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## COMPARISON OF ANXIETY LEVELS OF CHILDREN FACING DENTISTS WEARING NORMAL MASKS VERSUS CHILD FRIENDLY MASKS

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### Abstract

**Aim:** To compare the anxiety levels of children facing dentists wearing normal masks versus child friendly masks.

**Background:** Dental anxiety refers to the fear going to the dentists. It exists in a considerable number of children and it is a major plight and concern in pediatric dental practice. To ease the anxiety levels several methods have been carried out, such as child friendly environment, child friendly coats, child friendly tools, child friendly masks etc. In this study the effect of child friendly masks on anxiety levels of pediatric patients will be determined.

**Materials and Methods:** 'n' number of children with two pulp infections were selected. These children were aged between (x and y). The dental procedure selected was pulp therapy. During the first treatment, the child faced a dentist wearing a normal mask. In the second treatment the child faced the same dentist, whereas in this case the dentist wore a child friendly mask. Children's anxiety level was measured using RMS Pictorial Scale.

**Results:** The p value was found to be more than 0.05 in all three circumstances. This indicates that the results are not significant

**Conclusion:** Since the p value is more than 0.05, this study is statistically not significant although minor changes were observed in the anxiety levels

**Key words:** Anxiety, child friendly masks, scale, distraction

### Introduction:

Dental anxiety can be defined as a multidimensional complex phenomenon or an unreasonable fear of dental treatment, which does not necessarily have to be related to a specific stimulus. This issue is being naturally encountered by dentists all around the globe and it remains as a significant challenge while treating pediatric patients, typically children of ages 5

to 18. Surveys indicate that 16% of school age children have a fear of dentists [1]. Dental anxiety has been ranked 5<sup>th</sup> among commonly feared[2] situations.

The following factors have been regularly linked with dental anxiety as they have a greater incidence with it. They are:

- Fear of pain
- Personality Characteristics
- Past terrifying dental experiences
- Fears related to Blood-injury
- The influence of family members and friends who also have this fear

Dental treatment is still disagreeable and unpleasant for most patients, regardless of the latest scientific advancements, and visiting the dentist creates a great deal of stress and anxiety in patients [3].The use of needles and syringes for local anesthesia are the main causes for dental fear and anxiety. The threatening appearance of dental syringes provoke or increase fear.

Pediatric patients with this condition tend to overestimate the pain experienced previously. This leads to the avoidance of dental care and eventually leads to poor oral hygiene [4].

Various techniques have been used by the dentists to manage an anxious child[5]. Distraction is one such technique that has been used by dentists in the dental clinics. Such children can be controlled by diverting their attention and making them engage in activities like watching TV, playing video games or listening to music. And also computerized dental anesthesia, child friendly environments, child friendly coats, child friendly tools, child friendly masks etc.

Several studies have been carried out to examine dental anxiety in pediatric patients and how they can be managed. Many methods have been used for the assessment of dental anxiety such as: Physiological measures by measuring blood pressure, pulse rate, muscle tension [6], psychological test such as Modified Child Dental Anxiety Scale (MCDAS) [7], Corah's Dental Anxiety Scale (CDAS)[8], and projective techniques such as children's dental fear picture test [9]. The Children's fear survey schedule-dental subscale (CFSS-DS) is another method and Venham Picture Test (VPT) has also been used many studies.

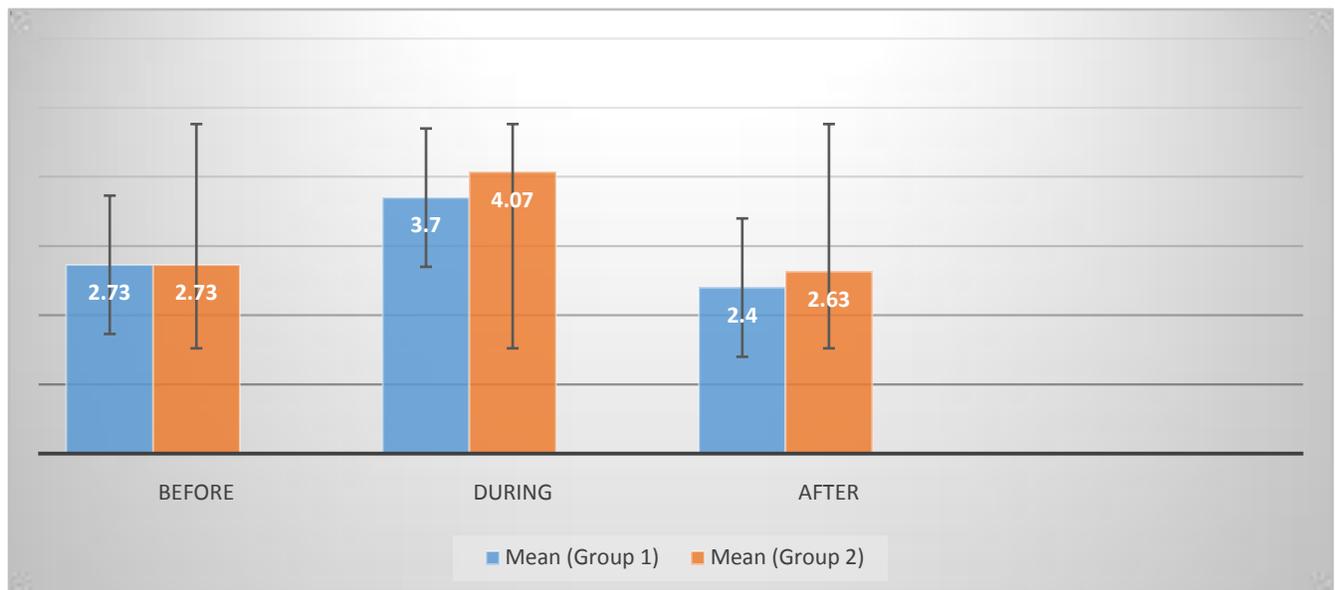
The aim of the present study is to compare the anxiety levels of children facing dentists wearing normal masks vs child friendly masks. Anxiety levels were measured using modified version of the self-report Face Scale by LeBaron et al.

## Materials and Methods

The study was conducted on thirty 6-12-year-old children. Children with multiple pulpectomy or extractions were selected from patients being treated at the Department of Pediatric Dentistry, Saveetha Dental College and Hospitals.

The children were divided into two groups according to the last digit of their registration number, that is odd or even number. Based on this the patients were randomly divided. The first group included children whose last digit of the registration number was an odd number. These children were first exposed to dentists wearing normal dental masks. The second group with an even numbered registration number was first exposed to dentists wearing child friendly dental masks. The above randomization was during the first visit of the patient. During the second visit, the patients should be swapped. That is odd numbered patients who were exposed to normal dental masks during their first visit, will now be exposed to child friendly masks in the second visit and vice versa. The patient's anxiety was recorded two times – when exposed to normal masks and when exposed to child friendly masks, using modified version of the self-report Faces Scale by LeBaron et al. It consists a row of five face ranging from 'relaxed' to 'very worried', combined with a visual analogue scale of 0-10. The most appropriate face or number was chosen which most closely represented the child's anxiety.

## Results:



**Discussion:** The p value was found to be more than 0.05 in all three circumstances. This indicates that the results are not significant. The overall mean score remains between 2-4, there is no significant difference in the scores. The scores remain the same before the procedure, an increase of 0.37 during the procedure and a 0.23 increase after the procedure.

This can be due to the fact that it was only part of the dentist's attire that was changed which was insufficient to bring about a significant change in the child's anxiety level.

Changing the conventional lab coat into a child friendly one along with a few other changes to the dental clinic may also favour the outcome in addition to the child friendly masks. And also, children with extreme anxiety levels can be selected in order to see a significant difference in the scores.

### **Conclusion:**

Since the p value is more than 0.05, this study is statistically not significant although minor changes were observed in the anxiety levels

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