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primary health TASMANIA

Alcohol and other drugs at the primary care interface - Tasmanian Project ECHO

Wednesday 19 November 1pm

Acknowledgement of traditional owners

We acknowledge the Tasmanian Aboriginal people as the traditional owners and ongoing custodians of the land on which we are meeting today. We pay our respects to Elders past and present.

We would also like to acknowledge Aboriginal people who are joining us today.

Alcohol and other drugs at the primary care interface – Tasmanian ECHO

To strengthen primary care responses to alcohol and other drug use across Tasmania by connecting providers with specialist knowledge, fostering collaborative learning, and supporting integrated, evidence-informed treatment approaches.

Working together agreement

Be curious, and remain present together in this shared space

Listen, ask, suggest and support

Value differences in thinking

Now let's hear from our panel members

- **Dr Nicolle Ait Khelifa,** Statewide Specialty Director, Alcohol and Drug Service, Tasmanian Department of Health
- **Dr Catherine Horan,** GP, Alcohol and Drug Service, Tasmanian Health Service
- **Monika Petschar,** Social Worker, Allied health Workforce Development Consultant, Alcohol and Drug Service, Tasmanian Department of Health
- **Dr Diane Hopper**, GP and Medical Director, Aboriginal Health Service Tasmania

Today's presenter:

- **Dr Andrew Nolan**, Addiction Medicine Specialist, Alcohol and Drug Service, Tasmanian Department of Health

Session Agenda

Introductions	Name, profession, where do you work?
Presentation	Alcohol Use Disorders in Primary Care: Engagement, Assessment and Management with Dr Andrew Nolan
Discussion	Case study scenario discussion

Alcohol related illness presentation in General Practice

Dr Andrew Nolan FRACGP FAChAM

Relevance of Alcohol related problems in General Practice

- Alcohol use and subsequent problems is very common in Australia and a major burden on health and a cause of disadvantage
- These will present every day in general practice
- It is important to develop the knowledge, skills and confidence to intervene in an evidence-informed manner

(1) Addiction, dependence and misuse

- The terms addiction/dependence often used interchangeably
- Dependence is a physiological state where a substance is needed to feel an effect, and in its absence there is a characteristic withdrawal
- There is often a need to increase the level of use over time to achieve the same effect and avoid withdrawal
- Where there is dependence to a prescribed medication, this escalation can lead to misuse

(2) Addiction or “Use Disorder” (DSM-5)

“A problematic pattern of substance use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

1. substance is often taken in **larger** amounts or over a **longer** period than was intended
2. There is a persistent desire or unsuccessful efforts to **cut down** or control substance use
3. A great deal of **time** is spent in activities necessary to obtain, use, or recover from its effects

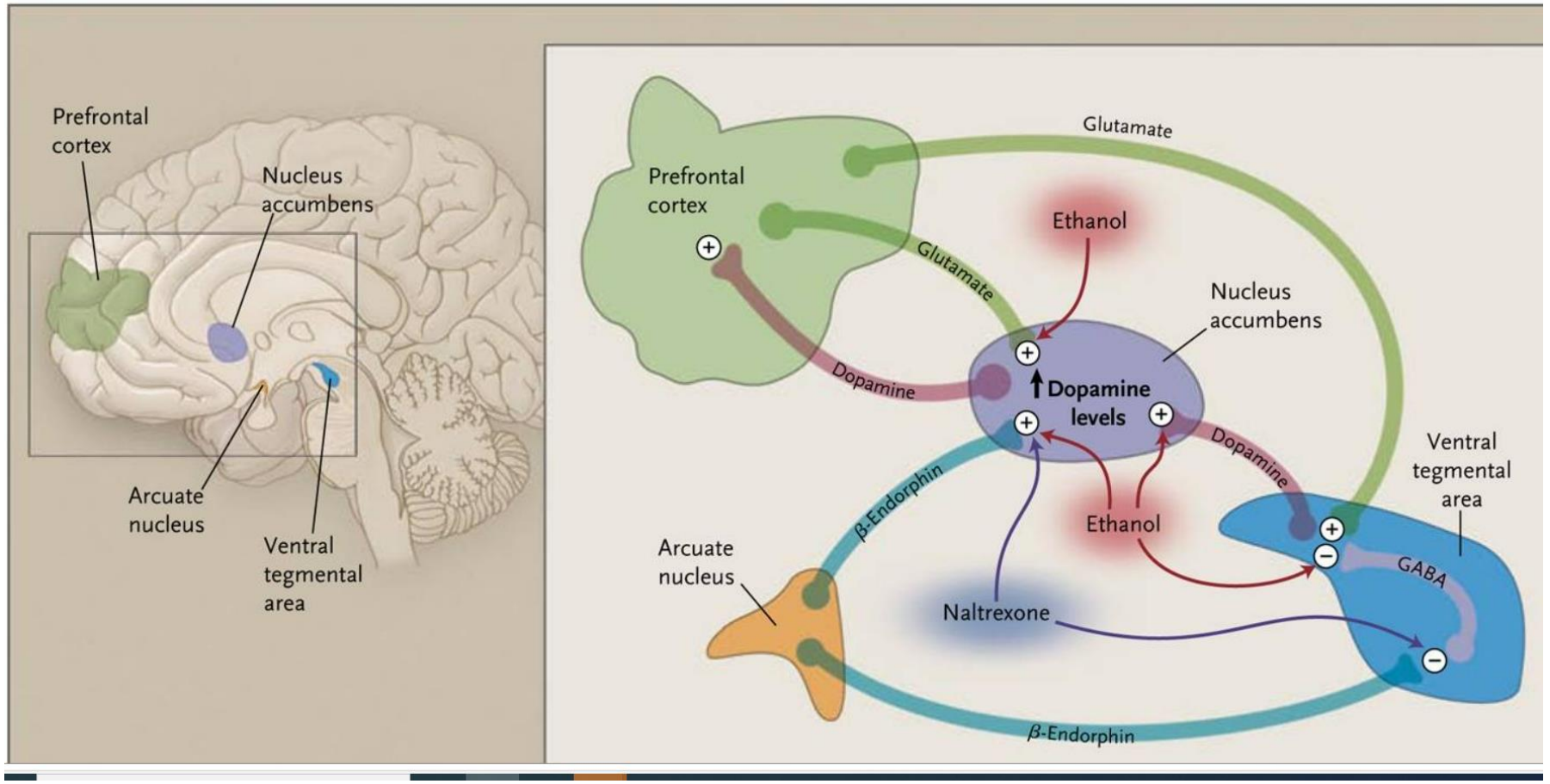
(3) Use Disorder (DSM-5)

4. **Craving**, or a strong desire or urge to use substance
5. Recurrent substance use resulting in a failure to fulfil major **role obligations** at work, school, or home.
6. **Continued** substance use despite having persistent or recurrent social or interpersonal **problems** caused or exacerbated by the effects of substance
7. **Important** social, occupational, or recreational **activities** are given up or reduced because of substance use
8. Recurrent substance use in situations in which it is physically **hazardous**

(4) Use Disorder (DSM-5)

9. substance use is **continued despite** knowledge of having a persistent or recurrent physical or psychological **problem** that is likely to have been caused or exacerbated by alcohol
10. **Tolerance**, as defined by either of the following:
    a. A need for markedly increased amounts of substance to achieve intoxication or desired effect.
    b. A markedly diminished effect with continued use of the same amount of substance.
11. **Withdrawal**, as manifested by either of the following:
    a. The characteristic withdrawal syndrome
    b. Substance or a closely related substance, is taken to relieve or avoid withdrawal symptoms.

Neural pathways in addiction

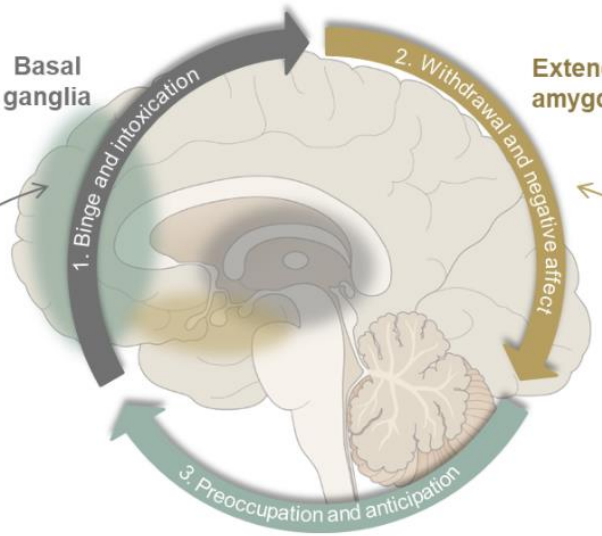


Neurocircuitry of the addiction cycle

1. Reward circuits in the brain are activated during intoxication

2. Activation of emotional circuitry in the brain results in negative mood and enhanced sensitivity to stress during withdrawal

3. Decreased prefrontal functioning impairs the balance of desire and ability to abstain



Response to drug

Stress and reward

Neuroadaptation

Adapted from: Volkow & Boyle. Am J Psychiatry 2018;175(8):729–740; Sadock et al. (eds) Kaplan & Sadock's Comprehensive Textbook of Psychiatry. 2017; Wise & Koob. Neuropsychopharmacology 2014;39(2):254–262; Volkow et al. N Engl J Med 2016;374(4):363–371

neurotorium

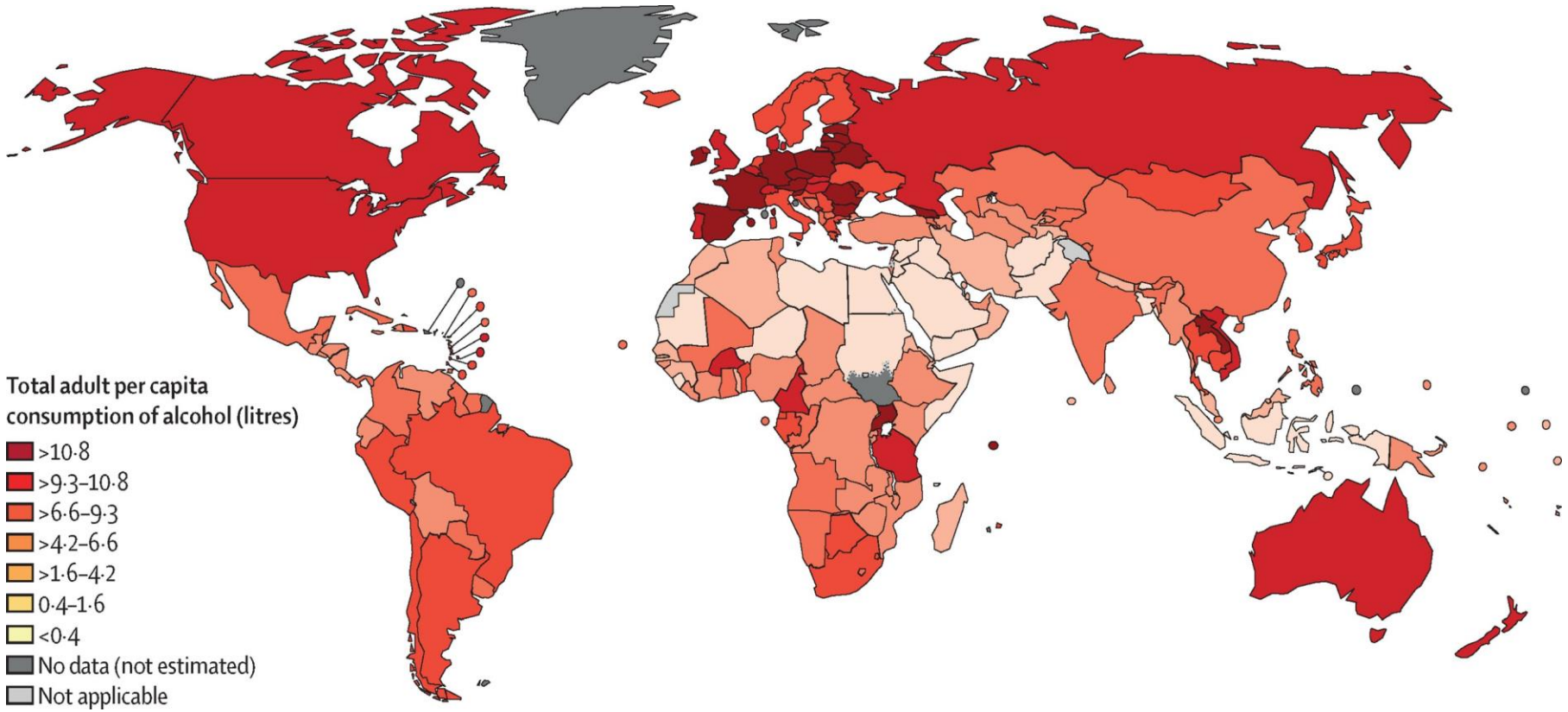
Alcohol

- Most commonly used drug in Australia – 9.5 L per capita/yr (France/Germany> UK Australia> Italy Spain)
- No health benefits from consumption
- Increasing availability in Tas drives consumption
- Economic cost $16bn (tobacco double this)

National, regional, and global statistics on alcohol consumption and associated burden of disease 2000–20: a modelling study and comparative risk assessment

Shield, Kevin et al.

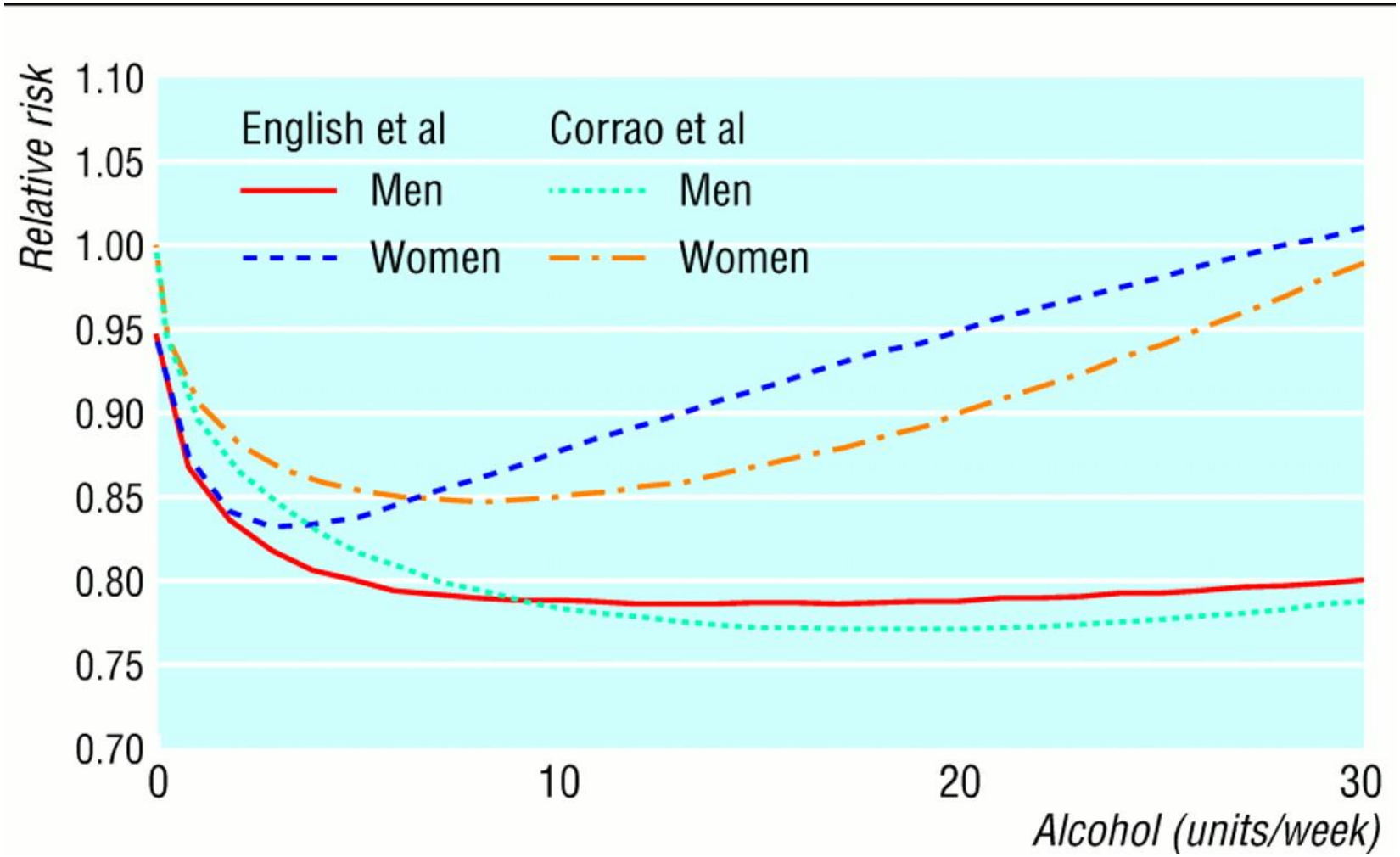
The Lancet Public Health, Volume 10, Issue 9, e751 - e761



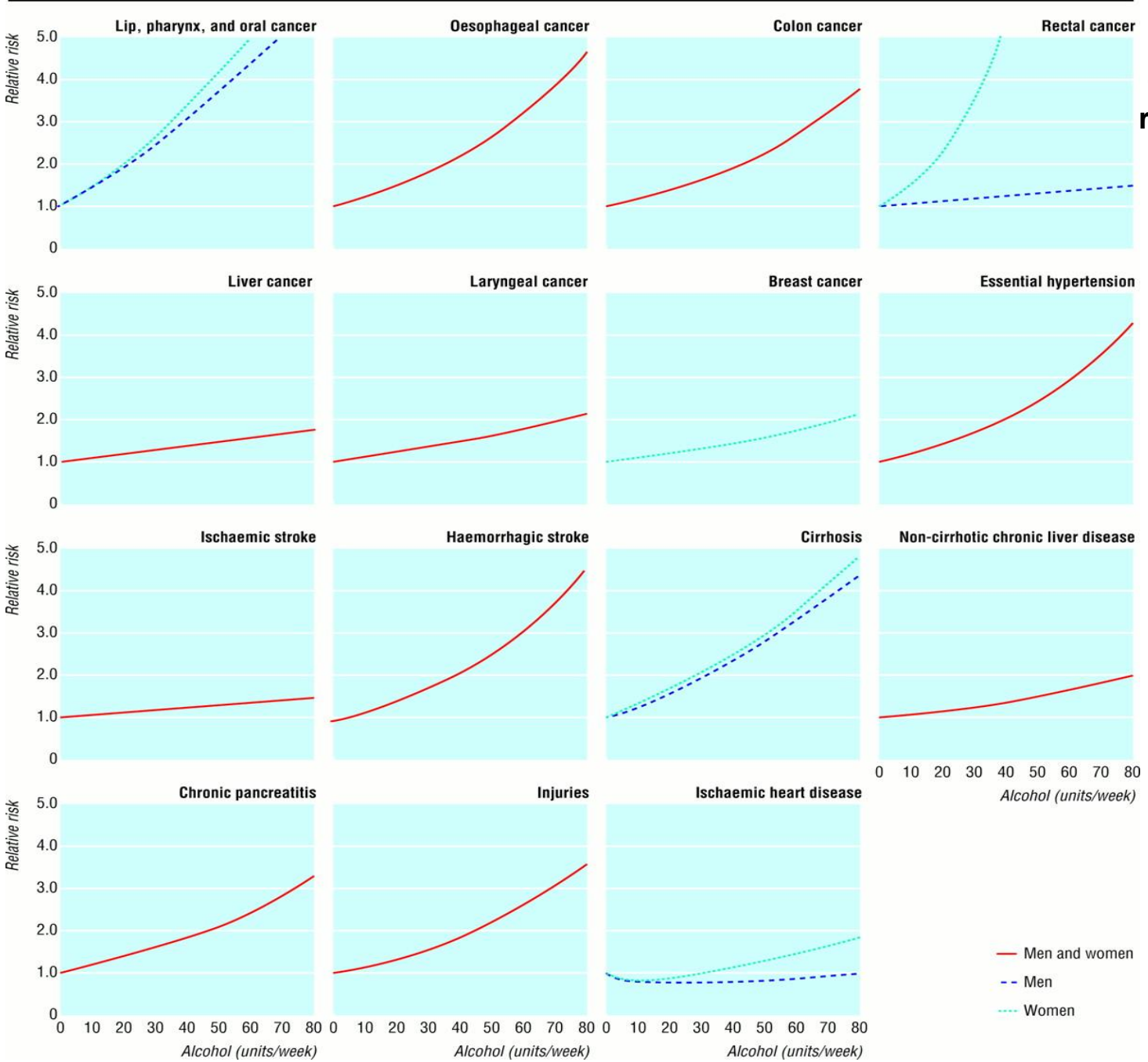
(1) benefits of alcohol consumption?

- A common idea that drinking up to 2 standard drinks per day reduced heart disease and diabetes risk. Based on epidemiological studies, promoted by the alcohol industry. These studies seemed to show that abstaining from alcohol increased risk slightly, but did not take into account that many abstainers had previously been heavy drinkers, ie they only took into account drinking status at the time of interview, not lifelong status.

Models for ischaemic heart disease from Corrao and others (used in main analysis) and derived from English and others1 18.



Ian R White et al. BMJ 2002;325:191



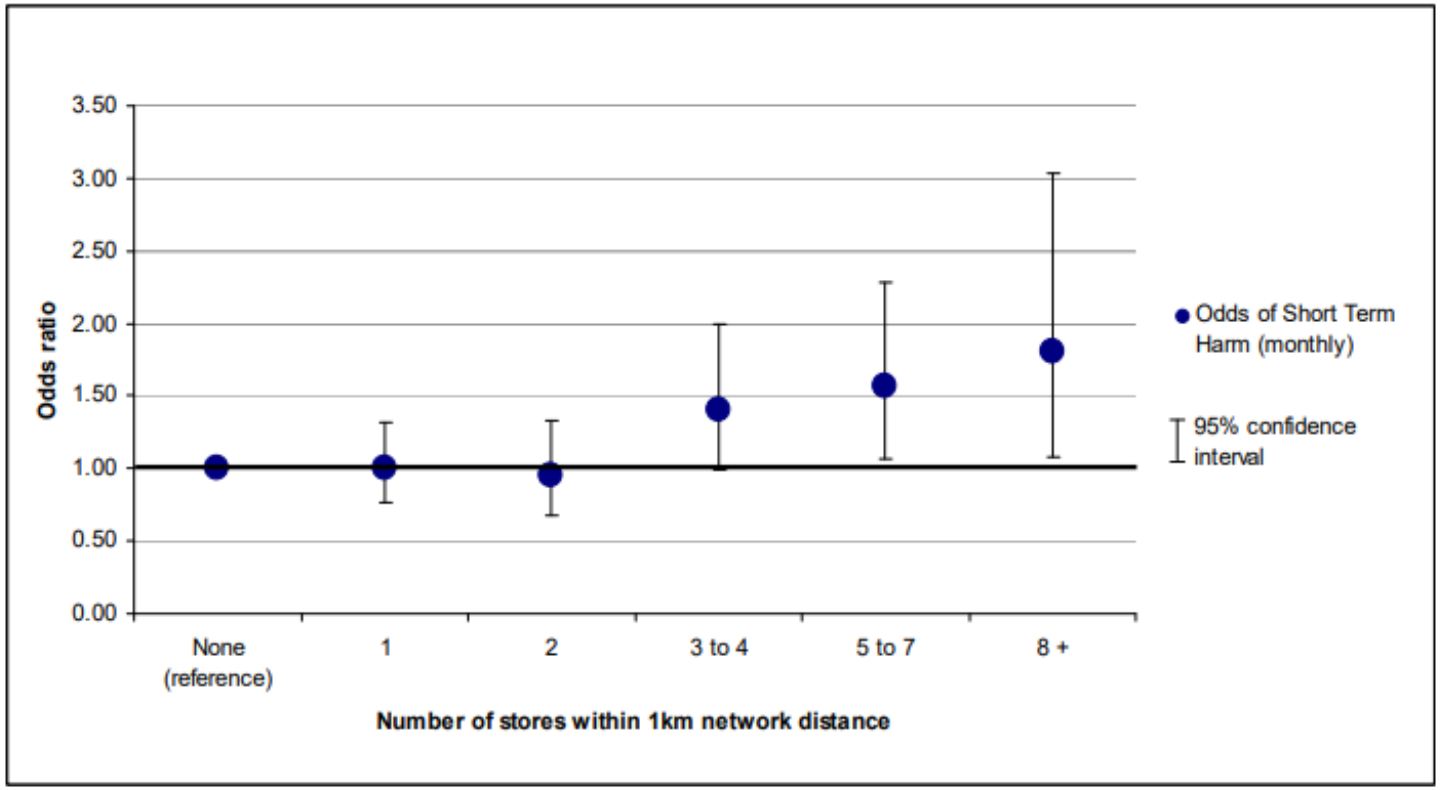
Cause specific relative risks by alcohol consumption.

Ian R White et al. BMJ 2002;325:191

thebmj

Accessibility to alcohol outlets and alcohol consumption: Findings from VicLANES. Professor Anne Kavanagh and Ms Lauren Krnjacki Centre for Women's Health, Gender and Society Melbourne School of Population Health The University of Melbourne

Figure 3: Odds of consumption at levels associated with short-term harm (monthly) by number of stores (within 1-kilometre network distance) compared to no stores



Economic Cost - AIHW

- “The estimated social cost of alcohol use in Australia was $66.8 billion in 2017–2018. Of the total tangible amount, workplace costs were $4.0 billion, with an estimated $3.6 billion due to absenteeism. This was followed by crime ($3.1 billion), total healthcare costs ($2.8 billion) and road traffic crashes ($2.4 billion). Of the total intangible amount, premature death was $25.9 billion and lost quality of life was $20.7 billion (Whetton et al. 2021).”
- “The estimated social cost for tobacco use in 2015–16 was $136.9 billion. ”
- Alcohol, tobacco & other drugs in Australia, Economic impacts - Australian Institute of Health and Welfare

Alcohol Market Growth and Projections

Australia's Alcohol Industry and Economic Outlook for 2025 - Vinsight

- The Australian liquor market was valued at AUD 27.20 billion in 2024 and is projected to grow at a compound annual growth rate (CAGR) of 4.20% from 2025 to 2034. This means that by 2034, the market could reach approximately AUD 41.04 billion. This growth is expected to be driven by:
- Increasing consumer interest in premium and craft beverages
- Expansion of online alcohol sales and delivery services
- Growth in non-alcoholic and low-alcohol beverage segments
- While these projections indicate a positive outlook for the industry, businesses will need to be adaptive in meeting changing consumer demands.

Alcohol- strategies to reduce use

- Media coverage on alcohol and violence, cancer, CV disease
- Minimum unit pricing per content of alcohol
- Restricting new sales outlets
- Restricting sales at particular times
- Banning home delivery

Consequences of alcohol use

- Family problems / family violence
- DUI, legal problems
- Unemployment, poverty
- Depression/anxiety/mental health
- Sleep disordered/OSA → HT → CV disease
- Accidents/trauma
- Cancer risk
- Hypertension → CV disease
- Fatty liver→ cirrhosis → anaemia, infection
- Lipid disorder → CV disease
- Cardiomyopathy
- Gastritis /GOR /pancreatitis
- Gout
- Nutritional deficiency –Wernicke/Korsakoff
- Dementia, cerebellar damage
- Insulin resistance T2DM
- hypogonadism

When to think of alcohol

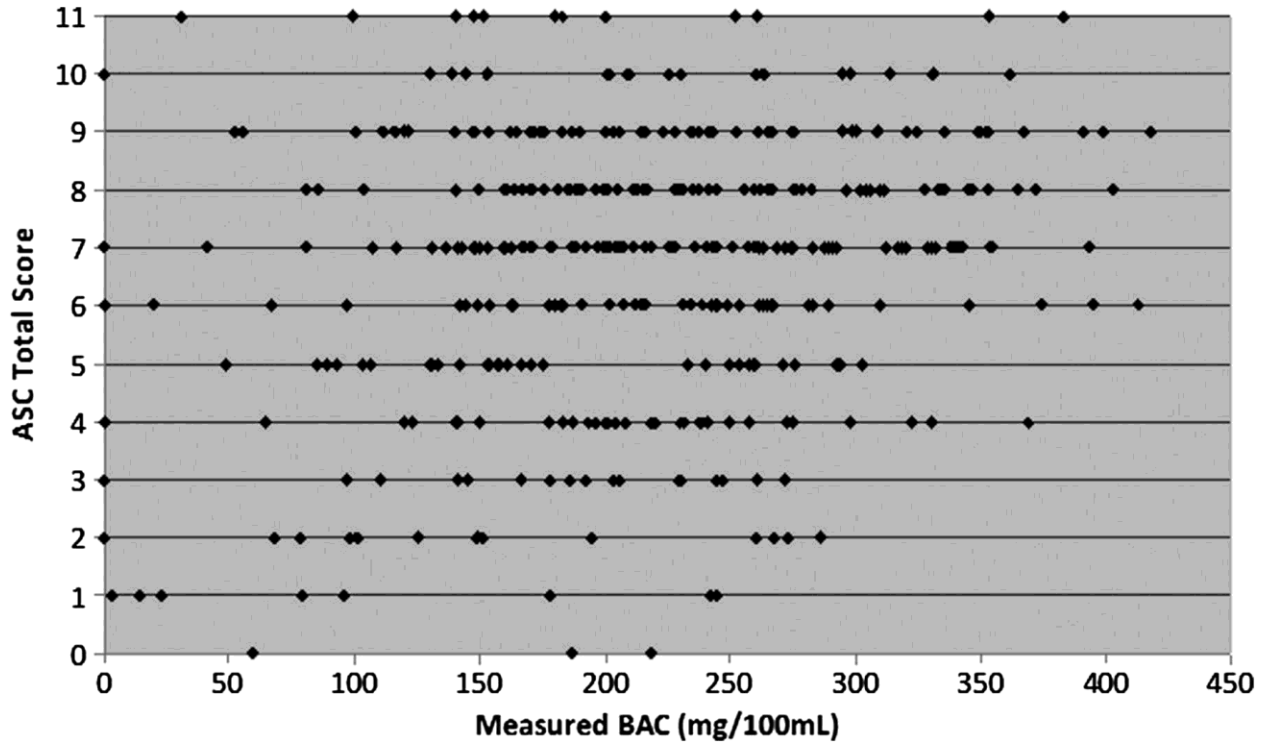
- Metabolic syndrome
- Resistant HT with raised resting pulse rate
- Sleep problems, OSA
- Gout
- Family problems
- Employment problems
- Injuries
- Anxiety disorder
- Seeking benzodiazepines
- Clinical signs, eg of liver disease or intoxication

Alcohol intoxication signs

- odour of alcohol on breath
- impaired fine motor control
- impaired gross motor control
- slurred speech
- change in speech volume
- decreased alertness
- Sweating
- slow or shallow respiration
- Sleepiness
- pace of speech
- red eyes.
- BUT – harder to detect intoxication in alcohol-tolerant patients- see next slide

Ability of ED doctors to predict blood alcohol based on signs and symptoms

Fig. 2. Correlation analysis of total score of the ASC (highest possible score =11) versus measured BAC (r = 0.250) ...



Alcohol Alcohol, Volume 48, Issue 4, July/August 2013, Pages 386–389, https://doi.org/10.1093/alcalc/agt042

Prevalence of AUD - AIHW

- 25% population drink > 10 stds/week
- 31% population drink at risky levels (>10 stds/week +/or bingeing).

Blood tests and Alcohol

- LFTs
  - GGT elevated but there are other causes!
  - AST /ALT ratio >2 = hepatocellular damage
- APRI score AST/platelet ratio
- Anaemia in cirrhosis/ MCV
- Lipids?
- Iron studies (ferritin, T saturation)
- CDT (Carbohydrate deficient transferrin) for long term use

Alcohol and metabolic syndrome

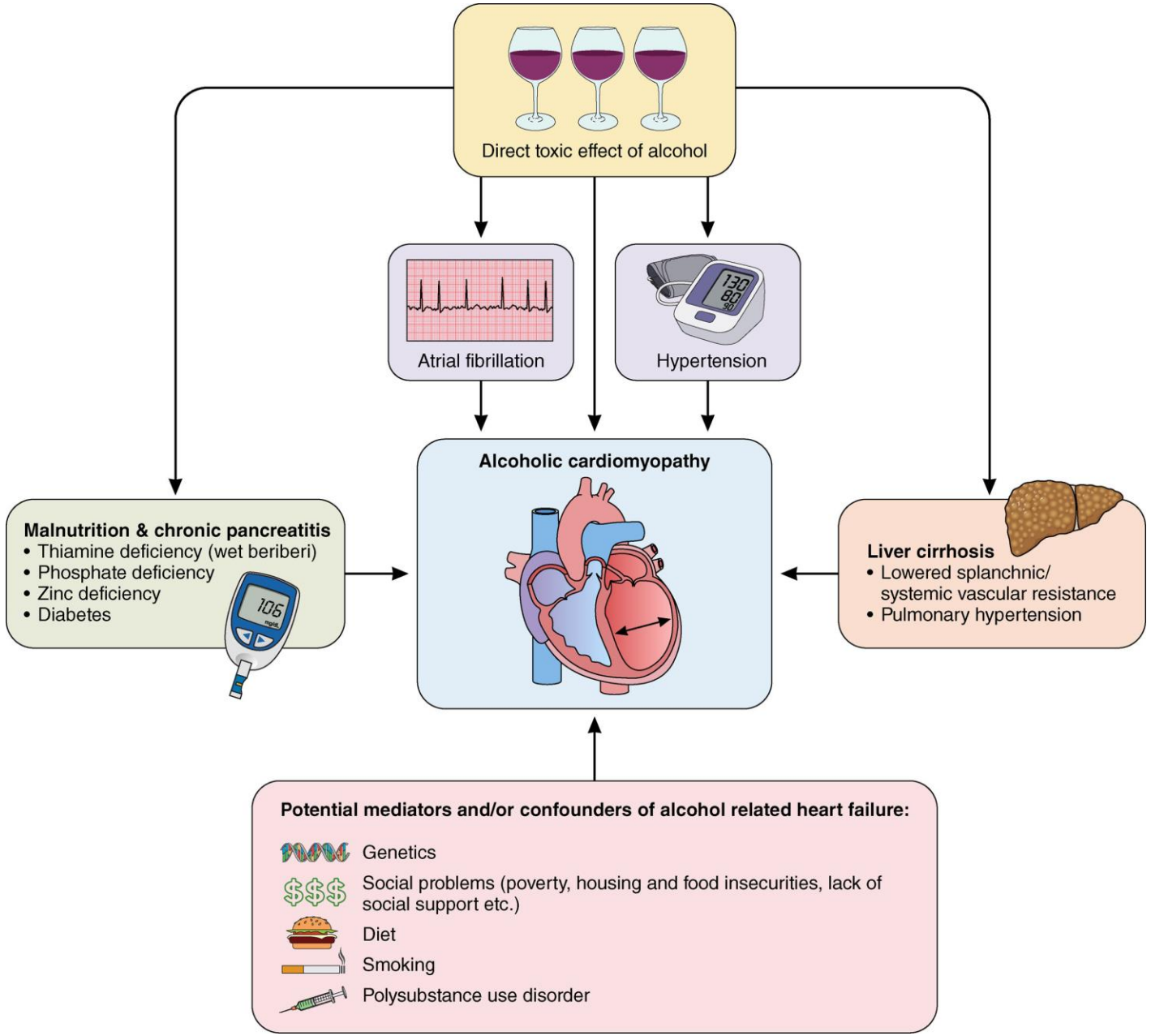
- Exact relationship unclear, certainly alcohol consumption worsens MetS
- combination of risk factors such as abdominal obesity, high blood glucose, hypertension and dyslipidemia (high TG, low HDL)
- Outcomes to consider: chronic liver disease, CVD, DM, CKD

Alcohol and CVD

- Cardiomyopathy
- Atrial fibrillation
- Coronary artery disease
- Cerebrovascular disease
- Hypertension (dependant on alc consumption >2 std/d)

Alcohol Intake in Patients With Cardiomyopathy and Heart Failure: Consensus and Controversy

Circulation: Heart Failure Volume 15, Number 8 https://doi.org/10.1161/CIRCHEARTFAILURE.121.009459



Alcohol and Cancer

Cancer Type	Risk increases associated with alcohol drinking*	Reference(s)
Oral cavity (mouth) and throat	1.8 times as likely in light drinkers 5 times as likely in heavy drinkers	4
Voice box	1.4 times as likely in light drinkers 2.6 times as likely in heavy drinkers	4
Esophageal (squamous cell carcinoma)	1.3 times as likely in light drinkers 5 times as likely in heavy drinkers	4
Liver	2 times as likely in heavy drinkers	4, 9, 10
Breast	1.04 times as likely in light drinkers 1.23 times as likely in moderate drinkers 1.6 times as likely in heavy drinkers	4, 11, 12
Colorectal	1.2 to 1.5 times as likely in moderate to heavy drinkers	4, 11, 13

Alcohol and dementia

Association between alcohol consumption and incidence of dementia in current drinkers: linear and non-linear mendelian randomization analysis Zheng, Lingling et al. Lancet eClinicalMedicine, Volume 76, 102810

- “ Ethanol and acetaldehyde (a metabolite) are neurotoxic and cause central nervous system inflammation, reduced numbers, and morphological changes in hippocampal neurons in animal models.[39] Alcohol can also induce brain atrophy with neuronal loss, particularly in the frontal cortex,[40] central nervous system inflammation and epilepsy, all of which contribute to dementia risk.[41] In a 30-year longitudinal study, multimodal magnetic resonance imaging (MRI) showed that even moderate alcohol intake was associated with adverse brain outcomes including hippocampal atrophy and impaired white matter microstructure.[42] In addition, the effect of alcohol on dementia can be indirect through diseases linked to higher intake of alcohol and dementia, such as liver and kidney disease, diabetes, hypertension, coronary heart disease, and stroke.[43–46] ”

Drugs to treat alcohol consumption

- Naltrexone (first-line treatment)
  - 50mg dose, daily vs pre-emptive. Aim is to reduce heavy drinking
  - Blocks Mu opioid receptor (reward)→ reduction in dopamine in NA
  - Interaction with prescribed opioids (blocks MOR)
  - 5 -17% better than placebo in various trials, NNT 9-18 depending on desired outcome
  - High dose IM (not available in Aust) better. Naltrexone implant?
  - Side effects headache, nausea, fatigue and lowered mood
- Acamprosate
  - reduces glutamine via NDMA receptor (and GABA-a to lesser extent), enhances taurine mediated suppression of nucleus accumbens
  - Counteracts Alc withdrawal effects, ie cravings. Aim is to maintain abstinence after alc cessation
  - 2 x 333mg TDS
  - Side effects abdo cramps, diarrhoea
  - Effectiveness is not clear –mixed results from trials
- Disulfiram
  - Blocks acetaldehyde dehydrogenase -> flushing, nausea, headache
  - 250mg or 500mg/d
  - 'Aversive' treatment vs 'supervised' treatment within counselling program (see Brewer et al)
  - Not PBS listed
- Topiramate –increasing evidence but not yet approved for AUD
  - Side effects paresthesia, mental "fogginess" changes in taste
  - 200mg/d
- Baclofen
  - GABA-b agonist
  - 30mg/d and up
  - Not mainstream treatment yet as efficacy and standard dosing not established
  - Risks when used together with alcohol
  - Overdose dangerous

Interventions in GP continued

- Active listening
  - "fully concentrating on a patient to understand their message, emotions, and needs through verbal and non-verbal cues, such as maintaining eye contact, using reflective paraphrasing, and asking clarifying questions"
- Brief interventions
  - "aim to inform people that they are drinking at levels that increase their risk of developing abuse or dependence disorders and to encourage them to decrease consumption to reduce risk"
- CBT
  - "identifying and changing the thought patterns and behaviours that lead to alcohol misuse, and teaching skills to manage cravings, cope with triggers, and prevent relapse"
- Motivational interviewing
  - "collaborative, patient-centered communication style that helps patients resolve ambivalence and find motivation for change, rather than confronting them. Key techniques include asking open questions, reflective lsitening and summarizing to build trust and confidence"
- See Insight Qhealth for free training https://insight.qld.edu.au/training/elearning
- Be aware of your own biases (or own drinking habits?)

Understanding Standard Drinks

- One standard drink
  - 10g of pure ethyl alcohol, or
  - 12.5mL (SG ethyl alcohol=0.789)

Screening tests

- AUDIT (alcohol use identification test)
  - Full version see Insight - Resources - Alcohol use disorders identification test (AUDIT) (10 questions)
- Short version AUDIT-C see RACGP - Resource F. Drug and alcohol assessment tool (3 questions)
  - 1. How often do you have a drink containing alcohol?
  - 2. How many drinks would you have on a typical day?
  - 3 How often do you have 6 or more drinks on one occasion?

- I find it useful to ask if they drink alcohol, and if so what type, so to establish what a standard drink is for them. Ask Q3 in terms of the answer.
- General practice is littered with unused screening tests!

Alcohol withdrawal management

- Excitatory brain state due to removal of GABA agonism
- Diazepam used in acute alcohol withdrawal
- Diazepam not indicated while patient is still drinking!
- Nutritional deficiencies need to be urgently addressed (thiamine, magnesium) otherwise risk of Wernickes
- Care to avoid refeeding syndrome -see above
- Rehab on completion important

Discussion

- Any questions from the audience?
- Any additional comments from our panel?

Scenario

1. **68-year-old patient who presents requesting home-based support to detox from a bottle of wine a day? They want to continue working and they are avoiding the AOD service as they know people who work there.**

2. **A high functioning professional in their 20s has revealed in consultation that they have been using alcohol daily to manage their mental health. They rarely come to the Dr. They've presented for an unrelated medical issue.**

For group discussion

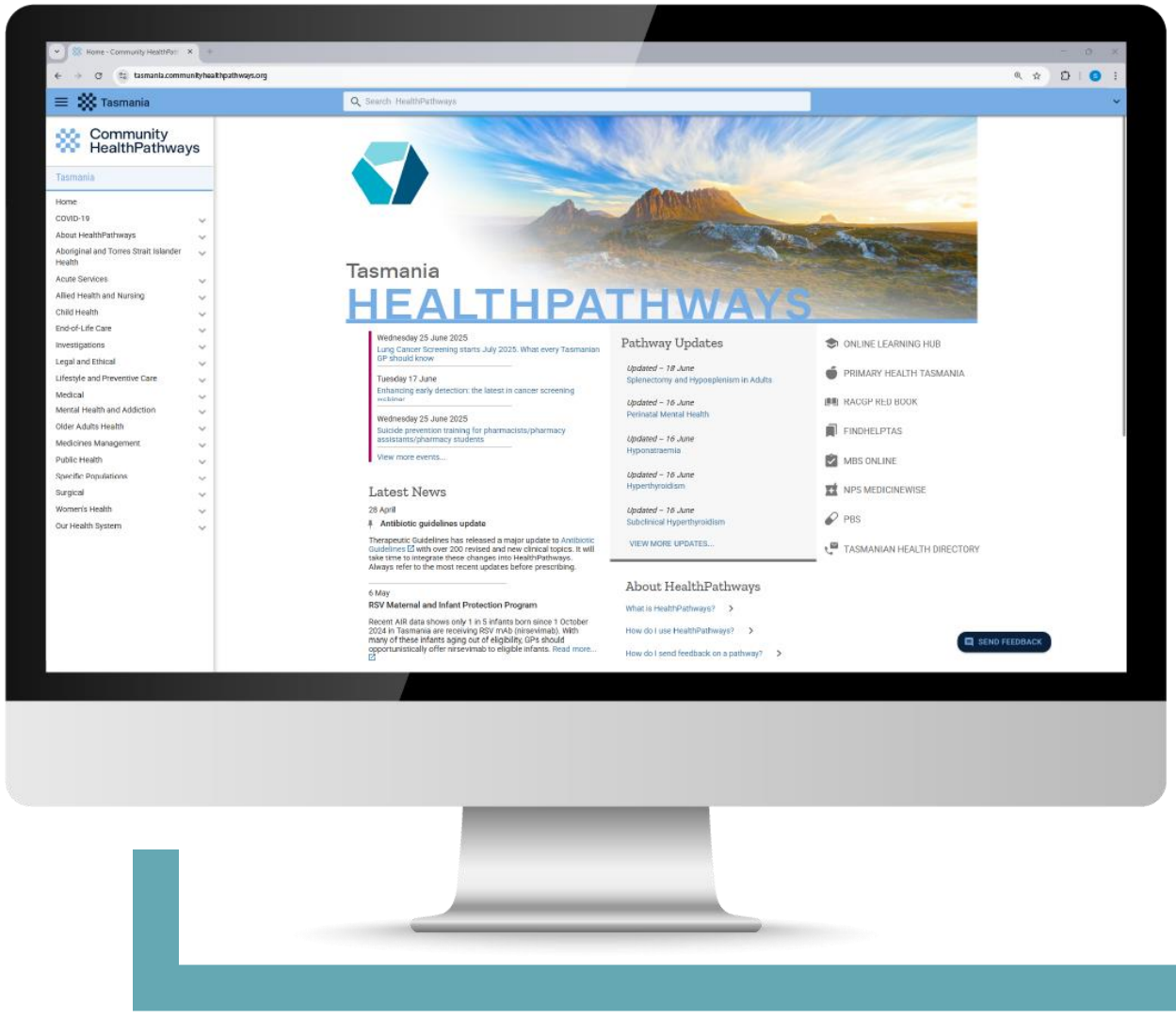
How would you support these patients?

Tasmanian HealthPathways

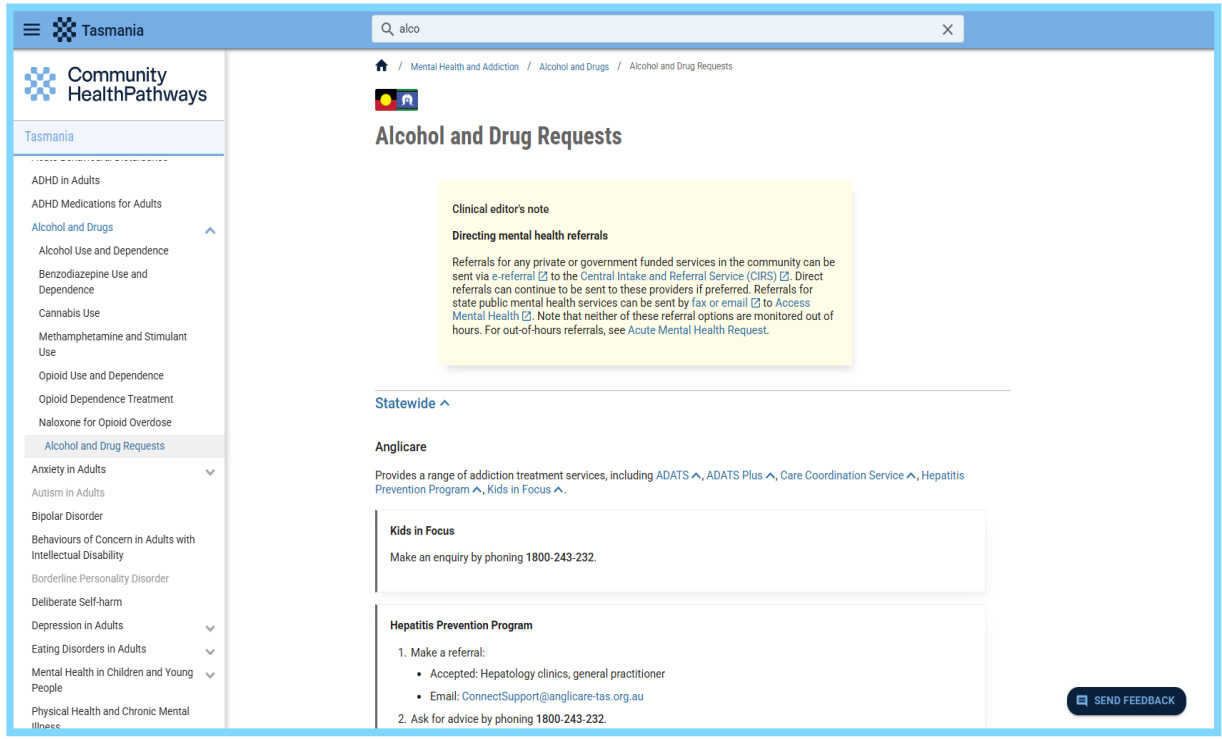
Tasmanian HealthPathways

is a web-based information portal developed by Primary Health Tasmania. It is designed to help primary care clinicians plan local patient care through primary, community and secondary healthcare systems.

tasmania.communityhealthpathways.org



Tasmanian HealthPathways



To gain access to HealthPathways, please email
healthpathways@primaryhealthtas.com.au

Some final words

- For event queries, please contact events@primaryhealthtas.com.au

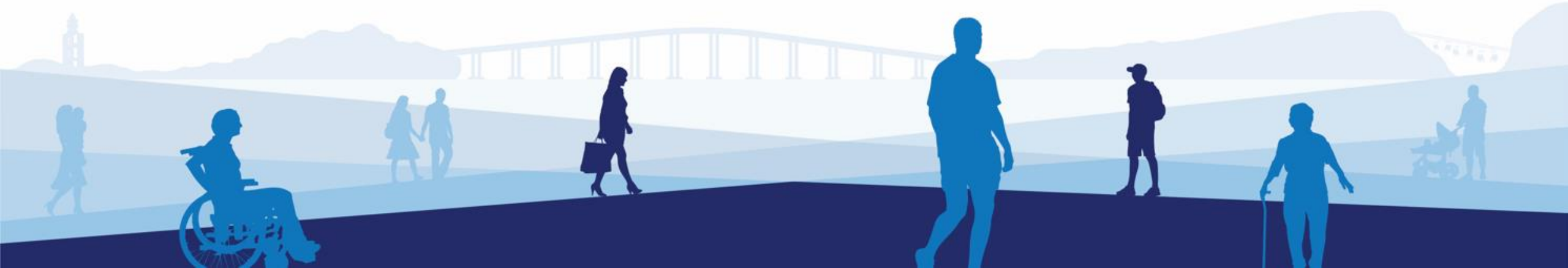
Session Evaluation Form

Thank you

Share a case Project AOD ECHO:
Alcohol and Drug services
Tasmania and PHT

Next Session: Wednesday 18 Feb 2026 1:00-1:45pm

Dependence on cannabis – non prescribed or medicinal; supporting withdrawal in primary care(TBC)



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