



# Plenary 1

**Umbrella Reviews: what are they, and do we need them?**

**Lorne Becker**

*Pembroke*

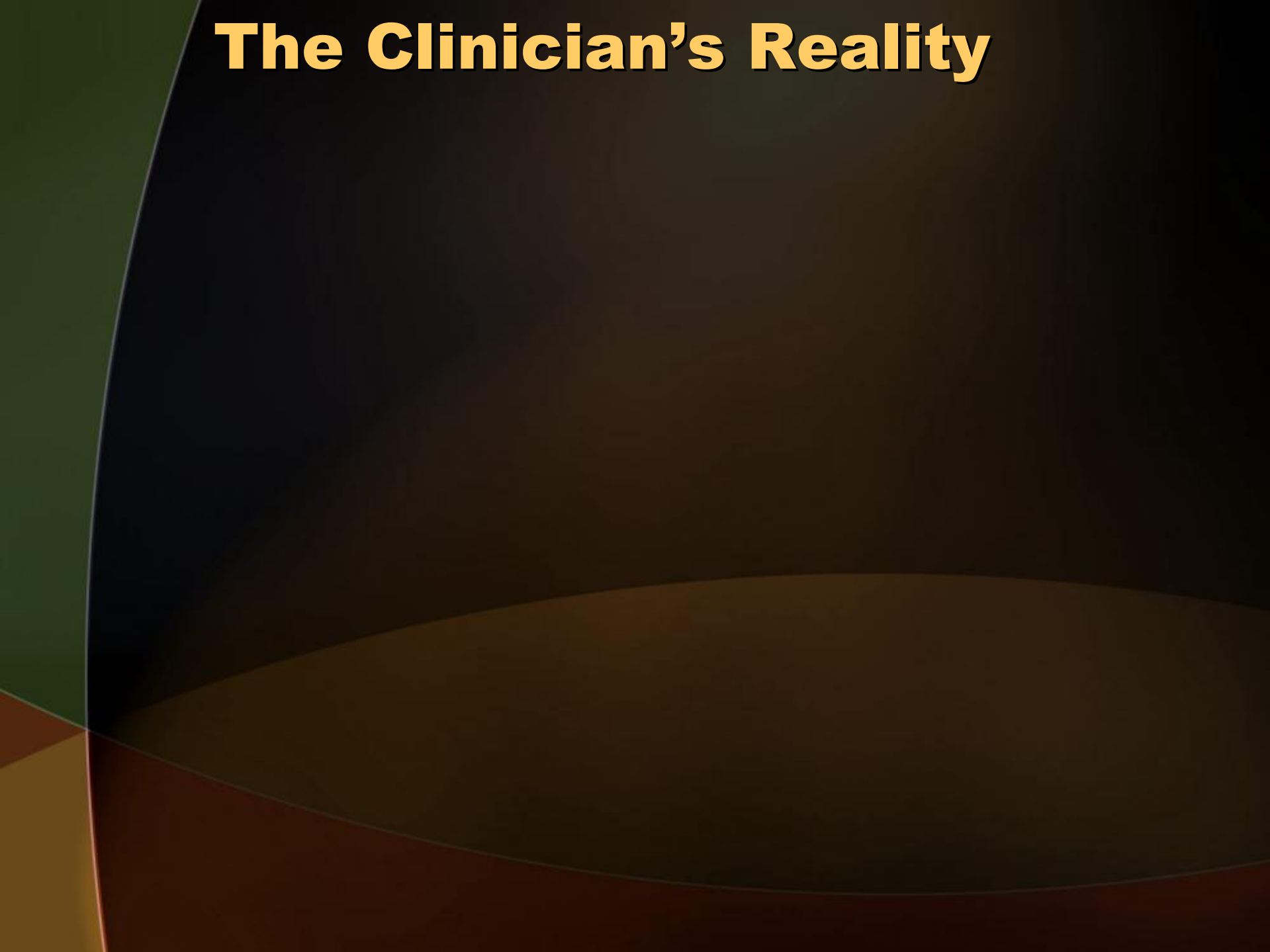
# **Umbrella Reviews**

**What are they, and do we need them?**

# **The Cochrane Vision**

*That healthcare decision-making  
around the world will be informed  
by high quality, timely research  
evidence*

# **The Clinician's Reality**

The background features a large, dark green curved shape on the left side. The rest of the background is black, with a large, dark brown curved shape at the bottom. The title 'The Clinician's Reality' is written in a bold, yellow, sans-serif font at the top left.

# **Lots of Unanswered Questions**

- **Random sample of 103 US family physicians**
- **Researcher recorded questions after every consultation**
- **3.2 questions per 10 patients seen**
- **2/3 questions not pursued**
- **Of questions pursued**
  - **Mean time spent - 2 minutes**
  - **Median time spent - 1 minute**

# Median Minutes/Week Spent Reading About My Patients:

## Self-reports at 17 Grand Rounds:

- Medical Students: 90 minutes
- House Officers (PGY1): 0 (up to 70%=none)
- SHOs (PGY2-4): 20 (up to 15%=none)
- Registrars: 45 (up to 40%=none)
- Sr. Registrars 30 (up to 15%=none)
- Consultants:
  - Grad. Post 1975: 45 (up to 30%=none)
  - Grad. Pre 1975: 30 (up to 40%=none)

# **A Common Clinical Question**

- **What is the best treatment for a child who wets the bed?**

# Possible Treatments

- Alarm Systems
- Medications
  - Tricyclic Antidepressants
  - Desmopressin
  - Others
- Behavioral interventions
- Complementary medicine approaches



## BROWSE

Cochrane Reviews: [By Topic](#) | [New Reviews](#) | [Updated Reviews](#) | [A-Z](#) | [By Review Group](#)

Other Resources: [Other Reviews](#) | [Clinical Trials](#) | [Methods Studies](#) | [Technology Assessments](#) | [Economic Evaluations](#)

[Export All Results](#)

### Record Information

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | <b>Complex behavioural and educational interventions for nocturnal enuresis in children</b><br>CMA Glazener, JHC Evans, RE Peto<br>Year: 2004<br><a href="#">Record</a> <b>R</b> |
| <input type="checkbox"/> | <b>Simple behavioural and physical interventions for nocturnal enuresis in children</b><br>CMA Glazener, JHC Evans<br>Year: 2004<br><a href="#">Record</a> <b>R</b>              |
| <input type="checkbox"/> | <b>Alarm interventions for nocturnal enuresis in children</b><br>CMA Glazener, JHC Evans, RE Peto<br>Year: 2005<br><a href="#">Record</a> <b>R</b>                               |
| <input type="checkbox"/> | <b>Complementary and miscellaneous interventions for nocturnal enuresis in children</b><br>CMA Glazener, JHC Evans, DKL Cheuk<br>Year: 2005<br><a href="#">Record</a> <b>R</b>   |
| <input type="checkbox"/> | <b>Desmopressin for nocturnal enuresis in children</b><br>CMA Glazener, JHC Evans<br>Year: 2002<br><a href="#">Record</a> <b>R</b>   |
| <input type="checkbox"/> | <b>Drugs for nocturnal enuresis in children (other than desmopressin and tricyclics)</b><br>CMA Glazener, JHC Evans, RE Peto<br>Year: 2003<br><a href="#">Record</a> <b>R</b>    |
| <input type="checkbox"/> | <b>Tricyclic and related drugs for nocturnal enuresis in children</b><br>CMA Glazener, JHC Evans, R Peto<br>Year: 2003<br><a href="#">Record</a> <b>R</b>                        |

# **Cochrane Enuresis Reviews**

- **7 Reviews**
- **Cover all of the potential interventions**
- **Reviews are up to date**
  - **One from 2002**
  - **Two each from 2003, 2004, 2005**

## Clinical Reality

2 minutes per  
question

30 minutes per week

## 7 Cochrane Enuresis Reviews

410 pages

Excluding tables  
figures and  
references

- 73 pages

Metaviews only

- 113 Metaviews

# **Umbrella Reviews**

- **Designed for busy decision makers**
- **A “friendly front end”**
- **Summarizes a group of related reviews**
  - **Minimum of text**
  - **1-3 tables**
  - **0-2 figures**
- **Pointers to the full Cochrane Reviews**

EVIDENCE-BASED CHILD HEALTH: A COCHRANE REVIEW JOURNAL

*Evid.-Based Child Health* 1: 5–8 (2006)

Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/ebch.13

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## Umbrella Review

# ***The Cochrane Library* and nocturnal enuresis; an umbrella review**

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<sup>2</sup>Department of Surgery, University of Alberta, Edmonton, Canada

- 4 Pages
- 2 Tables
- 7 References

Evidence-  
Based  
Child Health



# Enuresis Umbrella Review

## Description of Cochrane reviews indentified

### Criteria for including studies

The inclusion criteria were comparable. All of the reviews included randomized or quasi-randomized trials. All of the reviews included children with nocturnal enuresis. The age range was determined by the individual trials and tended to be up to 16 years of age. While children with daytime enuresis or organic causes were sometimes included, the primary condition must have been non-organic nocturnal enuresis. The intervention

### Search strategies

The search strategies used to identify the included studies were very similar. All included reviews used the search strategy that was developed by the Inconti-

# Enuresis Umbrella Review

## Description of studies

Within *The Cochrane Library*, seven systematic reviews examining treatments for nocturnal enuresis have been published. The treatments are enuresis alarms, desmopressin, tricyclics, pharmacological interventions other than desmopressin or tricyclics, simple behavioural interventions, complex behavioural or educational interventions, and complementary and miscellaneous interventions. A total of 230 trials were included but because the comparison group included any other treatment, there is partial overlap of the trials between many of the reviews. The age of the children was not specified by the reviews, but instead age was defined by the individual trials, and was usually up to age 16.

# Enuresis Umbrella Review

**Table I.** Failure to achieve 14 consecutive dry nights during treatment

Comparison	Number of subjects (studies)	Average control group rate*	Relative risk (95% CI) <sup>†</sup>
Enuresis alarms versus no treatment			0.45
Enuresis alarm versus dry bed training			0.24
Enuresis alarm versus desmopressin			0.99
Enuresis alarm versus imipramine			0.88
Alarm versus cognitive treatment/psychotherapy/counseling			0.90
Cognitive treatment/psychotherapy/counseling versus imipramine			0.85
Dry bed training versus imipramine			0.02
Dry bed training versus placebo			0.28
20 mcg desmopressin versus placebo			0.91
40 mcg desmopressin versus placebo			0.88
60 mcg desmopressin versus placebo			0.89 (0.89, 0.99)
Diclofenac versus placebo			0.38 (0.38, 0.70)
Imipramine versus placebo			0.77 (0.72, 0.83)

Comparison	Subjects	Studies
Alarm vs. Imipramine	208	3
Alarm vs. No Treatment	576	13
Imipramine vs. No Treatment	813	11

# Analyses and Figures

Direct and Indirect Comparisons  
(comparison intervention is Alarm)

Failure to  
nights w

N of patients (trials)

Desmopressin  
Imipramine

243 (3)

208 (3)

Desmopressin  
Imipramine

463 (6) vs. 576 (13)

813 (11) vs. 576 (13)

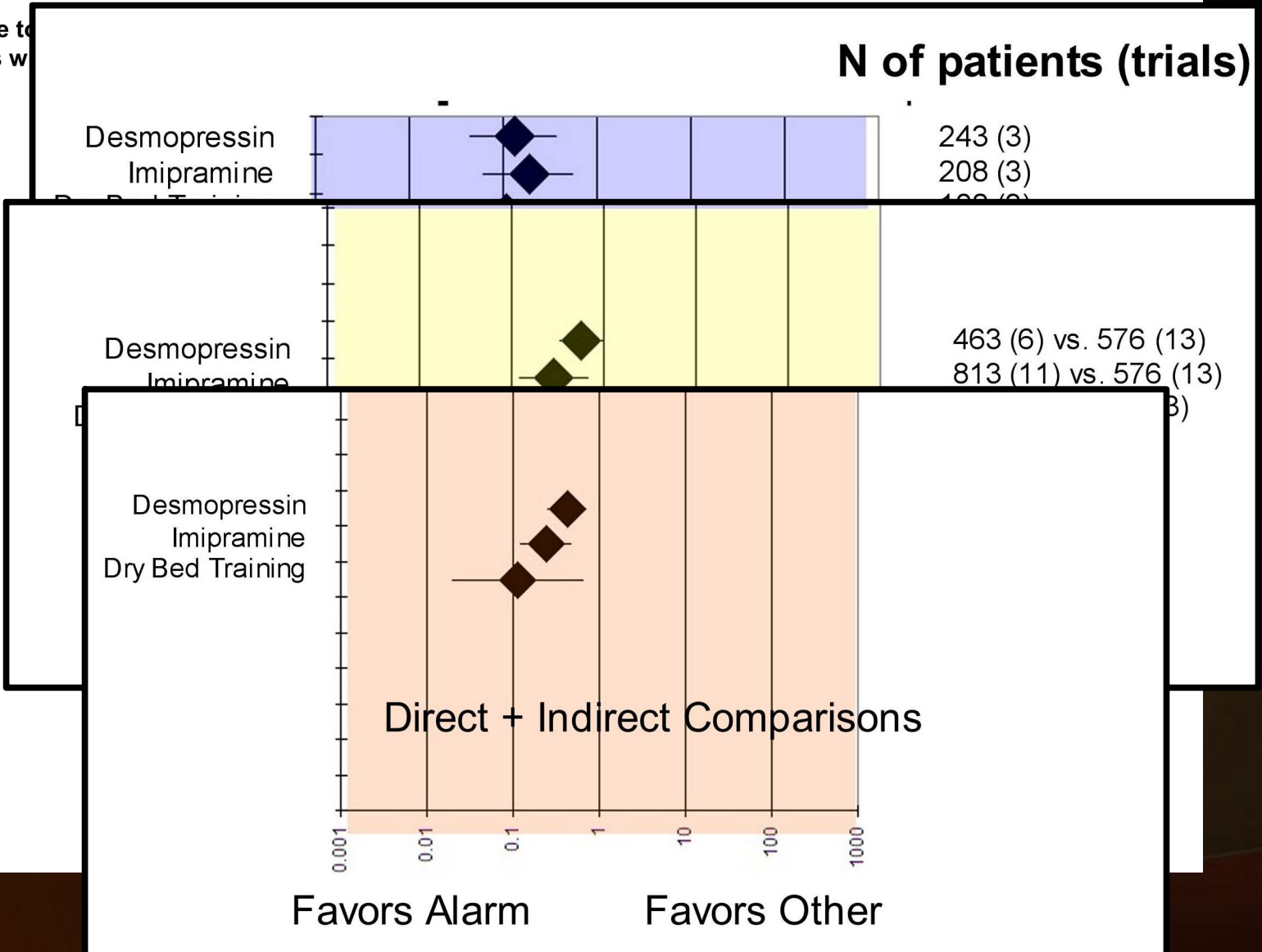
Desmopressin  
Imipramine  
Dry Bed Training

Direct + Indirect Comparisons

0.001 0.01 0.1 1 10 100 1000

Favors Alarm

Favors Other



# **Umbrella Reviews Working Group**

- Lorne Becker
- Jon Deeks
- Paul Glasziou
- Steff Lewis
- Yoon Loke
- Lara Maxwell
- Andy Oxman
- Deborah Pentescio-Gilbert
- Rebecca Ryan
- Peter Tugwell
- Janet Wale



# Plenary 1

*Pembroke*