Author(s): KEB/KAB/JP/AT

**Date**: 2015-03-09

Question: Should music distraction vs no treatment be used for reducing vaccine injection pain in adults?<sup>1,2</sup>

Settings: hospital, clinics

Bibliography: Jacobson 1999, Jacobson 2006 (1,4)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Music distraction	No treatment	Relative (95% CI)	Absolute		
Pain <sup>3,4</sup> (measured with: validated tool (Visual Analog Scale 0-100, Numerical Rating Scale 0-10); Better indicated by lower values)												
	randomised trials		no serious inconsistency	serious <sup>6</sup>	serious <sup>7</sup>	none	80	76	-	SMD 0.10 lower (0.48 lower to 0.27 higher) <sup>3,4</sup>	⊕000 VERY LOW	CRITICAL
Fear <sup>3,4</sup> (measured with: validated tool (Visual Analog Scale 0-100, Numerical Rating Scale 0-10); Better indicated by lower values)												
	randomised trials		no serious inconsistency	serious <sup>6</sup>	serious <sup>7</sup>	none	80	76	-	SMD 0.25 lower (0.61 lower to 0.10 higher) <sup>3,4</sup>	⊕OOO VERY LOW	CRITICAL
Distress, Procedure Outcomes, Use of intervention, Vaccine Compliance, Memory, Preference, Satisfaction (assessed with: no data were identified for these important outcomes)												
-	No evidence available					none	-	-	-	-		IMPORTANT
		1						0%		-		

<sup>&</sup>lt;sup>1</sup> In included studies (Jacobson 1999, 2006), participants selected their own music distraction

<sup>&</sup>lt;sup>2</sup> Study by Jacobson (1999) includes patients needing intravenous therapy. Study by Jacobson (2006) includes same day surgery patients.

<sup>&</sup>lt;sup>3</sup> Additional data and study details provided by author (Jacobson 2006)

<sup>&</sup>lt;sup>4</sup> In Jacobsen 2006, analysis (1) includes males and analysis (4) includes females.

<sup>&</sup>lt;sup>5</sup> Operator not blinded, participants not blinded; outcome assessor not blinded

<sup>&</sup>lt;sup>6</sup> Context is venipuncture/venous cannulation

<sup>&</sup>lt;sup>7</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