Development of a contemporary evidence-based practice workshop for clinicians with a focus on pre-appraised evidence and shared decision-making: a before-after pilot study

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Clinicians expected to be fully competent in all 5 EBP steps, including the detailed critical appraisal of research evidence.
Hypothesis

1. Formulate a question
2. Search evidence
3. Critically appraise
4. Apply evidence
5. Evaluate performance
Objectives

Assess

Feasibility and clinicians’ acceptability to a new approach to teaching EBP, which focuses on SDM and uses pre-appraised evidence.

Explore

The effect of this workshop on clinicians’ SDM and evidence communication skills.
Methods

Study Design

A single-arm before and after pilot study
### Methods

<table>
<thead>
<tr>
<th>Population</th>
<th>Registered and practicing clinicians in AU</th>
</tr>
</thead>
</table>

**Study Design**
A single-arm before and after pilot study
A half-day EBP workshop

Measures of effect and uncertainty for continuous and categorical outcomes

Shared decision making, communicating research evidence used of decision aids

3.1 Exercise – Long-term pain (1-2 years) – does arthroscopy help?

The following results are from Simieniak et al reporting the effect of arthroscopic surgery (compared to conservative management) on long-term pain for patients with knee osteoarthritis.

Effects of Aspirin for Primary Prevention in Persons with Diabetes Mellitus

The ASCEND Study Collaborative Group

ABSTRACT

BACKGROUND: Aspirin increases the risk of gastrointestinal events, which may outweigh the benefits of cardiovascular events. This study compared the effect of aspirin in patients with and without diabetes.

METHODS: We conducted a randomized controlled trial comparing aspirin (300 mg/day) with placebo in patients with type 2 diabetes and without diabetes. Patients were randomized to aspirin or placebo in a 1:1 ratio. The primary outcome was the occurrence of cardiovascular events, which included fatal and non-fatal myocardial infarction, stroke, and revascularization. Patients with diabetes were also randomized to intensive or standard management. The trial was completed in 2018.

RESULTS: Among 938 patients with diabetes, 484 were randomized to aspirin and 454 to placebo. The incidence of cardiovascular events was 8.5% in the aspirin group and 6.9% in the placebo group. The rate ratio was 1.25 (95% CI, 1.00 to 1.57). The difference in cardiovascular events was not statistically significant (P = .04).

CONCLUSION: Aspirin for primary prevention in persons with diabetes was not associated with a significant reduction in cardiovascular events.
Outcomes

SDM and Evidence Communication skills

ACEPP
Assessing Communication about Evidence and Patient Preferences Tool (0-5 points)

OPTION
Assessing the revised Observing Patient Involvement scale (0-100 points)

Feedback Questionnaire
9 statements rated using a 5-point Likert-scale (from strongly disagree = 1 to strongly agree = 5).
4 open-ended questions (e.g. most beneficial aspect/s, least useful aspects)

Methods

2 independent assessed audio-recorded consultations

Patient’s Scenario
Interpretation of Research Evidence
SDM & Applying Research Evidence
GRADE & Evaluation of Research

GRADE, RCT critical appraisal, and Forest Plot Interpretation

Study Design
A single-arm before and after pilot study
Population
Registered and practicing clinicians in AU
Intervention
A half-day EBP workshop
Results

14 Clinicians

9 Women
6 Medical & 7 Pharmacists
10 from hospitals
4 Teaching & clinical roles
7 (3.6-18.3) Clinical experience
## Results

### Feedback Questionnaire

<table>
<thead>
<tr>
<th>Objective</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
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<td>Objectives were clear</td>
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<td>4</td>
<td>6</td>
<td></td>
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<tr>
<td>Objectives have been fulfilled</td>
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<td>3</td>
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<td>Teaching methods appropriate</td>
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<td>Duration and pace appropriate</td>
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<tr>
<td>Time managed appropriately</td>
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<td>Resources were useful</td>
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<td>Relevant to clinical practice</td>
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<td>7</td>
<td>5</td>
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<td>Small group session useful</td>
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<td>EBP confidence enhanced</td>
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<td></td>
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<td></td>
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</tbody>
</table>
Results

**OPTION**

Observing Patient Involvement scale (0-100 points)

Mean difference (95% CI)

5.5 (1 to 9.9)

**ACEPP**

Communication about Evidence and Patient Preferences Tool (0-5 points)

Mean difference (95% CI)

0.54 (0.02 to 1.06)
A contemporary approach to teaching clinicians EBP, with a focus on SDM and pre-appraised evidence, was feasible, perceived as useful, and showed modest improvements in skills.

Results should be interpreted cautiously because of the small study size and pre-post design.
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