The DECIDE evidence to recommendation framework – adapted to the public health field in Sweden

• Karin Guldbrandsson PhD in Public Health
  karin.guldbrandsson@folkhalsomyndigheten.se

• Nils Stenström PhD in Social work
  nils.stenstrom@folkhalsomyndigheten.se
Background

• There are no joint systems for recommendations of effective methods within the field of public health in Sweden

• Claims about specific interventions have been based on different evidence grading systems and led to conflicting assessments

Frustration, inability to act and lack of confidence among practitioners and policy makers
Government Assignment in 2012:

Investigate and propose how a transparent system for recommendations of effective methods in public health can be designed.

Apply GRADE on a public health intervention, Investigate the experiences of recommendations assessment in public health in other countries and Assess whether any of these systems can be used directly or after adaptation to Swedish conditions.
Assignment directives

Recommendations shall:

✓ Include several important aspects when deciding

**Aspects to consider**

- Scientific support
- Seriousness of the problem
- Theoretical basis
- Expected impact
- Balancing the risk/benefit
- Health economic assessment
- Cost effectiveness and resource requirements
- Relevance to the Swedish arena
- Ethical principles
- Values and preferences
- Implementation options
- Equity in health
- Collaboration, decentralization, flexibility, choice
- Social aspects
- Human rights and equality

✓ Be able to provide guidance even when the scientific evidence is limited
✓ Identify knowledge gaps where vital information is missing
Aim of study

The aim of this study was to investigate if the DECIDE evidence to recommendations framework is applicable in the public health field in Sweden.
**Systematic review**

- **Formulate question**
- **Select outcomes**
- **Rate importance**
- **Outcomes across studies**
- **Create evidence profile with GRADEpro**
- **Rate quality of evidence for each outcome**

- **Randomization increases initial quality**
  - Risk of bias
  - Inconsistency
  - Indirectness
  - Imprecision
  - Publication bias

- **Grade down**
  - High
  - Moderate
  - Low
  - Very low

- **Grade up**
  - Large effect
  - Dose response
  - Confounders

**Summary of findings & estimate of effect for each outcome**

---

**Guideline development**

**Formulate recommendations:**
- For or against (direction)
- Strong or conditional/weak (strength)

**By considering:**
- Quality of evidence
- Balance benefits/harms
- Values and preferences

Revise if necessary by considering:
- Resource use (cost)

**Grade overall quality of evidence across outcomes based on lowest quality of critical outcomes**

- “We recommend using...”
- “We suggest using...”
- “We recommend against using...”
- “We suggest against using...”
Method

1. PICO-question
(Population, Intervention, Comparison and Outcome)

“Should behavioural and cognitive-behavioural group-based parenting programs be used in children aged 3 to 12 years with early conduct problems?”
Method

2. Literature search

Relevant databases were searched and a systematic review on parenting training programs was identified.

The results of the meta-analysis indicated that parenting training programmes produced a reduction in conduct problems among children (SMD -0.44).

3. GRADE

The quality of evidence was considered moderate.

Author(s): Swedish National Institute of Public Health (SNIPH)
Date: 2012-11-07
Question: Should group-based parenting programmes based on behavioural and cognitive theory vs no such programmes be used in children aged 3 to 12 years with early-onset conduct problems?1,2,3
Settings: Western industrialized countries1

<table>
<thead>
<tr>
<th>Quality assessment</th>
<th>No of patients</th>
<th>Effect</th>
<th>Quality</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of studies</td>
<td>Design</td>
<td>Risk of bias</td>
<td>Inconsistency</td>
<td>Indirectness</td>
</tr>
<tr>
<td>9</td>
<td>randomised trials</td>
<td>serious</td>
<td>no serious inconsistency1,11,12,13</td>
<td>no serious indirectness</td>
</tr>
</tbody>
</table>

Increased conflict within the home (due to introduction of new parenting techniques)

0 No available evidence

We interpreted SMDs using the following rules suggested by the Cochrane Handbook: <0.40 represents a small effect size; 0.40 to 0.70 represents a moderate effect size; >0.70 represents a large effect size.

1 Interventions: The Incredible Years (IY) BASIC Parenting Programme was used in three studies (Hutchings, 2007; McGilloway, 2009; Scott, 2001); the Incredible Years (IY) Parenting Programme was used in four studies (Webster-Stratton, 1984, 1988, 1997, and 2004). The remaining two studies used Parenting Management Training (PMT) based on Parent Management Training, Oregon, and the Incredible Years Parenting Programme (Braet, 2009), and Barkley’s Parent Training Programme (Barkley, 2000), respectively.
2 Waiting-list control (MLC) in 8 studies, no treatment control in 1 study (Barkley, 2000).
3 Children aged 3 to 12 years who manifested either: (a) conduct problems, as identified by a score above the clinical cut-off point on an outcome measure; or (b) a clinical or psychiatric diagnosis of Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD), or both, as classified by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 2000) or the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (WHO, 2009).
4 Five studies were conducted in the USA (Barkley, 2000; Webster-Stratton, 1984, 1988, 1997, and 2004), and four studies were conducted in Europe (UK (Hutchings, 2007; Scott, 2001); Ireland (McGilloway, 2009), and Belgium (Braet, 2009)). Five of the studies were conducted in urban, university-based research clinics (Webster-Stratton, 1984, 1988, 1997, 2004; Braet 2009) and four were conducted within both urban and rural community-based agencies: medical centre (Barkley, 2000), Sure Start Service areas within predominantly rural areas (Hutchings, 2007). Various community-
Method

4. DECIDE

The DECIDE framework was discussed in:
- four semi-structured interviews
- a stakeholder test panel
- meetings with governmental organizations

The purpose was to get feedback on the different parts of the DECIDE framework from actors relevant for public health recommendations in Sweden.
Method

5. An authentic DECIDE panel

Based on previous steps.

The purpose was to make a real-world recommendation regarding parent training programs in Sweden.
Results

1. There seemed to exist a readiness to use GRADE/DECIDE in the public health field in Sweden

2. Two criteria were added to the Swedish version of the DECIDE form
   - Individual autonomy
   - Method sustainability

3. A final recommendation was agreed on

   "We do recommend the intervention with the following conditions ..."

   (e.g. sufficient resources for supervising and quality development must be reserved and the intervention must be evaluated)
Results

A final recommendation was agreed on

"We do recommend the intervention with the following conditions …”

<table>
<thead>
<tr>
<th>Question: Should behavioural and cognitive-behavioural group-based parenting programmes vs. waiting-list or no treatment be used in children aged 3 to 12 years with early-onset conduct problems?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance of consequences</strong></td>
</tr>
<tr>
<td>Recommendation</td>
</tr>
</tbody>
</table>

Certain conditions: e.g. sufficient resources for supervising and quality development must be reserved and the intervention must be evaluated.
Discussion

"Recommendations are needed for guidance in practical public health work”

“To simply present results from systematic reviews is not enough for guidance!"

Two criteria were added to the Swedish version:

✓ Individual autonomy
✓ Method sustainability
DECIDE in the public health field in Sweden – ongoing work at the Agency of Public Health

- National level
  - Governmental assignment on cannabis
  - Governmental assignment on smoke-free environment
  - Governmental assignment on children at risk
- Local level
  - A municipal project on cannabis
- Lots of questions ...
Thanks for your attention!