

Positives and pitfalls of evidence-based practice when determining outcomes

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Sackett et al, 1996; Donald & Greenhalgh, 2000

The current state of EBP

- Many studies avoid the important questions or measure the right outcomes
- Bias
- Discovery favoured over replication
- Negative findings don't get published
- Confusion: Lots of opposing studies and dubious practices

How do we evaluate effectiveness?

- Subjective outcome/end point: based on feeling better
 - Can be misleading: is the effect real and lasting?
 - Harms associated with placebo
- Objective outcome/end point: surrogate versus clinical end points

Types of objective outcomes

Surrogate end points

- Defined and measured
- Invisible to the patient
- Easier and cheaper to study
- Research dozens of patients, months-years
- Often make intuitive sense

e.g. drug lowers blood pressure

Clinical end points

- Defined and measured
- Meaningful to patients (what they're *really* interested in)
- Complex and expensive to study
- Research hundreds of patients, years-decades

e.g. drug improves survival

Objective outcomes in dysphagia studies

Surrogate end points

- OTT, PTT
 - UES opening
 - Laryngeal penetration
 - Aspiration (amount, frequency)
 - Coughing
- e.g. thickeners reduce OTT

Clinical end points

- Physical health and well-being
 - Emotional health and well-being
 - Hunger, thirst
 - Perceived quality of life
 - Survival rates
- e.g. oral care lowers pneumonia risk

The problem with surrogate end points

- Don't always correlate with the clinical end point, i.e. the outcome that matters to patients:
 - cough reflex testing \nRightarrow pneumonia rates (Miles et al, 2013)
 - aspiration \nRightarrow long-term survival (Chen et al, 2004)
 - thickener \nRightarrow pneumonia rates (Robbins et al, 2008)

Reflecting on potential barriers

- Heuristics
- Biases
- Cognitive dissonance
- We see dysphagia, we reflexively try to fix dysphagia

Moving the stones in the road

- Approaching EBP with caution
- Reflecting on heuristics and biases that affect our decision-making
- Clinical outcomes rather than surrogate outcomes
- QI methodology