

Supplementary Material

Article Title: Effectiveness of Peer-Administered Interventions for Perinatal Depression or Anxiety: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

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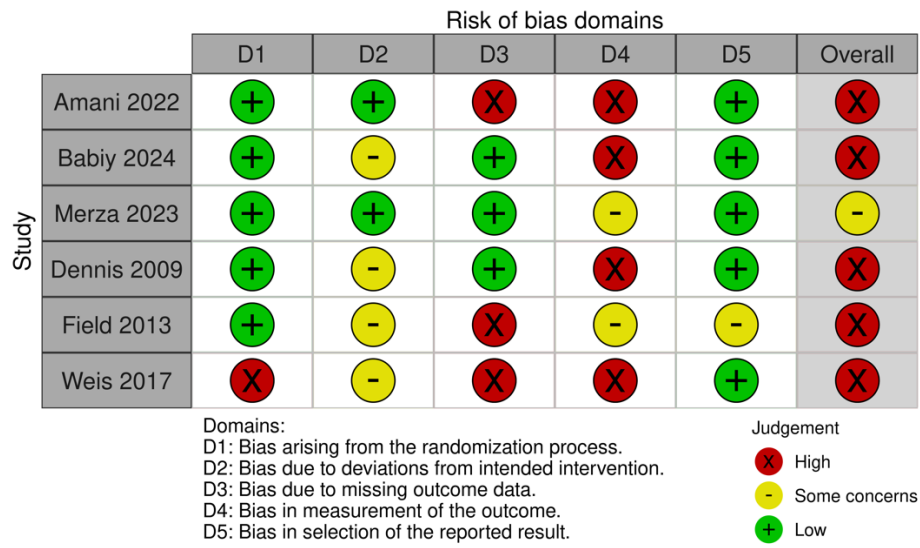
Supplemental Material – Effectiveness of PAIs for Perinatal Depression and/or Anxiety

Risk of Bias Summary for Perinatal Depression and Anxiety Outcomes

Supplementary Figure 1. Traffic light plot presenting risk of bias for studies assessing perinatal depression



Supplementary Figure 2. Traffic light plot presenting risk of bias for studies assessing perinatal anxiety



References

McGuinness, LA, Higgins, JPT. Risk-of-bias VISualization (robvis): An R package and Shiny web app for visualizing risk-of-bias assessments. Res Syn Meth. 2020; 1- 7. <https://doi.org/10.1002/jrsm.141>

Supplementary Table 1. GRADE Assessment – Perinatal Depression Outcomes

Question: Peer administered interventions (PAIs) compared to control for perinatal depression

Certainty assessment							№ of patients		Effect		Certainty	
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	peer administered interventions (PAIs)	control	Relative (95% CI)	Absolute (95% CI)		

Depression (peer delivered psychotherapy vs control)

8	randomised trials	not serious ^a	serious ^b	not serious	not serious	none	1170	1106	-	SMD 0.51 SD lower (0.79 lower to 0.24 lower)	⊕⊕⊕○ Moderate ^{a,b}	
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Depression (individual peer support vs control)

6	randomised trials	not serious ^a	serious ^c	not serious	serious ^d	none	454	485	-	SMD 0.3 SD lower (0.63 lower to 0.04 higher)	⊕⊕○○ Low ^{a,c,d}	
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Depression (peer discussion groups vs control)

Certainty assessment							№ of patients		Effect		Certainty	
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	peer administered interventions (PAIs)	control	Relative (95% CI)	Absolute (95% CI)		
4	randomised trials	serious ^e	serious ^f	not serious	very serious ^g	none	213	215	-	SMD 0.09 SD lower (0.42 lower to 0.25 higher)	⊕○○○ Very low ^{e,f,g}	

CI: confidence interval; SMD: standardized mean difference

Explanations

- a. All studies were at a low risk of bias for randomization. Studies were most often at unclear or high risk of bias due to the measurement of the outcome domain, as they used self-report measures and participants were aware of their assigned intervention.
- b. Heterogeneity was high overall (I^2 of 89%) for peer-delivered psychotherapies. Some clinical heterogeneity may be due to varying intervention characteristics (e.g., content, peer training, intensity, structure) between studies.
- c. Heterogeneity was high overall (I^2 of 74%) for individual peer support. Some clinical heterogeneity may be due to varying intervention characteristics (e.g., content, peer training, intensity, structure) between studies.
- d. The confidence interval (95% CI: -0.63, 0.04) overlaps the clinical threshold (i.e., SMD of 0.20) for benefit. Rated down for imprecision.
- e. One out of four studies were at a high risk of bias for randomization. Studies were most often at unclear or high risk of bias due to the measurement of the outcome domain, as they used self-report measures and participants were aware of their assigned intervention.
- f. Heterogeneity was moderate overall (I^2 of 59%) for peer discussion groups. Some clinical heterogeneity may be due to varying intervention characteristics (e.g., content, peer training, intensity, structure) between studies.
- g. The confidence interval (95% CI: -0.42, 0.25) overlaps both clinical thresholds (i.e., SMD of 0.20) for benefit and harm, therefore rated down twice for imprecision.

Supplementary Table 2. GRADE Assessment – Perinatal Anxiety Outcomes

Question: Peer administered interventions (PAIs) compared to control for perinatal anxiety

Certainty assessment							№ of patients		Effect		Certainty
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	peer administered interventions (PAIs)	control	Relative (95% CI)	Absolute (95% CI)	

Anxiety (peer delivered psychotherapy vs control)

3	randomised trials	not serious	not serious ^a	not serious	not serious	none	236	216	-	SMD 0.63 SD lower (0.95 lower to 0.31 lower)	⊕⊕⊕⊕ High ^a
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Anxiety (individual peer support vs control)

1	randomised trials	not serious	not serious ^a	not serious	serious ^b	none	297	316	-	SMD 0.14 SD lower (0.3 lower to 0.01 higher)	⊕⊕⊕○ Moderate ^{a,b}
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Anxiety (peer discussion groups vs control)

Certainty assessment							№ of patients		Effect		Certainty
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	peer administered interventions (PAIs)	control	Relative (95% CI)	Absolute (95% CI)	
2	randomised trials	serious ^c	not serious ^a	not serious	serious ^d	none	143	147	-	SMD 0.28 SD higher (0.04 higher to 0.51 higher)	⊕⊕○○ Low ^{a,c,d}

CI: confidence interval; **SMD:** standardized mean difference

Explanations

- a. No significant heterogeneity between studies.
- b. The confidence interval (95% CI: -0.30, 0.01) overlaps the clinical threshold (i.e., SMD of 0.20) for benefit. Rated down for imprecision.
- c. One out of two studies were at a high risk of bias for randomization. Studies were most often at unclear or high risk of bias due to the measurement of the outcome domain, as they used self-report measures and participants were aware of their assigned intervention.
- d. The confidence interval (95% CI: 0.04, 0.51) overlaps the clinical threshold (i.e., SMD of 0.20) for harm. Rated down for imprecision.