

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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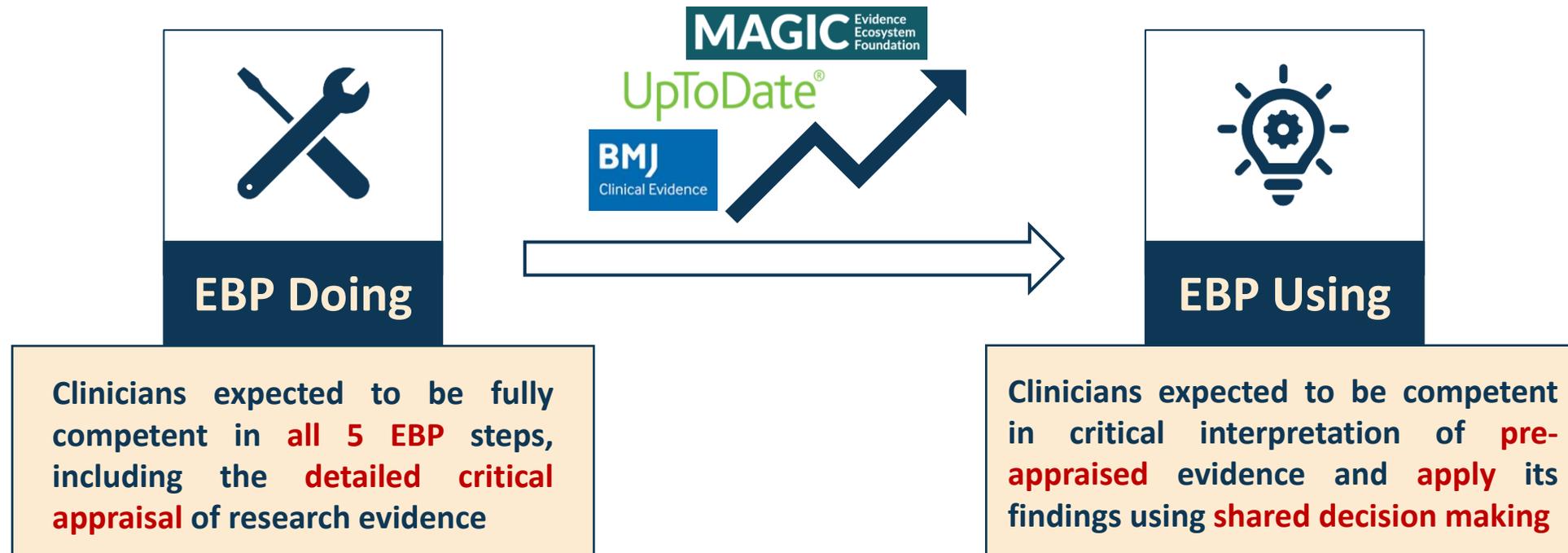
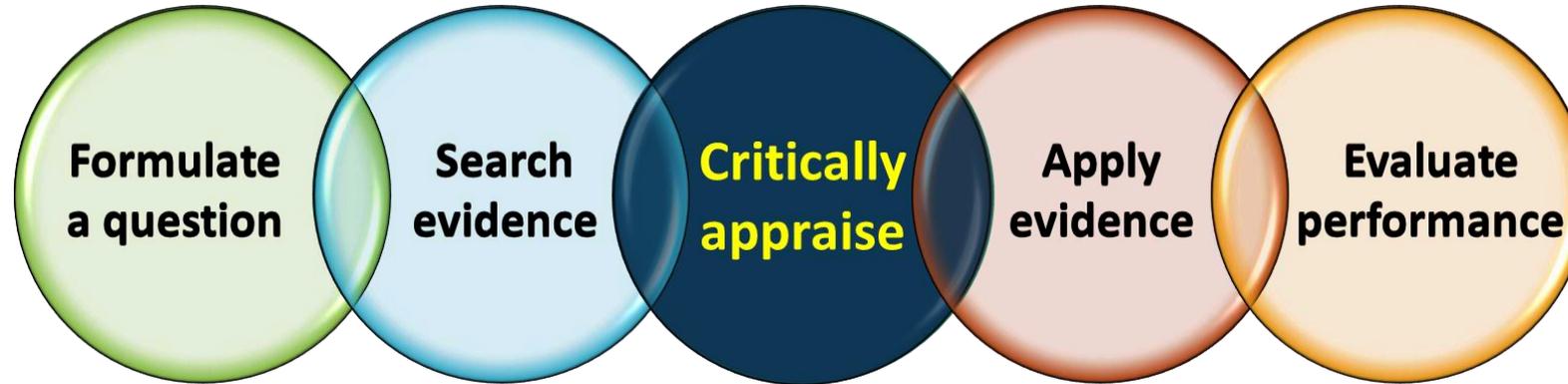
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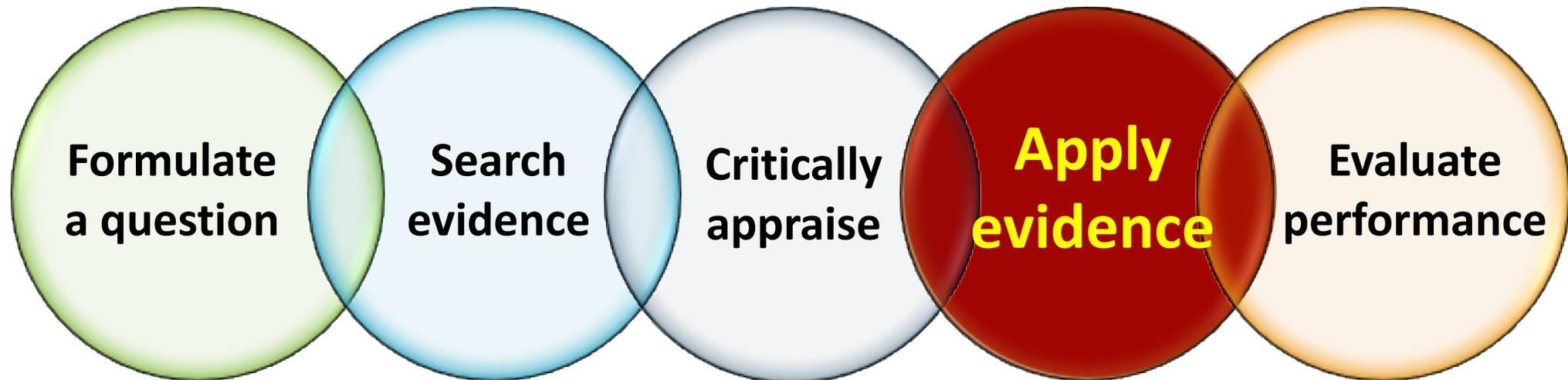
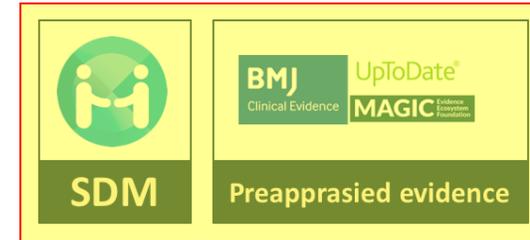
Bond University



Background



Hypothesis



Objectives

Assess

feasibility and **Clinicians' acceptability**
to a new approach to teaching EBP, which focusses on
SDM and uses **pre-appraised evidence**

Explore

the **effect** of this workshop on clinicians' **SDM**
and **evidence communication skills**

Study Design

A single-arm before and after pilot study

Methods

Population

Registered and practicing clinicians in AU

Methods

Intervention

A half-day EBP workshop



RAPID RECOMMENDATIONS

Arthroscopic surgery for degenerative knee arthritis and meniscal tears: a clinical practice guideline

Measures of effect and uncertainty for continuous and categorical outcomes

Open Access

Author: Arthroscopic Surgery for Degenerative Knee Arthritis and Meniscal Tears: A Clinical Practice Guideline. *Journal of Orthopaedic Surgery and Sports Medicine*. 2018; 23(1): 1-10. doi:10.1177/1099136218762400

Favours arthroscopic surgery
 Favours conservative management

Among a 1000 patients like you, on average with Arthroscopy

Knee replacement	Pain reduction (long-term)	Improved function (long-term)
11 more	3.1 higher	3.2 higher
12 per 1000	19 per 1000	10 per 1000
23 per 1000	22 per 1000	13 per 1000

Shared decision making, communicating research evidence, used of decision

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

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

Figure 3.



Effects of Aspirin for Primary Prevention in Persons with Diabetes Mellitus

The ASCEND Study Collaborative Group*

ABSTRACT

BACKGROUND
Diabetes mellitus is associated with an increased risk of cardiovascular events. Aspirin use reduces the risk of occlusive vascular events but increases the risk of bleeding; the balance of benefits and hazards for the prevention of first cardiovascular events in patients with diabetes is unclear.

METHODS
We randomly assigned adults who had diabetes but no evident cardiovascular disease to receive aspirin at a dose of 100 mg daily or matching placebo. The primary efficacy outcome was the first serious vascular event (i.e., myocardial infarction, stroke or transient ischemic attack, or death from any vascular cause, excluding any confirmed intracranial hemorrhage). The primary safety outcome was the first major bleeding event (i.e., intracranial hemorrhage, sight-threatening bleeding event in the eye, gastrointestinal bleeding, or other serious bleeding). Secondary outcomes included gastrointestinal tract cancer.

RESULTS
A total of 15,480 participants underwent randomization. During a mean follow-up of 2.4 years, serious vascular events occurred in a significantly lower percentage of participants in the aspirin group than in the placebo group (638 participants [8.5%] vs. 745 [9.6%]; rate ratio, 0.88; 95% confidence interval [CI], 0.79 to 0.97; P=0.01). In contrast, major bleeding events occurred in 314 participants (4.1%) in the aspirin group, as compared with 285 (3.2%) in the placebo group (rate ratio, 1.29; 95% CI, 1.09 to 1.52; P=0.003), with most of the excess being gastrointestinal bleeding and other extracranial bleeding. There was no significant difference between the aspirin group and the placebo group in the incidence of gastroin-

The Numbers Vascular Events
Placebo – 9.6%
Aspirin – 8.5%

Rate Ratio
 $8.5/9.6 = 0.88$
(a 12% reduction)

Rate Difference
 $9.6 - 8.5 = 1.1\%$

SDM & Applying Research Evidence

ed

Using Evidence

A guide for how to interpret and communicate evidence in daily clinical practice

Prepared By:
The Centre for Research in Evidence Based Practice

Workbook

BOND UNIVERSITY

October 2018

Among a 1000 patients like you, on average with Arthroscopy

Knee replacement		Blood clot		Infection	
↑ 11 more 1-2 years		↑ 5 more 3 months		↑ 2 more 3 months	
Conservative management	Arthroscopy	Conservative management	Arthroscopy	Conservative management	Arthroscopy
12 per 1000	23 per 1000	0 per 1000	5 per 1000	0 per 1000	2 per 1000
Certainty ○○○○ MODERATE		Certainty ○○○○ LOW		Certainty ○○○○ LOW	

Methods

Outcomes

SDM and Evidence Communication skills

BEFORE

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)

AFTER

2 independent assessed audio-recorded consultations

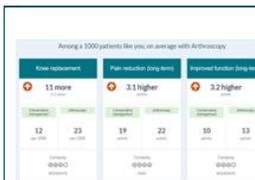


Patient's Scenario



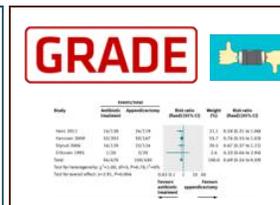
Interpretation of Research Evidence

Measures of **effect** and **uncertainty** for **continuous** and **categorical** outcomes



SDM & Applying Research Evidence

Shared decision making, communicate research evidence, and used of decision aids



GRADE & Evaluation of Research

GRADE, RCT critical appraisal, and Forest Plot Interpretation

14

Clinicians

9 Women

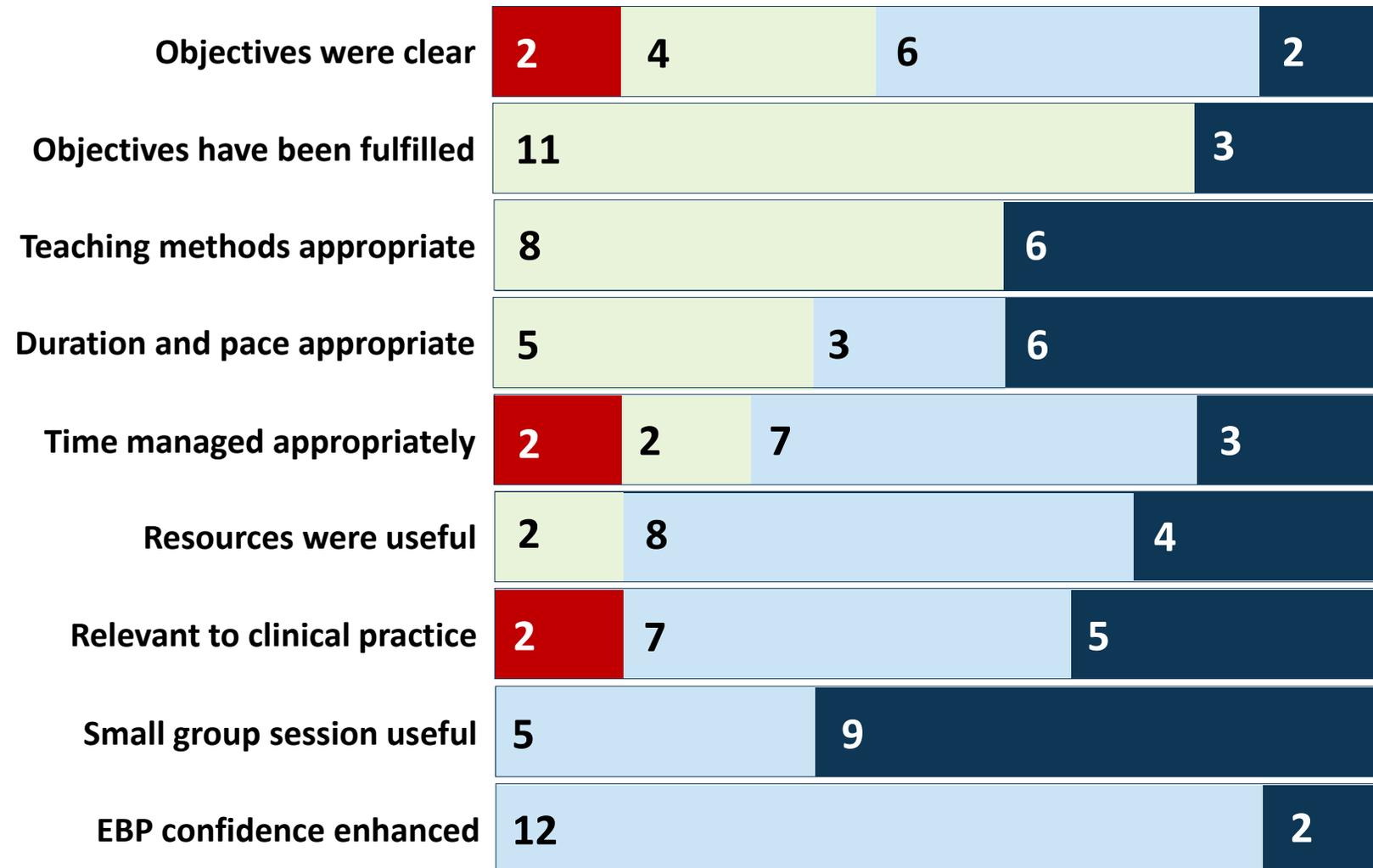
6 Medical & 7 Pharmacists

10 from hospitals

4 Teaching & clinical roles

7 (3.6-18.3) Clinical experience

Strongly Disagree Disagree Neutral Agree Strongly agree

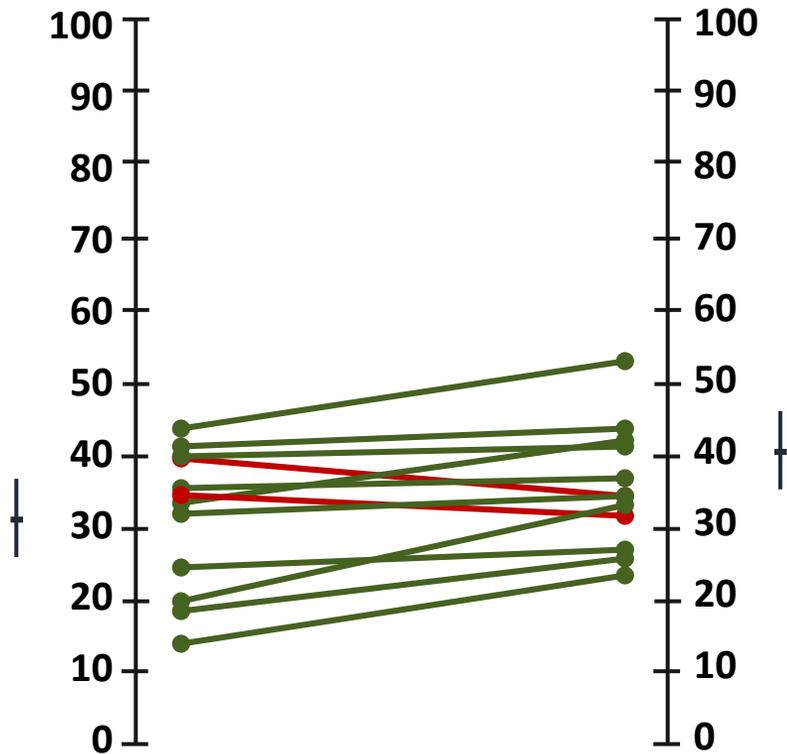


Results

OPTION

Observing Patient Involvement scale (0-100 points)

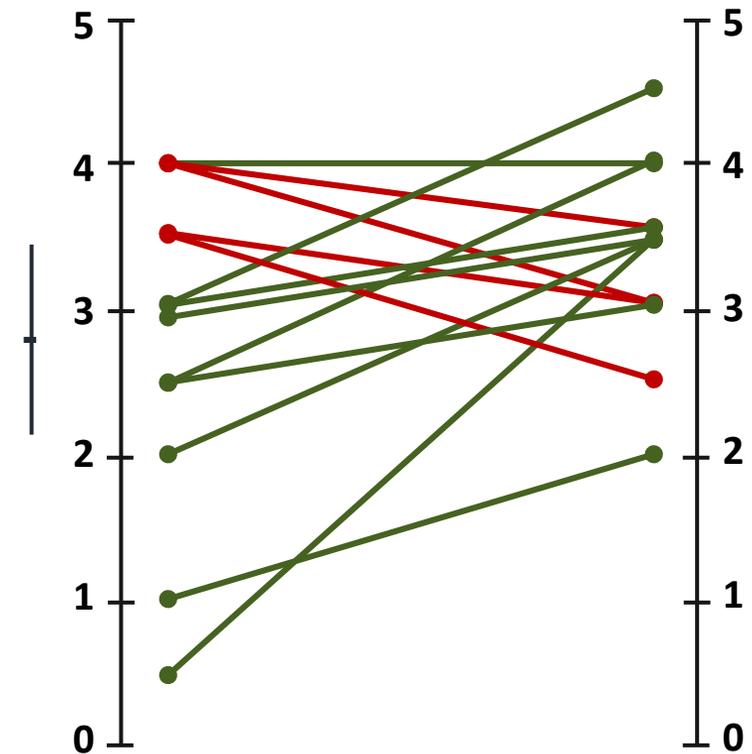
Mean difference (95% CI)
5.5 (1 to 9.9)



ACEPP

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

Mean difference (95% CI)
0.54 (0.02 to 1.06)

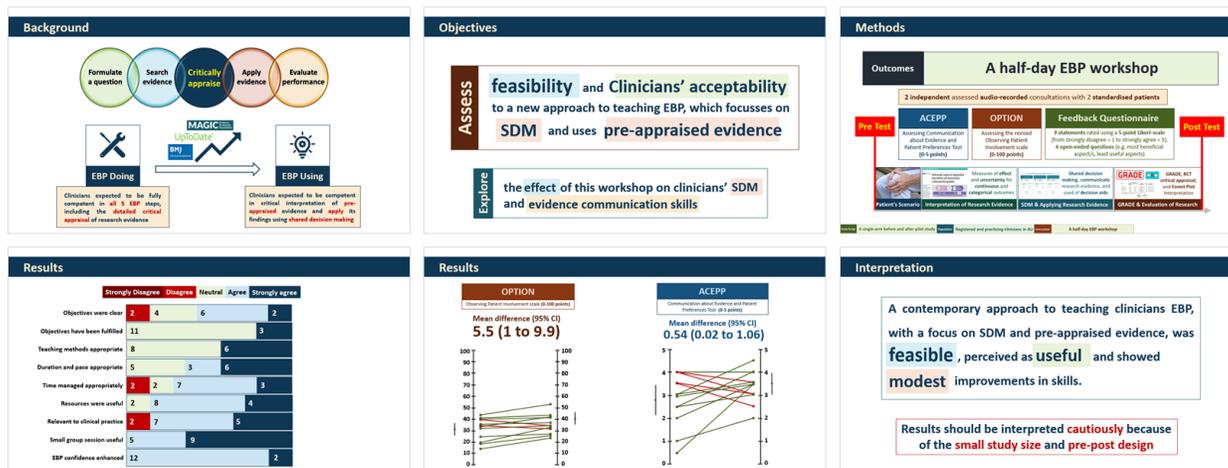


Interpretation

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**

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



Original EBM Research: Primary care

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

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