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# Oral Health Practices, Beliefs and Dental Service Utilization of Albanian Immigrants in Milwaukee, Wisconsin: A Pilot Study

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## Abstract

There is limited information on the oral health of Albanian immigrant population residing in the U.S. This creates a hinderance to developing and implementing appropriate dental care programs for the

population. This study investigated oral health practices, beliefs, dental visits and associated factors of Albanian adults living in Milwaukee, Wisconsin. Purposive and snowball sampling methods were employed. Self-administered questionnaires were used to collect data on oral health practices, beliefs, dental visits and socio-demographic information. Descriptive and multivariable logistic regression were conducted. Overall, 266 adults were recruited, 54% male, 56% have lived 10 or more years in the U.S., 95% rated their oral health as excellent/good and 87% reported having a dental visit in the last year. Age, ability to speak English, having a usual source of dental care, and reporting excellent/good oral health were associated with having a dental visit in the last year. A substantial number of Albanians adult reported a dental visit in the last year and those that did not write or read in English had lower odds of reporting a dental visit.

## Keywords

Dental service utilization, Albanian population, Adults, Dental insurance

## Introduction

Since the 1970s, there has been a steady growth in the immigrant population of the United States (U.S.). Currently, the immigrant population is about 43.3 million (13.5%) of the total U.S. population,<sup>1,2</sup> and immigrants constitute a substantial proportion of racial and ethnic minority population in the U.S. Immigrants are considered by policymakers, health professionals and health advocates to have limited access to dental care when compared to the majority population.<sup>1,2</sup> Oral health is part of general health and it contributes to overall health and general well-being of individuals.<sup>3</sup>

Albanians started migrating to the U.S. after the Albanian Communist regime fell in the early 1990s,<sup>4,5</sup> and they make up about 0.06% of the total U.S. population.<sup>4,5</sup> Approximately 1182 immigrants (+/-341) in Milwaukee County identified as Albanian in the most recent American Community Survey administered by the U.S. Census Bureau.<sup>4</sup> Despite the availability of scientific evidence about the prevalence of common dental diseases and improper oral hygiene practice by different population groups globally,<sup>6,7</sup> limited information still exists about the oral health of immigrants, specifically Albanian immigrants living in the United States. There is also a dearth of information on Albanians' oral health beliefs, knowledge and dental care utilization critical for the development and delivery of appropriate dental care.

Most studies on the oral health of Albanians have been conducted in Albania and all revealed a need for adequate access and improved oral health care.<sup>6,7,8</sup> Lagana et al. reported a need for the establishment of early detection programs and preventative oral care for adolescents living in Albania.<sup>8</sup> Hysi et al. reported a high level of untreated dental caries among 12-year-olds living in Albania and recommended the creation of a national preventive oral health program to improve access to dental care.<sup>6</sup> While it is known that Albanians believe that illness is associated with poor eating, physical and psychological oppression,<sup>9</sup> information about their oral health status, knowledge and dental visits, which contributes to overall health and general well-being is limited. To the best of our knowledge, this is the first study conducted on the oral health of the Albanian population residing in Milwaukee. This

study examined oral health practices, beliefs, and dental service utilization of Albanians residing in Milwaukee, Wisconsin.

## Methods

### Participants and Data Collection

This study employed a purposive and snowball sampling method to recruit participants due to the challenges associated with identifying this group in the general population.<sup>10</sup> The Albanian immigrant population of Milwaukee County is closely knit and engages in various community-related activities. The snowball sampling expanded the list of potential contacts, whereby the initial participants contacted were able to refer other people to the study by word-of-mouth. Many participants were recruited during their change of shift in a factory well-known for employing Albanian immigrants. Recruitment also took place at various Albanian social events in Milwaukee. The inclusion criteria were that the participants had to be at least 18 years of age, of Albanian nationality, and residing in Milwaukee County.

Data was collected from Albanian adults using a self-administered questionnaire in English and Albanian after they consented to participate in the study. The questions in the survey had been previously validated in some states and national oral health surveys. The questionnaire in English was translated by an expert (forward translation) into Albanian and the translated questionnaire in Albanian was then back translated into English (back translation) to ensure the accuracy of the translation. An expert committee reviewed the final translated Albanian document and a pilot testing was done to ensure appropriateness and validity of information before it was provided to participants who were not fluent in English in the study. The questionnaire asked about respondents' sociodemographics—age, self-rated oral health, oral health practices, dental visits and need for linguistic assistance in dental care. The Marquette University Institutional Review Board approved this study under the exempt status.

### Statistical Analysis

Descriptive statistics of the population characteristics and survey responses were computed by time since last dental visit. Continuous variables were summarized with mean  $\pm$  standard deviation, and discrete variables as a percentage of each category, T-test and Chi square test were used for univariate analyses to determine differences in sociodemographic factors by time of last dental visit for continuous and categorical variables, respectively. Multivariable logistic regression analysis was used to identify factors associated with having had a dental visit within the last year. All analyses were performed using SAS 9.4 (SAS Institute, Cary, NC).

## Results

### Study Population Characteristics

A total of 266 Albanian immigrant adults residing in Milwaukee County participated in this study. The mean age of the respondents was  $43.1 \pm 14.5$ , with the largest age group being between 45 and 65-years old, and the majority being males (54%). A high proportion of the respondents (42.9%) had at least some college education, with 50% indicating that they were able to read, speak, and write in

English. However, majority of the respondents had higher Albanian competency in reading, writing, and speaking, versus English knowledge. Moreover, 98.1% of the respondents were not born within the U.S., but 73.3% had lived in the U.S. for longer than 5 years. 81.2% of the respondents were employed at the time of participation, and 91.7% had dental insurance while 92.7% had a regular source of dental care. Wisconsin dental insurance allows individuals to pay a monthly fee, called a premium, in order to receive checkups, X-rays, and other dental services that promote dental health. Majority of respondents reported their self-rated general and oral health as good/excellent. Table 1 displays the demographic information of study respondents.

Table 1 Study population characteristics

<b>Variables</b>	<b>N = 266 (%)</b>
Age	
Mean ± SD	43.1 ± 14.5
Age group	
15 to <25 years old	35 (13.2)
25 to <45 years old	104 (39.1)
45 to <65 years old	107 (40.2)
≥ 65 years old	20 (7.5)
Sex	
Male	143 (53.8)
Female	123 (46.2)
Education	
High school diploma or less	152 (57.1)
Some college or associate's degree	59 (22.2)
Bachelor's degree or higher	55 (20.7)
Were you born in the US?	
Yes	5 (1.9)
No	261 (98.1)
Length of stay in the U.S.	
< 5 years	70 (26.7)
5–10 years	45 (17.2)
> 10 years	147 (56.1)
English knowledge	
Speak, read, write	133 (50.0)
Speak and read	26 (9.8)
Speak	19 (7.1)
None	88 (33.1)

<b>Variables</b>	<b>N = 266 (%)</b>
Albanian knowledge	
Speak, read, write	249 (93.6)
Speak and read	2 (0.8)
Speak	4 (1.5)
None	11 (4.1)
Employment status	
Employed/working	211 (81.2)
Full time homemaker	13 (5.0)
Retired	12 (4.6)
Presently not working	24 (9.2)
Dental insurance	
Yes	244 (91.7)
No	22 (8.3)
Regular source of dental care?	
Yes	243 (92.7)
No	19 (7.3)
Self-rated general health	
Fair/poor	6 (2.3)
Good	176 (66.7)
Excellent	82 (31.1)
Self-rated oral health	
Fair/poor	12 (4.5)
Good	203 (76.9)
Excellent	49 (18.6)

**Dental Visit, Oral Health Knowledge, Habits and Beliefs of Albanian Adults in Milwaukee**

Approximately 86.8% of the respondents had visited their dentist within the past year and less than 1% had never had a dental visit. Most of the respondents brushed their teeth at least two times a day and used dental floss. Additionally, 89.4% of respondents agreed that dental disease is preventable, and a majority of respondents agreed that keeping their natural teeth for as long as possible was the most important reason for taking care of their teeth. Most respondents indicated that the type of food that they ate and whether or not they smoked affected the state of their oral health. Moreover, most respondents reported that not having interpretive services did not prevent them from seeking dental care (see Table [2](#)).

Table 2 Dental visit, oral health practice, and knowledge of Albanian adults in Milwaukee

<b>Variables</b>	<b>N = 266 (%)</b>
Last dental visit	
> 1 year	231 (86.8)
2–3 years	33 (12.4)
Never	2 (0.8)
Teeth brushing habit	
Once daily	53 (19.9)
Twice daily	157 (59.0)
More than 3× daily	56 (21.1)
Use of toothpaste when brushing teeth	
Hardly ever	2 (0.8)
Some days	10 (3.8)
Most days	15 (5.7)
Every day	237 (89.8)
Use dental floss	
Yes	147 (56.5)
No	113 (43.5)
Use of mouthwash	
Yes	104 (40.2)
No	155 (59.8)
Smoking can affect your oral health	
Yes	193 (73.1)
No	5 (1.9)
Don't Know	66 (25.0)
Dental problems can cause other health problems	
Agree	229 (86.7)
Disagree	6 (2.3)
Not sure	29 (11.0)
Dental disease can be prevented	
Agree	235 (89.4)
Disagree	1 (0.4)
Not sure	27 (10.3)
Keeping my natural teeth is very important	
Agree	252 (95.1)
Disagree	1 (0.4)

<b>Variables</b>	<b>N = 266 (%)</b>
Not sure	12 (4.5)
The food you eat can affect your oral health	
Yes	204 (77.0)
No	19 (7.2)
Don't know	42 (15.8)
Reasons that you could not get the dental care you needed? Did not have interpreter	
Yes	16 (8.1)
No	181 (91.9)
Most important reason to take care of teeth/gums—help appearance	
Yes	31 (11.7)
No	234 (88.3)
Most important reason to take care of teeth/gums—keep teeth as long as possible	
Yes	178 (67.2)
No	87 (32.8)
Most important reason to take care of teeth/gums—avoid expensive treatment later	
Yes	17 (6.4)
No	248 (93.6)
Most important reason to take care of teeth/gums—avoid future pain and trouble	
Yes	54 (20.4)
No	211 (79.6)

### Factors Associated with Last Dental Visit

There was a significant difference by age, sex, and employment status between respondents who had had a dental visit within the previous year compared to those who had a dental visit more than 2 years ago. Respondents who visited the dentist less than a year ago had a mean age of  $42.0 \pm 14.0$ , whereas those who had last seen the dentist 2 or more years ago were older with a mean age of  $50.4 \pm 15.2$ . In addition, males were more likely to have visited the dentist more recently than females. Those who were employed were also more likely to have visited the dentist within the past year than those that were unemployed, full-time homemakers, or retired.

There was a significant difference in self-rated oral health and brushing habits between respondents with a dental visit within the previous 1 year compared to those with a dental visit more than 2 years ago. Those that self-rated their oral health as good/excellent were more likely to have visited the dentist within the past year and to have brushed their teeth twice daily, whereas those who had last visited the dentist more than 2 years ago were more likely to rate their oral health as fair/poor and to brush their teeth only once daily.



There was a significant difference in the need for interpreter between respondents with a dental visit in less than 1 year compared to those with a dental visit more than 2 year. Respondents that indicated that their last dental visit was more than 2 years ago were more likely to have not had an interpreter at their last visit (see Table 3). Table 4 show the association between how long a subject have been living in the US and sociodemographic factors. The relationship between living in the US less than 5 years or between 5-years or more than 10 years were not significantly associated with age, gender, education, place of birth, last dental visit, self-rated oral health or general health, smoking habits, flossing and use of mouthwash. But there was a significant association between living in the US and dental insurance, speaking English, brushing teeth with fluoride toothpaste.

Table 3 Results of bivariate analysis: factors associated with last dental visit

<b>Variables</b>	<b>Last dental visit: &gt; 1 year<sup>[L]</sup><sub>[SEP]</sub> N = 231(%)?</b>	<b>Last dental visits: 2 + years<sup>[L]</sup><sub>[SEP]</sub> N = 35(%)</b>	<b>P value</b>
Age			0.001
Mean ± SD	42.0 ± 14.0	50.4 ± 15.2	
Age group			0.004
15 to < 25 years old	32 (91.4)	3 (8.6)	
25 to < 45 years old	97 (93.3)	7 (6.7)	
45 to < 65 years old	89 (83.2)	18 (16.8)	
≥65 years old	13 (65.0)	7 (35.0)	
Sex			0.767
Male	125 (87.4)	18 (12.6)	
Female	106 (86.2)	17 (13.8)	
Highest education			0.501
High School Diploma or Less	134 (88.2)	18 (11.8)	
Some college or Associate's Degree	50 (84.7)	9 (15.3)	
Bachelor's Degree or Higher	47 (85.5)	8 (14.5)	
Employment status			0.007
Employed	190 (90.0)	21 (10.0)	
Not employed	11 (84.6)	2 (15.4)	
Full-time homemaker	7 (58.3)	5 (41.7)	
Retired	18 (75.0)	6 (25.0)	
Dental insurance			0.184
Yes	214 (87.7)	30 (12.3)	
No	17 (77.3)	5 (22.7)	

<b>Variables</b>	<b>Last dental visit: &gt; 1 year<sup>[SEP]</sup> N = 231(%)?</b>	<b>Last dental visits: 2 + years<sup>[SEP]</sup> N = 35(%)</b>	<b>P value</b>
Regular source of dental care			0.004
Yes	217 (89.3)	26 (10.7)	
No	12 (63.2)	7 (36.8)	
English knowledge			0.028
None	70 (79.5)	18 (20.5)	
Speak	15 (78.9)	4 (21.1)	
Speak, read	25 (96.2)	1 (3.8)	
Speak, read, write	121 (91.0)	12 (9.0)	
Albanian knowledge			0.245
None	9 (81.8)	2 (18.2)	
Speak	4 (100.0)	0 (0.0)	
Speak, read	1 (50.0)	1 (50.0)	
Speak, read, write	217 (87.1)	32 (12.9)	
Length of stay in the U.S.			0.073
Less than 5 years	65 (92.9)	5 (7.1)	
5–10 years	39 (86.7)	6 (13.3)	
More than 10 years	123 (83.7)	24 (16.3)	
Place of birth			0.621
U.S.	5 (100.0)	0 (0.0)	
Other	226 (86.6)	35 (13.4)	
Self-rated general health			0.166
Fair/poor	5 (83.3)	1 (16.7)	
Good	149 (84.7)	27 (15.3)	
Excellent	76 (92.7)	6 (7.3)	
Self-rated oral health			0.038
Fair/poor	8 (66.7)	4 (33.3)	
Good	176 (86.7)	27 (13.3)	
Excellent	46 (93.9)	3 (6.1)	
Teeth brushing habit			0.038
Once daily	39 (73.6)	14 (26.4)	
Twice daily	143 (91.1)	14 (8.9)	
More than three times daily	49 (87.5)	7 (12.5)	
Use of dental floss			0.033

Variables	Last dental visit:		P value
	> 1 year <sup>[SEP]</sup> N = 231(%)?	2 + years <sup>[SEP]</sup> N = 35(%)	
Yes	134 (91.2)	13 (8.8)	< 0.001
No	93 (82.3)	20 (17.7)	
Did not have interpreter			
Yes	7 (43.8)	9 (56.3)	
No	159 (87.8)	22 (12.2)	

Table 4 Relationship between how long subjects have been living in the U.S. and sociodemographic factors

Variables	How long have you been living in the US?			P value
	Less than 5 years	5–10 years	More than 10 years	
	N = 70 (col %)	N = 45 (col %)	N = 147(col %)	
Age				0.901 <sup>A</sup>
Mean ± SD	42.7 ± 14.7	42.8 ± 16.1	43.6 ± 13.7	
Age group				0.888 <sup>C</sup>
15 to < 25 years old	7 (10.0)	7 (15.6)	19 (12.9)	
25 to <45 years old	32 (45.7)	16 (35.6)	55 (37.4)	
45 to < 65 years old	26 (37.1)	18 (40.0)	63 (42.9)	
≥ 65 years old	5 (7.1)	4 (8.9)	10 (6.8)	
Sex				0.589 <sup>C</sup>
Male	34 (48.6)	25 (55.6)	82 (55.8)	
Female	36 (51.4)	20 (44.4)	65 (44.2)	
Education				0.698 <sup>K</sup>
High School Diploma or Less	45 (64.3)	24 (53.3)	80 (54.4)	
Some college or Associate's Degree	8 (11.4)	12 (26.7)	38 (25.9)	
Bachelor's Degree or Higher	17 (24.3)	9 (20.0)	29 (19.7)	
Were you born in the US?				0.385 <sup>C+</sup>
Yes	0 (0.0)	1 (2.2)	1 (0.7)	
No	70 (100.0)	44 (97.8)	146 (99.3)	
English knowledge				< 0.001 <sup>C</sup>
None	35 (50.0)	17 (37.8)	35 (23.8)	
Speak	9 (12.9)	0 (0.0)	10 (6.8)	
Speak, read	5 (7.1)	6 (13.3)	15 (10.2)	
Speak, read, write	21 (30.0)	22 (48.9)	87 (59.2)	

Variables	How long have you been living in the US?			P value
	Less than 5 years	5–10 years	More than 10 years	
	N = 70 (col %)	N = 45 (col %)	N = 147(col %)	
Albanian knowledge				0.059 <sup>C+</sup>
None	0 (0.0)	0 (0.0)	11 (7.5)	
Speak	0 (0.0)	1 (2.2)	2 (1.4)	
Speak, read	0 (0.0)	0 (0.0)	1 (0.7)	
Speak, read, write	70 (100.0)	44 (97.8)	133 (90.5)	
What best describes your present work/employment situation?				0.613 <sup>C+</sup>
Employed/working	54 (79.4)	32 (76.2)	124 (84.9)	
Full time homemaker	6 (8.8)	2 (4.8)	5 (3.4)	
Retired	3 (4.4)	3 (7.1)	6 (4.1)	
Presently not working	5 (7.4)	5 (11.9)	11 (7.5)	
Missing	2	3	1	
Do you have dental insurance				< 0.001 <sup>C+</sup>
Yes	57 (81.4)	40 (88.9)	143 (97.3)	
No	13 (18.6)	5 (11.1)	4 (2.7)	
Missing	0	0	0	
Do you have a regular source of dental care?				0.063 <sup>C+</sup>
Yes	61 (87.1)	40 (90.9)	138 (95.8)	
No	9 (12.9)	4 (9.1)	6 (4.2)	
Missing	0	1	3	
When was your last dental visit?				0.178 <sup>C</sup>
Less than 1 year	65 (92.9)	39 (86.7)	123 (83.7)	
2 + years	5 (7.1)	6 (13.3)	24 (16.3)	
Overall, how would you describe your general health?				0.383 <sup>C+</sup>
Fair/poor	3 (4.3)	0 (0.0)	3 (2.1)	
Good	50 (71.4)	28 (63.6)	95 (65.1)	
Excellent	17 (24.3)	16 (36.4)	48 (32.9)	
Missing	0	1	1	
Overall, how would you rate the health of your teeth and gums?				0.290 <sup>C+</sup>
Fair/poor	6 (8.6)	1 (2.2)	5 (3.4)	

Variables	How long have you been living in the US?			P value
	Less than 5 years	5–10 years	More than 10 years	
	N = 70 (col %)	N = 45 (col %)	N = 147(col %)	
Good	54 (77.1)	33 (73.3)	113 (77.9)	
Excellent	10 (14.3)	11 (24.4)	27 (18.6)	
Missing	0	0	2	
How many times do you brush your teeth in 1 day?				0.790 <sup>K</sup>
1	14 (20.0)	10 (22.2)	28 (19.0)	
2	40 (57.1)	27 (60.0)	87 (59.2)	
More than 3	16 (22.9)	8 (17.8)	32 (21.8)	
How often do you use toothpaste when brushing your teeth?				0.040 <sup>K</sup>
Hardly ever	0 (0.0)	1 (2.3)	1 (0.7)	
Some days	5 (7.1)	3 (6.8)	2 (1.4)	
Most days	4 (5.7)	4 (9.1)	6 (4.1)	
Every day	61 (87.1)	36 (81.8)	137 (93.8)	
Missing	0	1	1	
Do you floss in-between your teeth?				0.346 <sup>C</sup>
Yes	34 (49.3)	25 (58.1)	86 (59.7)	
No	35 (50.7)	18 (41.9)	58 (40.3)	
Missing	1	2	3	
Do you use a mouthwash on a regular basis?				0.316 <sup>C</sup>
Yes	29 (43.3)	21 (47.7)	52 (36.1)	
No	38 (56.7)	23 (52.3)	92 (63.9)	
Missing	3	1	3	
Do you think smoking affects your oral health?				0.339 <sup>C+</sup>
Yes	49 (70.0)	31 (68.9)	110 (75.9)	
No	0 (0.0)	2 (4.4)	3 (2.1)	
Don't know	21 (30.0)	12 (26.7)	32 (22.1)	
Missing	0	0	2	
Do you think the food you eat affects your oral health?				0.713 <sup>C+</sup>
Yes	53 (75.7)	34 (75.6)	113 (77.4)	

Variables	How long have you been living in the US?			P value
	Less than 5 years	5–10 years	More than 10 years	
	N = 70 (col %)	N = 45 (col %)	N = 147(col %)	
No	3 (4.3)	4 (8.9)	12 (8.2)	
Don't know	14 (20.0)	7 (15.6)	21 (14.4)	

Exact test: <sup>A</sup>ANOVA F-test; <sup>C</sup>Chi-square test; <sup>K</sup>Kruskal–Wallis test

Table 5 show results from the logistic regression analysis that evaluates factors associated with dental visits. Respondents who reported that they did not read or write English had lower odds of reporting a dental visit within the last year compared to those who were able to read/write English. Respondents with a regular source of care had almost seven times higher odds of reporting a dental visit compared to those without a regular source of care.

Table 5 Results of logistic regression analysis: factors associated with dental visits

Variable Label	Adjusted Odds Ratio			P value
	Odds Ratio	Lower 95% Confidence Limit	Upper 95% Confidence Limit	
Age group (years)				
15 to < 25 versus 25 to < 45	0.494	0.107	2.290	0.3674
45 to < 65 versus 25 to < 45	0.207	0.144	1.595	0.2304
≥ 65 versus 25 to < 45	0.332	0.043	1.004	0.0505
English knowledge				
Don't read/write versus read or write	0.332	0.111	0.992	0.0483
How long have been living in the USA?				
5–10 years versus >10 years	1.510	0.499	4.568	0.4659
< 5 years versus > 10 years	4.563	1.375	15.139	0.0131
Do you have a regular source of dental care?				
Yes versus no	6.526	1.996	21.333	0.0019

## Discussion

The purpose of this study was to identify oral health practices, beliefs and dental service utilization of the Albanian-Americans living in Milwaukee County. In this study, respondents that were not able to read or write English were less likely to visit the dentist. This finding is consistent with prior literature documentation of linguistic challenges faced by immigrant groups within the health care systems including dental care.<sup>11,12</sup> Although this study did not specifically ask about potential sources of interpreter services, it indicates a potential need for interpretative services at dental offices. We believe that professional interpreters play an important role in helping dental practitioners meet the

needs of their patients.<sup>13</sup> Furthermore, these study findings expand the literature on immigrant oral health and shed some light on whether Albanian-Americans living in Milwaukee experience profound difficulty accessing dental care.

Respondents with a regular source of dental care had higher odds of making a dental visit, compared to those without regular source of care. This finding was not surprising given the consensus in health services literature on the relationship between regular source of dental care and access to dental care.<sup>14</sup> Studies have documented that having a regular source of care is a strong determinant of access to health care.<sup>14</sup> In addition, older adults (> 65 years old) had higher odds of making a dental visit, although this finding is in sharp contrast to what is generally reported in the literature on this age group of unmet needs for dental care and low dental visits.<sup>15,16</sup>

This finding could reflect the high percent of Albanian-Americans who reported that they have dental insurance and that the amount that insurance covers did not deter most of them from receiving the dental care that they need. This finding on dental insurance is consistent with that reported of Somali immigrant populations living in Minnesota<sup>17</sup> in seeking dental care. Furthermore, respondents did not see cost of procedures as a barrier to receiving dental care, which could be an indication of the cultural value that these populations probably place on their oral health. This issue of cost as a barrier to dental care is in sharp contrast to Vujcic et al's report on how dental care presents the highest level of financial barriers to care.<sup>18</sup> Further research is warranted on the relationship between cost and dental service utilization especially given the growing immigrant population in the United States.

One issue worthy of note is the fact that most of the respondents indicated a desire to keep their teeth for as long as they live. In addition, majority of them rated their oral health as good or excellent. This is in contrast with the Somali immigrants study where only about half of Somali immigrants living in Minnesota rated their oral health as good or excellent.<sup>17</sup> This important contrast reported between the Somali and Albanian adults should be considered by dental providers when prescribing treatment options as it negates the impression that all immigrants are likely to report their oral health in the same way. As regards education, this did not appear to be a significant factor in determining the oral health practices of the Albanian-American immigrant group. This finding is consistent with that reported by Xhihani et al. and the high use of preventive health care services.<sup>19,20</sup>

Certain weaknesses should be taken into consideration when interpreting study results. First, the study used a convenient sample, however, the sampling technique and recruitment of subjects provided adequate opportunities to document oral health of Albanian immigrants living in Milwaukee. Second, the study relied on self-reported information, which could be subject to recall bias. Third, investigators had no way of validating information on dental insurance and dental visits with actual dental records. Finally, the study lacks information on the use of home remedies like salt water rinses, raki, honey, etc., as treatment for oral pain or dental diseases.<sup>20</sup>

In conclusion, a substantial number of adult Albanians had dental insurance, reported a dental visit in the last year and rated their oral health as excellent/good. Participants with a regular source of dental care had higher odds of a dental visit, and those who could not read or write English had lower odds of

reporting a dental visit. Findings from this study will be used to plan and develop appropriate programs and policies relevant to Albanians' oral health care.

## Notes

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