



## Effectiveness of music interventions in reducing dental anxiety in paediatric and adult patients

Submitted by

Sandeep Moola, BDS, MHSM (Hons)

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## **Abstract**

**Background** Dental anxiety has been identified as a significant and common problem in both children and adults and is considered an obstacle for dental care providers in the delivery of quality oral care. There are various treatment options for reducing dental anxiety and music is one of the treatment options. Music interventions can either be passive (music listening) or active music (therapy).

**Objective** The objective of this study was to present the best available evidence related to the effectiveness of music interventions on dental anxiety in paediatric and adult patients.

**Data sources** A comprehensive search was undertaken on major electronic databases from their inception to October 2010. The search was restricted to English language and other languages where a translation was available.

**Review methods** Randomised controlled trials, quasi-randomised controlled trials and quasi-experimental studies were included in the review. Critical appraisal and data extraction were undertaken using the Joanna Briggs Institute critical appraisal instrument and the standard data extraction form for evidence of effectiveness.

**Results** Two studies had paediatric patients as population group. One study found that music listening did not result in any reduction of anxiety during dental procedures on young patients. However, another study found that music reduced anxiety to some extent, which was not significant.

Five studies included in this review had adult patients as population group. Two studies concluded that relaxation when compared to music was an effective method of reducing patient's anxiety. One study concluded that music listening significantly lowered levels of anxiety and stress of females during dental procedures. Two other studies provided conclusive evidence on effectiveness of music in reducing dental anxiety in adults.

Conclusions There is enough evidence to suggest that adult patients may benefit from music

listening during dental treatment. There is inconclusive evidence on the effectiveness of music in

reducing dental anxiety in children.

Implications for practice It is recommended that pre-recorded music be offered through

headphones during the dental procedure, particularly in adult patients to reduce their dental

anxiety.

**Implications for research** More research needs to be performed before it is possible to show,

with a higher degree of certainty, that music listening does have a significant effect on the

reduction of dental anxiety, particularly in children.

Keywords: Music, music therapy, music listening, dental anxiety, adults, children

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**Statement of Declaration** 

This work contains no material which has been accepted for the award of any other degree or diploma

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