

Parent Oral Health Knowledge and Children's Missed and Emergency Dental Visits

Sood S¹, Adamczyk M¹, Yoon R¹, Lumsden C², Chussid S¹

Pediatric Dentistry Division¹ and Foundational Sciences Division²; Columbia University College of Dental Medicine

Background

Parent education is a main predictor of caries in primary teeth, the management of which largely relies on parent's oral health-related knowledge and practices, as they influence children's eating and dietary practices, frequency and technique of toothbrushing, and receipt of dental check-ups.

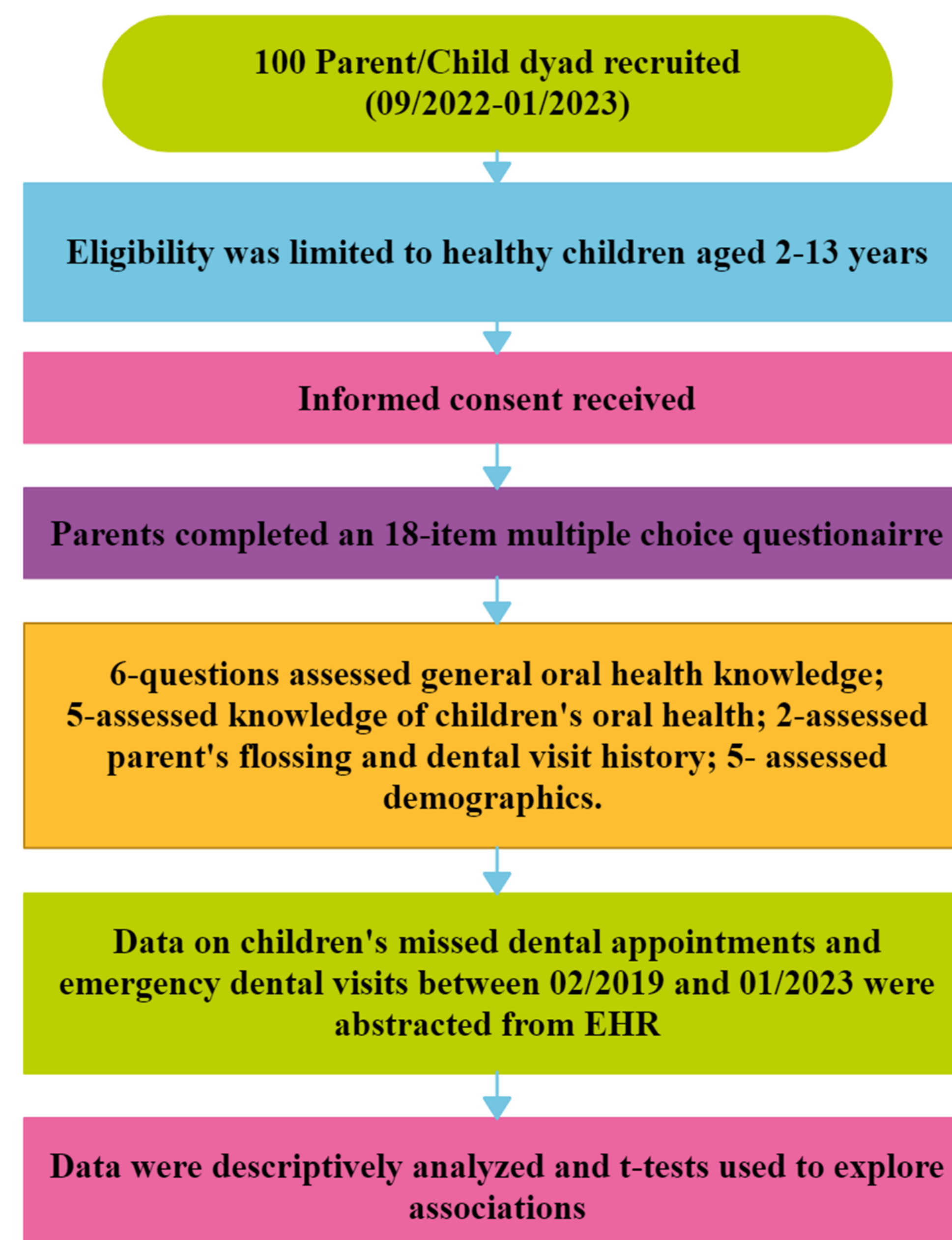
Caries disproportionately impacts socially vulnerable children and Medicaid patients have higher rates of broken appointments, which may influence use of emergency services among low-income populations.

Objectives

The aim of this cross-sectional survey research is to assess the relationships between parent's oral health knowledge and their children's missed appointment and emergency dental visit history in a high-risk population of children in Northern Manhattan.

We hypothesized that parents with lower oral health knowledge will have children with higher no-show rates and emergency dental visits compared to parents with higher levels of oral health knowledge, and that no-show rates will be positively correlated with frequency of emergency dental visits.

Materials & Methods



Results

- All 100 parents completed surveys. Most were 25-34 years of age (Figure 1), mainly spoke English at home (n=72), were employed (n=54), and completed high school education (n=77)

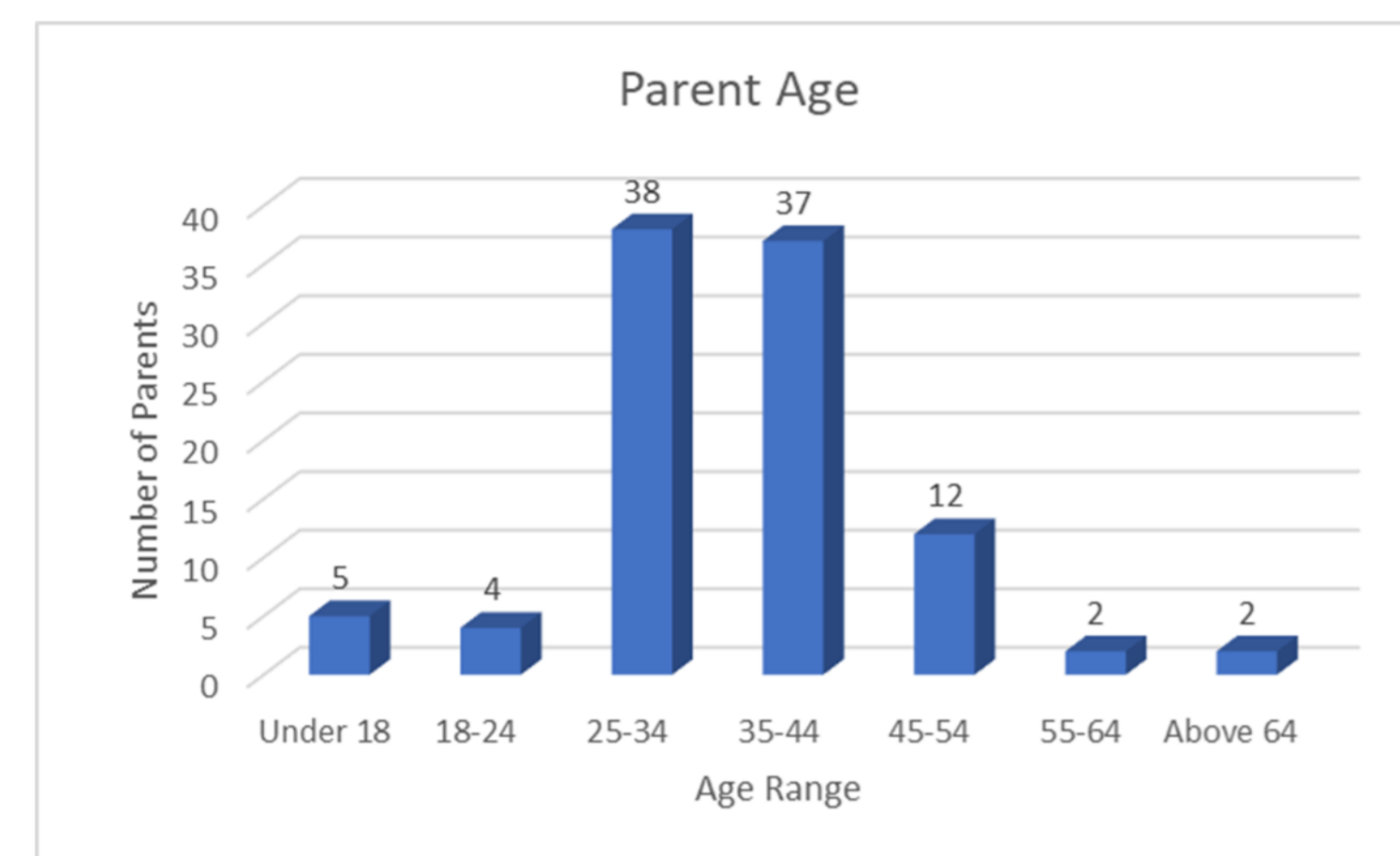


Figure 1. Age Range of Parents

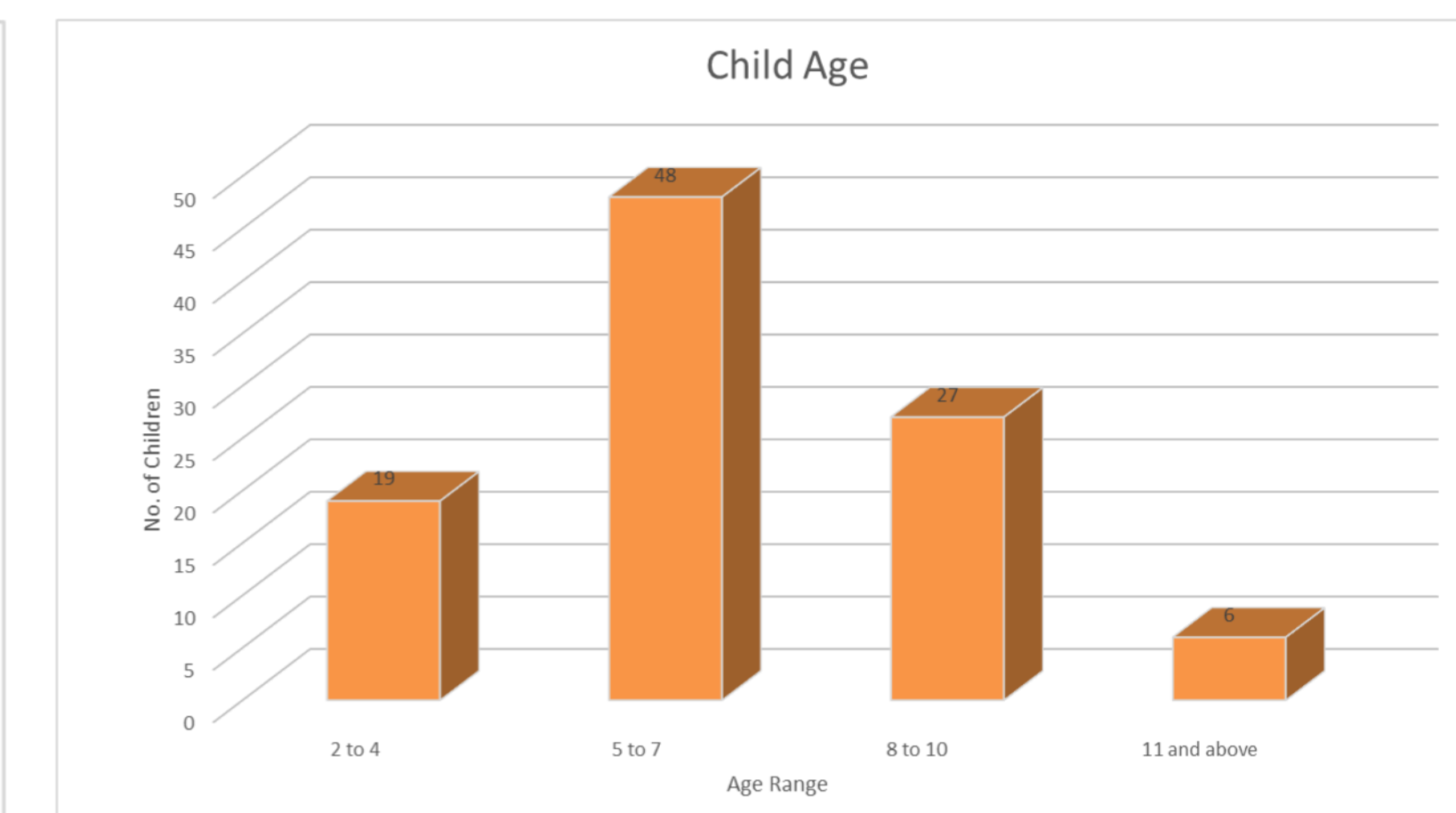


Figure 2. Age Range of Children

- Children averaged 6.62 years of age (Figure 2) with an average total dmfs of 7.67 (Figure 3). Most lived in multi-child households (Figure 4).

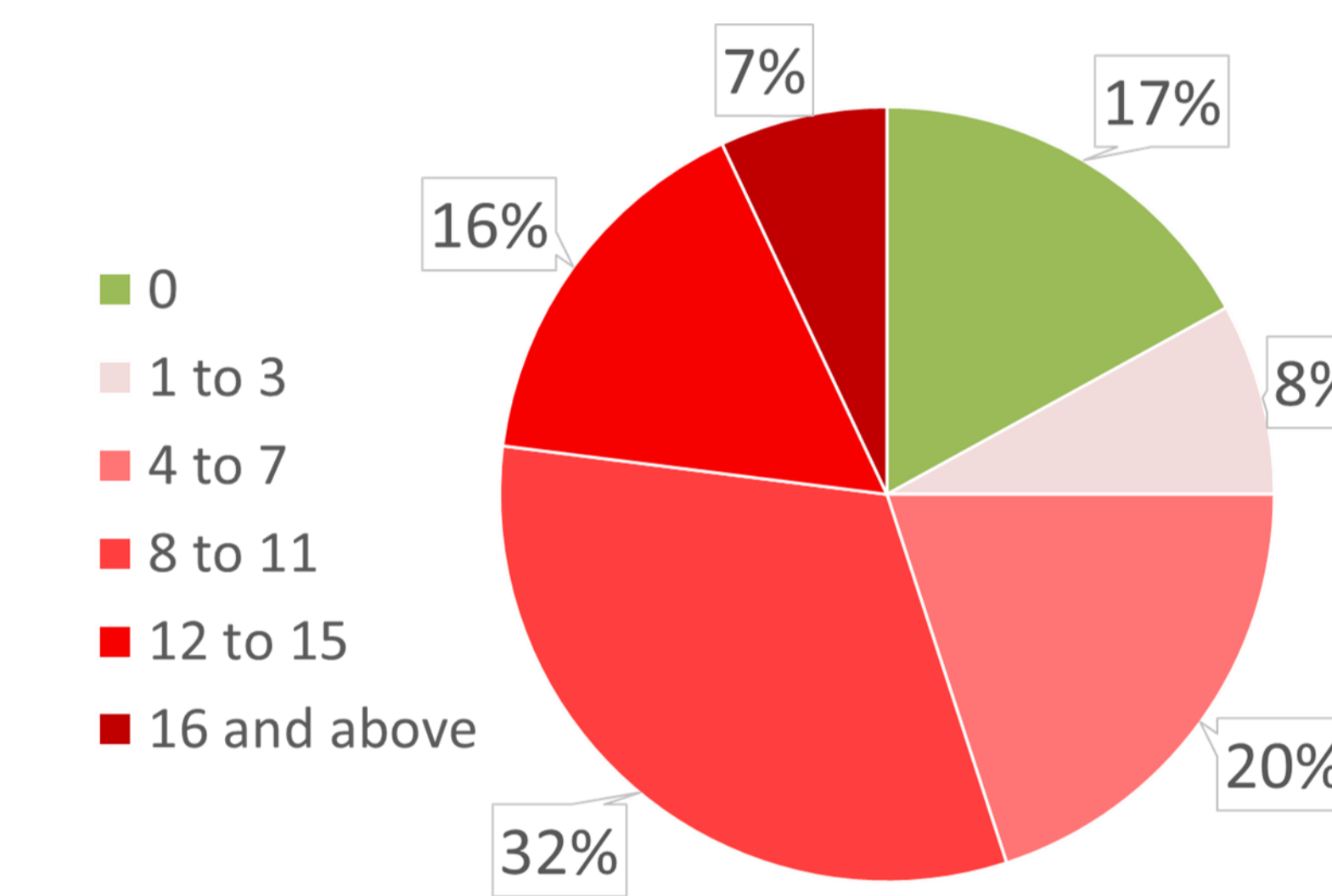


Figure 3. dmfs Range

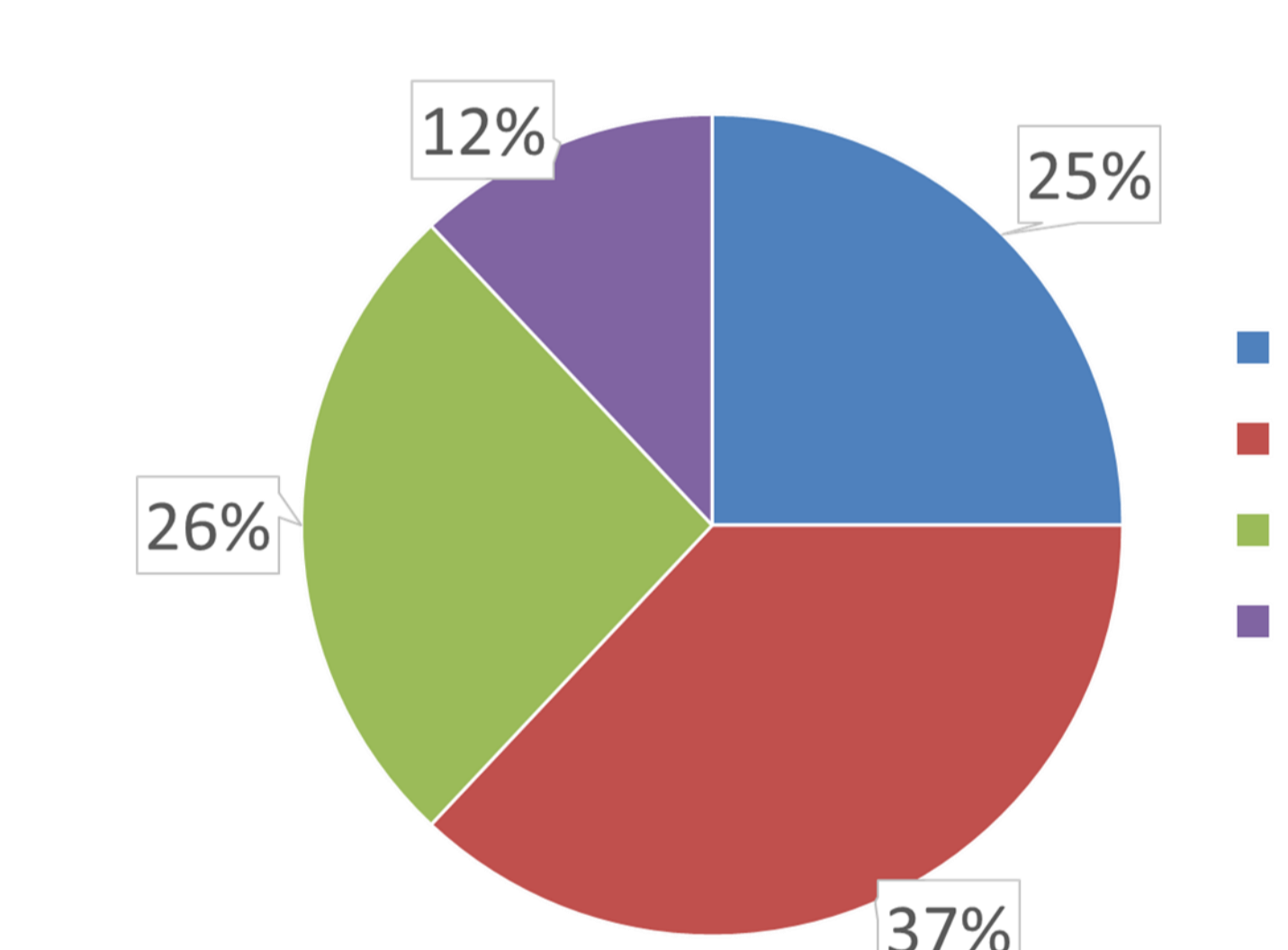


Figure 4. No. of children in a household

- 45 children had no missed appointments and 55 had one or more (Figure 5). 43 had one or more dental emergency appointments at the Haven clinic (Figure 6)

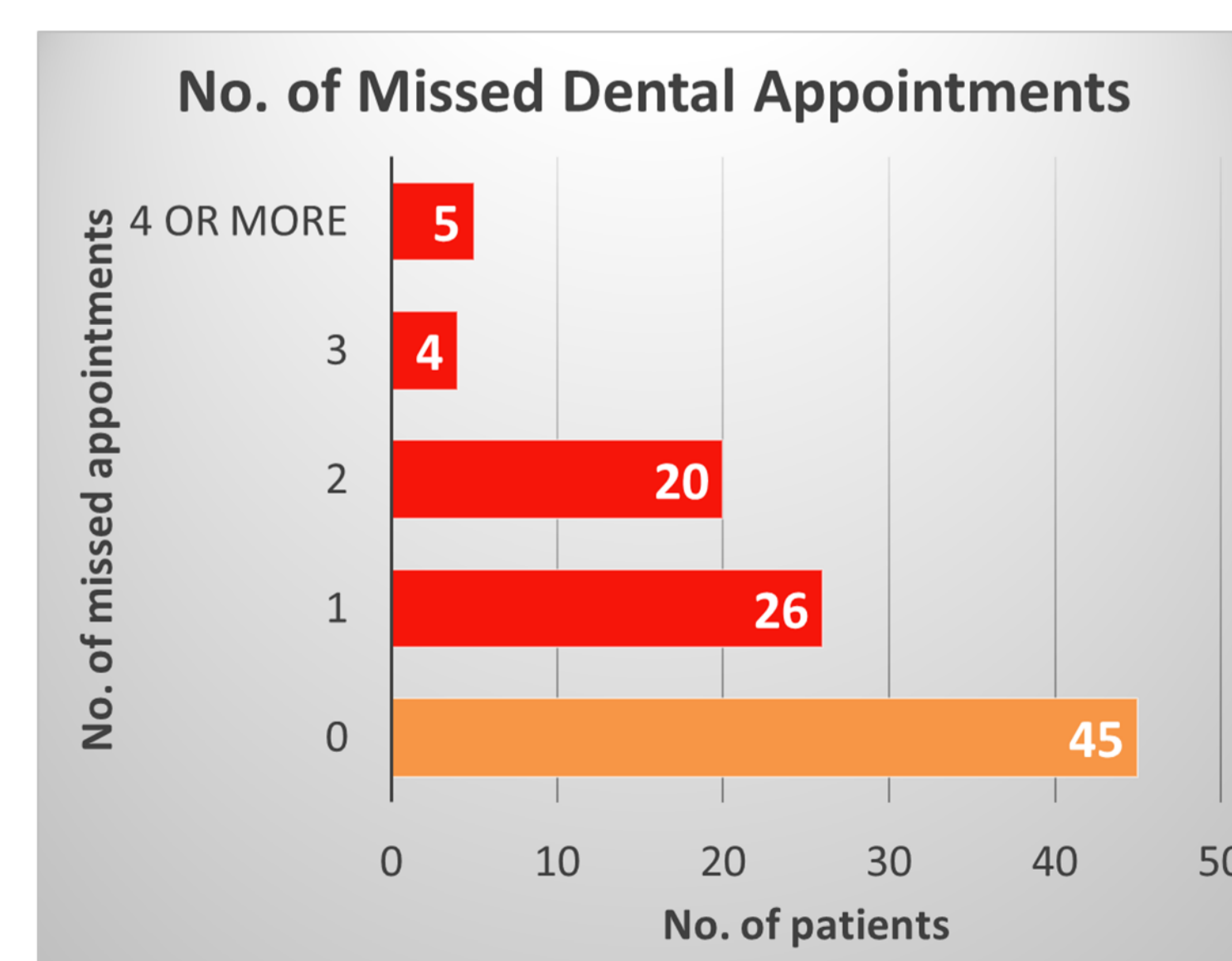


Figure 5 No. of Missed Dental Appointments

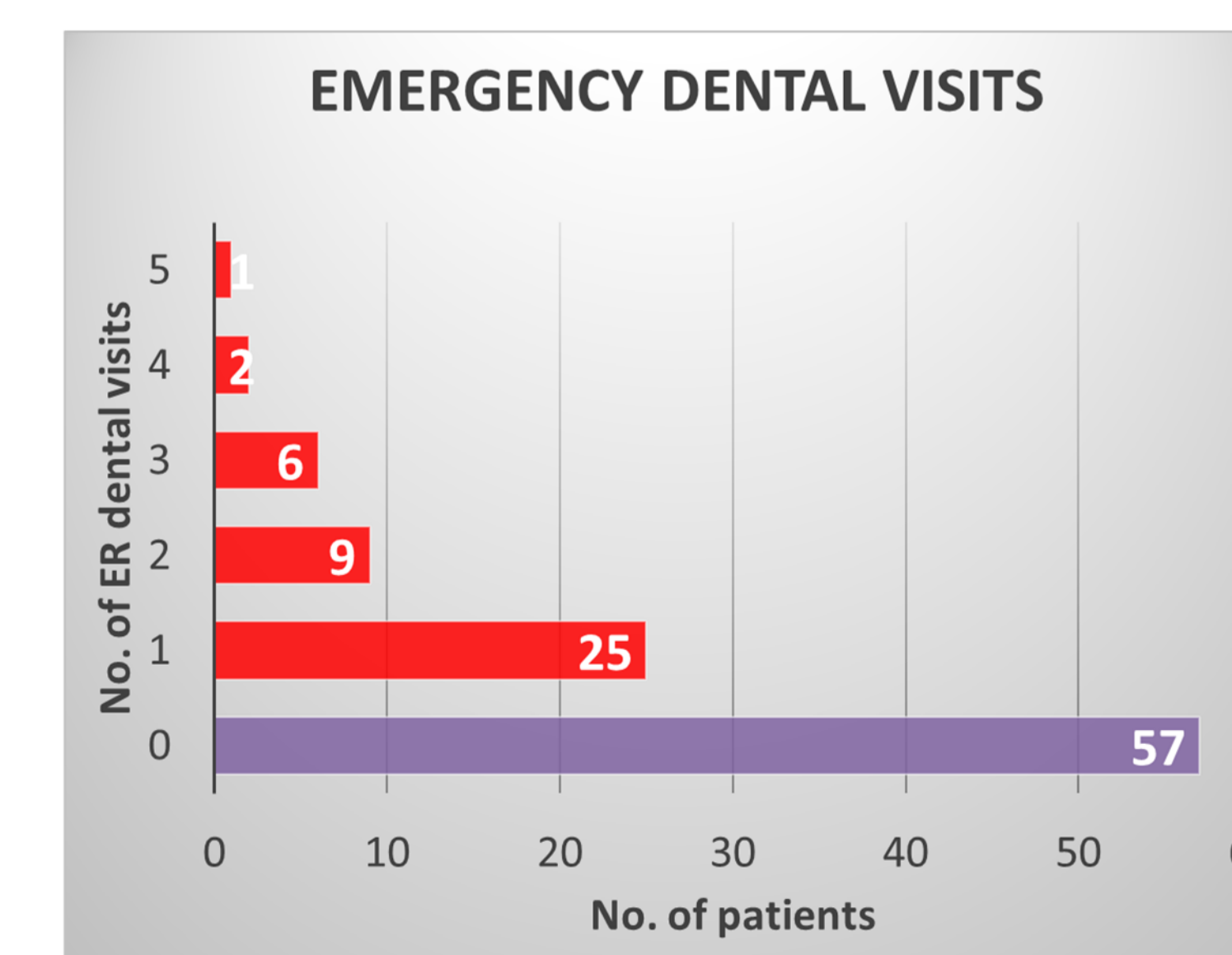


Figure 6 No. of Emergency Dental Visits

Results (continued)

- The average percent correct on the survey was 85%. The most frequently incorrectly answered question was the duration of time for tooth brushing (Figure 7).

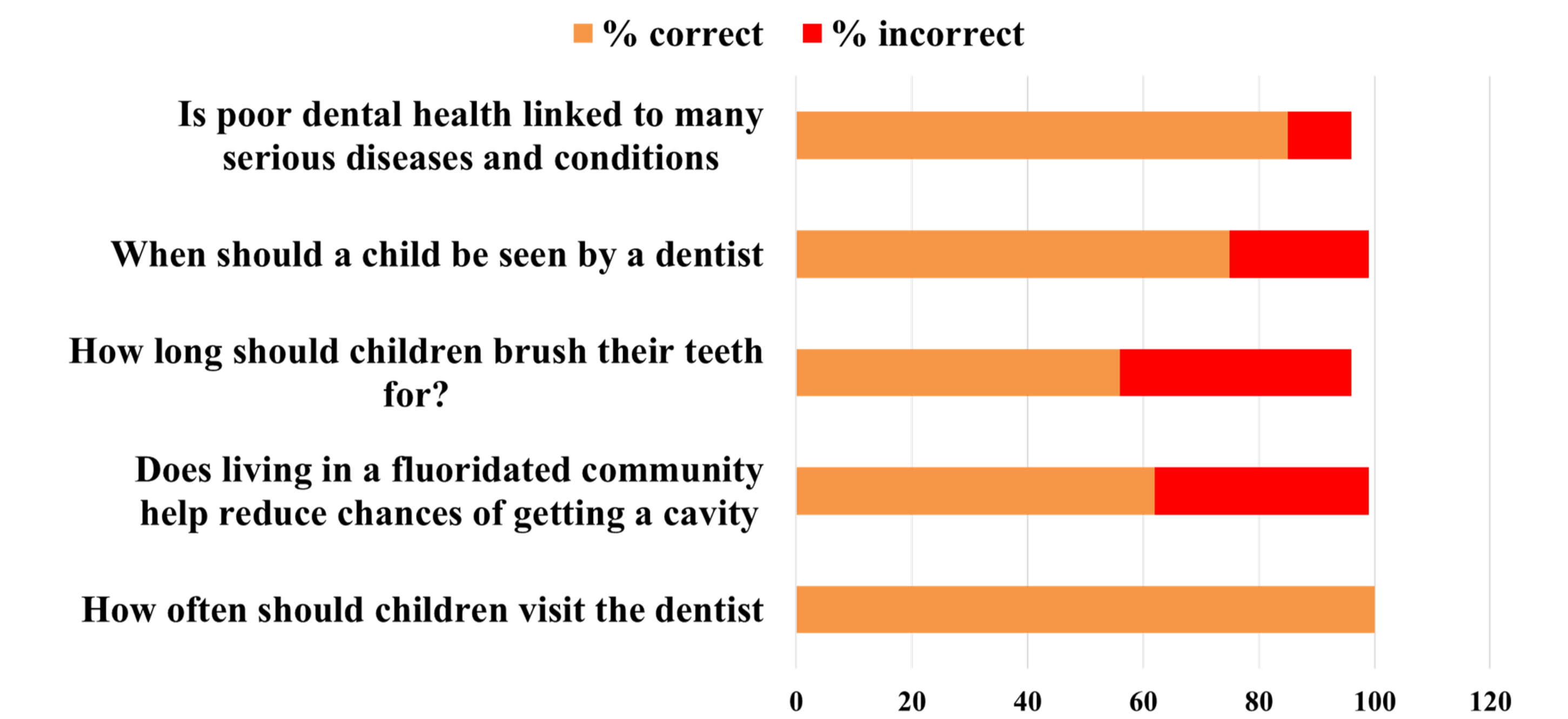


Figure 7. Analysis of Responses given by Parents

- No statistically significant associations were found between parental oral health knowledge and children's dental no-show rate and emergency visits

Discussion

- Parent oral health knowledge was high in the study sample (averaging 85% correct responses), which may have limited ability to detect significant differences in associations with visit outcomes
- Notably, many surveys were completed after routine or restorative appointments where discussing preventive oral health behaviors is standard of care, which may have increased knowledge scores
- Data were extrapolated from existing electronic health records and previous dental records were not taken into account to record the missed appointments or emergency dental visits
- Emergency dental visits occurring only in Haven clinic were recorded, which may not completely reflect the extent of emergency visits elsewhere due to dental pain or infection
- Published literature has shown that children enrolled in Medicaid, are of low-socioeconomic status, have high caries prevalence. Our findings demonstrated a similar pattern.

Conclusions

Although parents possessed high oral health knowledge, they may not be implementing optimal health behaviors at home, as caries rates, and number of missed and emergency dental visits remain high. Multiple missed appointments may delay treatment and result in a dental emergency visit, which are a significant and costly public health problem for vulnerable populations. Such visits may be avoided through early intervention, warranting additional research to help identify and address barriers to care.

From Special thanks to Dr. Lynn Tepper for assistance is developing the survey. Special thanks to Marissa Rifkin and Caroline Greco for help collecting the surveys. Thank you to Vivian Zhang.