A systematic review of the impact of brief interventions on substance use and co-morbid physical and mental health conditions.

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Background: Brief Intervention (BI)

- Research on BI for smoking 3 decades
  - Practitioner BA increase smoking cessation NICE, 2006

- BI for alcohol 2 decades
  - +ve effects of BI most consistent non-treatment seeking, Moyer et al, 2002
  - No sig. benefit of longer/more intensive, Kaner et al, 2007

- Large amount of high quality research
Impact on Practice

- Quality and Outcomes Framework (QoF)
  - Nationally prioritized areas of clinical activity
  - Financial incentive

- Minimal uptake of BI for alcohol in practice

- Low incentive for practitioners - no clear link of brief alcohol intervention improves patient health
Research Questions

1. Can BI bring positive change in index behaviour and comorbid physical or mental health condition?

2. Can BI bring change across more than one behaviour pattern?
Aim

Identify and synthesize the relevant published evidence on the impact of brief interventions on comorbid health conditions
Methods

- Categories of terms: Comorbidity, Health condition, Brief Intervention
- Medline and Embase: 1999-2009 limited
- Reference lists
- Google and Google Scholar
Inclusion/Exclusion Criteria

Brief Interventions
• Emphasis on personalization and empathy
• Included: face to face
• Up to 10 sessions
• Excluded: group sessions, telephone, internet

Comorbidity: Multiple disease/disorders. One or more medically recognized condition along side a primary condition
Database Search
1080 papers

972 papers excluded due to electronic title & abstract

Initial sift
108 papers

26 berry picked papers to be included

Retrieve hard copies
134 papers

88 papers excluded once able to see full article

5 Systematic Reviews

Data extract 41 papers

27 papers excluded at data extraction

Final papers to be included
14 papers
Design and Outcomes

- Sought: Randomized controlled trials (RCTs)

- Included: Randomized trials, Controlled trials, Pilot and Feasibility trials

- Analysis: Descriptive and Narrative Synthesis of Data
Results

- **14 trials:**
  - Physical health and substance use (n=3)
  - Mental health and substance use (n=8)
  - Dual substance studies (n=3)

- **Diversity of Literature**

- Evidence mixed but most +ve for BI on physical health and substance use
## Physical Health and Substance Use

<table>
<thead>
<tr>
<th>Study</th>
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<th>Intervention</th>
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<tbody>
<tr>
<td>El Sony et al, 2007</td>
<td>Tuberculosis &amp; Smoking</td>
<td>4xStructured questioning BA vs Routine Care</td>
<td>54% of intervention patients reported stopping smoking compared to 14% controls. TB treatment outcomes were sig. improved in intervention patients.</td>
</tr>
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<td>Fleming et al, 2004</td>
<td>Type 2 Diabetes and/or Hypertension &amp; Alcohol use</td>
<td>2xBA vs Advice booklet</td>
<td>Statistically sig. reduction in heavy drinking. No sig. difference in health status.</td>
</tr>
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<td>Maheswaran et al, 1992</td>
<td>Hypertension &amp; Alcohol use</td>
<td>1xBA (reinforced) vs Routine Care</td>
<td>Alcohol intervention group sig. reduced weekly consumption by 50%. Standing diastolic blood pressure fell sig. in intervention group.</td>
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<td>Baker et al, 2006b</td>
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<td>8x MI/CBT/NRT/SH vs Routine care &amp; SH booklet</td>
<td>Sig. drop in smoking rates for intervention group. Intervention patients who completed treatment-sig. more likely to be abstinent/ reduce smoking by 50%.</td>
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<td>Brown et al 2003</td>
<td>Psychiatric in-patients &amp; Smoking</td>
<td>2x MI vs 1xBrief advice+ Info booklet</td>
<td>No sig. between group differences. MI increased self efficacy for ability to quit and better for patients with little/no intention to quit.</td>
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<td>Graeber et al, 2003 (Pilot)</td>
<td>Schizophrenic in/out patients &amp; AUD</td>
<td>3x MI vs 3x Educational Treatment</td>
<td>MI group sig. reduction in drinking days and higher abstinence rates but not intensity or volume drunk.</td>
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<td>Hulse and Tait, 2002</td>
<td>Psychiatric in-patients &amp; AUD</td>
<td>1MI vs Info package</td>
<td>Both groups sig. reduced alcohol consumption. MI group sig. greater drop in weekly consumption and more drunk within medically recommended limits.</td>
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<td>Psychotic disorder out-patients &amp; Drug abuse</td>
<td>2x MI vs 2x Standard psych interview</td>
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<td>1xCBT for Schizophrenia vs Routine Care</td>
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<td>Gray et al, 2005</td>
<td>Alcohol, smoking &amp; cannabis use</td>
<td>1xMI &amp; questionnaire vs Questionnaire</td>
<td>No sig. between group differences in all three substance use rates.</td>
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<td>Marsden et al, 2006</td>
<td>Stimulant &amp; Alcohol abuse</td>
<td>1xMI+Health risk info vs Health risk written info</td>
<td>No sig. differences in stimulant abstinence. Alcohol consumption remained almost unchanged in both groups.</td>
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<td>Richmond et al, 1999</td>
<td>Drinking, smoking and stress in police</td>
<td>1xBA+Health assessment+Self-help materials vs No input</td>
<td>No between group differences in alcohol consumption. % of smokers declined significantly in both groups.</td>
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Conclusions

- BI some +ve findings for physical health & substance use but need more controlled trials

- BI for substance use & mental health problems or dual substance use less convincing

- Key feature of review- severity of mental health conditions
  - Entrenched & enduring problems
  - BI is being added to lots of treatment

- Further research is needed to promote positive change across mental health and substance use
Questions?

Thank you