



# Effect of music therapy in anxiety reduction for local anesthesia injection by dental students

## Abstract

### Objective:

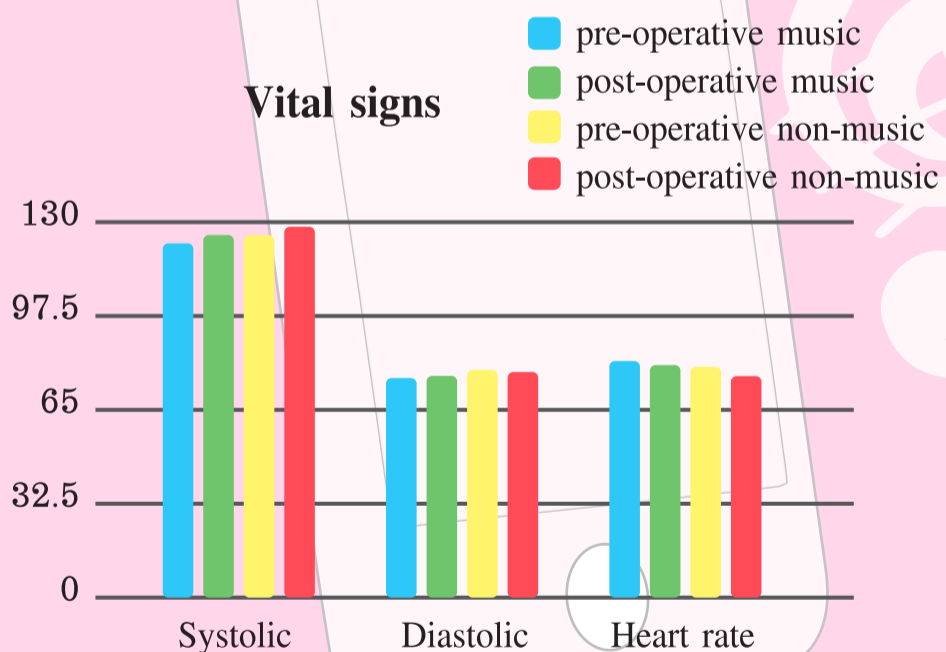
The objective of this research is to reduce dental anxiety of the patient during local anesthesia injection by dental students

### Study design:

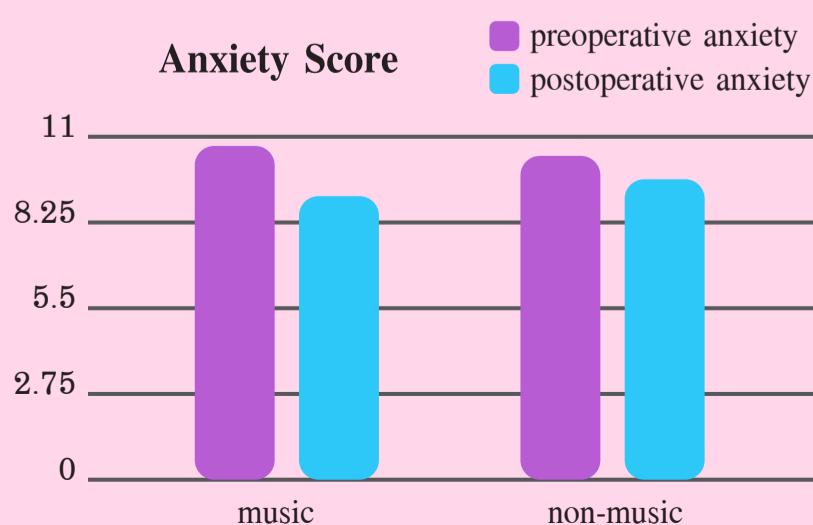
In this pilot study, 60 patients who came into Oral Surgery Department, College of Dental Medicine, Rangsit University during the period between June 2019 to October 2019 were evaluated. Patient data including vital signs (systolic blood pressure, diastolic blood pressure and heart rate), anxiety score (MDAS), pain score (VAS) and satisfaction score were evaluated by statistical tests.

### Results:

No statistically significant difference of vital signs between music and non-music groups ( $p > 0.05$ ).



No statistically significant difference of anxiety score between music and non-music groups ( $p > 0.05$ ).



There was statistically significant difference of preoperative anxiety score and postoperative anxiety score in music group ( $p < 0.05$ ) while there was no difference in non-music group ( $p > 0.05$ ). (Table 1)

Anxiety score					
Variable	Preoperative anxiety		Postoperative anxiety		p-value
	Mean	S.D.	Mean	S.D.	
Music	10.66	3.976	10.66	3.976	0.001*
Non-music	10.34	3.921	10.34	3.921	0.102

Table 1. Difference of preoperative anxiety and postoperative anxiety in music and non-music group

\*  $p < 0.05$

\* p-value of preoperative anxiety and postoperative anxiety using Wilcoxon Signed Rank Test.

### Conclusion:

The use of music therapy is a simple, safe, inexpensive and non-pharmacological intervention that can effectively reduce dental anxiety of the patients during local anesthesia injection.

### Key words:

music therapy, dental student, anxiety, local anesthesia injection



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