Impact of Traumatic Dental Injuries on the Quality of life in Children from 8-14 years old
(A Pilot Study)

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INTRODUCTION

- Sustaining a traumatic dental injury (TDI) in childhood and adolescence is unfortunately, a common occurrence, with an average of 80% of all TDIs happening before the age of 20.
- The most common TDI seen in children and adolescents is crown fracture with maxillary central incisors being the most prevalent affected teeth. Collisions and falling during play and sports have been reported as the principle reasons for pediatric TDI.
- TDI affects the quality of life by physical disfigurement, psychological problems, and poor esthetics as well as affecting social well-being. It occurs due to discomfort mostly caused by pain, psychological problems such as difficulty with smiling in social situations, irritability, and an inability to maintain emotional health, especially since physical appearance and attractiveness are important concern.
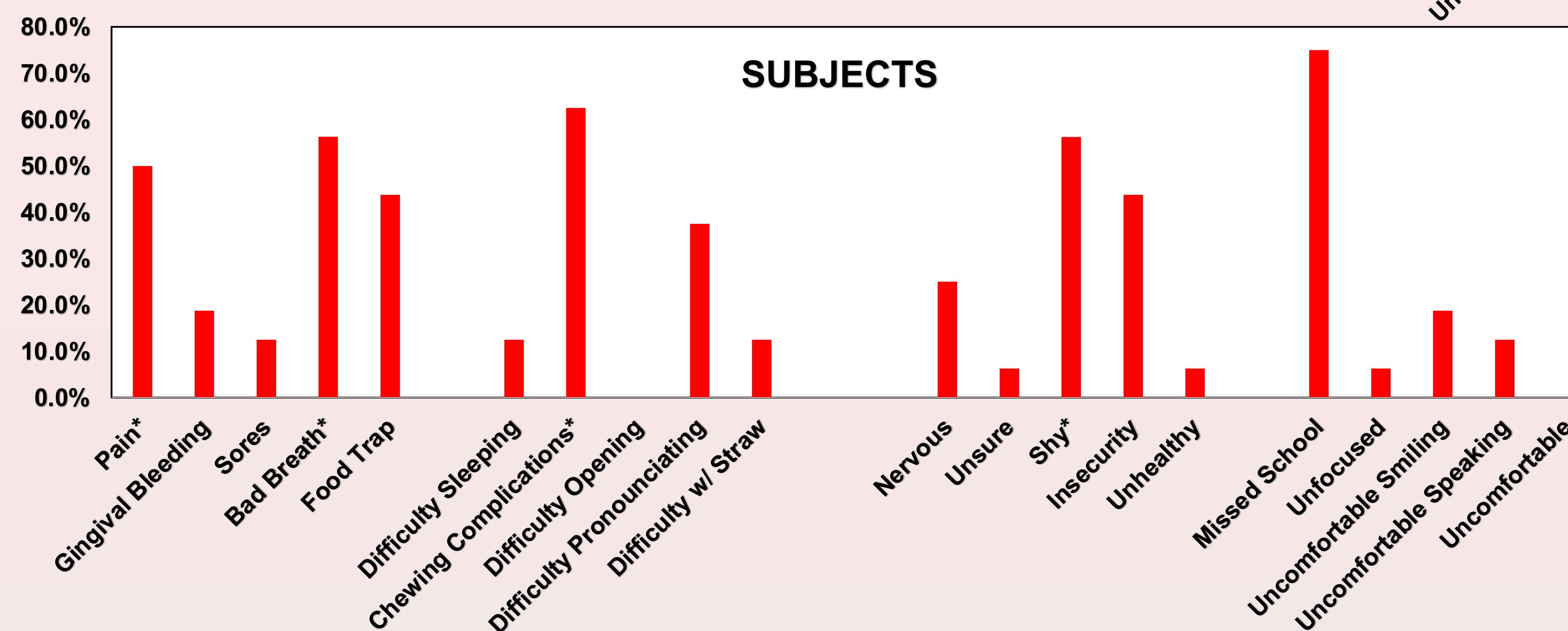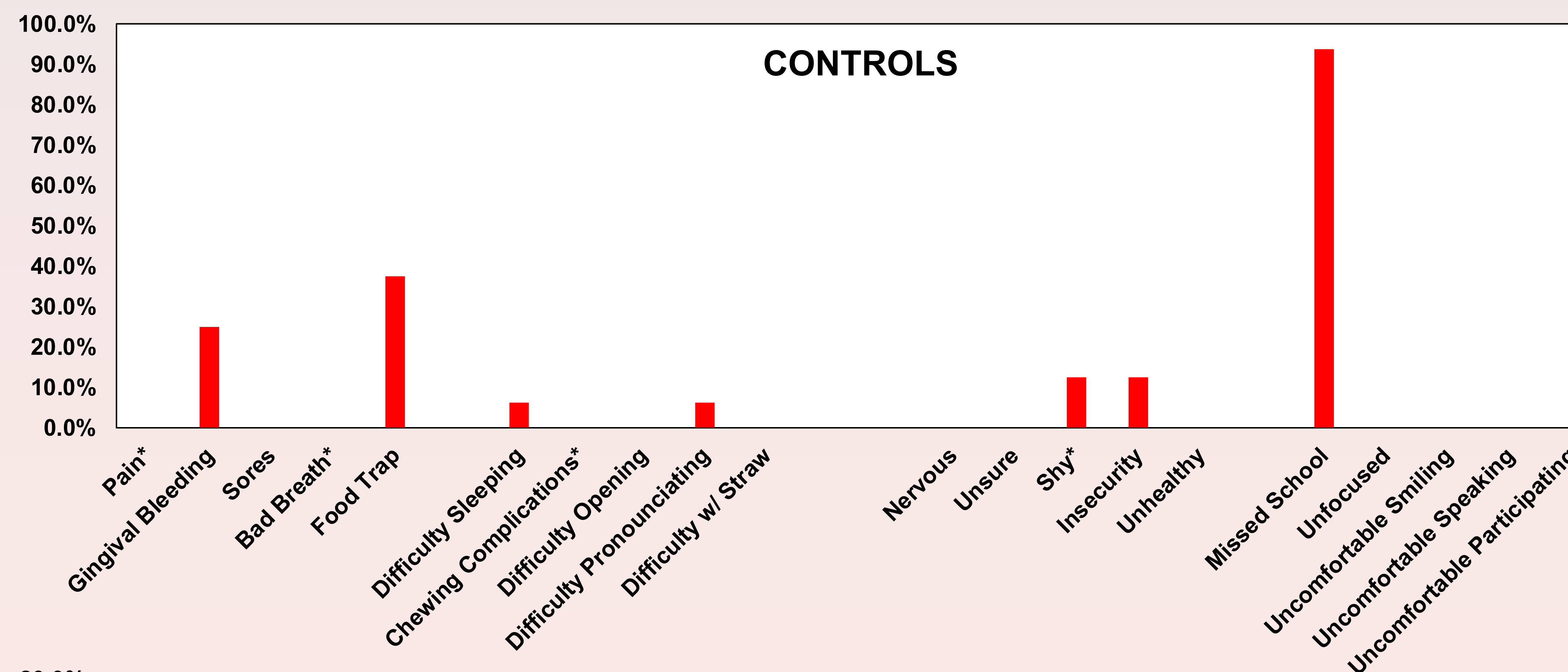
OBJECTIVE

- The aim of this study is to determine the association between TDI and Children's Oral Health Quality of Life (COHQoL) among children aged 8 -14 years using the Children Perception Questionnaire (CPQ).
- We hypothesize that there will be differences in coping ability of children with TDI, longevity of the traumatic effects and quality of life on patients.

METHODS

- Patients between 8-14 years who presented for dental treatment within one year since the day of the injury.
- The investigator asked the legal guardian to join the study and signed the informed consent for patients who fulfilled the inclusion criteria.
- The investigator administered the survey instruments to the patient and the legal guardian and performed a clinical examination.
- The Children Perception Questionnaire (CPQ) consists of 20 items (Yes/No questions) divided in four sections to measure the impact of oral disorders on the quality of life (oral symptoms, functional limitation, emotional and social well-being).
- The survey instruments were administered through direct interviewing and decayed, missing and filled teeth index (DMFT) was documented for upper and lower anterior teeth registered through clinical examination.

RESULTS

"* Denotes significant difference between groups (p < 0.05)"

- For statistical analysis, Fisher's exact test was used to compare the control and subject groups. Significance was defined as p < 0.05.
- Thirty-two patients (16 subjects, 16 controls) were enrolled into the study and interviewed (44% boys, 56% girls).
- Evaluating the overall Children Perception Questionnaire scores, children with history of TDI had a higher score compared to controls.
- A significant difference exist between children with history of TDI and control group with the most common findings noted for pain and bad breath (oral symptoms), chewing complications (functional limitation), and feeling shy or embarrassed (emotional well-being).

CONCLUSIONS

- TDI negatively impacts COHQoL in the 8-14 age group. Timely-performed dental management of the TDI could allow for preventing further disfigurement and socio-psychological impact.
- Treatment of TDI with professional care is extremely relevant. Clinicians could discuss treatment options, such as partial denture, to restore aesthetics and function with caregivers for a better outcome. Furthermore, it would assist clinicians to prioritize treatment strategies that are cost effective for patients and their families.
- Future studies with increased sample size and languages available (Spanish and Arabic) should be performed to increase the confidence interval.

Limitations: Small sample size and surveys were collected only from subjects whose primary language was English.

REFERENCES

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