



# Relationship of Caregiver Demographics and Oral Health Knowledge

Micaela Cleere, DMD; Maria Davila, DDS, MPH, DrPH; Susan Gorman, MS.Ed, RDH; Lauren Governale, DMD, MPH  
The University of Florida, Department of Pediatric Dentistry, Naples Florida



## Introduction

Immokalee, Florida, a rural community in Collier County, is home to a substantial migrant farmworker population, primarily made up of immigrants from Central America, Mexico, and Haiti. The oral health knowledge of caregivers for pediatric patients plays a crucial role in influencing the oral health outcomes of these children. Oral health has been ranked as one of the major health problems facing migrant and seasonal farmworkers, as well as one of the unmet needs in farmworker health services.<sup>1</sup>

## Objective

This study aimed to evaluate the oral health knowledge of caregivers to pediatric patients and the relationship to their demographics including education level, immigration status, insurance status, and family size.

## Materials and Methods

In a cross-sectional analysis, 93 caregivers were asked:

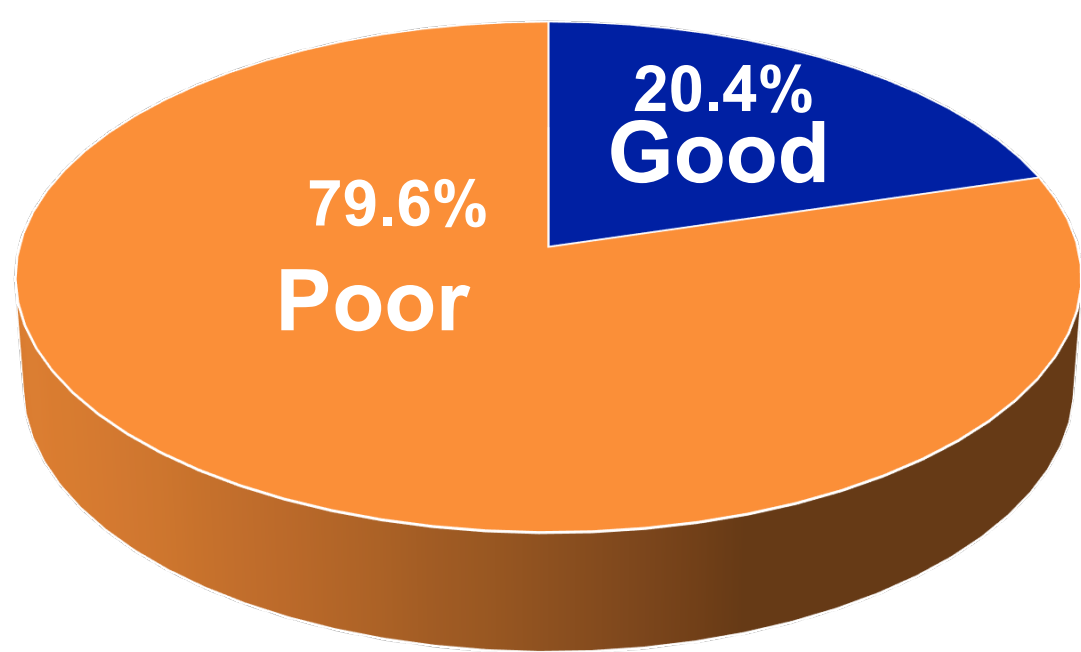
1. If cavities are caused by germs in the mouth
2. If they should share utensils or drinks with their child if they have cavities
3. If their child should visit the dentist before age 1

- “**Good**” knowledge of oral health was determined as all questions answered correctly
- “**Poor**” knowledge was classified as answering zero, one or two questions correctly

Correct answers were summed and compared based on education level, number of children in the family, US born, Medicaid status, and ethnicity.

Statistical significance was determined using Fischer’s exact test (2-sided) with a cutoff of  $p < 0.05$ .

**Chart 1: Overall Oral Health Knowledge of Caregivers**

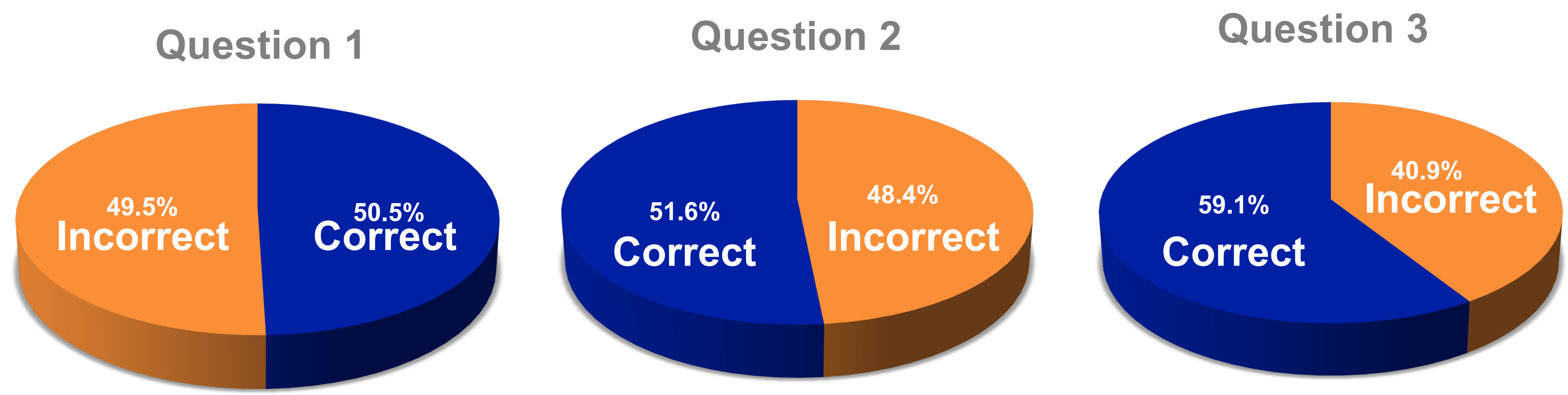


**Table 1: Demographic Characteristics of the Caregivers**

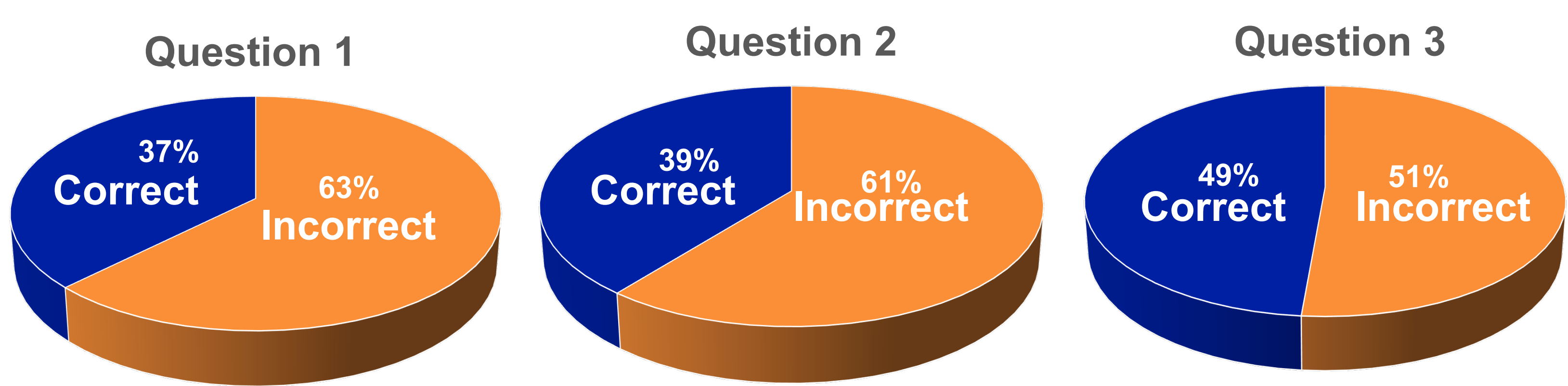
Variable		Number (N <sup>o</sup> )	Percent (%)
Age of Child*:	1-4 years old	49	52.7%
	5-8 years old	28	30.1%
	9+ years old	16	17.2%
Gender of Child	Male	46	49.5
	Female	47	50.5
Child Born in the US	Yes	54	58.1%
	No	39	41.9%
Medicaid Status	Yes	53	57.0%
	No	40	43.0%
Recent Migrant	Yes	57	61.3%
	No	36	38.7%
Number of Children in Family	1-2	51	54.8%
	3-4	29	31.2%
	5+	13	14.0%
Education Level of Caregivers	Less Than High School (None-Grade 8)	55	59.1%
	More Than High School (Grade 9-College)	38	40.9%
Ethnicity	African American	3	3.2%
	Haitian/Creole	20	21.5%
	Hispanic	70	75.3%

\*Average age of child is  $4.81 \pm 3.30$

**Chart 2: Caregivers Responses To Three Questions Asked Regarding Oral Health**



**Chart 3: Responses of Caregivers with Poor Knowledge to Questions 1-3**



## Results

- Only 19 (20.4%) caregivers were scored as having “good” knowledge.
- The question with the lowest accuracy was Question 1: Are cavities caused by germs in the mouth?
- There was a statistically significant ( $p=0.017$ ) relationship between ethnicity and overall oral health knowledge
- There was a statistically significant ( $p < 0.05$ ) relationship between caregivers who had overall “poor” knowledge and incorrect answers to all three questions.
- There was no statistically significant difference observed between caregiver oral health knowledge and child age, gender, birth country, Medicaid status, migrant status, number of children in the family, or caregiver education level.

## Conclusions

- Overall, the oral health knowledge of caregivers was poor, regardless of caregiver demographics.
- These results emphasize the need for education of all caregivers to improve overall oral health of pediatric patients.
- Caregivers lacked knowledge in some key concepts related to the disease process and prevention of ECC. Caregivers need additional oral health education with consideration for oral health literacy.<sup>2</sup>
- Limitations of the study were sample size and no follow-up surveys to measure improved knowledge after visits to the community outreach-based site.

## References

1. Quandt, S. A., Clark, H. M., Rao, P., & Arcury, T. A. (2007). Oral health of children and adults in Latino migrant and seasonal farmworker families. *Journal of immigrant and minority health*, 9(3), 229–235.
2. Rivera, Y., Boyd, L. D., & Libby, L. (2020). Hispanic Seasonal Farmworker Caregivers' Beliefs and Perceptions of Early Childhood Caries. *Journal of dental hygiene* : JDH, 94(5), 14–21.