CREMS Webinar Series: Welcome!

UPCOMING WEBINARS

Prevention and Early Intervention of Mental Illness and Substance Use: Building the architecture for change

Tuesday 27 November 2018: 4:30PM AEDT
Presented by Professor Maree Teesson

Full details available at: http://comorbidity.edu.au/training/webinars
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What is CREMS?

CREMS = NHMRC Centre of Research Excellence in Mental Health and Substance Use

CREMS aims to significantly improve

- understanding
- prevention
- treatment

of comorbid mental health disorders and substance use
CREMS Team

NHMRC Centre of Research Excellence in Mental Health and Substance Use (CREMS)

Directed by Prof Maree Teesson
How and why should we treat comorbid depression and alcohol/other drug use problems in young veterans?

Associate Professor Frances Kay-Lambkin

Collaborators: Dr Sally Hunt, Associate Professor Carole James, Dr Doug Randell, Dr John Shephard, Dr Jane Rich, Jake Jubelin (PhD), Katrina Streatfeild (PhD),
Today…

- The prevalence and harms of co-occurring depression and alcohol use disorders.

- How we can use online technologies to treat depression and alcohol use problems, with a focus on young veterans?

- The potential benefits of clinician-assisted computerised treatment for depressive and addictive disorders among veterans, versus face-to-face treatment.
Definitions...

- Alcohol consumption: drinking at least one full serve of alcohol.

- Alcohol misuse: drinking in excess of guidelines to minimize harms associated with alcohol.

- Alcohol use disorders.

Mild = 2-3 criteria
Moderate = 4-5 criteria
Severe = 6+ criteria

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

- Alcohol is often taken in larger amounts or over a longer period than was intended.
- There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
- A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.
- Craving, or a strong desire or urge to use alcohol.
- Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home.
- Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
- Important social, occupational, or recreational activities are given up or reduced because of alcohol use.
- Recurrent alcohol use in situations in which it is physically hazardous.
- Alcohol 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.
- Tolerance, as defined by either of the following:
  - A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.
  - A markedly diminished effect with continued use of the same amount of alcohol.
- Withdrawal, as manifested by either of the following:
  - The characteristic withdrawal syndrome for alcohol (refer to Criteria A and B of the criteria set for alcohol withdrawal).
  - Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms.

B. For women who are breastfeeding, not drinking is the safest option.

Harms Associated with Alcohol Misuse…

Alcohol use contributes:

- 40% of the burden due to liver cancer
- 30% of the burden due to road traffic injuries involving motor vehicle occupants
- 28% of the burden due to chronic liver disease
- 15% of the burden due to suicide and self-inflicted injuries

<table>
<thead>
<tr>
<th>Short-term effects</th>
<th>Long-term effects</th>
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<tr>
<td>Reduced inhibitions</td>
<td>Oral, throat and breast cancers</td>
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<td>A sense of relaxation</td>
<td>Liver cirrhosis</td>
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<td>Loss of alertness or coordination, and slower reaction times</td>
<td>Brain damage and dementia</td>
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<tr>
<td>Impaired memory and judgement</td>
<td>Some forms of heart disease and stroke</td>
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<tr>
<td>Nausea, shakiness and vomiting</td>
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<td>Blurred or double vision</td>
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<td>Disturbed sleep patterns</td>
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<td>Disturbed sexual functioning</td>
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But isn’t a little alcohol healthy?

- 10-40% reduction in CHD.
- Studies frequently compared moderate level drinkers to non-drinkers – sick quitters?
- Not designed to detect negative consequences.
- Even at moderate levels, potential benefits are outweighed by potential harms.

Moderate Alcohol Consumption Lowers the Risk of Type 2 Diabetes

A meta-analysis of prospective observational studies

Lando L.J. Koppes, PhD,1,2 Jacqueline M. Dekker, PhD,1 Henk F.J. Hendriks, PhD,1 Lex H.D.1 and Robert J. Heine, MD, PhD1

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https://doi.org/10.2337/diacare.28.3.719

Moderate alcohol intake and lower risk of coronary heart disease: meta-analysis of effects on lipids and haemostatic factors

Eric B Rimm, Paige Williams, Kerry Fosher, Michael Criqui, Mein J Stamper

Abstract

Objective: To summarise quantitatively the association between moderate alcohol intake and biological markers of risk of coronary heart disease and to predict how these changes would lower the risk.

Introduction: The inverse association between men and coronary heart disease is over 40 prospective studies in diverse Men and women who consume one to moderate alcohol intake and lower risk of disease than those who abstain. In men risk of coronary heart disease decreases.
Alcohol Consumption in Australia

- The proportion of people drinking in excess of lifetime and single occasion risk guidelines has been declining since 2010.
- 46% of Australians approve of regular use of alcohol by adults.
- 77% of people aged 14 years + have consumed a full serve of alcohol in the previous 12 months (23% abstinent).
- Adult males were more likely to consume alcohol in the past year (86%) than females (76%).

Lifetime risky alcohol consumption

- 17.1% of Australians aged 14 years and over consume more than 2 standard drinks per day.
  - 1 in 4 males
  - 1 in 10 females
Single Occasion Risky Drinking

- 37% of Australians aged 14 and older drink more than 4 standard drinks on one occasion at least once a year.
- 1 in 4 (26%) did so at least once a month.
- 1 in 7 (13%) did so at least once a week.
- Males more than females
The consumption of beer per capita has decreased and wine has increased.

14+ lifetime and single occasion (monthly) risky drinking has declined.

Alcohol was the most common principal drug of concern for which clients sought treatment for in 2016–17.
Harms Associated with Alcohol Misuse...

- 5.5% of people that exceeded lifetime risk guidelines required medical attention or admission to hospital due to injuries sustained while drinking or due to intoxication, compared with 2% for low risk drinker.
- 8.4% of people who consumed 11 or more standard drinks at least monthly, required medical attention for their injuries.

Figure ALCOHOL5: Snapshot of harms among recent drinkers\(^a\) while under the influence of alcohol, 2016 (per cent)

- 2.8% were injured and required medical attention
- Victim of any alcohol-related incident:
  - 2010: 30
  - 2013: 28
  - 2016: 24
- 9.9% drove a motor vehicle

\(^a\) Consumed at least a full serve of alcohol in the previous 12 months.

Source: AIHW; Table S2.64, S2.65, S2.66
On average, Australians seek treatment 18 years after onset.

- Lifetime treatment rate is 34.6%
- Current treatment coverage is 11%

At Risk Populations for Alcohol Use Disorders...

- Harms related to alcohol misuse are not experienced uniformly across our community.
  - Aboriginal and Torres Strait Islander peoples
  - People with a mental illness
  - Young people
  - People in remote areas
As we age, Australians are significantly less likely to exceed single occasion risk guidelines for alcohol (4+ on one occasion).

Over the past 15 years, more young people than ever before are abstinent from alcohol (10.6% in 2001 vs. 18.5% in 2016).

In 2016, 42% of Australians aged 18–24 reported exceeding the single occasion risk guideline, a significant decline from 57% in 2001.

Australian Secondary Students Alcohol/other Drug Study:

- 82% teenagers aged 12–17 abstained from drinking in 2016, vs. 72% 2013.
- Average age of first drink was 16.1 years in 2016 vs. 14.7 years in 2001.
Alcohol use disorders peak in adolescence
Burden highest in young adults

Slade, Johnston, Oakley Brown, Andrews & Whitford, 2009 ANZJP
Barriers to treatment access in youth

- Half as likely to visit a GP for a mental health problem than general population
- Less than ¼ access mental health services
- Services not catering well for comorbid mental illness and alcohol/other drug use in young people;
- Service access designed around the need for young people to come to them, rather than taking services to where young people already are;
- Fear of confidentiality breaches, lack of trust, and embarrassment in discussing personal issues;
- Lack of awareness and knowledge about services and how to access them
People with Mental Health Problems

- Being diagnosed with a mental health problem places Australians at 1.2-1.3 times more risk of problematic alcohol consumption.
- Self-medication hypothesis: alcohol use triggers mental health problems, mutual influence.
- Lifetime risk for people with Mental Health Problems was 19% vs. 17% for the general population.
- Low-risk drinking and abstinence among people with Mental Health Problems was 14% vs. 23% for the general population.
Comorbidity is the rule

- 25-50% of people experience comorbidity
  - >1 mental disorder
  - One mental disorder and 1+ physical conditions
- Every year, approx. 340,000 Australians experience the combination of a mental health and alcohol/other drug problem
  - Excluding tobacco alone
  - Increasing by approx. 10% annually

AIHW (2012) Comorbidity of mental disorders & physical conditions
Sacks et al. (2013) J Substance Ab Treat, 44: 48-493
In Defence Force Personnel

- A systematic review of the literature on prevalence of mental disorders in Australian veterans...only 2 reports, commissioned by the Commonwealth.
- Mental health disorders appear to be exacerbated after leaving the ADF
  - Lifetime prevalence of any mental disorder in current-serving ADF members is 54%.
  - Lifetime prevalence of any mental disorder in transitioned ADF members is 75%.
  - Lifetime prevalence of any mental disorder in civilian Australian population is 46%.
- Ex-serving ADF members vs Civilian population
  - High-very high psychological distress – 33% vs. 13% (19% current serving).
  - Past 12-month mental disorder – 46% vs. 20%.
  - Past 12-month affective disorder - 23% vs. 6%.
  - Past 12-month alcohol use disorder – 13% vs. 5%.
In Defence Force Personnel

- The same rates of treatment access for mental health and related problems
  - Approximately 1/3 in ex-service personnel
  - This is even lower among younger veterans (45 years and younger)
  - Ex-Service Organisations have a large role to play

- ASPEN Medical ESO scoping review:
  - Difficulties engaging younger Veteran populations

- Need to emphasise technology, such as telemedicine and smartphones, as the uptake of smartphone and other related technology is wide in the contemporary Veteran population
So... what can we do?
Why don’t people seek treatment?

(Barker, et al., 2005; Rickwood, et al., 2007)

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How do we overcome these barriers?
The potential of eHealth to respond...

- eHealth = rapidly expanding field of health information and communication technology.

- Widespread recognition within health sector that better use of e-health initiatives should play a critical role in improving the healthcare system.

- Increasing acceptance for individuals to take a more active role in protecting their health and participating in their own health care.
Internet World Penetration Rates by Geographic Regions - December 31, 2017

North America: 95.0%
Europe: 85.2%
Australia / Oceania: 68.9%
Latin America / Caribbean: 67.0%
Middle East: 64.5%
World, Avg.: 54.4%
Asia: 48.1%
Africa: 35.2%

Source: Internet World Stats - www.internetworldstats.com/stats.htm
Penetration Rates are based on a world population of 7,634,758,428 and 4,156,932,140 estimated Internet users in December 31, 2017.
Copyright © 2018, Miniwatts Marketing Group
% of Australian mobile phone users who own a smartphone

Expected to reach 68% of Australian population by Dec 2018.
Potential of eHealth as a tool to overcome barriers to treatment in mental health and AOD...

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The SHADE program

- 10 modules of CBT/MI and mindfulness
  - Behavioural activation
  - Managing thoughts
  - Problem solving
  - Drink/drug refusal
  - Coping with cravings
  - Relapse prevention
Clinician-assistance

- “Check-in” sessions
  - Suicide/mood assessment
  - Plan for completing homework
  - Make next appointment
  - Occurred at the conclusion of therapist-delivered and SHADE sessions

- Manualized, tape recorded and timed
  - SHADE check-in sessions averaged 16 minutes per week
Person Centred Therapy (PCT)

1 session CBT/MI + 9 sessions PCT

PCT:
- Sellman et al. – Christchurch School of Medicine
- Content/direction set by participant
- Supportive, reflective listening
  - Genuineness or congruence
  - Unconditional positive regard
- Accurate empathy
- No CBT/MI strategies
- Matched for therapist contact
Demographics (N=274)

- **Males**: 57%
- **Mean Age**: 40 yrs
- **Education**
  - Age at leaving school: 16 yrs
- **Employment Status**
  - Employed at least part-time: 42%
  - Disability benefit: 20%
  - Unemployment benefit: 24%
- **Primacy**
  - Depression: 54%
  - Substance use: 16%
  - Inter-related: 30%
  - Not related to treatment outcome
Treatment Attendance

- 100% compliance (all 10 sessions = mode) – p=0.302
  - Therapist = 41%
  - CAC = 36%
  - PCT = 38%

- Average sessions attended – p=0.353
  - Therapist = 6.12 (SD 3.79)
  - CAC = 5.28 (SD 3.92)
  - PCT = 5.37 (SD 4.07)

- Median sessions attended
  - Therapist = 7
  - CAC = 4.5
  - PCT = 4

- Not related to treatment outcomes
Effect size differences: baseline – 36/12
Therapist: $d=1.69$
Clinician-assisted SHADE: $d=1.55$
PCT (control): $d=0.79$
Alcohol use (n=168)

- Effect size differences: 36/12
- Therapist: $d=0.90$
- CA SHADE: $d=1.04$
- PCT: $d=-0.17$
Clinician-assisted computerised versus therapist-delivered treatment for depressive and addictive disorders: a randomised controlled trial

Frances J Kay-Lambkin, Amanda L Baker, Brian Kelly and Terry J Lewin

There is increasing recognition of the impact of common disorders such as depression and misuse of alcohol and other drugs (AOD) on illness-related burden and health care costs. Comorbidity is the rule rather than the exception, with up to 89% of people with AOD use disorders also experiencing depression. Available evidence-based treatment manuals focus on treatment for single problems rather than comorbid conditions. Moreover, despite the availability of effective treatments for depression and AOD-related disorders, there is a substantial gap between treatment need and accessibility. As the treatments are often high-intensity and require specialist training, they are only accessible to a minority of people in need. The presence of comorbid disorders compounds difficulties in treatment access and provision. Computer-based treatments may improve access to and acceptability of treatments for these common mental health problems.

Objective: To compare computer-delivered and therapist-delivered treatments for people with depression and comorbid addictive disorders.

Design: Randomised controlled clinical trial.

Setting and participants: Our study was conducted between January 2005 and August 2007 in seven rural or urban New South Wales. Participants were 274 people who had a Beck Depression Inventory II (BDI-II) score ≥ 17 and were using alcohol and/or cannabis at harmful levels in the month before baseline. They were self-referred or referred from other sources such as outpatient drug treatment clinics, general practices and non-government support agencies.

Interventions: Participants were randomly allocated to receive (1) integrated cognitive behaviour therapy and motivational interviewing (CBT/MI) delivered by a therapist; (2) integrated CBT/MI delivered by computer, with brief therapist assistance at the end of each session (clinician-assisted computerised [CAC] treatment); or (3) person-centred therapy (PCT), consisting of supportive counselling given by a therapist (the control group). All three treatments were delivered according to a manual developed specifically for the study.

Main outcome measures: Changes in depression, alcohol use and cannabis use at 3 months after baseline; significant predictors of change in the primary outcome variables.

Results: Compared with computer- or therapist-delivered CBT/MI, PCT was associated with significantly less reduction in depression and alcohol consumption at 3 months. CAC therapy was associated with improvement at least equivalent to that achieved by therapist-delivered treatment, with superior results as far as reducing alcohol consumption. Change in depression was significantly predicted by change in alcohol use (in the same direction) and an ability to determine primary, irrespective of whether this was for drug use or depression. Change in alcohol use was significantly predicted by changes in cannabis use and depression, and change in cannabis use by change in alcohol use. In the regression model, treatment allocation did not independently predict change, but was associated with significant reduction in depression and alcohol use at 3 months.

Conclusions: Over a 3-month period, CBT/MI was associated with a better treatment response than supportive counselling. CAC therapy was associated with greater reduction in alcohol use than therapist-delivered treatment.

Trial registration number: ACTRN12610000274077.
SHADE study

- No differences in therapeutic alliance or treatment satisfaction for therapist-delivered versus SHADE treatment.
- No relationship between treatment preference and retention, alliance or perceptions.
- If no preference, significantly greater benefit for alcohol use from SHADE.
Old People
It's funny when they think they are 'hip'...
In younger populations...

- In younger age groups (18-30 years), the need to talk to a ‘real’ person in ‘real’ time was prohibitive.
- Removed the in-person/phone call, significantly increased engagement.
- In younger age groups (18-30 years), still want clinical oversight, but want it in the background.
vSHADE project

- Funded by Defence Health Foundation
- Mood, alcohol use problems
- Partnership with ASPEN Medical and the University of Newcastle
- Approved by DDDVA HREC and UON HREC
- Recruit 150 Australians aged 18-44 years
- Evaluate SHADE +/- Breathing Space

www.vshade.com.au
Breathing Space

• Closed social network.
• Similar to Facebook.
• Encourage discussions about health, drinking reduction, mood.
• Social support for change
• Encourage uptake of SHADE?

DOWNLOAD THE APP

[Icons for App Store and Google Play]
THANK YOU


Email: frances.kaylambkin@newcastle.edu.au

Twitter: @DrFranKayLamb
Sources
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Join us again:

Tuesday 27 November 2018: 4:30PM AEDT
Prevention and Early Intervention of Mental Illness and Substance Use: Building the architecture for change
Presented by Professor Maree Teesson

Example past webinars:

Title
Post-traumatic stress disorder and substance use: Promising new treatments for adults and adolescents
Description
Presented by A/Prof Kath Mills and Dr Natalie Peach.
Date and Time
Thu, May 10, 2018 10:00 AM - 11:00 AM AEST
https://vimeo.com/268912651