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Evaluation of Children's Dental Anxiety in Colorful Versus Conventional Dental Clinic

A Thesis

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Abstract

Background: Dental anxiety is a widespread problem that can occur at any age and contributes to undesirable discomfort such as avoiding dental visits and change in behavior in the dental clinic, which subsequently affects the quality of treatment.

The child's perception of dental surroundings is an important factor that causes dental anxiety. If the color of dental environment can have a positive effect on the behavior of the child, those colors may add to a child's comfort, thereby reducing dental anxiety.

Aims: The purpose of the present study is to evaluate the effect of colorful dental environment on children's anxiety, evaluation of the color preference of children for various dental clinic materials in relation to age and gender, and assessment of the causes of avoiding dental visits in children.

Methodology: A total of 80 children aged 8–9 year were randomly and equally divided into two groups, the first group (group A) were treated in the conventional dental clinic and the second group (group B) were treated in colorful dental clinic. The dental procedure employed was restorative treatment for both groups. Anxiety level was measured by using physiological measurement and psychological measurement; in the waiting room as a baseline, after local anesthesia and after finishing dental procedure.

Results: Fear was reported as the highest cause of avoiding dental visits (36.25%) in children. In general, the children in the intervention group showed less dental anxiety in the mean of Venham Picture Test , Abeer Children Dental Anxiety Scale , pulse rate, peripheral capillary oxygen saturation , and salivary cortisol level in comparison to the children in control group after local anesthesia and after the dental procedure. Most children showed a preference for multicolor and bright colors (pink, blue, green, yellow) for materials, equipments, instruments, and supplies that use in pediatric dental clinic.

Conclusion: Fear was the most common cause of avoiding dental visits in children. Children preferred multicolor and bright colors for dental use with significant differences between genders. Adding attractive colors to the dental environment and the incorporation of colors in the dental instruments, equipments, and restorative materials can enhance positive emotions and help reduce dental anxiety.