

Author(s): CMM/MN/AT

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Question: Should non in vivo exposure-based therapy in adults with high levels of needle fear vs control be used for reducing vaccine injection fear in adults?

Settings: dental clinic, MS clinic

Bibliography: Heaton 2013, Mohr 2005

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Non in vivo exposure-based therapy in adults with high levels of needle fear	Control	Relative (95% CI)	Absolute		
<b>Fear (specific)<sup>1</sup> (measured with: validated tool (Needle Survey 18-90); Better indicated by lower values)</b>												
1	randomised trials	serious <sup>2</sup>	no serious inconsistency	serious <sup>3</sup>	serious <sup>4</sup>	none	34	34	-	SMD 0.62 lower (1.11 to 0.14 lower) <sup>1</sup>	⊕○○○ VERY LOW	CRITICAL
<b>Fear (acute during procedure)<sup>1,5</sup> (measured with: validated tool (Modified Interval Scale of Anxiety Response Visual Analog Scale 0-100); Better indicated by lower values)</b>												
1	randomised trials	serious <sup>2</sup>	no serious inconsistency	serious <sup>3</sup>	serious <sup>6</sup>	none	12	5	-	SMD 0.18 higher (0.87 lower to 1.23 higher) <sup>1,5</sup>	⊕○○○ VERY LOW	CRITICAL
<b>Compliance (assessed with: validated tools (voluntary dental injection or self-injection of medication, yes/no))</b>												
2	randomised trials	serious <sup>7</sup>	no serious inconsistency	serious <sup>3,8</sup>	serious <sup>4</sup>	none	20/49 (40.8%)	9/49 (18.4%)	RR 2.22 (1.13 to 4.39)	224 more per 1000 (from 24 more to 623 more)	⊕○○○ VERY LOW	IMPORTANT
								0%		-		
<b>Pain, Distress, Fainting, Procedure Outcomes, Memory, Preference, Satisfaction (assessed with: no data were identified for these important outcomes)</b>												
0	No evidence available					none	-	-	-	-		IMPORTANT
								0%		-		

<sup>1</sup> Additional information and study data provided by author (Heaton 2013)

<sup>2</sup> Participants not blinded; outcome assessor not blinded

<sup>3</sup> Not vaccination; however, includes individuals with high needle fear

<sup>4</sup> Sample size was below the recommended optimum information size (OIS) of 400 for an effect size of 0.2

<sup>5</sup> Includes subsample of participants who opted to undergo a voluntary injection

<sup>6</sup> 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

<sup>7</sup> Therapists and participants not blinded; outcome assessor not consistently blinded

<sup>8</sup> In the study by Heaton (2013), individuals with high needle fear opted to undergo dental injection; in the study by Mohr (2005), patients with Multiple Sclerosis opted to self-inject medication.