



Folkhälsomyndigheten  
PUBLIC HEALTH AGENCY OF SWEDEN

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

- Karin Guldbrandsson PhD in Public Health  
[karin.guldbrandsson@folkhalsomyndigheten.se](mailto:karin.guldbrandsson@folkhalsomyndigheten.se)
- Nils Stenström PhD in Social work  
[nils.stenstrom@folkhalsomyndigheten.se](mailto: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.

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

P  
I  
C  
O

Outcome Critical

Outcome Critical

Outcome Important

Outcome Not important



Summary of findings  
& estimate of effect  
for each outcome

High  
Moderate  
Low  
Very low

Grade down

- 1. Risk of bias
- 2. Inconsistency
- 3. Indirectness
- 4. Imprecision
- 5. Publication bias

Grade up

- 1. Large effect
- 2. Dose response
- 3. Confounders

Systematic review

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).

*Furlong et al. Behavioural and cognitive-behavioural group-based parenting programmes for early-onset conduct problems in children aged 3 to 12 years. Cochrane database of systematic reviews 2012, Issue 2.*



# Method



## 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?<sup>1,2,3</sup>

**Settings:** Western industrialized countries<sup>4</sup>

**Bibliography:** Furlong, M., Mc Gilloway, S., Bywater, T., Hutchings, J., Smith, S.M., & Donnelly, M. (2012). Behavioural and cognitive-behavioural group-based programmes for early-onset conduct problems in children aged 3 to 12 years (review). The Cochrane Collaboration & The Cochrane Library 2012(2).

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Behavioural and cognitive-behavioural group-based parenting programmes	Waiting-list or no treatment	Relative (95% CI)	Absolute		
Child conduct problems, independent report instruments to measure child conduct problems. Scale from -0.87 to +0.22												
9 <sup>7</sup>	randomised trials <sup>8</sup>	serious <sup>9</sup>	no serious inconsistency <sup>10,11,12,13</sup>	no serious indirectness <sup>14</sup>	no serious imprecision	none	408	262 <sup>2</sup>	-	SMD -0.44 lower (-0.77 to -0.11 lower) <sup>15,16,17</sup>	⊕⊕⊕○ MODERATE	CRITICAL
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												

<sup>1</sup> 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.

<sup>2</sup> Waiting-list control (WLC) in 8 studies, no treatment control in 1 study (Barkley, 2000).

<sup>3</sup> 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).

<sup>4</sup> 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, 1998, 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

Does the option take into account the individual's right to self-determination? <b>ADDED QUESTION*</b>	Is the option sustainable in the long term? <b>ADDED QUESTION*</b>	No	Probably no	Uncertain	Probably yes	Yes	Varies
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 ..."*

**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?**

Balance of consequences	Undesirable consequences clearly outweigh desirable consequences in most settings	Undesirable consequences probably outweigh desirable consequences in most settings	The balance between desirable and undesirable consequences is uncertain	Desirable consequences probably outweigh undesirable consequences in most settings	Desirable consequences clearly outweigh undesirable consequences in most settings
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Recommendation	We do not recommend the option	We recommend the option under certain conditions	We recommend the option		
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

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

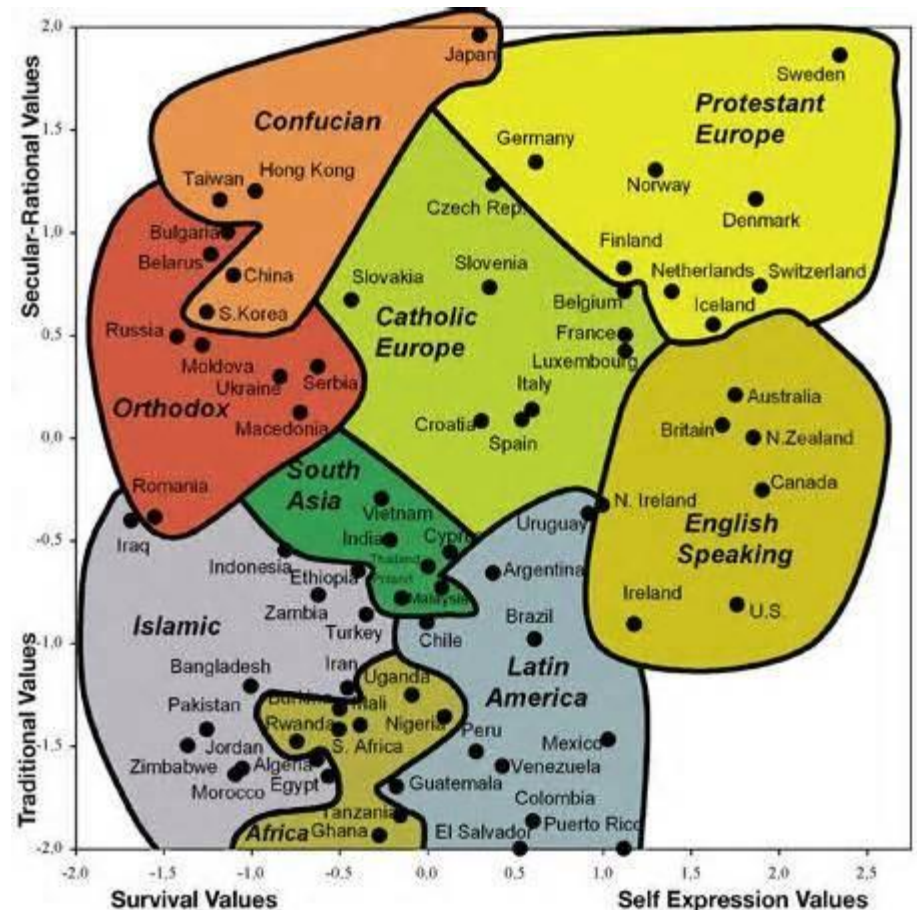
# Discussion

"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 ...

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

P

Outcome

Critical

I

Outcome

C

Outcome

O

Outcome

Systematic review

# Thanks for your attention!

High

Low

2. Inconsistency  
Indirectness  
Imprecision  
Publication bias  
Large effect  
Dose response  
Confounders

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..."