

# Oral Health and Hygiene Campaign: A Health Education Intervention in Mukono, Uganda

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## Background

**Oral health is an often neglected, yet important part of overall health and wellbeing.**

- According to the World Health Organization (WHO), an estimated 3.5 billion people are affected by oral diseases worldwide and 480 million people in WHO African Region
- Higher risk of dental diseases exist among those of low socioeconomic status
- An estimated 63% of children in Kampala and Mukono, Uganda have tooth decay

### Oral Health and Hygiene Campaign:

- Pre-intervention questionnaire
- Presentation on oral health
- Workbook activity
- Post-intervention questionnaire
- Demonstration of oral hygiene
- Oral hygiene kits

## Aim

**Collaborative education intervention to increase oral health and hygiene knowledge.**

- Increase knowledge of oral diseases and their common presentations
- Improve knowledge of nutrition as related to oral health and disease prevention
- Provide guidance on best oral hygiene practices
- Deliver oral hygiene kits and education materials

## Methods

### Program Design

- Existing partnership between Sparkman Center for Global Health at UAB and Sunrise Centre in Mukono, Uganda
- An oral health campaign was created to provide culturally and age-appropriate oral health education
- The curriculum was developed jointly by UAB interns and local personnel at Sunrise Centre
- In-kind and monetary donations were obtained to secure educational and dental hygiene kit supplies

### Study Population

- The pre- and post- intervention questionnaires were administered to students 7-15 years of age
- The data was analyzed by two age group categories, “primary lower” (PL) comprising of students 7-9 years old and “primary upper” (PU) comprising of students 10-15 years old
- 125 questionnaires were collected to gauge the change in knowledge on oral health and nutrition

### Data Collection

- Questionnaire responses were coded as follows:
  - '0' for incorrect
  - '1' for correct
  - '2' for partially correct, for multi-response Qs
  - '99' for invalid (illegible or blank responses)
- Highest possible total score: 8

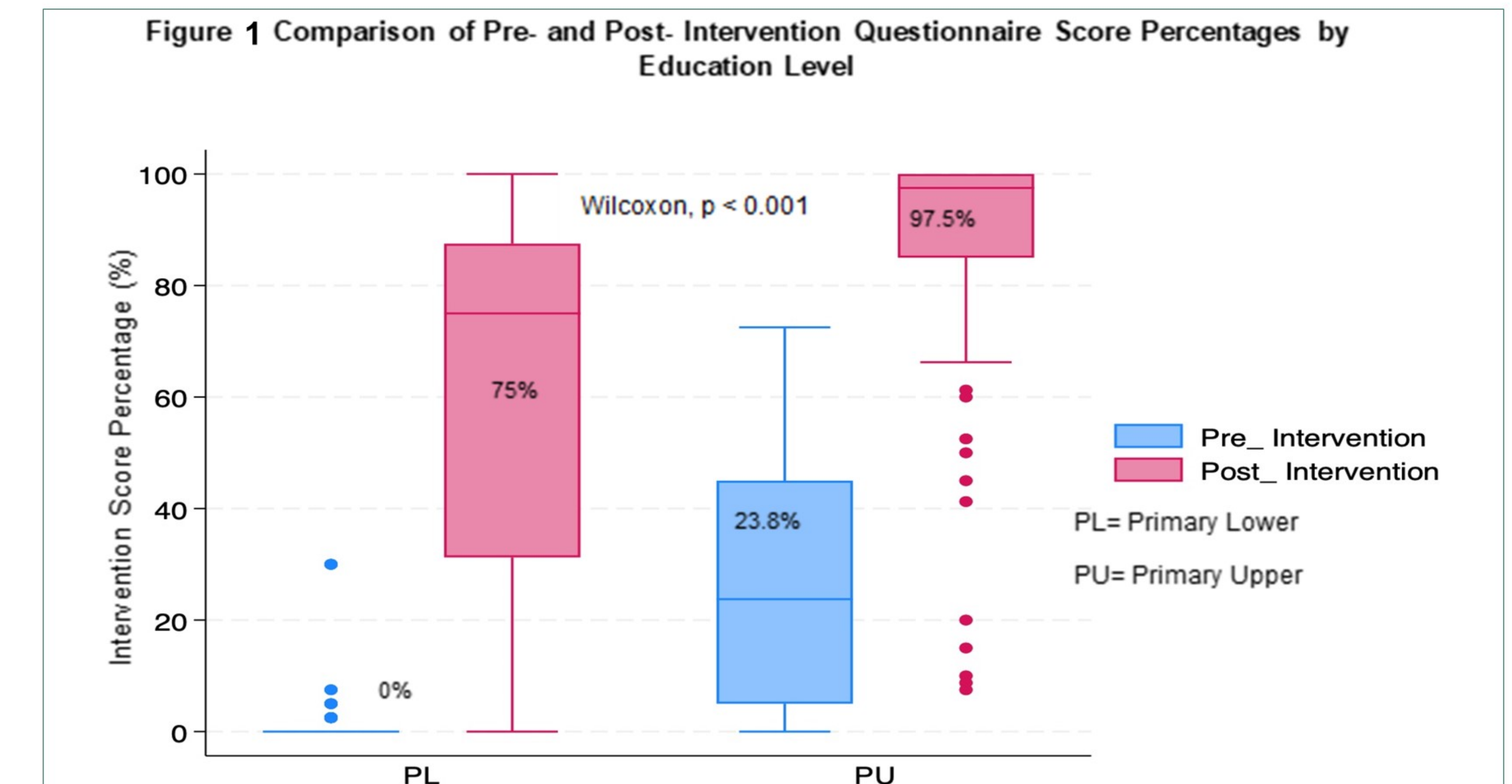
### Data Analysis

- A Wilcoxon signed-rank test analysis using STATA was performed to compare the median of the pre- and post- intervention questionnaires.

## Results

**There was an increase in questionnaire scores after intervention.**

- A total of 125 questionnaires, of which, 51 (40.8%) pre- and post- intervention questionnaires were collected from PL group.
- The baseline scores were 0% and 23.8% for PL and PU groups, respectively.
- The post-intervention questionnaire scores were significantly improved from the baseline scores in both groups, as shown in Figure 1 below.



## Conclusion

- Over 150 students participated in the Oral Health and Hygiene Campaign
- The intervention was successful as interpreted by increased knowledge uptake illustrated by higher post-intervention assessment scores and feedback from school personnel and parents
- This project was accomplished by assessing community needs, creating educational materials based on local teacher feedback, discussing logistics with local school admin, and by participation of teachers during the education sessions.



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