
Oral Health Disparities in United States and Canadian Immigrant Population and Low-income Families

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Abstract

Even though our country's oral health has improved since 1960s; however, the access to these improvements is not equally distributed among all Americans. According to the Center for Disease Control and Prevention, more people are unable to afford dental care than other types of health care. Specifically, in 2015, 29% of the people in the United States have no health insurance, of out which 62% are older adults. Many low-income adults do not have public dental insurance, which includes immigrant population. Specifically, Medicaid programs are not required to provide dental benefits to retiring adults. As a result, currently, there are fifteen states that provide no dental coverage or only emergency coverage for adults who are on Medicaid. Moreover, 40% of low-income and non-Hispanic African American adults have untreated tooth decay. Among children between 2 and 5 years, about 33% of Mexican American and 28% of non-Hispanic African American have had cavities in their primary teeth, compared to 18% of non-Hispanic White children. For children between 12 and 19 years old, about 70% of Mexican American children have had cavities in their primary teeth, compared with 54% of non-Hispanic White children. This paper will discuss the need to respond to these statistics. These oral health disparities do not only have health consequences, but also have social and economic impacts that cannot be overlooked (CDC.gov, 2021).

Keywords: healthcare, oral dental care, low-income, immigrant communities, cavities, brushing, flossing, socio-economic status

1. Introduction

Growing up in an immigrant family, many are very aware how cultural and socio-economic status effects one's perception and access to the health system. According to the Center for Disease Control and Prevention, our country's overall health has improved; however, even today, not all Americans have equal access to these improvements (CDC.gov, 2021). Specifically, many low-income adults do not have public dental insurance (CDC.gov, 2021). Moreover, state coverage varies widely between states because Medicaid programs are not required to provide dental insurance to those over 65 years old (CDC.gov, 2021). In addition, there are clear disparities in access to oral health based on race, ethnicity, and immigrant status.

As it relates to the oral health discrepancies among adult population, the following statistics have been established by the Centers for Disease Control and Prevention (CDC):

- Among adults aged 20 to 64, there is a nearly 50% increase in untreated cavities among non-Hispanic African American adults as compared to non-Hispanic White adults.
- About 40% of adults with low-income or no private health insurance have untreated cavities
- Low-income or uninsured adults are 50% more likely to have one to three untreated cavities than adults with higher income levels.
- Among adults aged 65 and older, non-Hispanic African American adults are more than 50% likely to have untreated cavities than older non-Hispanic White adults.
- Among adults aged 65 and older, 17% of older adults have lost all their teeth.
- Finally, severe gum disease is most common among adults aged 65 or older, Mexican American, non-Hispanic African American adults and people who smoke (CDC.gov, 2021).

As it relates to the oral health discrepancies among children based on data from 2011-2016, the following statistics have been established by CDC:

- For children aged 2 to 5 years old
- about 33% of Mexican American and 28% of non-Hispanic African American children had cavities in primary teeth, compared with 18% of non-Hispanic White children.
- 17% of children from low-income households had untreated cavities in primary teeth, compared to about 6% of children from higher income households.
- For children aged 12 to 19
- nearly 70% of Mexican American children had cavities in their permanent teeth, compared with 54% of non-Hispanic White children.
- 23% of children from low-income families had untreated cavities in permanent teeth, compared to about 12% of children from higher income households.
- For children aged 6 to 19 years old, low-income households are about 15% less likely to get preventive care, such as sealants compared to higher-income families (CDC.gov, 2021).

These disparities have a drastic effect on the patients' quality of life and productivity. Specifically, untreated tooth decay leads to unplanned urgent dental care, higher dental care costs, and untreated oral disease (CDC.gov, 2021). Finally, 29% of working-age adults with low-incomes report that the appearance of their mouth and teeth affects their ability to interview for a job (CDC.gov, 2021). This paper focuses on the need to respond to these statistics, including providing adequate funding, conducting studies focused on children and providing adequate education to the most-affected population. These oral health disparities do not only have health consequences, but also have social and economic impacts that cannot be overlooked.

2. Method

This study examines several existing studies of low-income immigrant participants oral health care habits and draws conclusions and recommendations based on the review. Specifically, three

studies were examined, and conclusions were drawn based on their findings. In addition, based on the findings in the published studies, inferences were drawn for further research and examination.

Cultural background plays a crucial role on how immigrants and ethnic minority populations view and access oral dental care (Valdez, 2022). However, it is truly unfortunate that only very few studies have been conducted evaluation the oral health disparities among US immigrant population or even North American population. Specifically, only two studies addressed OHL (oral health literacy) in migrant populations (Valdez, 2022). These studies are truly important, especially because oral health has a significant impact on our general health, including cardiovascular diseases and diabetes (Valdez, p. 2-4, 2022). As a result, these health concerns have a substantial effect on patients' overall health as well as the entire healthcare economy, since treatment of oral diseases can be a substantial financial burden (Valdez, p. 5, 2022). As a result, poor oral healthcare has a negative effect on the patient's quality of life (Valdez, p. 7-11, 2022).

The current definition of OHL based on the World Health Organization is: "the cognitive and social skills which determine the motivation and ability of individuals to gain access, understand and use information in ways which promote and maintain good health." (Valdez, p. 16, 2022). Specifically, the study found that having a migration background is a risk factor in it of itself of poor oral health (Valdez, p. 16, 2022). Previous studies have shown that being an immigrant has a profound effect on ones' awareness of the periodontitis and health management, where factors such as cultural beliefs and attitudes, education, language barriers, ability to access oral health information and services, as well as one's income has a critical impact on one's oral health (Valdez, p. 16-20, 2022).

3. Results

A study conducted in Canada reported that 46.5% of participating immigrant population had inadequate oral health knowledge and many did not visit a dentist in the previous year (Valdez, p. 36, 2022). The study further found that even though Caucasian participants had a higher OHL than non-Caucasian, education, and English competency increased OHL in non-Caucasian participants (Valdez, p. 36, 2022).

Another study of New York City residents in 2010 observed that Asian, Hispanic, and African American Caribbean immigrants reported not having regular source of dental care, not having dental care insurance, and not having visited the dentist within the last year (Valdez, p. 36, 2022). As such, these studies reveal a low dental service utilization among the immigrant population (Valdez, p. 38, 2022). Within these studies, the following factors were reported as contributing factors to the low dental service utilization: level of education, number or condition of remaining teeth, duration of stay in the host country, fluency in host country's language, cost of dental care, possibility of getting dental appointment and familiarity with the dental health care system (Valdez, p. 44, 2022).

In addition, several studies that involved flossing revealed that this oral health behavior was rare to non-existent in the immigrant population (Valdez, p. 49, 2022).

Another study that examined oral healthcare of immigrant population in Canada, revealed that dental problems of adult immigrants nearly tripled after two years of their arrival in Canada (Sano, 2022). Similarly, as in other studies, it was reported that only 57% of recent immigrants into Canada used dental care regularly, compared to 72% and 76% of established immigrants and native-born (Sano, p.19, 2022). In that study, similar factors contributed to the oral health disparities including existence of dental insurance, household income, language barriers, education, professional experiences, and cultural differences (Sano, p.10-30, 2022). Finally, the study also digested that immigrant population's oral health deteriorated with an increased length of stay in Canada (Sano, p.27, 2022).

Another study of New York City immigrant population confirmed similar results. Specifically, an analysis of Asian immigrants between 2013 and 2016 in New York City revealed that 41% of those earning less than \$55,000 a year had no dental exam in previous year compared to 29.8% of those earning more than \$55,000 a year (Leopold, 2021).

In addition, a nationwide study suggested that noncitizens had 45% higher odds of periodontal disease than US citizens (Leopold, p. 20, 2021). Similar factors were reported as contributing to the disparities, such as lack of health insurance, low income, and immigrant status (Leopold, p.21, 2021).

Oral health discrepancies exist among the immigrant communities. Poor oral health can be very detrimental to one's overall health, potentially leading to hypertension, diabetes, respiratory disease, coronary heart disease and cardiovascular disease (Valdez, p.4, 2022). Oral health is directly linked to one's ability to eat, swallow, smile, speak and has a direct connection to one's social, economic, and psychological wellbeing (Valdez, p.5, 2022).

There are only a few studies that focus on such discrepancies, and they are all conducted to study adult oral health. It is important to note that in the NYC taxi drivers' study, many participating immigrants reported as not having dental care insurance when they did have coverage under Medicaid (Leopold, 2021). Proper health care education coverage is necessary to address these misunderstandings.

As such, more studies are necessary to examine oral health discrepancies among immigrant children. With proper programs, funding and education, oral health behavior of US immigrant population can be positively improved.

Dentists and their staff should be aware and open to the possibility that immigrant population will have different cultural belief systems, different capabilities, and backgrounds (Valdez, p.73, 2022).

4. Discussion

Currently, CDC promotes two programs: school sealant programs and community water fluoridation. However, these programs are not enough to address the oral health disparities among immigrant population.

To adequately combat the oral health disparities, the following programs and interventions are strongly suggested:

1. Oral Health Education, specifically for middle school and high school students, focuses on flossing in addition to brushing.
2. Expanding insurance programs to include regular and urgent dental care coverage.
3. Extended research into the subject matter, including conducting studies that cover both adults and children.
4. Special program funding to the middle school and high school students to educate and provide regular oral dental care.
5. Establishing mobile dental offices that provide oral dental care on the spot and travel to places where care is needed the most, such as immigrant and low-income communities.

As mentioned in this paper, significant disparities in oral health exist among US immigrant population that cannot be overlooked. Special programs need to be developed and funded to address the disparities. Furthermore, more studies need to be conducted that focus not only on the oral health in the immigrant adults but also on the effects of immigrant children. Finally, more educational programs need to be implemented to specifically target the more vulnerable cohort – children between the ages of 12 and 19 years of age.

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