

# INPLASY PROTOCOL

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**Conflicts of interest:**  
None declared.

## INTRODUCTION

**Review question / Objective:** Will music therapy be effective compared to other modalities for the control of dental anxiety and fear in pediatric patients aged 4 to 6 years who come to the dental office for the first time?

## Efficacy of music therapy for the control of anxiety and fear in pediatric patients aged 4 to 6 years who come to the dental office for the first time - a systematic review

Hizo - Bendezu, G<sup>1</sup>; Otazu - Aldana, C<sup>2</sup>.

**Review question / Objective:** Will music therapy be effective compared to other modalities for the control of dental anxiety and fear in pediatric patients aged 4 to 6 years who come to the dental office for the first time?

**Condition being studied:** Music therapy is a non-pharmaceutical intervention used in medical and educational settings to provide feelings of physical and mental well-being. Therefore, people who receive music therapy experience greater motivation and ability to develop defense mechanisms against anxiety. The population group of greatest interest are children from 4 to 6 years of age, who are the ones who experience the greatest anxiety and fear when going to a dental office.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 March 2023 and was last updated on 29 March 2023 (registration number INPLASY202330118).

**Rationale:** The present investigation focuses from the theoretical point of view, on collecting information through a systematic review to analyze music therapy as a non-pharmacological alternative for the control of anxiety and fear in pediatric patients. This is because several studies have examined the positive effects of listening to music on anxiety and pain

control. Likewise, by collecting this information regarding music therapy studies as an effective method, dentists will have the necessary and accurate information to use music therapy in the pediatric dental office. In addition to this, the time and costs invested by the parents will be reduced by the control of these physiological states. It should be noted that the pediatric dental consultation has a very important duty, this is mainly based on the prevention and next treatment of possible oral diseases. However, this cannot be affected by the complex care of pediatric patients. For these reasons, research is necessary to collect all current information about music therapy and its effectiveness for the control of anxiety and fear in pediatric patients in the dental office.

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## METHODS

**Search strategy:** The search strategy is given by means of Mesh terminology independently for each database separately. Likewise, the Boolean operators will be used for a correct general search of studies. This terminology depends on the Pico question.

**Participant or population:** Children from 4 to 6 years old who go to the dentist for the first time.

**Intervention:** Music therapy.

**Comparator:** Music therapy versus other modalities to control anxiety and fear.

**Study designs to be included:** RCT, Non-RCT, cohort studies and case - control studies.

**Eligibility criteria:** • Patients: Pediatric patients 4-6 years old who attend the dental office for the 1st time. • Interventions: Music therapy used in the dental office. • Comparison: Treatment of anxiety and fear with other modalities. • Result: Music therapy is effective for the control of anxiety and fear compared to other modalities.

**Information sources:** The databases in which the search was carried out: SCOPUS, COCHRANE, PUBMED and SCIENCE DIRECT. Specific Mesh terminology already established in each of the data sources to be used will be used. Likewise, Boolean operators (OR, AND, NOT) that are specified in the Search strategy table will also be used. Studies carried out until September 2022 will be taken into account.

**Main outcome(s):** Decreased anxiety and fear. Measured before and after music therapy. The measurement values would be pressure, pulse and heart rate, which are the main signs that are altered by anxiety and fear.

**Additional outcome(s):** None.

**Data management:** We will use the 2020 prism format for systematic feedback. In addition, tables will be used to compile information on the studies, as well as tables with information on studies excluded according to the eligibility criteria. The studies to be included in the study will be in a table with the information corresponding to: country of origin, year of publication, authors, type of anxiety measurement, results.

**Quality assessment / Risk of bias analysis:** The risk of bias of the included studies will be assessed using the ROB 2 tools for randomized studies, ROBINS for non-randomized studies, and NewCastle-Ottawa for cohort and case-control studies.

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**Strategy of data synthesis:** Meta-Analysis will be not performed.

**Subgroup analysis:** Subgroup analysis will not be performed.

**Sensitivity analysis:** Sensitivity analysis will not be performed.

**Language restriction:** The studies to be included will only be in English and Spanish.

**Country(ies) involved:** lima, Peru.

**Keywords:** Music therapy, treatment, dental anxiety, dental fear, children.

**Contributions of each author:**

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