Using evidence in early child development & family support: What’s in your toolkit?

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Sunny Hill Health Centre for Children
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Overview

- Introductions
- Learning objectives
- The EBP Toolkit
- Hands-on activities
  - Formulating a clinical question
  - Searching for evidence
  - Appraising the evidence
  - Applying the evidence
  - Evaluating the evidence
- Wrap-up
Who we are

Stephanie Glegg
- Occupational therapist
- Evidence Facilitator
- Researcher

Andrea Ryce
- Clinical Librarian
- Evidence Facilitator

Evidence Centre
What we do

- Augment EIHC knowledge, skills & attitudes
- Facilitate EIHC processes & outcomes
- Drive knowledge translation & practice informed research

Clinical Librarian Services
Evidence-Based Practice
Rapid Response
Knowledge Brokering
Linkage & Exchange
Why we’re here

• To share our experience in facilitating evidence informed health care
• To learn from your experience in the field of child development & family support
• To explore evidence in the field
• To equip you with tools for evidence-informed practice
Learning Objectives

1. To develop competencies in evidence informed decision-making
2. To enhance understanding about the variability involved in evidence informed practice through collaborative learning with people from diverse backgrounds
3. To access and apply the best evidence to support the children and families with whom you work
Evidence Informed Health Care
Step 1: Formulating a clinical question

**PICO Framework**

- **Population**
- **Intervention** (or assessment)
- **Comparison** (optional)
- **Outcome of interest** (measureable)

Among \( P \), does \( I \) versus \( C \) affect \( O \)?
Activity: Formulating a clinical question

• In groups of 2-3, formulate a clinical question using the PICO Framework

Resources:

• Clinical Question Worksheet
• Clinical Question Guidelines
Step 2: Searching for Evidence

Select sources of evidence

Clinical Experience
- Exchange expertise
- Reflect on practice
- Document current practice

Research
- Plan your search
- Run your search
- Save your search

Your Client
- Client experiences, characteristics & preferences
- Environment/context
- Collaborate to target client’s information needs

Select the best evidence

Exchange expertise
Reflect on practice
Document current practice
Plan your search
Run your search
Save your search
Client experiences, characteristics & preferences
Environment/context
Collaborate to target client’s information needs
How do I choose where to search?

Considerations:

- Convenience?
- Clinical Relevance?
- Validity?
Research Databases

Features:

• Articles published in academic & professional journals
• Systematic reviews
• Peer-reviewed
• Indexed
• Links to full-text depending on institution
• Often costs $$

How to search:

• Choose a database
• Select search terms
• Use connectors (eg. AND, OR, parentheses for concepts)
• Limit results
• Document your search
Grey Literature

Features:
- Government reports
- Conference papers
- Theses & dissertations
- White papers
- Policy statements
- Usually freely available online

How to search:
- Choose a search engine
- Select search terms
- Refine your search with “phrase searching”, boolean operator “OR”, specifying a site or file type
- Document your search
Activity: Developing a Search Strategy

In groups of 4 or 5:

• Brainstorm sources of evidence that might inform your daily work
• Develop a search strategy to answer one of your group’s PICO questions

Resources:

• Sources of Evidence in Early Child Development & Family Support Worksheet
• Search Strategy Worksheet
Step 3: Appraising the evidence

Which tools should I use?
6s Hierarchy of Pre-Appraised Evidence

Grey Literature Appraisal

“Expert Opinion”

AACODS Checklist

- Authority
- Accuracy
- Coverage
- Objectivity
- Date
- Significance

 Archived at http://dspace.flinders.edu.au/dspace/
Activity: Appraising the evidence

In groups of 4-5:
• Identify the level of the 6s pyramid on which your evidence belongs
• Select an appraisal tool using the flowchart, and assign a level of evidence
• Extract 1-3 actionable key messages
• Assign a quality rating (time permitting)
Clinical applicability

Characteristics of the Study:
• Clinical relevance
• Validity
• Statistical significance
• Clinical importance
• Risk-benefit ratio

Generalizability:
• Similarity to clinical population
• Need
• Reach

Feasibility
• Social acceptability
• Organizational capacity
• Professional capacity
• Reproducibility
Step 4: Applying the evidence

STOP
• Proven ineffective or harmful

MEASURE
• No, insufficient or conflicting evidence

GO
• Proven effective

3 ways to apply evidence

| Clinical implementation (practice change) | Knowledge transfer (raise awareness & understanding) | Research (answer emerging questions) |
Facilitating Practice Change

1. Identify stakeholders & roles
2. Define proposed versus current practice
3. Develop an action plan
4. Evaluate outcomes
## Action plan should target...

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<thead>
<tr>
<th>Facilitators</th>
<th>Barriers</th>
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<tbody>
<tr>
<td>• Human resources</td>
<td>• Generalizability</td>
</tr>
<tr>
<td>• Material resources</td>
<td>• Social acceptability</td>
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<tr>
<td>• Organizational resources</td>
<td>• Organizational capacity</td>
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## Step 5: Evaluating evidence use

### 3 ways to apply evidence

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<td>• Utility of</td>
<td>• Projects</td>
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<tr>
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<td>• Results</td>
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• EIHC competencies

• Metrics gathered?

• Practice change

• Clinical outcomes

• Reach/engagement

• Awareness

• Understanding

• Utility of knowledge products/tools

• EIHC competencies

• Partnerships

• Funding

• Projects

• Results

• Knowledge translation
Activity: Creating a practice change & evaluation plan

In groups of 4-5:

• Develop a practice change & evaluation plan to address the key messages that emerged from the evidence on your assigned intervention or assessment

Resource:

• Practice change plan
www.childdevelopment.ca

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