Author(s): KAB/JP/AT
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Question: Should false suggestion vs no treatment/control be used for reducing vaccine injection pain in individuals of all ages?[1,2]
Settings: clinics
Bibliography: Eland 1981 (1,2), Fowler-Kerry 1987 (1,3)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	False suggestion	No treatment/control	Relative (95% CI)	Absolute		
Pain (measured with: validated tool (Adapted Eland Color Assessment Tool 0-3, Visual Analog Scale 0-3); Better indicated by lower values)												
2	randomised trials	serious[3]	no serious inconsistency	no serious indirectness	serious[4]	none	100	140[5]	-	SMD 0.21 lower (0.47 lower to 0.05 higher)[5]	⊕⊕OO LOW	CRITICAL
Distress Pre-procedure (measured with: validated tool (3-point scale 1-3) by immunizer; Better indicated by lower values)												
1	randomised trials	serious[6]	no serious inconsistency	no serious indirectness	serious[4]	none	20	20	-	SMD 0.28 lower (0.91 lower to 0.34 higher)	⊕⊕OO LOW	IMPORTANT
Fear (assessed with: no data were identified for this critically important outcome)												
0	No evidence available					none	-	-	-	-		CRITICAL
								0%		-		
Procedure Outcomes, Parent Fear, Vaccine Compliance, Memory, Preference, Satisfaction (assessed with: no data were identified for these important outcomes)												
0	No evidence available					none	-	-	-	-		IMPORTANT
								0%		-		

[1] In study by Eland (1981), analysis (1) compared suggestion and placebo vapocoolant to no treatment and placebo vapocoolant and analysis (2) compared suggestion and vapocoolant to no treatment and vapocoolant

[2] In study by Fowler-Kerry 1987, analysis (1) compared suggestion and no treatment, and analysis (3) compared suggestion and distraction and no treatment and distraction

[3] Immunizer and outcome assessor not consistently blinded; selective outcome reporting

[4] Confidence interval crosses line of nonsignificance and sample size was below the recommended optimum information size (OIS) of 400 for an effect size of 0.2

[5] Removal of the data from Eland 1981 (2) and Fowler-Kerry 1987 (3) does not alter the meta-analytic results: SMD = -0.24 (95% CI -0.59 to 0.11)
[6] Immunizer not blinded; outcome assessor not blinded; selective outcome reporting