Death from other causes 2.8% (M:F ratio 1:1)

Sinclair et al 2010

[Suicidal behaviour and Suicide](#)

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Details of patients dying during follow up

Sex	Age	Coroner's Verdict	Cause of death	Other	No. DSH
F	60-70	N/A	LVF	Recurrent MDE	7
M	40-50	N/A	GI bleed	Alcohol dependant	5
M	40-50	N/A	GI bleed	Alcohol dependant	18
F	30-40	Accident	# skull in RTA	Alcohol dependant	3
F	20-30	Open	Unascertained	EUPD	12
M	30-40	Open	Multiple # from fall from bridge	Low IQ, long hx of psychiatric probs	16
M	30-40	Open	CBZ and alcohol intoxication	NFA	>100
M	40-50	Suicide	Drowning	Psychiatric IP	4

- *No, the self harm was a cry for help, it wasn't an attempt to kill myself, it was actually the alcohol that was killing me, I just used another drug because at the end of the day if you ring up a hospital and say you're drunk they tell you to bugger off, if you ring up and say you've swallowed a bottle of pills, they let you in.*

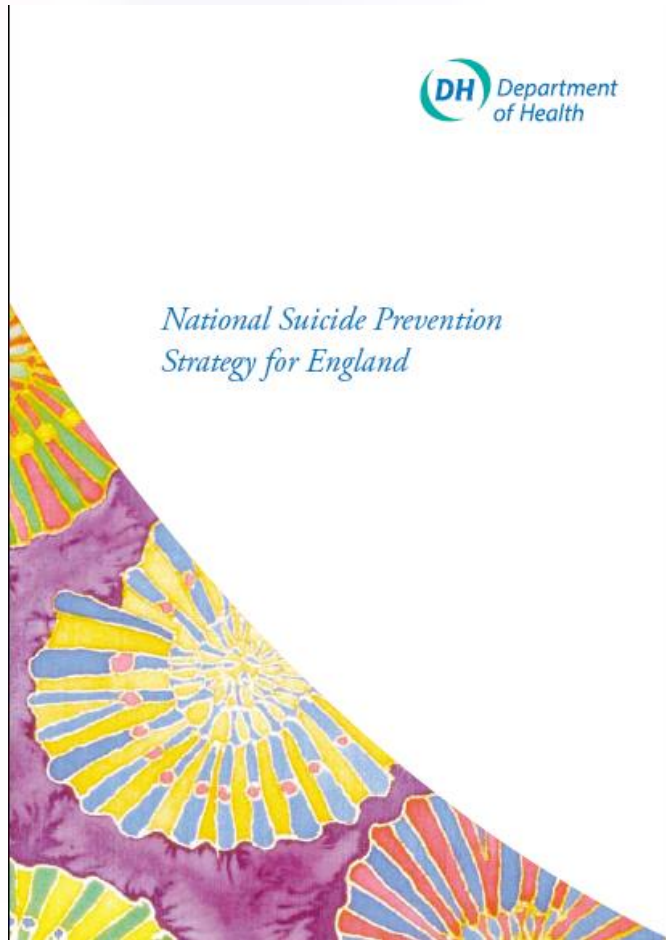
Mr P, unemployed ex-officer in 1997

Sinclair and Green BMJ 2005

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National Suicide Prevention Strategy for England



- Aim of strategy is to reduce suicide by 20% by 2010
- Based on six key goals
- Tries to balance low impact interventions at a population level with targeted strategies in high risk groups

Six goals of suicide prevention strategy

1. To reduce risk in key high risk groups
2. To promote mental well being in the wider population
3. To reduce availability and lethality of suicide methods
4. *To improve the reporting of suicidal behaviour in the media*
5. *To promote research on suicide and suicide prevention*
6. *To improve monitoring of progress towards suicide reduction targets*

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Alcohol-use disorders: preventing harmful drinking

NICE public health guidance 24

- Policy
- price
- availability
- marketing
- Practice
- Organisational issues
- 10 to 15yrs
- 16 and 17 yrs
- Adults

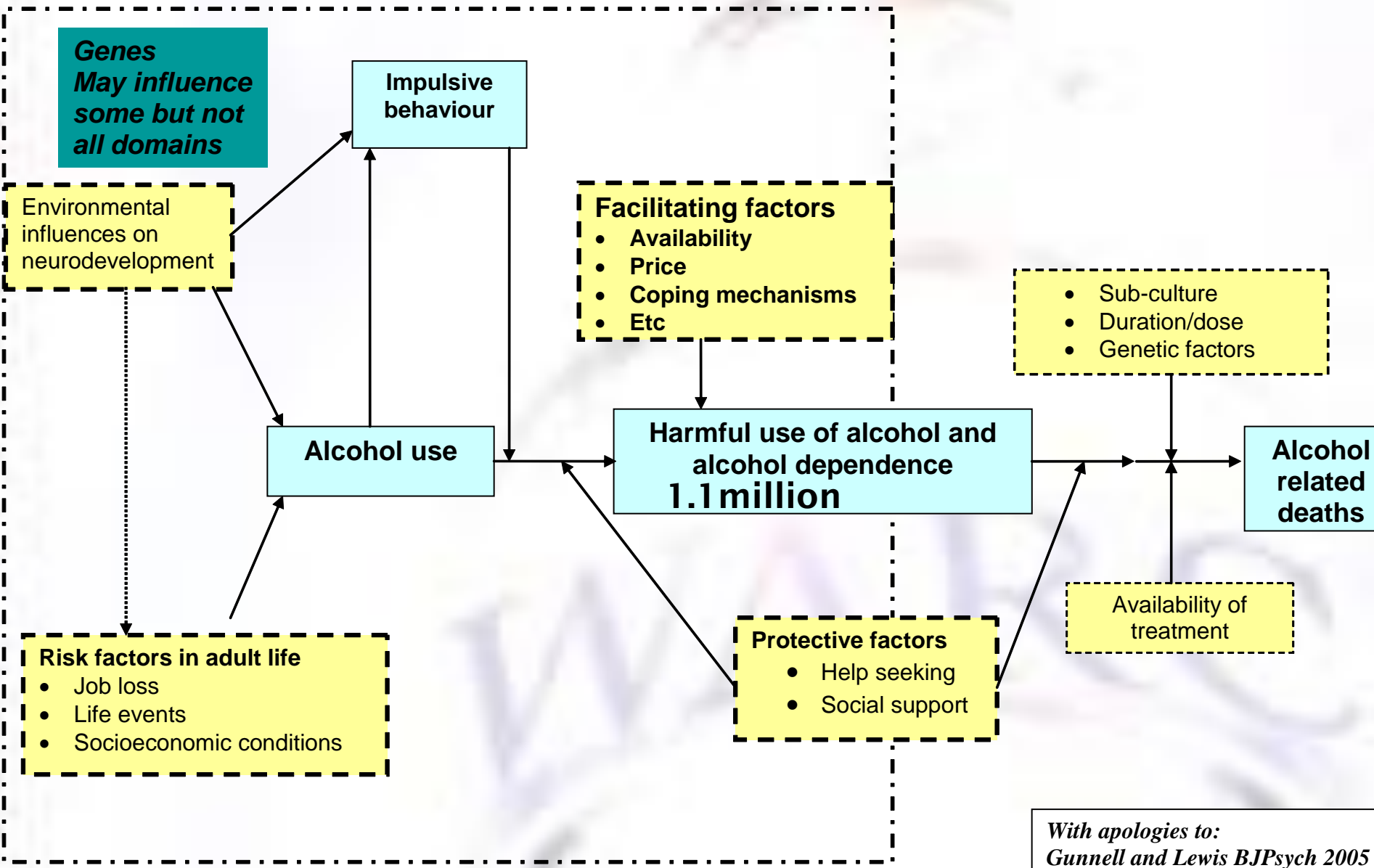
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Rose 1985



Genes
May influence
some but not
all domains

Environmental
influences on
neurodevelopment

Impulsive
behaviour

Facilitating factors

- Availability
- Price
- Coping mechanisms
- Etc

- Sub-culture
- Duration/dose
- Genetic factors

Alcohol use

Harmful use of alcohol and
alcohol dependence
1.1 million

Alcohol
related
deaths

Risk factors in adult life

- Job loss
- Life events
- Socioeconomic conditions

Protective factors

- Help seeking
- Social support

Availability of
treatment

*With apologies to:
Gunnell and Lewis BJPsych 2005*



Might the recent reduction in suicide deaths be caused not by the success of suicide prevention strategies but by increased alcohol mortality?



“We die young in my family – it’s a cultural thing”

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