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The Effect of Educational Backgrounds on Levels of Knowledge on Dental Care and Hygiene in Adults

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**Background**

Dental care and hygiene are a common worry and often overlooked by adults. Individuals’ lack of knowledge on dental care and hygiene may reflect other educational gaps in their development. Multiple sources found that lower levels of education reflected upon less knowledge on oral health and hygiene, and vice-versa, in low-income adults, specifically low-income Hispanics and immigrants.

**Objective**

This study assesses the relationship between educational attainment and oral health knowledge among a sample of low-income immigrants served at a free clinic in Richmond, Va.

**Methods**

Patients from Crossover Healthcare Ministry clinics were recruited to complete a survey on their oral health experiences, quality of life, and knowledge. Oral health knowledge was assessed using the Comprehensive Measure of Oral Health Knowledge (CMOHK), a 25-question instrument that has been validated in English and Spanish. We entered participants data into REDCap. We used SAS to produce descriptive statistics using means and standard deviations or frequencies and relative frequencies and assessed differences in oral health knowledge according to educational attainment using t-tests or chi square tests. We also produced a cross-classification of education level and CMOHK level and used a chi-squared test to test the association between education and CMOHK scores.

**Results**

- There is a linear correlation between level of education and oral health knowledge.
- Over 65% of participants who had completed college or more had high scores on the measure of oral health knowledge.
- Almost 60% of participants who had completed some college had high CMOHK scores.
- Over 65% of participants who had not completed high school had low scores on the measure of oral health knowledge.

**Table 1: Education vs CMOHK**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low CMOHK</th>
<th>High CMOHK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education &lt; High School</td>
<td>83 (65.9%)</td>
<td>43 (34.1%)</td>
</tr>
<tr>
<td>High School</td>
<td>26 (59.1%)</td>
<td>18 (40.9%)</td>
</tr>
<tr>
<td>Some College</td>
<td>9 (40.9%)</td>
<td>13 (59.1%)</td>
</tr>
<tr>
<td>College +</td>
<td>12 (34.3%)</td>
<td>23 (65.7%)</td>
</tr>
</tbody>
</table>

**Discussion**

- Educational level is associated with higher scores on the oral health knowledge instrument.
- Oral health education programs should take patients’ educational levels into account when trying to help them understand oral health. They should also take language preferences into account.
- Measures of oral health knowledge should be tested to make sure they reflect knowledge that is relevant to patients as well as providers and researchers.

**Figure 1: Covariates**

- Non Current Smoker vs Current Smoker
- Spanish vs English
- Other vs English
- Multi-lingual vs English
- Male vs Female
- Age
- College or More vs Less than High School
- Some College vs Less than High School
- Some High School vs Less than High School

**Sources Cited**


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