Effects of decision aids in patients with depression: Systematic review and meta-analysis

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Figure 1: Flow diagram (study selection)

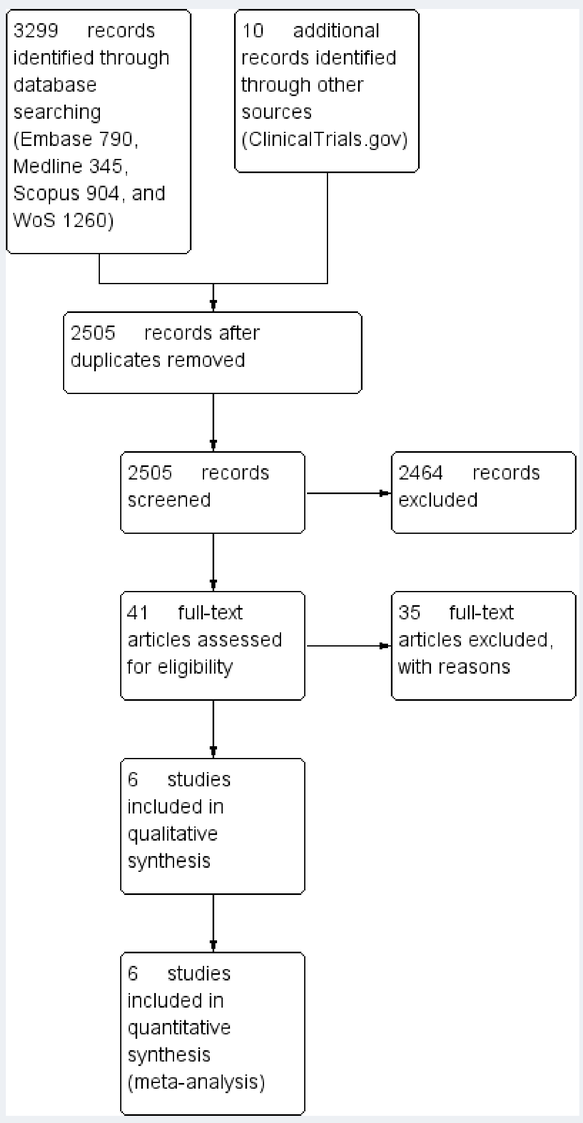
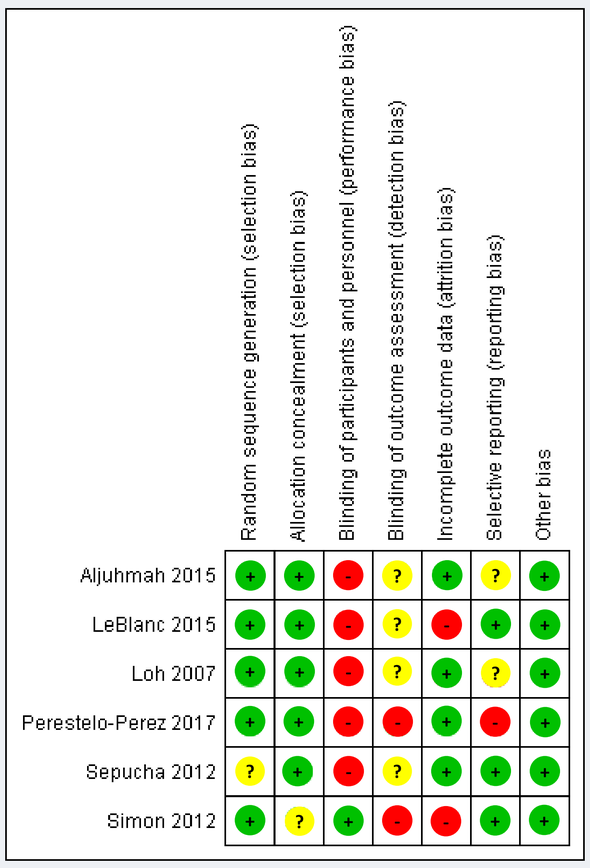


Figure 2: Risk of bias of selected studies



The Problem

Depression represents the leading cause of disability worldwide. **Decision aids are tools or technologies used to help patients make informed decisions that offer information about treatment options and help patients construct, clarify and communicate their values.** Their use can potentially involve them in treatment choice and self-determination, generate higher participant satisfaction, and improve adherence to treatment which can translate in lower depression scores.

Methods

1. Systematic review in 5 databases in January 2019 (PROSPERO CRD42019121878) (Figure 1)
2. RCTs that assessed the effects of decision aids in patients with depression were included.
3. Random effects for meta-analyses were used.
4. Certainty of evidence was assessed using the GRADE methodology.

Key Results

- 6 RCTs = 1369 patients.
- High heterogeneity between RCTs in their population, intervention and control group.
- Main results are shown in Table 1.

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Table 1: Summary of findings to evaluate the certainty of the evidence, using the GRADE methodology

Outcomes	Standardized mean difference (95% CI)	№ of participants (Studies)	Certainty of the evidence (GRADE)
Patient knowledge	**0.65 SD (95% CI: 0.14 SD to 1.15 SD)**	**982 (4 RCTs)**	**⊕◯◯◯ VERY LOW[a,b,e]**
Information exchange between patient and doctor	**0.55 SD (95% CI: 0.28 SD to 0.82 SD)**	**239 (2 RCTs)**	**⊕◯◯◯ VERY LOW[a,b,c,e]**
Decisional conflict	**-0.47 SD (95% CI: -0.73 SD to -0.22 SD)**	**558 (3 RCTs)**	**⊕◯◯◯ VERY LOW[a,b,e]**
Doctor facilitation of patient involvement	0.36 SD (95% CI: -0.77 SD to 1.48 SD)	239 (2 RCTs)	⊕◯◯◯ VERY LOW[a,b,c,d,e]
Adherence to treatment	0.16 SD (95% CI: -0.14 SD to 0.73 SD)	459 (3 RCTs)	⊕◯◯◯ VERY LOW[a,b,c,d,e]
Depression symptoms	-0.06 SD (95% CI: -0.22 SD to 0.09 SD)	667 (3 RCTs)	⊕◯◯◯ VERY LOW[a,b,e]

95% CI: 95% Confidence Interval; RCT: Randomized Controlled Trials; SD: Standard Derivations; a. Blinding participants, personnel, and outcome assessment was not detailed in the publication. Incomplete data are reported; b. Sample sizes were small (< 400); c. Selective reporting was not evaluated as the protocol was not available; d.I2 > 60 %; e. 95% confidence intervals include 0.5 value.

Conclusion: The use of decision aids has a beneficial effect in knowledge, information exchange, and decisional conflict; but has no effect in treatment adherence or depression symptoms, in adults with depression, with very low certainty of evidence.

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