What Works? Integrating evidence into crime prevention decision-making

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Dr Lisa Tompson
Thursday 25th February
Session outline

- Introducing the evidence base and the crime reduction toolkit
- Toolkit demonstration
- Group session on alcohol-related interventions
- Feedback from group session
- Feedback on the toolkit
What kind of ‘evidence’ are we looking for?

Statements about ‘what works’

5 Systematic Reviews (Based on level 3-5 studies)

4 Randomised controlled trials

3 Before/after measures
   Multiple site comparisons

2 Before/after measures
   Two site comparisons

1 Before/after measures
   One-off measure

Statements about ‘what’s promising’

2 Before/after measures
   No comparison site

1 One-off measure
   No comparison site

Study designs increasingly rule out potential alternative causes

Statements about possible impact

Study designs cannot rule out potential alternative causes
What Works – the evidence base

- Systematic reviews commissioned by various stakeholders who frame the research question in myriad ways
  - By intervention
  - By problem
  - By population
  - By context
  - By policing strategy
  - By outcome
  - By stakeholder

![Pie chart showing distribution of systematic reviews by orientation: Multiple interventions 41%, Single interventions 31%, Population focused 12%, Both population and intervention 14%, Other orientation 2%]
Crime prevention outcomes

- Recorded crime, 105, 22%
- Self-reported offending, 53, 11%
- Anti-social behaviour, 7, 1%
- Calls for service, 14, 3%
- Reoffending, 206, 42%
- Arrests, 104, 21%
The evidence base – systematic reviews

- 125 single-intervention systematic reviews
- 60 different topics
- 35 on toolkit

- 10 more in production
- Others unsuitable (poor quality evidence, not UK suitable e.g. execution)
Topics

- Alcohol related
- Youth offenders
- SCP
Why does it matter?

- I’ve had this great idea…

Pupils sent to jail... by their school: Children taken on field trips to visit rapists and murderers to deter them from a life of crime

- Schoolboys aged 15 and 16 are shown cells and given a talk by inmates
- Notton House School, Chippenham caters for boys with emotional and behavioural problems
- Deputy head said talk by inmates had been ‘a salutary lesson for the boys’

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Why does it matter?

- I’ve had this great idea…

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<table>
<thead>
<tr>
<th>Study name</th>
<th>Odds ratio</th>
<th>Lower limit</th>
<th>Upper limit</th>
<th>Z-Value</th>
<th>p-Value</th>
<th>Odds ratio and 95% CI</th>
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</thead>
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<tr>
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<td>1.110</td>
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<td>2.128</td>
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<tr>
<td>GERPDC (1979)</td>
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<td>0.888</td>
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<td>5.090</td>
<td>1.627</td>
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</tr>
</tbody>
</table>

Reduces Crime

Increases Crime
The challenge for crime prevention

• Cochrane Collaboration
  - Medicine/ Healthcare
  - Over 5,000 systematic reviews
  - Focus on specific interventions for specific illnesses

• Campbell Collaboration
  - Crime and Justice area
  - Only 58 systematic reviews
  - Focus on broad intervention strategies (hot spots, problem solving), not specific tactics
# Crime Reduction Toolkit

## Interventions and Their Impact

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Impact on Crime</th>
<th>How it works</th>
<th>Where it works</th>
<th>How to do it</th>
<th>What it costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Scared Straight&quot; Programmes</td>
<td>XX</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>Multisystemic Therapy</td>
<td>✓</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>Alcohol ignition interlock</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>CCTV</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>CPTED (Robbery)</td>
<td>✓</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>Drink driving (DUI) courts</td>
<td>✓</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>Electronic monitoring</td>
<td>✓</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>Increased police patrol</td>
<td>✓</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>Mass media campaigns</td>
<td>✓</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
<tr>
<td>Multisystemic Therapy</td>
<td>✓</td>
<td>🌀</td>
<td>🌀</td>
<td>🌀</td>
<td>₹</td>
</tr>
</tbody>
</table>

**Key**

- **Quality of evidence**
  - No information
  - Limited quality
  - Moderate quality
  - Strong quality
  - Very strong quality

**Filters**

- **Impact on Crime**
  (select a range using the marker below)
  - XX
  -
  - ✓

**Search term...** Go

- Violent Crime Off On
- Property Crime Off On
- Offender Based Off On
- Victim Based Off On
- Location Based Off On

[Reset filters]  [Clear pins]
Neighbourhood watch

<table>
<thead>
<tr>
<th>Impact on crime</th>
<th>How it works</th>
<th>Where it works</th>
<th>How to do it</th>
<th>What it costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅</td>
<td>🎥</td>
<td>📍</td>
<td>🔎</td>
<td>💰</td>
</tr>
<tr>
<td>Effect</td>
<td>Mechanism</td>
<td>Moderator</td>
<td>Implementation</td>
<td>Economic cost</td>
</tr>
</tbody>
</table>

What is the focus of the intervention?

Neighbourhood watch schemes aim to reduce crime by directly involving the community in activities that promote safety or assist with the detection of crime. They actively seek the greater involvement of local people in crime prevention activities. The first schemes were seen in the US in the late 1980s and they are now very common in both the US and the UK. They are known under a variety of names including home watch, block watch and community watch (Review 1).

This narrative is primarily based on one systematic review covering 18 studies.

**EFFECT**

How effective is it?

Overall, the evidence suggests that neighbourhood watch can reduce crime. There are however some important considerations, such as variation in practices across schemes, and large differences between countries in terms of observed reductions.

The review estimated that overall, for every 100 crimes, an average of 26 crimes were prevented with Neighbourhood Watch (based on 18 studies). There was no evidence of a backfire effect (where crime increases) across the evaluations reviewed.

How strong is the evidence?

The review was sufficiently systematic that many forms of bias that could influence the study conclusions can be ruled out.

This evidence is taken from a systematic review covering 18 studies. The review demonstrated high quality in terms of having a transparent and well-designed search strategy, featured a valid statistical analysis and considered the validity of the way outcomes are measured and/or combined. The review did not quantify an overall effect for unanticipated outcomes such as displacement caused by the intervention and, whilst it considered publication bias, it did not consider bias introduced by coder subjectivity or statistical outliers.

**MECHANISM**

How does it work?

The authors note that: “It is … difficult to determine from current research how neighbourhood watch works”. However, they go on to suggest that Neighbourhood Watch might reduce crime by:

(a) Deterring offenders through increasing their awareness of a great propensity of residents to look for and report suspicious activity; (b) reducing perceived opportunity via increasing signs of occupancy in vacant homes (moving bins, removing newspapers);
## Our effect scale

**How we rate the effect of an intervention on reducing crime.**

<table>
<thead>
<tr>
<th>Effect rating</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>2XX</td>
<td>Overall, evidence suggests an increase in crime</td>
</tr>
<tr>
<td>0XX</td>
<td>Overall, evidence suggests an increase in crime (but some studies suggest a decrease)</td>
</tr>
<tr>
<td>0X</td>
<td>Overall, no evidence to suggest an impact on crime (but some studies suggest an increase)</td>
</tr>
<tr>
<td>1</td>
<td>No evidence to suggest an impact on crime</td>
</tr>
<tr>
<td>6✓</td>
<td>Overall, evidence suggests no impact on crime (but some studies suggest either an increase or a decrease)</td>
</tr>
<tr>
<td>12✓</td>
<td>Overall, evidence suggests no impact on crime (but some studies suggest a decrease)</td>
</tr>
<tr>
<td>4✓</td>
<td>Overall, evidence suggests a decrease in crime (but some studies suggest an increase)</td>
</tr>
<tr>
<td>10</td>
<td>Overall, evidence suggests a decrease in crime</td>
</tr>
</tbody>
</table>
What information are we looking for?

- **Effect size** – does it work?
- **Mechanisms** – how does it work?
- **Moderators** – in which contexts does it work?
- **Implementation** – how do we implement it?
- **Economics** – how much does it cost?
Searching the toolkit – demonstration

- Toolkit
- whatworks.college.police.uk/toolkit
Toolkit as a complementary instrument

- Not all evidence is advanced enough to be synthesised

- The toolkit is NOT:
  - designed to REPLACE professional experience

- The toolkit IS:
  - designed to COMPLEMENT existing experience
  - designed to make you THINK about the evidence
## Interventions linked to alcohol-related crime reduction

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Effectiveness</th>
<th>Impact</th>
<th>Cost</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol ignition interlock</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>Alcohol tax and price policies</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>Drink driving (DWI) courts</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>Increased police patrols to reduce drink driving</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>Mass media campaigns to reduce drink driving</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>Minimum legal drinking age (MLDA) laws</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>Moral Reconciliation Therapy</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>Policies on hours and days of alcohol sales</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>School-based programmes to reduce drink driving</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td>Sobriety checkpoints</td>
<td>✓</td>
<td>⭐️</td>
<td>£</td>
<td></td>
</tr>
</tbody>
</table>
Using the toolkit – group exercise

In groups over the next 25 mins, please do the following:

1. Read one of the interventions per person

2. Identify the interventions you’ve seen in place or been involved in

3. Debate and decide on one intervention that you would consider implementing in your area and:
   - Take note of why you would implement them (i.e. for which problems)
   - Take note of in which circumstances you would implement them (i.e. town centres, only young people aged 16-21 etc.)
   - Take note of any additional information you may need to consider (e.g. economics, politics, legislative frameworks).
Feedback from group exercise

• **Which** interventions did you pick and **why**?

• What interventions would work best as a **short-term** strategy over a **high-risk** period (e.g. Christmas, bank holidays)?

• **What other interventions** could you consider proposing as part of a longer-term strategy to reduce crime in your area?

• **How** can you as practitioners get involved in **generating** a stronger evidence base?