Evidence-Based Practices for Depressed Treatment in Adolescents

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Conflicts of Interest

- Dr. Courtney's research is funded by the Cundill Centre for Child and Youth Depression; he has no conflicts of interest to declare.

Outline

- What do we mean by evidence-based practice? Why do we care?
- How do best determine Evidence-based Practice for Adolescent Depression
- Discuss specific recommendations from the NICE guideline for depression in children and young people

Temptation of Bias

- Problem of Multiple Endpoints:
  - The probability of *any* outcome is high.
  - The probability of a specific outcome is happening is low
- Confirmation Bias:
  - Tendency to gather and assess information which confirms your theory

“Catalogue of Bias”

- Admission rate bias
- All’s well literature bias
- Allocation bias
- Ascertainment bias
- Attrition bias
- Biases of rhetoric
- Chronological bias
- Confounding

“Catalogue of Bias”

- Confounding by indication
- Detection bias
- Diagnostic access bias
- Diagnostic suspicion bias
- Hawthorne effect
- Hot Stuff bias
- Informed presence bias
- Language bias

“Catalogue of Bias”

- Mimicry bias
- Misclassification bias
- Non-contemporaneous control bias
- Observer bias
- One-sided reference bias
- Outcome reporting bias
- Perception bias
- Popularity bias

“Catalogue of Bias”

- Et cetera…..

Enter the RCT

- Randomized Controlled Trials function to eliminate bias as best as possible.

- We need them.

Limits of RCTs

- ? Generalizable to “real-life patients”?
- Many of poor quality
- Expensive
- Some important rare outcomes hard to study
- Replication has been problematic

RCTs

"Indeed, it has been said that democracy is the worst form of government; except all those other forms that have been tried from time to time" – Winston Churchill

RCTs

"Indeed, it has been said that the RCT the worst form of determining effective treatment; except all those other forms that have been tried from time to time" – Darren Courtney, June 4th 2018

RCTs

- Need to complement:
  - with “effectiveness” trials
  - with well-designed observational studies
- Need to be co-created with youth and clinicians’ perspectives

Beyond RCTs

- Quality Systematic Reviews:
  - Clear question (Population, Intervention, Comparison, Outcome, Timing – PICOT)?
  - Detailed search strategy with inclusion/exclusion?
  - Assessment of Bias of studies?
  - Funding?

Beyond the RCT

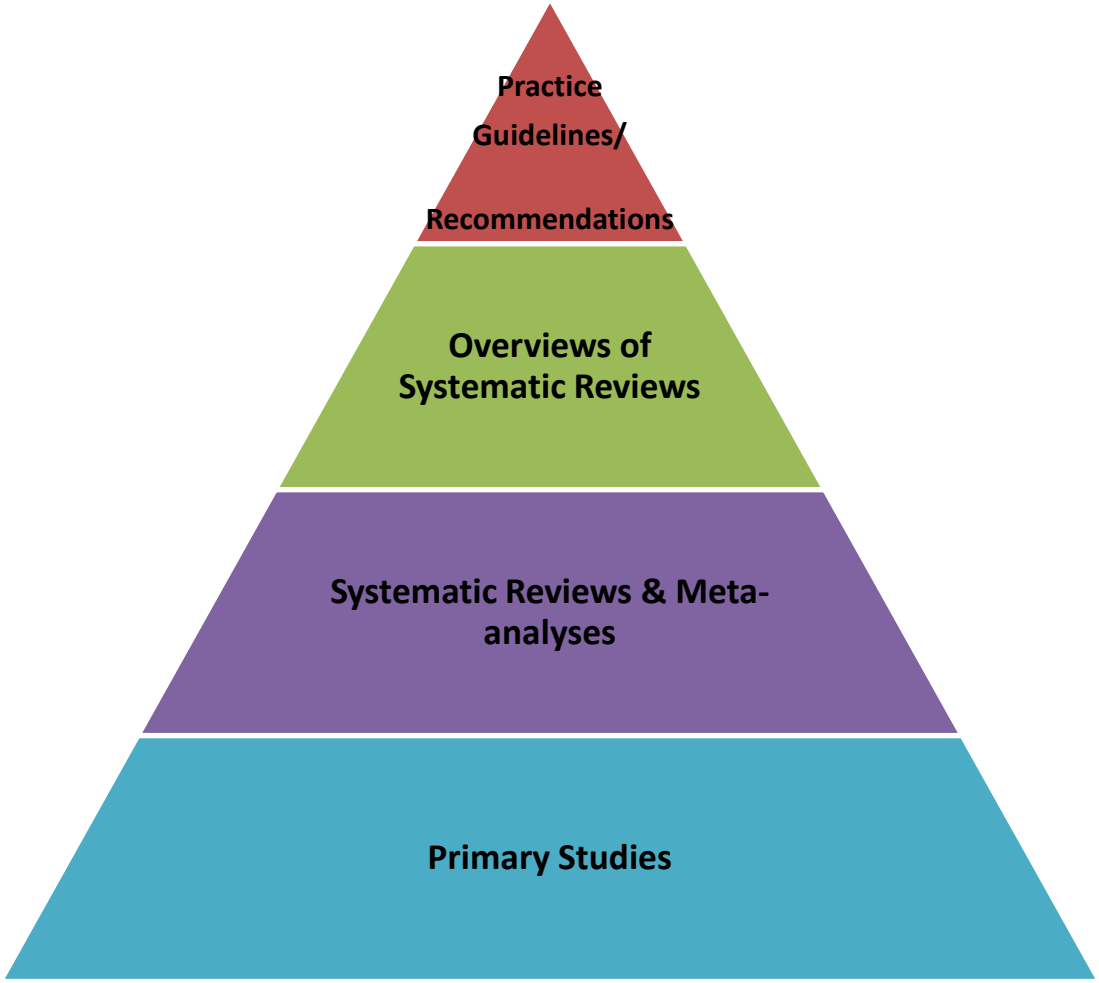
- Meta-analyses:
  - Same as systematic reviews, and….
  - Description of how results were synthesized (eg. Forest plot)?
  - Heterogeneity described?

Beyond the RCT

- Clinical Practice Guidelines:
  - Same as meta-analyses and….
  - Input from multiple disciplines?
  - Input from people with lived experience and their families?
  - Transparent process for:

    results → recommendations?
  - Strength of evidence for each recommendation clearly labeled?

Research Evidence Pyramid: The Science



Our research

- Systematic Review and Appraisal of Clinical Practice Guidelines for Adolescent Depression
- Identified 21 Clinical Practice Guidelines for the treatment of child and adolescent depression published from 2005-2015
- Appraised them with the AGREE II tool
- How many were of high quality?

Our research

- Two:
  - (1) NICE guidelines
  - https://www.nice.org.uk/guidance/cg28/chapter/1-Recommendations
  - (2) Beyond Blue (expired)

Key Point

- Refer to the NICE guideline when making treatment decisions

What do the NICE CPGs say

- A lot (worth reading all recommendations for details – paraphrased here)
- (1) All young people with moderate-severe depression should be offered a specific individual psychotherapy (CBT, IPT, Family, Psychodynamic) – at least 3 months
- (2) Antidepressants should not be used as initial treatment for mild depression

What NICE CPG says

- (3) Consider fluoxetine as first line agent for moderate-severe depression in adolescents:
  - Either at beginning in combination with therapy
  - Or if not responding to psychotherapy after 4-6 weeks
  - Start at 10mg daily, increase to 20mg after 1 week
    - Higher doses have little evidence to support
  - Consider weekly contact for first 4 weeks for potential side effects

What NICE CPGs say

- Use recognized scale to monitor response:
  - Eg. Mood and Feelings Questionnaire
- "Multidisciplinary Reviews" assess progress and direct treatment

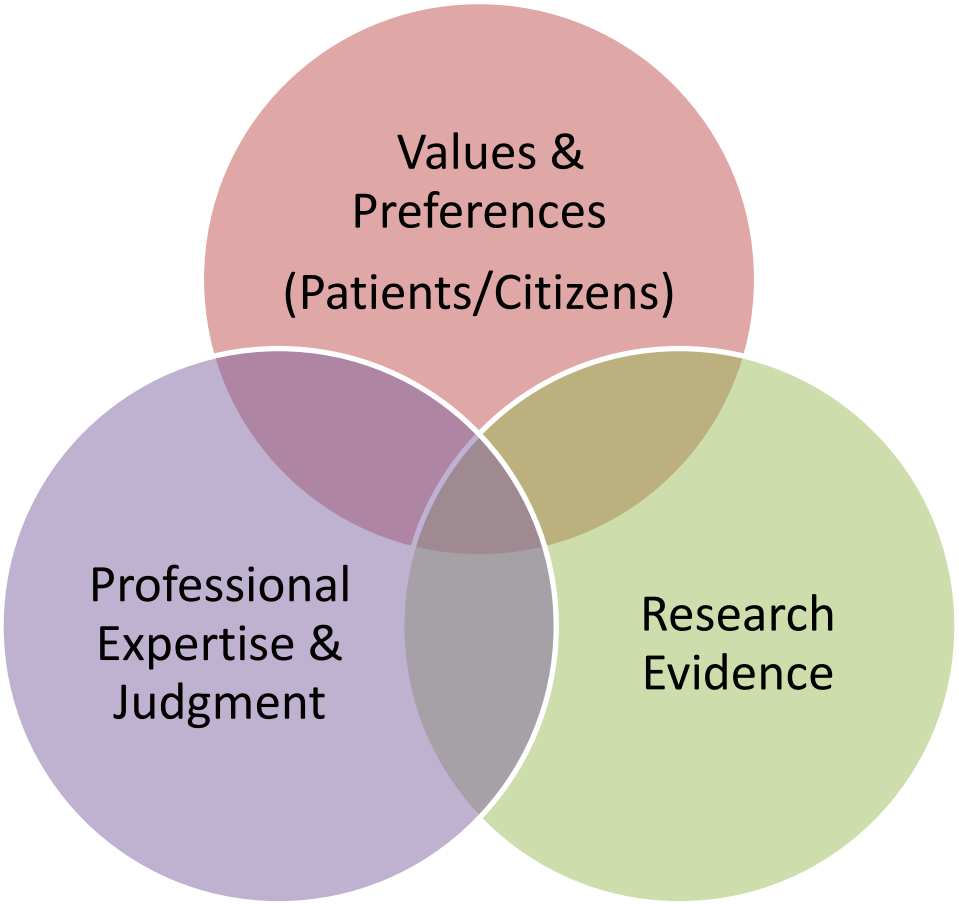
What NICE CPGs say

- Consider sertraline or citalopram if:
  - Adequate trial of fluoxetine
  - Assessment of other causes of treatment resistance
  - Clear discussion about risks/benefits with youth +/- caregiver
  - Sufficient severity to warrant 2nd medication

What NICE CPG says:

- If response to SSRI, continue for at least 6 months.
- If discontinuing – taper over 6-12 weeks (limited evidence for this recommendation).
- TCAs, Paroxetine and venlafaxine should not be offered
- St. John's Wort should not be offered

Evidence-informed Decision Making: 3 Pillars



Implementation

- See decision aid
- More to come during workshop….