Childhood Oral Health Practices: Cultural Beliefs of Three Hispanic Sub-populations

Erika Urgiles, DDS; Keith S. Margulis, DDS, MPH; Farhad Yeroshalmi, DMD; Victor Badner, DMD, MPH
Jacobi Medical Center, Department of Pediatric Dentistry, Bronx, New York

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EINSTEIN Albert Einstein College of Medicine

ABSTRACT

Purpose: This qualitative study sought to identify the potential impact of cultural beliefs on oral health practices of caregivers of pediatric patients treated in a hospital setting from three Hispanic sub-populations.

Methods: Questionnaires were completed by twenty caregivers of children 1-5 years old from three sub-groups: Mexicans, Dominicans (DR), and Puerto Ricans (PR). All of the interviews were conducted in Spanish. Subjects were asked demographic (8) and open-ended questions (11) regarding past dental experiences, influences on current dental practices, and attitudes towards the primary dentition and dental diseases.

Results: Among all groups, beliefs about primary teeth created barriers to receiving dental care. Misconceptions regarding preventative care were most prevalent among the Mexican community, citing pain as a reason for their child's first dental visit. Stained teeth motivated Puerto Ricans to visit the dentist while Dominicans and Mexicans cited improved brushing at home to remove stains would suffice. Participants from the DR and PR groups mentioned the influence grandmothers had over dental decisions at a higher rate.

Conclusion: The cultural beliefs of the three sub-populations of the Hispanic community were generally similar. However, targeted opportunities exist for oral health improvement when accounting for the different cultures among Hispanic sub-populations.

INTRODUCTION

The Hispanic community is composed of people from 20 countries with different races: white, black, and indigenous. Within the group, there are different customs, dialects, foods, and beliefs. While acculturation to a new environment plays an important role in oral health care, changes in behavior occur long before changes to underlying beliefs. Therefore, changes in diet, health care utilization, social status, and financial stability tend to change dramatically with immigration to a new country; however core cultural beliefs and knowledge regarding illnesses and proper treatment tend to change more slowly.[1]

Since the 2,000 Surgeon General's Report on Oral Health in America[2], Hispanic youth continue to suffer from the highest prevalence of total dental caries.[3] This high rate is significant as the Latino population accounts for over half of the country's population growth, increasing to 18.7 percent of the U.S. population.[4] These figures fail to include the large number, in the millions, of Hispanics who have crossed the US-Mexican border without required documentation. In 2020, the Census questionnaire changed their format to include distinction in race descriptions within the Latino communities.[5] The census data results showed a drastic drop in the number of Latinos identifying as White from 26.7 million in 2010 to 12.6 million in 2020. While this is an improvement in understanding the variety in the demographics of the USA, the lack of distinction in race and sub-populations among the Hispanic community contributes to a gap in the current literature. Failing to acknowledge and incorporate these cultural differences into oral health care could be the missing component in effectively targeting the persistent high burden of dental disease in the Hispanic population.

The purpose of this qualitative study was to identify key cultural perceptions among three distinct sub-populations of the Hispanic cohort: Mexican, Dominican Republic, and Puerto Rican communities relating to children's oral health. The goal being to identify and target potential factors that hinder oral well-being and impede improvement in oral health outcomes, ultimately decreasing utilization of pediatric dental care.

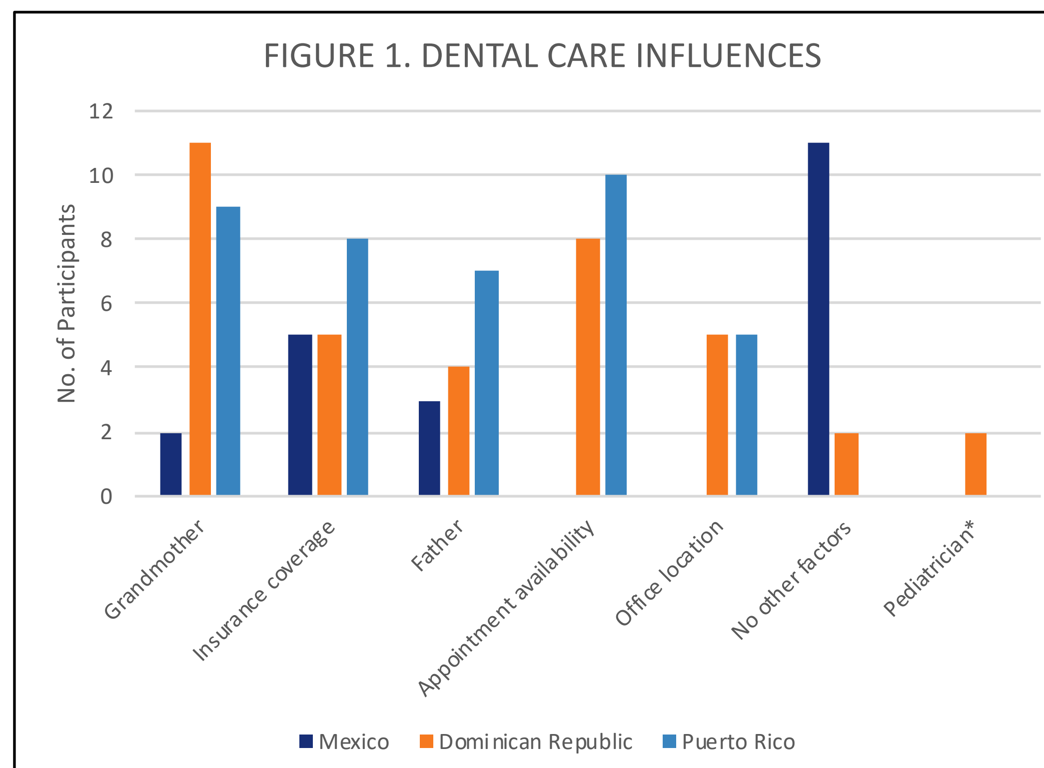
MATERIALS AND METHODS

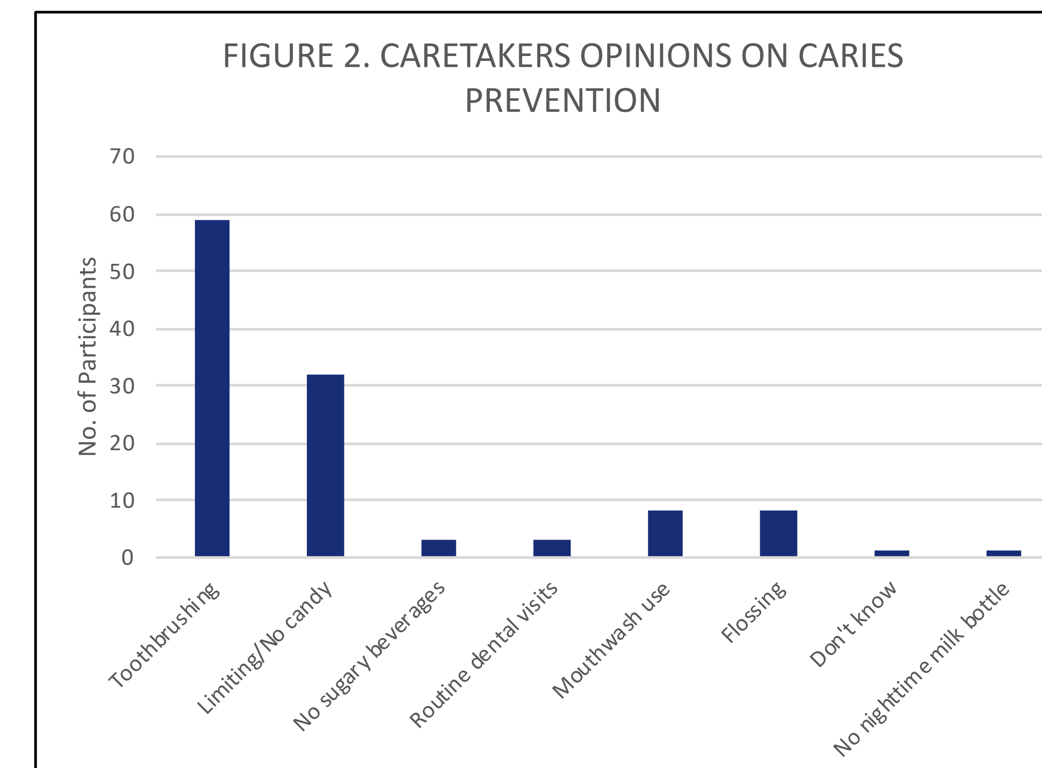
This qualitative study was reviewed and approved by the Institutional Review Board of the Albert Einstein College of Medicine, Bronx, NY, and conducted at Jacobi Medical Center (JMC) and North Central Bronx Hospital (NCBH) in Bronx, NY between December 2022 and March 2023. Participants were recruited by a single trained interviewer, proficient in English and Spanish, from the pediatric medical clinic departments at JMC and NCBH. Participation was voluntary and families assured that their answers were anonymous and confidential. The selection criteria used for participation in the study were: Spanish speaking caretakers; families of patients 1-5 years of age; and families self-identified as Mexican, Dominican Republic or Puerto Rican.

Consent forms and demographic questionnaires were completed prior to the interviews. The interview consisted of 11 open ended questions, shown in Table 1, based on Hilton et al study.[4] The format of the interview was meant to elicit new topics and a deeper understanding of specific behaviors. A limited number of participants were chosen based on their experiences as caretakers of young children. During the interviews, the participants were asked in a conversational manner to answer each question in detail. Initial questions were followed up using a 'tell me more about…' technique. Ultimately collecting a full range of viewpoints and experiences that formulate a narrative of cultural beliefs and oral health. The responses were contemporaneously typed as the respondents spoke during the interview and later translated into English text by a single interviewer. Each response was read for specific words and ideas that could be grouped into themes. The recurring themes were categorized and stratified by country of origin. All themes and ideas were generated after analysis of the data. The three independent sets of results were reviewed together in order to search for similarities and differences among the groups. These results and observations were integrated into the major findings reported here.

Table 1. Interview Questions

1. When you were a child, who made dental care decisions (e.g. when to go to the dentist) in your family?
2. Now that you are a caregiver of a child 5 years of age or younger, who makes the dental care decisions? (e.g. when to go to the dentist)?
3. Are there other people or things that influenced your dental care decisions?
4. What have been some of your personal experiences going to the dentist?
5. How has/have your experience(s) influenced your decision to take your youngest child to the dentist?
6. How do you feel about the first set of teeth your child gets?
7. What is the purpose of the first set of teeth?
8. Are there things that you know of that can prevent your child from getting cavities?
9. When do you feel is the best time to take your youngest child to the dentist?
10. How do you take care of your child's teeth?
11. If your child experiences the following: dental pain, broken tooth, black/brown staining- how would you address their concern?





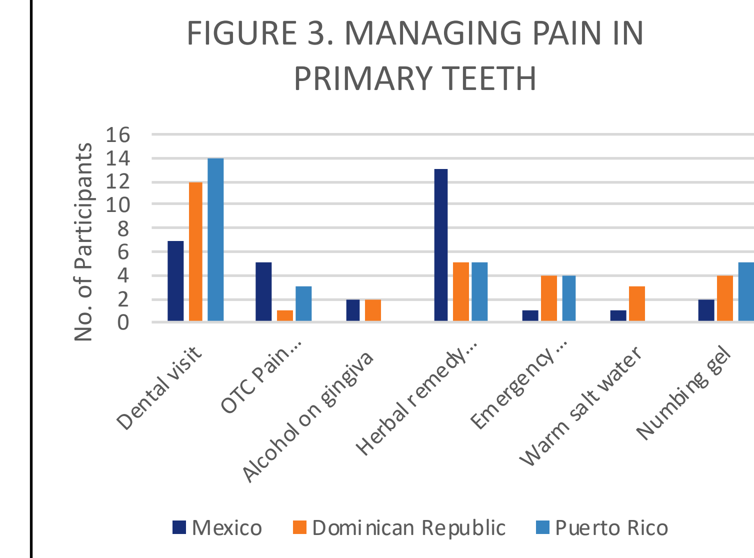
RESULTS

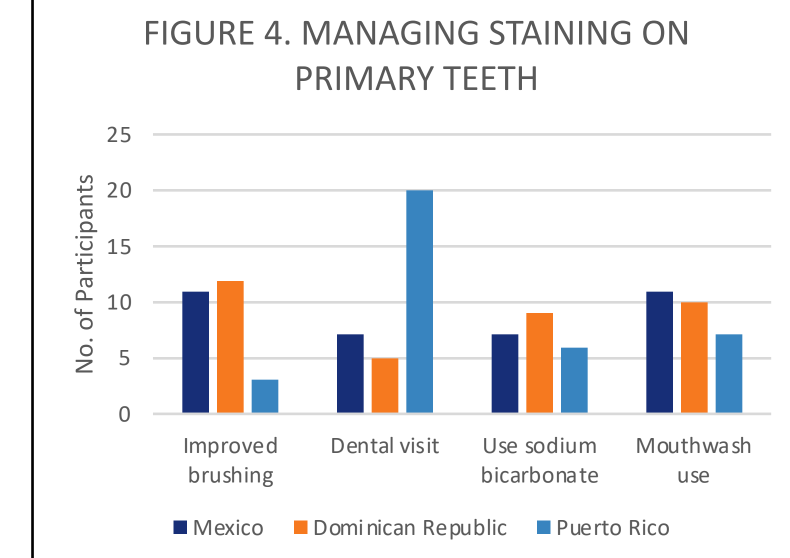
Sixty participants were recruited equally from each of the following Hispanic populations: Mexico, Dominican Republic, and Puerto Rico. The majority of the participants 56.7% (n=34) were female caretakers and 58% (n=35) an education level at High school or GED. Ninety-five percent of the participants (n=57) self-reported as being in the U.S. for longer than 1 year. All children had Medicaid insurance.

Among Dominicans and Puerto Ricans, data revealed grandmothers had a significant influence on dental care and decisions (Fig 1). These groups also cited more factors such as appointment availability, office location, and insurance coverage as important influences on dental care when compared to the Mexican sub group that denied any other factors. *In the PR group, special healthcare need children may have influenced the participants response.

Opinions on caries prevention did not differ greatly among the subgroups, all groups cited toothbrushing as the primary method for preventing cavities followed by limiting or no candy (Fig 2).

Among all groups there was a consensus that dental pain in a child would elicit seeking care from a dental professional (Fig 3). In addition, herbal remedies were most commonly cited as a form of temporary relief of pain while awaiting dental care especially in the Mexican sample. Herbal remedies listed included the use of raw garlic, cloves, and chamomile tea. However in the Puerto Rican sample, staining of primary teeth prompted a visit to the dentist citing the need for professional cleanings as compared to the other two groups that suggested improved toothbrushing or the use of sodium bicarbonate would help with staining (Fig 4).





CONCLUSION

1. There are general similarities across the groups interviewed in this study. Culture specific health beliefs created different barriers among groups indicating the need for modifications in the dental delivery system.
2. Caries prevention education should enhance the importance of limiting sugary beverages and snacks, proper oral hygiene after nighttime bottle feeding, and the promotion of fluoride.
3. Oral hygiene was widely recognized by all groups but knowledge regarding alternative preventative modalities were deficient.
4. Education should also extend family members such as grandmothers that are active participants in the upbringing of the child.
5. These results support the need for additional larger studies to further evaluate distinctions and identify new concepts preventing dental care in children.

BIBLIOGRAPHY

Available upon request