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Correlation of Acculturation in the U.S. and Oral Health Knowledge

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Correlation of Acculturation in the U.S. and Oral Health Literacy

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CrossOver Healthcare Ministry
COMPASSIONATE HEALTHCARE FOR PEOPLE IN NEED

Abstract

Introduction: The United States is one of the leading nations among developed countries regarding high infant mortality rates, obesity rates, and chronic disease rates. Healthcare disparities and inequalities across the U.S. are becoming an increasing problem; low-income and minority families are regularly denied basic healthcare or simply cannot afford care. ***Objective:*** to assess the relationship between time since settling in the U.S. and the oral health knowledge of a sample of low-income immigrants served at a free clinic in Richmond. ***Methods:*** Patients from the CrossOver Healthcare Ministry clinics were recruited to measure reasons for dental disengagement. The clinics developed and provided a list of patients that have not been to the clinic in over a year or at all. Eligible participants were asked to complete a consent form and surveys on dental health status, socioeconomic status, and health conditions. Oral health knowledge was assessed using a validated instrument, the comprehensive measure of oral health knowledge (CMOHK) that included a set of twenty-five questions designed to help understand the patient's knowledge of dental health. Because most of the patients that register with the CrossOver clinics are Latinx and Spanish-speaking individuals, the surveys were administered in both English and Spanish, depending on the patient's preference. Responses from the surveys were entered into REDCap research portal data were analyzed using SAS to produce descriptive statistics of means and standard deviations or frequencies and relative frequencies. Differences in oral health knowledge according to time since settling in the U.S. were assessed using chi square tests. ***Results:*** 57% of our sample had low oral health literacy while 43% had high oral health literacy. Time since settling in the U.S. appears to be associated with lower oral health literacy, although association was not statistically significant. ***Conclusions:*** minorities and low-income individuals often neglect their own dental care needs for various reasons; this study helps us understand if length of stay in the U.S. affects oral health knowledge/literacy.

Introduction

Dental health and hygiene are areas of our health that are viewed as less important, we often forget that our teeth are living tissues that do impact our health if neglected. In the U.S., racial and ethnic minorities, like Hispanic/Latinx individuals, typically experience poor health-related qualities of life as opposed to their white counterparts (Zack, 2013). There is increasing evidence that children of recent immigrants [from poor Central American countries] bear a disproportionate rate of oral diseases (Watson et al., 1999). But why? "Early in the 20th century, public health authorities were central in lending a scientific basis to exclusive immigration policies and in racializing different immigrant groups" (Horton & Barker, 2009).

Methodology

Patients from the Crossover Healthcare Ministry clinics were recruited to measure reasons for dental disengagement. Patients attending medical appointments were invited to complete a consent form and surveys on dental health status, socioeconomic status, and health conditions while waiting for their appointments. Oral health knowledge was assessed using a validated instrument, the Comprehensive Measure of Oral Health Knowledge that included a set of twenty-five questions designed to help understand the patient's knowledge of dental health. Because majority of the patients that register with the CrossOver clinics are Latinx and Spanish-speaking individuals, the surveys are administered in both English and Spanish, depending on the patient's preference. Responses from the surveys were entered into REDCap research portal and were subsequently analyzed using SAS.

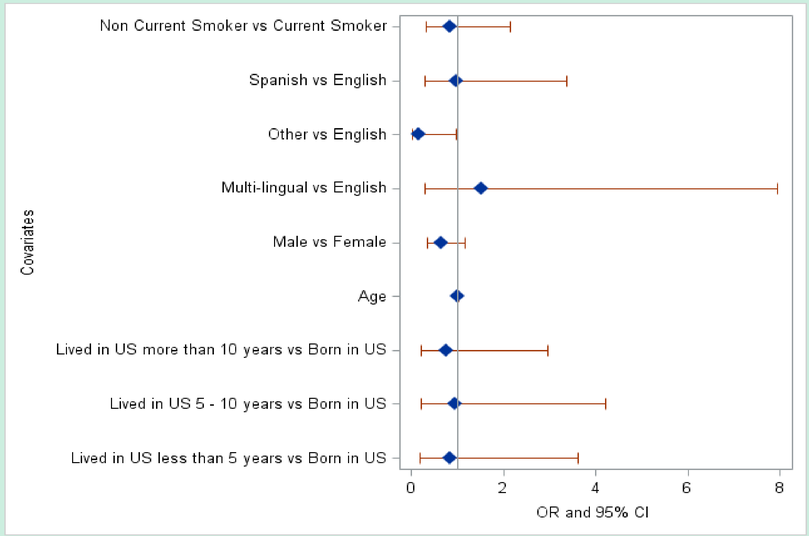
Results

Table 1: Descriptive Statistics (N = 227)

Variable	Summary
CMOHK	
High (Score 15 – 23)	97 (42.7%)
Low (Score 0 – 14)	130 (57.3%)
Lived in US	
Less than 5 years	37 (16.3%)
5 – 10 years	32 (14.1%)
More than 10 years	120 (52.9%)
Born in the US	38 (16.7%)
Education	
Less than High School	126 (55.5%)
High School	44 (19.4%)
Some College	22 (9.7%)
College or more	35 (15.4%)
Gender	
Male	71 (31.3%)
Female	156 (68.7%)
Language	
English	47 (20.7%)
Spanish	149 (65.6%)
Other	18 (7.9%)
Multi-lingual	13 (5.7%)
Current Smoker	
Yes	21 (9.3%)
No	206 (90.8%)
Age*	47.9 (12.8)

*Mean(SD) reported

- 57% of our sample had low oral health literacy while 43% had high oral health literacy
- 17% were born in the U.S., 53% had lived more than 10 years in U.S and 30% had lived less than 10 years in the U.S.
- Majority of our sample (66%) were predominantly Spanish speakers, 21% speak English while 8% and 6% spoke another language and are multilingual, respectively.
- The mean age of our study participants was 48 years, 69% of our sample was Female and 91% do not currently smoke.



Results

Table 2: Years lived in US vs CMOHK

Variable	Low CMOHK	High CMOHK	P-Value
Lived in US			0.800
Less than 5 years	22 (59.5%)	15 (40.5%)	
5 – 10 years	19 (59.4%)	13 (40.6%)	
More than 10 years	70 (58.3%)	50 (41.7%)	
Born in the US	19 (50.0%)	19 (50.0%)	

This is a cross-classification of time lived in the US and CMOHK level and using a chi-squared test to test the association between time in the US and CMOHK.

- Except in U.S. born participants where half had high oral health literacy, participants who immigrated to the U.S. irrespective of time since settling in the U.S. were more likely to have low oral health literacy. For instance, approximately 59% of non-U.S. born participants had low CMOHK scores (oral health literacy) versus 41% having high CMOHK scores.
- Upon adjusting for socio-demographic factors, time since settling in the U.S. was associated with lower oral health literacy, although none of the estimates were statistically significant (Figure).

Discussion

The non-significant association between time since settling in the U.S. and oral health literacy point to the difficulties in accessing and utilizing oral health care in the U.S. More effort is needed to make these services accessible to low income, immigrant populations as an initial step in closing the oral health disparities gap.

Works Cited

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