

Author(s): CMM/MN/AT

Date: 2015-02-27

Question: Should in vivo exposure-based therapy for adults with high levels of needle fear vs placebo/control (muscle tension) be used for reducing vaccine injection fear in adults?

Settings: unclear

Bibliography: Ost 1991 (1)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	In vivo exposure-based therapy for adults with high levels of needle fear	Placebo/control (muscle tension)	Relative (95% CI)	Absolute		
Fear (specific) (measured with: validated tool (Mutilation Questionnaire 0-30, Fear Survey Schedule 3rd Ed - Blood Subscale 8-40, Fear Questionnaire - Blood/Injury Subscale 0-40, Anxiety during lab-based fear-inducing task 0-10); Better indicated by lower values)												
1	randomised trials	serious ¹	no serious inconsistency	serious ²	serious ³	none	10	10	-	SMD 1.09 lower (2.04 to 0.14 lower)	⊕○○○ VERY LOW	CRITICAL
Fear (specific) at 1 year followup (measured with: validated tool (Mutilation Questionnaire 0-30, Fear Survey Schedule 3rd Ed - Blood Subscale 8-40, Fear Questionnaire - Blood/Injury Subscale 0-40, Anxiety during lab-based fear-inducing task 0-10); Better indicated by lower values)												
1	randomised trials	serious ¹	no serious inconsistency	serious ²	serious ⁴	none	10	10	-	SMD 0.28 lower (1.16 lower to 0.6 higher)	⊕○○○ VERY LOW	CRITICAL
Fear (general) (measured with: validated tool (Fear Survey Schedule 3rd Ed 76-380) ; Better indicated by lower values)												
1	randomised trials	serious ¹	no serious inconsistency	serious ²	serious ⁴	none	10	10	-	SMD 0.46 lower (1.35 lower to 0.43 higher)	⊕○○○ VERY LOW	IMPORTANT
Fear (general) at 1 year followup (measured with: validated tool (Fear Survey Schedule 3rd Ed 76-380); Better indicated by lower values)												
1	randomised trials	serious ¹	no serious inconsistency	serious ²	serious ⁴	none	10	10	-	SMD 0.51 lower (1.41	⊕○○○ VERY	IMPORTANT

	trials		inconsistency							lower to 0.38 higher)	LOW	
Fainting⁵ (measured with: validated tool (Fainting behaviour during lab-based fear-inducing task 0-4); Better indicated by lower values)												
1	randomised trials	serious ⁶	no serious inconsistency	serious ²	serious ³	none	10	10	-	SMD 1.16 higher (0.19 to 2.12 higher) ⁵	⊕○○○ VERY LOW	IMPORTANT
Fainting at 1 year followup³ (measured with: validated tool (Fainting behaviour during lab-based fear-inducing task 0-4); Better indicated by lower values)												
1	randomised trials	serious ⁶	no serious inconsistency	serious ²	serious ³	none	10	10	-	SMD 0.97 higher (0.03 to 1.91 higher) ⁵	⊕○○○ VERY LOW	IMPORTANT
Compliance (measured with: validated tool (Behavioural Avoidance Test); Better indicated by higher values)												
1	randomised trials	serious ⁶	no serious inconsistency	serious ²	serious ⁴	none	10	10	-	SMD 0.80 lower (1.72 lower to 0.12 higher)	⊕○○○ VERY LOW	IMPORTANT
Compliance at 1 year followup (measured with: validated tool (Behavioural Avoidance Test); Better indicated by higher values)												
1	randomised trials	serious ⁶	no serious inconsistency	serious ²	serious ⁴	none	10	10	-	SMD 0.74 lower (1.66 lower to 0.17 higher)	⊕○○○ VERY LOW	IMPORTANT
Pain, Distress, Procedure Outcomes, Memory, Preference, Satisfaction (assessed with: no data were identified for these important outcomes)												
0	No evidence available					none	-	-	-	-		IMPORTANT
								0%		-		

¹ Therapist and participants not blinded; outcome assessor not blinded

² Not vaccination or needle procedure; however, includes individuals with blood and injury phobia

³ Sample size was below the recommended optimum information size (OIS) of 400 for an effect size of 0.2

⁴ Confidence intervals cross the line of nonsignificance and the sample size was below the recommended optimum information size (OIS) of 400 for an effect size of 0.2

⁵ In included study (Ost 1991), the control group received instruction in a muscle tension technique, which may have had a benefit on this outcome (fainting)

⁶ Therapist and participant not blinded; unclear if outcome assessor blinded