MI and CBT to reduce substance use problems and improve mental health and well-being

*Amanda Baker PhD*

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Acknowledgments – Prof James Rankin; APSAD

• “The drug and alcohol area does not fit into any single professional area: it is truly interdisciplinary...”
  Prof James Rankin, 2000

Overview

• History – as a clinical psychologist
• MI/CBT – some treatment findings
  – MA
  – Alcohol and depression
  – Tobacco
• Healthy lifestyles
• Recommendations for practice
Health Issues 1984

- Deinstitutionalization
- Severe mental illness
- Motivational Interviewing
- HIV epidemic & harm reduction

Dual Diagnosis 1990s

- Mental Disorders
- Substance Use Disorders
- Dual Diagnosis
Treatments Silos

National Survey of MH & Well-being

- Concluded that:

“Whilst Australia has focused some research effort on comorbid mental health and substance use problems, comorbidity with physical disorders also warrants attention, with the evidence for the most appropriate treatment response to these comorbidities being particularly limited” (Teesson et al 2007).
Treatment Silos

Multiple drug and alcohol silos
Multiple mental health silos

Well-being

- Following substance use treatment, quality of life in the
  - physical
  - psychological
  - social and
  - environmental domains remains below Australian norms

(Manning et al 2016)
Ditch the silos?

One integrated service?
Excessive Appetite

Core elements:
• skewed consumption
• restraint
• + incentive learning mechanisms
  – rapid emotional change as rewards
  – wide cue conditioning
• cognitive schema
• conflict

Excessive Appetite

• **Strong attachment** to an appetitive activity
  – self-control is diminished
  – behaviour may appear to be disease-like

• **Giving up excess**
  – is a natural consequence of conflict

• Much change happens outside expert treatment

• Treatment change processes - more basic and universal
Motivational interviewing

- A client centered approach to working with a person to:
  - Strengthen their motivation
  - Resolve ambivalence
  - Build a plan for change

Cognitive Behaviour Therapy

- CBT
  - therapist and client work together in changing the client’s behaviours, or their thinking patterns, or both of these.
Counselling relationship

- Therapist
  - Empathy
  - Warmth
  - Reflection
  - MI (consistency)
- Working alliance
- Client feedback

- Measure / Training
  (Miller & Moyers 2014)

MI/CBT Methamphetamine

- Control, 2 or 4 sessions

- \(\geq 2\) sessions doubled abstinence (6m)

- More sessions: significantly improved depression
  (Baker et al 2001; Baker et al 2005)
Acceptance & Commitment Therapy (ACT)

- 12 ACT vs 4 CBT
- Median 3 sessions
- MA / dep ↓ 12, 26 w
- Hair samples; physical; polydrug favoured CBT
- High attrition
- Worthy of further research (Smout et al 2010)

MI/CBT Psychosis Sample

- Psychotic disorders
- RCT: MI/CBT 10 sessions vs control
- 42% MA abuse/dep
- Large effect of MI/CBT at 12m (Baker et al 2006)
MI/CBT for MA

- Effective
- ?CM
- Involve families
- Cognitive
- Healthy lifestyle
- Maintenance

Regular articles

Randomized controlled trial of MICBT for co-existing alcohol misuse and depression: Outcomes to 36-months

Amanda L. Baker, Ph.D. a,b, David J. Kavanagh, Ph.D. b, Frances J. Kay-Lambkin, Ph.D. c, Sally A. Hunt, M.Psych. (Clin.) a, Terry J. Lewin, B.Com. (Psych)Hons. d, Vaughan J. Carr, M.D. e, Patrick McElduff, Ph.D. f

a Center for Translational Neuroscience and Mental Health, The University of Newcastle, Callaghan NSW 2308, Australia
b Institute of Health and Biomedical Innovation and School of Psychology & Counselling, Queensland University of Technology, Queensland 4001, Australia
c National Drug and Alcohol Research Centre, University of New South Wales, NSW 2052, Australia
d Hunter New England Mental Health, Newcastle NSW 2300, Australia
e Schizophrenia Research Institute and School of Psychiatry, University of New South Wales, NSW 2052, Australia
f School of Medicine and Public Health, The University of Newcastle, Callaghan NSW 2308, Australia
MI/CBT Alcohol and Depression

• Reliable reductions lowest (Manning et al 2016)

• DAISI project
  – BI, Single, Integrated
  – Start with a brief integrated intervention and step up treatment, monitoring MH / AOD

(Baker et al 2010; 2014)

MI/CBT for Alcohol and Depression

• Effective

• Involve families & social networks
  (Copello et al 2006, 2006, 2009)

• Cognitive

• Healthy Lifestyle

• Maintenance
Maintenance - Mutual Aid

• Mutual aid attendance predicted treatment success (alcohol)
  (Manning et al 2016)

• Evaluate SMART Recovery and 12-step approaches

Tobacco
Fears about worsening AOD use and mental health

Tobacco

- Less behavioural disturbance
- Fears of patients not coping/aggression
- NRT widely available

Hughes & Weiss (2005)
“A national disgrace”


- Life expectancy shorter
- Cardiovascular disease: single largest cause of the death

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**Leading causes of death**

*(AIHW 2012)*

<table>
<thead>
<tr>
<th></th>
<th>Men %</th>
<th></th>
<th>Women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD</td>
<td>16.7</td>
<td>CHD</td>
<td>15.3</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>6.6</td>
<td>Stroke</td>
<td>9.8</td>
</tr>
<tr>
<td>Stroke</td>
<td>6.2</td>
<td>Dementia</td>
<td>8.0</td>
</tr>
<tr>
<td>Respiratory</td>
<td>4.4</td>
<td>Lung cancer</td>
<td>4.4</td>
</tr>
<tr>
<td>Prostate cancer</td>
<td>4.3</td>
<td>Breast cancer</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Unhealthy behaviours and leading preventable causes of death
(AIHW 2012)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Behaviour</th>
<th>Biomedical</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD/stroke</td>
<td>Smoking, Inactivity, Alcohol, Diet</td>
<td>Obesity, high BP,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cholesterol</td>
</tr>
<tr>
<td>Cancers</td>
<td>Smoking, Inactivity, Alcohol, Diet</td>
<td>Obesity</td>
</tr>
<tr>
<td>Respiratory</td>
<td>Smoking</td>
<td></td>
</tr>
</tbody>
</table>

Health score of 0 vs 4 = 14 year difference in chronological age for mortality risk
(Khaw et al 2008)
Smoking rates in D&A treatment populations

% smoker

<table>
<thead>
<tr>
<th>Study</th>
<th>smoker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richter et al</td>
<td>77</td>
</tr>
<tr>
<td>Clemmey et al</td>
<td>92</td>
</tr>
<tr>
<td>Shakeshaft et al</td>
<td>74</td>
</tr>
<tr>
<td>Kelly et al</td>
<td>77</td>
</tr>
<tr>
<td>Bowman et al</td>
<td>84</td>
</tr>
</tbody>
</table>

Service consumers are interested in quitting

- N = 228 smokers in residential D&A treatment
- 75% had tried quitting in the past
- 67% were ‘seriously thinking about quitting’

Kelly et al, 2012
D&A clients are able to quit - cessation rates in four trials

![Bar chart showing quit rates](chart.png)

Multiple risk profiles in inpatients

(Prochaska et al 2014)

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>% at risk</th>
<th>Behaviour</th>
<th>% prepared 30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>100</td>
<td>Depression prevent</td>
<td>76</td>
</tr>
<tr>
<td>High fat diet</td>
<td>68</td>
<td>Stimulant use</td>
<td>74</td>
</tr>
<tr>
<td>F &amp; V</td>
<td>67</td>
<td>Stress management</td>
<td>69</td>
</tr>
<tr>
<td>Sleep hygiene</td>
<td>53</td>
<td>Sleep hygiene</td>
<td>69</td>
</tr>
<tr>
<td>Inactivity</td>
<td>52</td>
<td>Non-Rx opiate use</td>
<td>68</td>
</tr>
<tr>
<td>Cannabis</td>
<td>46</td>
<td>Binge drinking</td>
<td>57</td>
</tr>
<tr>
<td>Depression prevent</td>
<td>43</td>
<td>Inactivity</td>
<td>51</td>
</tr>
<tr>
<td>Stress management</td>
<td>42</td>
<td>F &amp; V</td>
<td>46</td>
</tr>
<tr>
<td>Binge drinking</td>
<td>26</td>
<td>High fat diet</td>
<td>43</td>
</tr>
<tr>
<td>Stimulant use</td>
<td>22</td>
<td>Cannabis</td>
<td>23</td>
</tr>
<tr>
<td>Non-Rx opioids</td>
<td>11</td>
<td>Tobacco</td>
<td>23</td>
</tr>
</tbody>
</table>
Multi-component interventions: feasible, effective, and more efficient *(Spring et al 2010)*

A Randomized Controlled Trial of a Smoking Cessation Intervention Among People With a Psychotic Disorder

Amanda Baker, Ph.D.
Robyn Richmond, Ph.D.
Melanie Hall, M.Psych.(Appl.)
Terry J. Lewin, B.Com.(Psych.) Hons.
Vaughn J. Carr, M.D., F.R.A.N.Z.C.P.
Sylvia Jansons, R.N.
Kay Wilhelm, M.D., F.R.A.N.Z.C.P.

**Objective:** Despite extremely high rates of smoking among individuals with psychotic disorders and the associated financial and health costs, few studies have investigated the efficacy of smoking cessation interventions among this group. The purpose of this study was to compare an integrated psychological and nicotine replacement therapy intervention for people with a psychotic disorder with routine care alone.

**Method:** The authors recruited 208 regular smokers with a psychotic disorder residing in the community and randomly assigned them to a routine care comparison condition (N=151) or an eight-session, individually administered smoking cessation intervention (N=147), which consisted of nicotine replacement therapy, motivational interviewing, and cognitive behavior therapy. Outcome variables included continuous and point-prevalence abstinence rates, smoking reduction state, and changes in symptoms and functioning.

**Results:** While there were no overall differences between the treatment group and comparison group in abstinence rates, a significantly higher proportion of smokers who completed all treatment sessions stopped smoking at each of the follow-up occasions (point-prevalence rates: 3 months, 30.0% vs 6.0%; 6 months, 10.6% vs 4.0%; and 12 months, 10.6% vs 6.6%). Smokers who completed all treatment sessions were also more likely to have achieved continuous abstinence at 3 months (21.4% vs 4.0%). There was a strong dose-response relationship between treatment session attendance and smoking reduction status, with one-half of those who completed the intervention program achieving a 50% or greater reduction in daily cigarette consumption across the follow-ups, relative to less than one-fifth of the comparison subjects. There was no evidence of any associated deterioration in symptoms or functioning.

**Conclusions:** These findings demonstrate the utility of a nicotine replacement therapy plus motivational interviewing/cognitive behavior therapy smoking cessation intervention among individuals with a psychotic disorder. Further development of more efficacious interventions is required for those who do not respond to existing interventions.
Coronary heart disease risk reduction intervention among overweight smokers with a psychotic disorder: pilot trial

Amanda Baker*, Robyn Richmond†, David Castle‡, Jayashri Kulkarni§, Frances Kay-Lambkin*, Rebecca Sakroug*, Sacha Filia*; Terry J. Lewin*

*Centre for Brain and Mental Health Research (CSMHR), Faculty of Health, University of Newcastle, Callaghan, NSW, Australia
†School of Public Health and Community Medicine, University of New South Wales, Sydney, New South Wales, Australia
‡University of Melbourne, *Department of Psychiatry, St Vincent’s Hospital, Melbourne, Victoria, Australia
§Alfred Psychiatry Research Centre, The Alfred School of Psychology, Psychiatry and Psychological Medicine, Monash University, Melbourne, Victoria, Australia

Online Publication Date: 01 February 2009

Nicotine & Tobacco Research Advance Access published April 1, 2015

Amanda L. Baker PhD, Robyn Richmond PhD, Frances J. Kay-Lambkin PhD, Sacha L. Filia BSc(Hons), David Castle MD, Jill M. Williams MD, Terry J. Lewin BCom(MPsych)Hons, Vanessa Clark BPsych Hons, Robin Callister PhD, Natasha Weaver PhD

Original Investigation

Randomized Controlled Trial of a Healthy Lifestyle Intervention Among Smokers With Psychotic Disorders

Amanda L. Baker PhD, Robyn Richmond PhD, Frances J. Kay-Lambkin PhD, Sacha L. Filia BSc(Hons), David Castle MD, Jill M. Williams MD, Terry J. Lewin BCom(MPsych)Hons, Vanessa Clark BPsych Hons, Robin Callister PhD, Natasha Weaver PhD

1Priority Research Centre for Translational Neuroscience and Mental Health, University of Newcastle, Callaghan, Australia
2School of Public Health and Community Medicine, University of New South Wales, Sydney, Australia
3National Drug and Alcohol Research Centre, University of New South Wales, Sydney, Australia
4Monash Alfred Psychiatry Research Centre, Central Clinical School, Monash University, Alfred Hospital, Melbourne, Australia
5University of Melbourne and Department of Psychiatry, St Vincent’s Hospital, Fitzroy, Australia
6Division of Addiction Psychiatry, Rutgers- Robert Wood Johnson Medical School, New Brunswick, NJ, USA
7Mental Health Research, Evaluation, Analysis and Dissemination Unit, Hunter New England Mental Health, Newcastle, Australia
8Priority Research Centre for Nutrition and Physical Activity, University of Newcastle, Callaghan, Australia
9Clinical Research Design, IT and Statistical Support Unit, School of Medicine and Public Health, University of Newcastle, Callaghan, Australia

Corresponding Author: Amanda L. Baker, PhD, Priority Research Centre for Translational Neuroscience and Mental Health, University of Newcastle, Callaghan, 2308, NSW, Australia. Telephone: 61-2-40335690; Fax: 61-2-40335682; E-mail: amanda.baker@newcastle.edu.au
RCTs in progress

- **Peer delivery** in mental health settings by telephone (NEAMI, MIND)
- **Groups** within residential rehabilitation settings (The Salvation Army)
  - Kelly et al: feasible / results this conference
- **Quitline** Victoria
Summary of RCTs

• Mental health, substance use & physical health risk factors cluster together

• We can assist people to work on a few behaviours at a time if they want to

• Allows flexibility, success over time

Other groups

• Head and neck cancer: smoking, alcohol, diet
• Cardiac rehabilitation
• Stroke

• Young people disengaging from work and school (telephone)

• Mutual aid participants (SMART Recovery)
Conclusion (1)

- MI/CBT is effective

- Can target multiple behaviours

- Include
  - Family
  - Mutual aid groups
  - Telephone

Improving the quality of psychosocial interventions
Conclusion (2)

• “We need to go beyond interventions focused on the individual or family to include the local community and national policy” ...  
  (James McKay 2016)

• APSAD provides good opportunities for clinicians, community workers, policy makers and researchers to collaborate and work to improve treatment outcomes

Tip for the day

• Who Shot Thebarman
THANK YOU

Newcastle, Australia