The story so far: key lessons from IBA research in primary care

Dr Amy O’Donnell
Introduction

- Primary care and secondary prevention
- From efficacy to effectiveness: building the IBA evidence base
- Implementing IBA in routine primary care practice
- Knowing the unknowns and plugging the gaps
Primary care and secondary prevention

Heart disease or irregular heartbeat
Stroke
Depression and anxiety
Cancer of the mouth, throat, oesophagus or larynx
Breast cancer in women
Pancreatitis
Liver cirrhosis and liver cancer
High blood pressure
Reduced fertility
Harm to unborn babies
Spectrum of responses to problem alcohol use

Source: Raistrick et al, 2006
Problem drinking in primary care

- Chronic disease = major component of GP caseload.
- Alcohol is causally related to over 60 medical conditions:
  - Hypertension, stroke, coronary heart disease, liver disease, pancreatitis, cancer.
- Primary care is ideal context for detection and prevention of alcohol-related problems.
From efficacy to effectiveness: Building the IBA evidence base
IBA in primary health care

• Over 30 years of research examining impact of IBA in primary care and (more recently) other settings.
• 24 systematic reviews covering at least 56 high quality studies in primary care alone (O’Donnell et al 2014).
• Consistent message → IBA is effective at reducing the quantity, frequency and intensity of drinking when delivered in primary healthcare.
Impact on alcohol consumption

• For every eight people who receive simple alcohol advice, one will reduce their drinking to within lower-risk levels (Moyer et al., 2002).

• Kaner et al (2007) showed that IBA reduced the quantity of alcohol drunk by an average 38 g per week.

• Varies by age → Jonas et al (2012) suggested effects may be lesser in older adults aged 65 and over (23g) and for young adults / college students aged 18-30 (23g).
Wider health impacts

• Other positive outcomes include:
  – Reduction in alcohol-related problems;
  – Reduced health-care utilization;
  – Improved mortality outcomes.

• A reduction from 50 units/week to 42 units/week will reduce the relative risk of alcohol-related conditions by some 14%, the attributable fractions by some 12%, and the absolute risk of lifetime alcohol-related death by some 20% (Anderson 2008).
Cost-effectiveness of IBA

• Estimated quality-adjusted life-year (QALY) gain associated with IBA ranges from 4-19 per 1000 (Anderson 2009)

• IBA based on new patient registrations and delivered by a practice nurse provides modest cost savings to the health care system of £120m over 30 years and health gains over the same period amount to 32,000 QALYs, at £6900 per QALY gained (Purshouse et al 2009).

• Doctor-delivered IBA would be more expensive but result in incremental health gains equivalent to 92,000 QALYs, at £1175 per QALY gained (Purshouse et al 2009).
### IBA compared with other public health interventions for alcohol

**Table 1: Costs, impact and cost-effectiveness of different policy options in Europe**

<table>
<thead>
<tr>
<th>Intervention(s)</th>
<th>Coverage (%)</th>
<th>Annual cost per million persons</th>
<th>Annual DALYs saved per million persons</th>
<th>I$ per DALY saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>School-based education</td>
<td>80</td>
<td>0.84</td>
<td>–</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Brief interventions for heavy drinkers</strong></td>
<td><strong>30</strong></td>
<td><strong>4.20</strong></td>
<td><strong>672</strong></td>
<td><strong>6256</strong></td>
</tr>
<tr>
<td>Mass media campaign</td>
<td>80</td>
<td>0.83</td>
<td>–</td>
<td>N/A</td>
</tr>
<tr>
<td>Drink-driving legislation and enforcement (via random breath-testing campaigns)</td>
<td>80</td>
<td>0.77</td>
<td>204</td>
<td>3762</td>
</tr>
<tr>
<td>Reduced access to retail outlets</td>
<td>80</td>
<td>0.78</td>
<td>316</td>
<td>2475</td>
</tr>
<tr>
<td>Comprehensive advertising ban</td>
<td>95</td>
<td>0.78</td>
<td>351</td>
<td>2226</td>
</tr>
<tr>
<td>Increased excise taxation (by 20%)</td>
<td>95</td>
<td>1.09</td>
<td>2301</td>
<td>472</td>
</tr>
<tr>
<td>Increased excise taxation (by 50%)</td>
<td>95</td>
<td>1.09</td>
<td>2692</td>
<td>404</td>
</tr>
<tr>
<td>Tax enforcement (20% less unrecorded)</td>
<td>95</td>
<td>1.94</td>
<td>2069</td>
<td>939</td>
</tr>
<tr>
<td>Tax enforcement (50% less unrecorded)</td>
<td>95</td>
<td>2.21</td>
<td>2137</td>
<td>1034</td>
</tr>
</tbody>
</table>

*I$* per DALY saved

*a Annual costs are expressed in 2015 I$.

*b Annual DALYs saved are expressed relative to 2015.

*c N/A indicates not applicable.
Implementing IBA in routine primary care practice
IBA provision in routine care

- Provision of IBA remains sporadic - only about 1 in 20 of patients in primary health care settings who are risky drinkers are screened for alcohol consumption or offered brief advice.
- Even where IBA is being delivered, quality of content is questionable.
- Heavy reliance on identification via consumption questions (Khadjesari et al, 2013)

Fig 2: Are GPs familiar with and use standardised alcohol screening tools? (www.amphoraproject.net)
Barriers to IBA implementation in primary healthcare

• Many GPs remain unconvinced that patients will take such advice to change their drinking behaviour, particularly those patients drinking at heavy or dependent levels (Aira et al 2003).
• Practitioners are also concerned that they might offend patients by discussing alcohol or at least view alcohol as a ‘delicate’ subject to raise in the standard consultation situation (Moriaty et al 2012).
• Confusion about what advice they should actually be delivering on lower risk drinking (Hutchings et al 2006).
• Lack of training or suitable intervention materials (Aalto et al 2001)
• Inadequate financial incentives (Johnson et al 2010)
• Unsupportive specialist alcohol service provision (Kaner et al 1999)
• Everyday time pressures (Beich et al 2002)
## European survey data on implementation barriers

<table>
<thead>
<tr>
<th>Reason</th>
<th>N of responses</th>
<th>Percent of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time constraints</td>
<td>209</td>
<td>70.6</td>
</tr>
<tr>
<td>Lack of financial incentives</td>
<td>87</td>
<td>29.4</td>
</tr>
<tr>
<td>Risk of upsetting the patient</td>
<td>147</td>
<td>49.7</td>
</tr>
<tr>
<td>Lack of training</td>
<td>60</td>
<td>20.3</td>
</tr>
<tr>
<td>Lack of services to refer patient to</td>
<td>67</td>
<td>22.6</td>
</tr>
<tr>
<td>Other reasons</td>
<td>81</td>
<td>27.4</td>
</tr>
</tbody>
</table>

Table 2: Main barriers to alcohol screening in primary care (www.amphoraproject.net)
Knowing the unknowns and plugging the gaps

"I think you should be more explicit here in step two."

20th April 2015

Alcohol brief intervention: where next for IBA?
Effectiveness of IBA in different populations

- Majority of previous IBA research conducted in high-income regions – and generally in the English language (Peltzer 2009).
- Equally effective in both men and women (Ballesteros et al 2004) but there is a lack of evidence for pregnant women (Jonas et al 2012).
- Inconclusive evidence of effectiveness in younger (aged <18) and older drinkers (aged 65>) (Jackson et al 2010, Jonas et al 2012)
- Also lack of data on impact in different socio-economic / ethic groups (Jackson et al 2010)
Length, frequency and content of IBA

- Lack of data on long term impact of IBA post-12 months
- Some evidence suggests brief, multi-contact most impactful - but SIPS showed longer interventions not significantly beneficial (Kaner et al, 2013).
- Limited understanding of the key active ingredients of IBA – feedback, advice and goal setting appear important (Whitlock, 2004)
Where next?: IBA beyond primary care

- Opportunities to tackle risky drinking in non-PHC settings (A&E, education, workplace, CJS, social services).
- Potential for new modalities (e-Health; m-Health).
Any questions?

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