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# Factors Influencing Mexican-Americans Engagement in Health Behaviors

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## ABSTRACT

Background. Oral health among Mexican Americans (MAs) is often poor. MAs appear to develop a set of norms blending poor preventive care with U.S. norms of high calorie sugary snacks and drinks. This phenomenon is not well understood. Whether, how, and why MAs engage in preventive (self and professional) and urgent treatment remain equally ill-defined.
Methods. We sought to better understand the pervasive oral health issues affecting MAs by creating a culturally appropriate structured interview, following an established behavioral theory, supplemented with standardized questions from the NIDCR/CDC Data Resource Center (e.g. recognizing treatment needs, ascertaining patterns of dental visits, non-clinical factors mediating dental care seeking). The resulting protocol was implemented with adult and adolescent MAs in English or Spanish. Qualitative analysis examined engagement in preventive and therapeutic care and identified factors influencing engagement.
Results. A total of 33 interviews were completed. Analyses of discourse indicates that MAs do not consistently adhere to preventive oral health behaviors; and when MAs access dental care systems, it is often reactive and restricted to an emergency clinical situation. Norms, beliefs, barriers, and supports related to these suboptimal behaviors, as well as three health-positive activities were identified and will be discussed.
Conclusion. MAs frequently engage in suboptimal oral health behaviors. Perceived cost is a key factor, suggesting that intervention efforts be crafted around actual/perceived cost and access to care. Vanity/self-image were also identified as potential motivating factors. Future work should refine instruments and develop quantities models with larger samples to better inform future interventions.

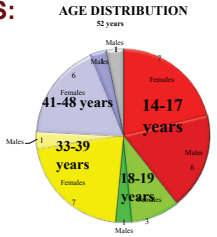
## BACKGROUND

Oral health outcomes among Mexican Americans (MAs) are often poor, as they confront numerous challenges that place them at higher risk for oral problems. Compared to the general population, they have less access to health care, lower levels of education, tend to work in low-wage jobs that offer no health insurance, are more likely to live in poverty, face cultural and linguistic barriers, and are unfamiliar, fearful, or mistrusting of the health care system [1][2][3][4]. Reports on oral health disparities in Latinos have mainly been epidemiological in nature. Limited research has been done on Latino beliefs about oral health and cultural factors affecting health and dental care-seeking behaviors [5], and there are no reports comparing these factors in adults versus adolescents. The purpose of this study is to analyze recorded one-on-one interviews with MA adults and sets of parents and adolescents to identify barriers, facilitators, beliefs and norms influencing MA engagement in oral health care and oral health behaviors – including oral hygiene practices –using a qualitative methodology. It is the first phase of the DentKnow study whose overall aim is to develop a culturally relevant questionnaire that can be used to evaluate uptake of oral health behaviors by MAs in an integrative behavioral health model.

## METHODS

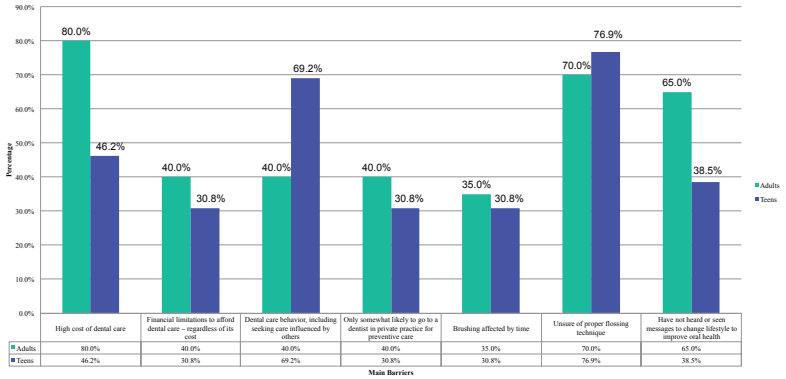
People of Mexican American (MA) origin were recruited from churches and community organizations in central Indiana through partnerships with church and community leaders. Interviewees were informed of the purpose, risks, benefits and alternative to participation, and verbal consent was obtained prior to the interview. No personal identifiers were collected. Participants received a $30 compensation. A total of 33 interviews (20 adults; 13 teens) were conducted and audiotaped, either in English or Spanish, according to interviewee preference. Some interviews were of a parent and their teenage son or daughter, interviewed separately, while the other interviewees were adults. The interviewers were one English-speaking female with a public health background, one female dentist and one male dentist, both bilingual. Background was not shared with interviewees, except rarely at the end of the interview. Questions from the National Institute of Dental and Craniofacial Research/Center for Disease Control and Prevention Data Resource Center were identified and adapted to create a semi-structured interview script, which was IRB-approved. Interviews in Spanish and English were randomly assigned to the Spanish-speaking interviewers for analysis, while the third interviewer analyzed the teenage interviews, which were in English. Summaries of the analyzed recorded interviews were assembled independently by the 3 interviewers, and after discussion, the dominant themes were identified and categorized into: barriers, facilitators/enablers, beliefs and norms. Interviews were randomly assigned to the investigators again, to tally interviewee responses into the previously identified dominant themes in each category. Calibration of interviewers was performed by scoring 4 interviews independently, and then comparing and discussing results to reach consensus. Resulting tallies were recorded in Excel.

## RESULTS:




| TOTAL INTERVIEW (Adults and Teens) RESPONSES | | |
|---|---|---|
| **MAIN BARRIERS** | **#** | **%** |
| High cost of dental care | 22 | 66.7% |
| Financial limitations to afford dental care – regardless of its cost | 12 | 36.4% |
| Dental care behavior, including seeking dental care influenced by others (spouse, family, teachers, etc.) | 17 | 51.5% |
| Only somewhat likely to go to a dentist in private practice for preventive care | 11 | 33.3% |
| Brushing affected by time | 11 | 33.3% |
| Unsure of proper flossing technique | 24 | 72.7% |
| Have not heard or seen messages to change lifestyle to improve oral health | 18 | 54.5% |

**Comparison of Barriers to Dental Care and Oral Hygiene MA Teens and Adults**




| | High cost of dental care | Financial limitations to afford dental care – regardless of its cost | Dental care behavior, including seeking care influenced by others | Only somewhat likely to go to a dentist in private practice for preventive care | Brushing affected by time | Unsure of proper flossing technique | Have not heard or seen messages to change lifestyle to improve oral health |
|---|---|---|---|---|---|---|---|
| Adults | 80.0% | 40.0% | 40.0% | 40.0% | 35.0% | 70.0% | 65.0% |
| Teens | 46.2% | 30.8% | 69.2% | 30.8% | 30.8% | 76.9% | 38.5% |

## CONCLUSIONS

Some common themes among both Mexican American (MA) teens and adults that may constitute barriers for oral health care and oral hygiene behaviors include: high cost of dental care, financial limitations to afford dental care, outside factors (such as family and teachers), not seeing a dentist in a private practice for preventive care, not having the time or habit to brush regularly, being unsure of their flossing technique (due to their gums hurting and/or bleeding), and not being aware of oral health care messages in the media. Adults reported many more barriers to oral health care than did the teens, suggesting that even though adults may not spend in dental care for themselves, they will find ways to get care for their children. Some of the additional barriers that MA adults face include: perceiving it as unlikely that they will seek a dentist in private practice for urgent care, difficulty making dental appointments, dental anxiety, lack of dental insurance, and transportation difficulties and/or location of dental offices.

## REFERENCES

[1] Balluz, L.S., Okoro, C.A., Strine, T.W. & National Center for Chronic, Disease Prevention and Health Promotion. (2004) . Access to Health-Care and Preventive Services Among Hispanics and Non-Hispanics-United States, 2001-2001. *JAMA* 292(19):2331-2333.
[2] Indiana Commission on Hispanic/Latino Affairs. (2007). Addressing Tobacco & Alcohol Use and other Issues in the Hispanic/Latino Community. Retrieved September 7, 2011, from http://www.in.gov/ichla/files/2006HealthCommitteeReport.pdf
[3] Niederman R, Gould E, Soncini J, Tavares M, Osborn V, Goodson JM. A model for extending the reach of the traditional dental practice: the ForsythKids Program. *J Am Dent Assoc*. 2008;139 (8):1040–1050.
[4] Simmer-Beck, M., Gadbury-Amyot, C.C., Ferris, H., Voelker, M.A., Keselyak, N. T., Eplee, H., Parkinson, J., Marse, B., & Galemore, C. (2011). Extending Oral Health Care Services to Underserved Children through a School-Based Collaboration: Part 1-A Descriptive Overview. *The Journal of Dental Hygiene*, 85(3): 181-192.
[5] Butani, Y., Weintraub, J.A. & Barker, J.C. (2008). Oral health-related cultural beliefs for four racial/ethnic groups: Assessment of the literature. *BMC Oral Health*, 8:26.

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