

Facilitators and Barriers to Dental Care Among Mexican Migrant Women and Their Families in North San Diego County

Diane Velez¹ · Ana Palomo-Zerfas² · Arcela Nunez-Alvarez³ · Guadalupe X. Ayala^{4,5} · Tracy L. Finlayson^{1,5} 

Published online: 25 July 2016

© Springer Science+Business Media New York 2016

Abstract To qualitatively examine facilitators and barriers to dental care access and quality services among Mexican migrant women and their families living in North San Diego County, California. Six focus groups were conducted, with 52 participants. Three focus groups were with community residents (average group size of 10), and three were with community health workers/leaders (called *Lideres*; average group size of 7). The behavioral model for vulnerable populations theoretical framework guided qualitative data analyses. Predisposing factors to dental care access varied and included immigration status, language, and dental care experiences. Barriers to accessing quality dental services included high cost, lack of insurance coverage, dissatisfaction with providers, long wait times and discrimination. Participants expressed a desire for health policy changes, including affordable coverage for immigrants and their families. This study provided insights into how dental care providers, community health centers, and policymakers can improve dental care access and services to migrant populations.

Keywords Dental care · Behavioral model for vulnerable populations · Mexican · Migrant

Introduction

Dental caries and periodontal disease are among the most prevalent chronic diseases among adults in the United States (US). The 2000 Surgeon General's report labeled poor oral health a "silent epidemic" and called attention to the persistent disparities in oral health status, access to care, and unmet needs [1]. Nationwide, between 2001 and 2010, adult dental care utilization declined from 41 to 37 % [2]. Individuals with less income, less education, and racial/ethnic minorities experience greater barriers to dental care compared with the general public [1]. Regular dental care access is critical to prevent and treat caries and periodontal disease, yet remains a challenge among some populations, including Latinos.

Latinos comprise the nation's largest and fastest growing racial/ethnic minority group, making up 17 % of the US population (53 million in 2012) [3]; one-fourth live in poverty [4]. In 2008, 31 % of Latino adults reported fair or poor oral health [5]. The American Dental Association (ADA) found that non-English speaking Latinas from low-income families without health insurance were more susceptible to having plaque, cavities, and periodontal disease than their counterparts [6]. Similarly, economically-disadvantaged women on the US-Mexico border in California were at higher risk for poor oral health due to additional vulnerability during pregnancy, low literacy levels, inadequate transportation, and language barriers [7]. Latino health data show that migrant populations, in particular, are disproportionately affected by poor oral health due to a lack of access to care, income, and language barriers [8].

Ana Palomo-Zerfas was previously with Vista Community Clinic.

✉ Tracy L. Finlayson
tfinlays@mail.sdsu.edu

- ¹ Graduate School of Public Health, San Diego State University, San Diego, CA 92182, USA
- ² Vista Community Clinic, Vista, CA 92084, USA
- ³ National Latino Research Center, California State University San Marcos, San Marcos, CA 92096, USA
- ⁴ College of Health and Human Services, San Diego State University, San Diego, CA 92182, USA
- ⁵ Institute for Behavioral and Community Health, 9245 Sky Park Court, Suite 221, San Diego, CA 92123, USA

According to the 2009 California Health Interview Survey (CHIS), 10 % of Latinas could not afford needed dental services, and 11 % did not have any dental coverage [9]. Non-English speaking migrant women were the least likely to receive dental services [7], suggesting a need to focus on this subpopulation.

Migrant status is an additional vulnerability experienced by Latino immigrants [10]. The Public Health Service Act and the Migrant and Seasonal Agricultural Worker Protection Act defines different types of agricultural workers, including those that migrate to follow crops. However, this study employed a broader definition of “migrant worker,” to include gardeners, nannies, and other types of day laborers, and not just migratory agricultural workers [11]. Failing to define “migrant workers” prevents accuracy in identifying specific health data [12, 13]. With respect to dental services, 44 % of Hispanic adult agricultural workers in California reported a usual source of dental care and 34 % reported a recent dental visit [14]. The Affordable Care Act (ACA) did not mandate adult dental coverage as an essential benefit and it is optional in states’ Medicaid programs [15]. Between 2009 and 2014, Denti-Cal, California’s dental component in Medicaid, was eliminated creating access disparities for the state’s vulnerable populations [16].

Within this context, this study sought to identify facilitators and barriers that low-income Mexican migrant women in North San Diego County, California encounter when trying to access dental care for themselves and their families.

Theoretical Framework

The behavioral model for vulnerable populations (BMVP) provided the theoretical orientation for understanding this population’s needs [17] and identifying relevant factors for dental utilization [18]. Vulnerable populations include rural and racial/ethnic minorities and undocumented immigrants [17]. The original Behavioral Model of Health Services Utilization focused on the individual’s use of health services as determined by their predisposition to seek care, enabling resources, and their need for treatment [19]. The BMVP vulnerability component is useful for studying Mexican migrant health because it removes the “blame the victim” personal deficiency orientation of many individually-based theoretical models [20]. In the BMVP, predisposing factors include several social structural characteristics, such as immigration status, mobility, discrimination and literacy [17]. Enabling factors include personal, family and community resources that help or hinder vulnerable populations to acquire needed health services. Need factors include perceived and evaluated health status. Few studies have systematically explored

dental utilization in this dually-vulnerable population (Latina women, migrant status) [21, 22]. Consistent with the guiding theoretical framework, it was hypothesized that women would experience barriers in accessing dental services due to their low-income, racial/ethnic minority status, and language barriers.

Methods

Study Design

Six focus groups were conducted with Mexican migrant women in North San Diego County (North County); three with community residents averaging 10 participants per focus group and three with community health workers/leaders (*Lideres*) averaging 7 participants per focus group. Focus groups were conducted as part of the community-based participatory research (CBPR) study known as *Boca Sana, Cuerpo Sano* (BSCS; Healthy Mouth, Healthy Body). BSCS was a 1-year formative research CBPR study funded by the DentaQuest Foundation, available through the Centers for Disease Control and Prevention-funded Prevention Research Centers and the National Community Committee. The formative research study sought to inform an intervention to increase oral health literacy and reduce dental care access barriers among North County’s migrant families [23, 24]. It was led by a federally qualified health center (FQHC) that is also a migrant health center (Vista Community Clinic; VCC), an academic institution (San Diego State University; SDSU) and its affiliated health disparities research institute (Institute for Behavioral and Community Health; IBACH) [25], and two other organizations. Throughout the one-year planning period, the four funded partners collaborated with over twenty community partners in the North San Diego County region and sought in-depth input from *Lideres* and community members during all stages of planning and developing an oral health intervention. This study was approved by the SDSU Institutional Review Board.

Participant Recruitment

Focus group participants were either part of an existing *Lideres* network or a community resident in one of the three targeted communities in North County. Bilingual (English/Spanish) Site Coordinators recruited a convenience sample of male and female community residents and *Lideres* to participate using flyers and verbal announcements; only females participated. Participant inclusion criteria included: self-identification as Mexican migrants or part of a Mexican migrant family; 18 years or older; speak and understand Spanish; and reside in North

County. One community resident focus group and one *Lideres* focus group were held in Vista, Fallbrook and Pala/Rainbow, which differ in geography (urban/rural), population, needs and services. Vista and Fallbrook migrant communities primarily engage in urban labor, while Pala/Rainbow area migrants engage in farmwork. The VCC Program Director obtained written informed consent in Spanish. Childcare, refreshments and a \$25 gift card were provided to minimize barriers to participation.

Focus Group Procedures

The VCC Program Director, a native Spanish-speaker with a demonstrated history of established rapport and work experience within Mexican migrant communities, moderated all focus groups in Spanish during February 2013. She served as a liaison between the migrant community and VCC health services, and led the Farmworker CARE coalition, which brings together community-based organizations to improve the living and working conditions of agricultural workers and their families in North County [26]. A VCC Health Educator assisted with note-taking and audio recording. The three community resident focus groups were conducted at the Pala Fire Station, and two different residences in Fallbrook and Vista. The three *Lideres* groups were held at the Pala Fire Station, the VCC Women's Center and a Fallbrook residence.

The community resident and *Lideres* focus group guides included 13 questions assessing their experiences with accessing dental care and strategies for promoting oral health. The questions for both guides were developed by the study team in part to better understand the community's experiences with dental providers and barriers to accessing services and how to best design an oral health educational intervention program. This paper's analyses focused on responses to these first five questions (same for both groups), which are listed in Table 1. The full guide included another set of questions for both groups to aid in planning the future oral health educational intervention, such as preferred popular education methods, preferred educational session length, meeting place, frequency, and incentives. The *Lideres* answered additional planning questions informing the design of the intervention and support they would need to conduct such a program, based on their experiences leading other popular educational programs in the community (feedback not described or analyzed here).

According to the BMVP, domains such as knowledge, structural barriers and experiences are relevant to understanding the health and health-seeking behavior of vulnerable populations [17]. Participants completed a short demographic survey after the focus groups.

Data Analyses

A bilingual research team member transcribed verbatim all focus groups in their original language of Spanish, then translated all transcripts from Spanish to English, for data coding and analyses. Portions of the transcriptions were checked for accuracy.

Focus group data were reviewed and BMVP concepts were coded for community residents and *Lideres* separately to identify dental care access facilitators and barriers for themselves and their families. One community resident focus group was not audio-recorded due to technology malfunction, therefore handwritten notes and a summary were used for the analyses. Notes were written on hard copies of the transcripts prior to coding. A grounded theory approach was used to allow the researchers to identify themes beyond those specified by BMVP. Figure 1 displays an adapted version of the BVMP for dental care used in this analysis. Separate codebooks were used for community resident and *Lideres* focus groups in order to maintain data accuracy. The first author created the codebooks, which were reviewed by another more experienced co-author, and then analyzed in NVIVO 10.2.0, a qualitative data analysis software. NVIVO analysis and query features were used to facilitate the review of codes and interpretation process. Text segments that represented BMVP concepts were identified and presented in Tables 2 and 3.

Results

Twenty-two (22) *Lideres* participated in one of three focus groups (Group 1: six; Group 2: six; Group 3: ten). Thirty community residents participated in one of three focus groups (Group 1: fifteen; Group 2: six; Group 3: nine). All participants were female Mexican migrant workers or part of a Mexican migrant family. Women's average age was 36 years old (range 18–81). With the exception of two participants, all women had been living in the US for over 9 years. Not all participants had children, but most had two children over the age of 15. Participants provided input on predisposing factors (Table 2) and barriers (Table 3). Most comments reflected barriers to accessing dental care, rather than enabling factors.

Predisposing: Immigration Status (Table 2, Theme A)

According to *Lideres*, immigration status was viewed as the main barrier to accessing dental care. They feared immigration status exposure if they voiced complaints to

Table 1 Focus group guiding questions

Section 1: Primary experience with dental services and providers in the community

Summary of dental access experiences

Describe if generally positive or negative experiences, types of needs, and other concerns shared

1. What has been your experience in accessing dental services?

Probe: Did you get the services you needed? Why or why not?

Probe: What types of dental services?

Top barriers

2. Can you tell me about what gets in the way of going to see a dentist for you and your family? [write ideas in list on board for all to see]

Offer examples if needed: Cost, lack insurance, scheduling problems, can't find dentist, language, can't get an appointment, fear

3. Can you tell me which two or three from this list are the major barriers?

4. Given these are the biggest barriers, can we spend a few moments to brainstorm together about some ways you might overcome these barriers for your family?

Section 2: Dental health awareness

5. Can you tell me what you think about teeth and dental health? What do you know about this topic?

Probe: What are teeth for?

Probe: Do you feel that dental health is an important part of overall health?

Or why you feel it is not an especially important part of overall health?

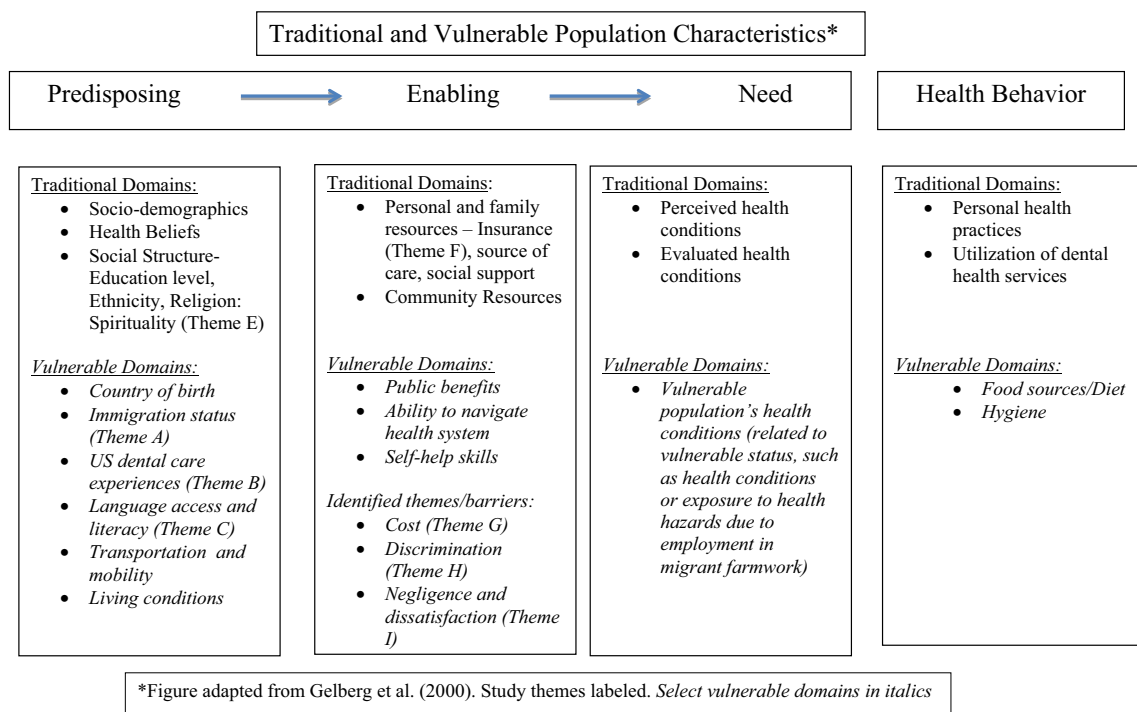


Fig. 1 The behavioral model for vulnerable populations, adapted for dental care use among migrant women

their dentist (see A1). Immigration status was also a barrier given their inability to travel to Mexico for dental care (see A2). Community residents indicated that immigration status contributed to their inability to leave the country for health care, obtain dental insurance, and find insurance providers who covered undocumented

immigrants (see A3, A4). Participants preferred receiving care in their home country, and more generally, desired binational access to care. The most prevalent theme described by both *Lideres* and community residents was immigration status as a barrier to obtaining government-funded insurance.

Table 2 Summary of predisposing factors and representative quotes by respondent type*Theme A: Immigration status*

Lideres

A1. Fear of deportation if voiced complaints

A lot of us have that idea that if we report something, the police is going to come and since we are immigrants, they can do something to us. It is the fear that exists, that we do not report things

A2. Inability to travel to Mexico for dental care services

What happens is that there is an infection and it is too strong, they prescribed him antibiotics—went to Escondido, and was not covered by Medi-Cal. And she had to pay like \$119, from what they had prescribed him some pills or something like that, because he had an infection, and you are not going to believe me, they gave her 2 weeks later for an appointment because they did not have anything available. An uncle, since the woman does not have papers—an uncle had to take him to Tijuana and they took out his tooth and the doctor said he did not understand how it was possible that the service was so bad here. And even more that it was a 7 year old boy

Community residents

A3. Inability to travel to Mexico for dental care services

I come from Mexicali, and that's where I would go to my dentist and because of reasons with immigration, I could not leave now. And when I had to go here, to the cleaning, I did not like that they put you in four cleaning sessions and I was accustomed to well going and getting your cleaning in 1 day, in one session, if you want, but they told me that because they are community clinics, they have to do it that way, in four sessions, that because this gives time for them to attend other patients

A4. Not eligible for government insurance due to immigration status

What I was going to tell you is that like us, the undocumented, we do not count with insurance like Medi-Cal, so since I have my children that were born here, they get treated fine

Theme B: US dental care experiences

Lideres

B1. Experience hostility from dental care supporting staff

We should make a law that everyone who is in front of the receptionist desk should have a good attitude, be friendly, smile and respect people, because you go and who knows if they have problems, I don't know, they come out with an attitude, all mad, they talk to you rudely, all like that and they make you feel, well you feel bad. I think, a person who is in the front needs to be friendly, inviting, I don't know, give people confidence to come back. If you treat someone like that, that person is not going to come back

B2. Lack of privacy at dental offices:

When a patient goes or something—I have seen these last few days that I have gone, they leave and share personal information about people and what happened during the appointment

B3. Fear

Visit the dentist with fear, is scary. Because it causes discomfort, it causes pain and the Bzzzzzzzz noise, and besides that toothache. But it is true, because it is fear we that we have towards the dentist

Community residents

B4. Lack of patient-provider trust

Trust, that they have trust in this community, to do as much as the doctors as well as the nurses to give the community complete trust that they are going to solve something that is personal, and that people have the willingness to return to that place

B5. Lack of patient-dental staff trust

During the time that I was waiting and the phone rang and they said, can you wait a second? And they talk and talk, the lady does talk. How many times have they done it like that? You think that they are very busy and they are gossiping and on the phone

Theme C: Language barriers

Lideres

C1. Lack of translators decreased appointments

A lot gets lost in translation. A lot of people don't go to the dentist because they say: No its because they only speak English and sometimes they do not have translators, and that is why I don't even go to the doctors. So I think that is something very important

C2. Quality of translation affected interactions

Sometimes it is better for dentists to speak Spanish because things get lost in translation, and sometimes the translator says things we didn't

C3. Language as a barrier

I think there is also a language barrier, I think because sometimes directly communicating with the dentist is difficult, if you have questions or with the person that is sitting in the front, like the receptionist, they do not provide all the information we need, just the necessary. And those people have no way of, you know, communicating with them, they have questions and they do not know how, so then access and communication is impossible

Table 2 continued

Community residents

C4. Lack of respect from providers based on language barriers

Like there in the service to the client, I think the language is also important, because there are a lot of people that do not speak English, and they need someone to translate and sometimes the dentist is doing their job and he is talking to his assistant, and the person—the patient—they don't even know what's going on

We do not understand much English, right? And...they do whatever they want, not what we ask, instead what they want. And for me it has been very expensive going to the dentist, I am with Western Dental but the truth, I do not like their work, I am not satisfied with the job they are doing to me

*Theme D: Transportation**Lideres*

D1. Utilizing public transportation delayed ability to set appointments they could attend

For example, I make my appointments according to the bus schedule. But, in the amount of time they see you, the bus already left you, and you wait for the next one, and an hour and a half or two hours pass by. Why? Because of transportation

Theme E: Spirituality

Community residents

E1. Use of spirituality as strength when faced with previous barriers

Spiritually, all the negativity from people who are treating us, like the doctors, or the young women who tell us things, that it is something bad, let it go, and see people differently, take it and analyze....And know that the lord will place everything where it should be, and it will help you resolve your problems. Do not pay attention to what others say, or how they act, rather pay attention to what you are going for, it is so that they can serve you and they can fix the problem

Predisposing: US Dental Care Experiences (Table 2, Theme B)

Participant's US dental care experiences shaped their impression of care. Participants felt that there was a lack of respect from staff towards patients. Disrespect was not only evident from providers, but also from supporting dental office staff. *Lideres* shared experiences of feeling unwanted in dental offices due to the staff's unwelcoming attitude towards patients (see B1, B2). Community residents expressed a lack of trust between patients and dental providers and staff (see B4, B5), as well as a desire for better customer service. However, in contrast to these negative experiences, some community residents expressed positive experiences noting that when dentists expressed care for their patients, it encouraged them to keep appointments.

Predisposing: Language Barriers (Table 2, Theme C)

For both sets of participants, language barriers and lack of access to Spanish-speaking staff affected their ability to obtain dental care. *Lideres* noted that they avoided making appointments if they knew the provider only spoke English. Not having a translator at the dentist office, or not having someone that the patient trusted, was a barrier to seeking dental care, in part because of concerns of what would be lost in translation (see C1–C3). A recurring concern within language barriers was the difficulty of communicating with providers and staff, and the distance it created between patients and providers. Community members overwhelmingly described receiving poor patient service due to

language barriers. Further, participants felt that providers did not treat patients with respect because they would take advantage of the language barrier and conduct services that clients had not approved (see C4).

Predisposing: Transportation (Table 2, Theme D)

Only *Lideres* described transportation as a barrier to accessing dental care services. *Lideres* stressed that using a city bus was time consuming and that most routes were not convenient because they required extra walking time from bus stops to their home or dental office.

Predisposing: Spirituality (Table 2, Theme E)

An unanticipated predisposing factor discussed by community residents was their ability to use spirituality and religion to overcome barriers in accessing dental care. Their faith allowed them to have a positive attitude towards their health. They also stressed the need to eliminate negativity towards providers and staff and instead have faith and trust that a higher being would provide them with a solution to their dental care needs.

Barriers: Insurance (Table 3, Theme F)

Lideres and community residents alike voiced that independent providers and lack of government-funded dental insurance were the most pressing barriers they faced when attempting to access dental care (see F1, F2, F4, F5). For those with health insurance, they still encountered barriers

Table 3 Summary of barriers and corresponding quotes by respondent type*Theme F: Insurance and Medi-Cal*

Lideres

F1. Ineligibility for insurance coverage

Because sometimes we are only a few and we do not qualify. We need to be a lot in our family for us to qualify. Like for example, a family of 3, we do not qualify for anything. A family of 5-6, you qualify 2 times for everything. Yes or no?

I only have one daughter. And I do not even qualify for health insurance. I am paying for her insurance

F2. Insurance not accepted at all dental offices

Oh since there are also some places, right? It has happened to me, that I have insurance, it is called Molina, umm, they don't accept that insurance in any place. So we also have to struggle with insurances because they will not accept us anywhere

F3. Limits in Medi-Cal coverage

It is also because, Medi-Cal, the insurance that we have, Medi-Cal does not cover dental.

F4. Inability to purchase insurance due to lack of employment

There are no jobs, because if we look for jobs there isn't good insurance, they reject undocumented immigrants from good jobs. Well they are asking for our social security number

Community residents

F5. Lack of dental care insurance

A lot of us do not have insurance. In my opinion health insurance is the number one barrier, there are many of us who do not have papers so insurance doesn't cover us

With adults, because they are the ones who do not have insurance, it's important with children first, but they have insurance and that covers them. Children have insurance, they have a visit from 6 months to a year, they have coverage. Pregnant women are covered. Adults do not, from what we were just talking, they do not have money, insurance, that is primary

F6. Limits in insurance coverage

My insurance is private, and in mine they only service you in certain locations, I want every doctor to accept every type of insurance. So we also have to struggle with insurances because they will not accept us anywhere

I have Medi-Cal. Right now it is very limited, so only if it is an emergency. What Medi-Cal covers for adults is very limited right now. Not even medicine is being covered by Medi-Cal now

Theme G: Cost

Lideres

G1. Cost of services too expensive

There are insurances where they talk to you and they tell you: Listen, you have to pay \$639 every month. I told them: No. Well. Can you imagine? Dentists are too expensive, appointments are too expensive when you do not have health insurance, too expensive, when you do, still too expensive

Community residents

G2. Cost of services too expensive:

I need a cleaning, I have cavities, I need to fix my dentures and all that, but why don't I fix it, because it is expensive. And not like the women said, that the lord would provide, we confide in God, he will provide, but we need to move too. They are not asking for \$50 or \$100, they ask for over \$1000

Theme H: Discrimination

Lideres

H1. Differences in service based on race or ethnicity

Sometimes they treat you well, and then you go to other clinics and see that they are white Americans or when one Mexican goes they treat you well, but when you go to a clinic where there is pure Mexicans, they treat us bad because there are a lot of us. That is the experience I've had, when I go to clinics. Although English is sometimes a barrier, you feel it when people treat you right, when the doctor and all employees treat you well

H2. Differences in service based on insurance type

I think it is a type of discrimination, because it depends on the type of health insurance that you have, it is the quality of the service you receive

Theme I: Negligence/Dissatisfaction

Lideres

I1. Providers conducting malpractice

Almost no one liked him, he would take out the tooth that was good. We wanted to speak with the supervisor, because we complained but they did not do anything about it, we can tell all that still happens

Table 3 continued

<p>I2. Staff conducting personal business while on the job</p> <p>During the time that I was waiting and the phone rang and they said: Can you wait a second? And they talk and talk and talk. You think that they are very busy but they are gossiping</p> <p>I3. Personal negligence to set up appointments</p> <p>No, what happens is personal negligence, of not getting the help you need in good time. And sometimes, there is not enough money. And I couldn't wait like 5 years, I couldn't contain the pain</p> <p>I4. Dissatisfaction with Dental Services:</p> <p>The services we have here, the experiences we have, are really bad, really bad service, they charge too much, the wait is too long, and the time that a person comes with an ache they end up seeing you in a month to month and a half, as if people could wait with the pain</p> <p>Community residents</p> <p>I5. Dissatisfaction with dental staff</p> <p>Abusive, they [dental staff] recommend semi exaggerated services, and they see it as a privilege, maybe the clinic does not treat them well, long waits, and there is also no access to Spanish, the dentists or the people who work in the front office don't speak Spanish</p> <p><i>Theme J: Wait time</i></p> <p>Lideres</p> <p>J1. Wait time too long, forced to cancel appointments</p> <p>And another experience when I am with my children, well it is a lot of waiting time, it is too much time. The last time I went my daughters had an appointment, we had it at 9 am and it was 11 am and they still hadn't seen them. So we had to cancel the appointment instead: You know what? Cancel my appointment and give me another time because it has been too much time now and there are still 4 or 5 patients to see, and things like that is what I have noticed in the community</p> <p>J2. Long wait time based on insurance coverage</p> <p>Personally, I haven't, but I have met people, people who have told me, because they have good health insurance, when they go to the clinic, they never have to wait, they pass directly and compared to people that have to wait too much time. I think that it is really bad, because the other person has been waiting there for a really long time and another person comes and passes just for having good health insurance</p> <p>Community residents</p> <p>J3. Wait time too long, forced to cancel appointments</p> <p>When you make an appointment, they tell you: you have to be here 15 min prior (inaudible) and they do not see you until half an hour later. So then, why do they ask you to come in early, and then when you are a little late, they tell you: No, we can not take you in anymore. And waiting half an hour outside, waiting for someone to call you in and tell you: No, (inaudible). It's too much wasted time, you lose half a day there</p>	<hr/> <p>due to coverage plan restrictions (see F3, F6). Women on Medicaid (a government-funded insurance program for those of low-income) encountered frustration with the limited coverage provided.</p> <p>Barriers: Cost (Table 3, Theme G)</p> <p>The cost of visiting a dentist was a barrier that they felt was impossible to overcome (see G1). With public or private dental insurance, the out-of-pocket cost was still too high. Participants compared costs in Tijuana and San Diego; cost in San Diego was impossible to pay with their incomes. Referring to the predisposing factor of spirituality, a participant noted that even a higher being could not help her make the payments (see G2).</p> <p>Barriers: Discrimination (Table 3, Theme H)</p> <p><i>Lideres</i> described the challenge of being treated differently than others during dental visits which made participants feel unwanted due to their race, language and class status</p>	<p>(see H1). Others felt discriminated against based on their type of insurance coverage (see H2).</p> <p>Barriers: Negligence/Dissatisfaction (Table 3, Theme I)</p> <p>Provider negligence and dissatisfaction are not part of the original BMVP, yet they were barriers identified by participants. A recurring concern among <i>Lideres</i> was providers' lack of responsibility and medical negligence. One participant shared how a provider removed the wrong tooth and showed no interest when she sought to speak with a supervisor (see I1). Participants considered bad customer service from staff as negligence (see I2). In contrast, one participant shared that personal negligence of not prioritizing her health played a role in not accessing care in a timely manner (see I3).</p> <p>Barriers: Wait Time (Table 3, Theme J)</p> <p>Wait time is another construct that is not in the original BMVP but is a relevant factor. For both <i>Lideres</i> and</p>
---	---	---

community residents, the amount of time spent waiting to be seen by a provider was overwhelming, leading them to cancelled appointments (see J1), and contributing to delays in care. Participants also shared their beliefs that wait time differed depending on insurance coverage (see J2).

Discussion

Summary of Findings

This study identified facilitators and barriers that Mexican migrant women from three communities in North San Diego County encounter when trying to access dental care for themselves and their families. *Lideres* and community residents identified immigration status, negative US dental care experiences and language access and literacy as predisposing factors and barriers to accessing dental services. The former is consistent with the BMVP model [19]; previous research suggests that Mexican immigrants in the US cross the border into Mexico to obtain health services [27, 28], and immigration status may limit their ability to cross. *Respeto*, or respect, was lacking in health care interactions with providers and staff (see Table 2, Theme B). *Respeto* is an important component of effective provider-patient communication [29]. Consistent with these findings, previous research found that Latino immigrants experience negative health outcomes because of their difficulty communicating with providers [30]. Transportation was identified as an important predisposing factor among *Lideres*. As Syed and colleagues found, bus users were twice as likely to miss their appointments compared to car users [31]. Community residents identified spirituality as a predisposing reinforcer for seeking dental care. Research suggests that religion helps Latino immigrants gain control and bolster their real or perceived health status [32].

In terms of barriers, *Lideres* and community residents reported insurance coverage, cost, dissatisfaction and wait time as factors associated with dental care access. *Lideres* reported discrimination as a barrier to accessing quality dental services. These findings fit with Blendon et al. [33] showing that when racial/ethnic minorities were discriminated against in a healthcare setting, they felt they did not receive quality health care. *Lideres* and community residents also reported feeling neglected by their dental providers. Ruiz-Beltran and Kamau [29] found that providers' lack of interest created a cultural barrier between Latino patients and providers. Participants reported that disrespect from staff was one of the most overt dissatisfactions with dental services, a finding consistent with that of Gelberg et al. [17]. Finally, both groups stressed frustrations with the amount of time they needed to wait to be seen by a dentist, resulting in cancelled appointments. A study found

that an effective appointment system and reduced patient wait time are critical to improving patient satisfaction [34]. Reducing wait time of initial appointments may favorably affect the rate of kept appointments [35].

Limitations

Study limitations include possible selection bias; by recruiting community-involved migrant Mexican women, results may not generalize to the migrant population in San Diego County. Participant reports of their experiences at the dentist offices and interactions may be skewed by recall or social desirability biases. The size of the focus groups was appropriate, yet six focus groups may not provide representative data. Finally, focus groups with men as well as FQHC administrators, dental providers and staff would have provided additional information.

Implications

Future research should focus on the implications of immigration status and eligibility for dental coverage. As a 2009 CHIS report found, over 51 % of undocumented Latino adults in California were uninsured [9]. In California, Medicaid coverage for undocumented immigrants is available with restrictions, yet excludes preventive dental services [36]. This study found that patients are willing to return to dental offices with a language barrier, as long as they felt welcomed and respected. Community-based mobile outreach clinics can be effective in uncovering illnesses and directing patients to a healthcare provider [37]. Bringing services to the community also reduces transportation barriers.

The ACA improved healthcare access for millions of California residents, yet initially excluded undocumented immigrants [38]. The ACA created a national Medicaid minimum eligibility of 133 % of the poverty level, and states had the option to expand Medicaid and allow private insurance companies to provide improved comprehensive insurance coverage [39]. States may also set additional eligibility criteria, yet California excludes migrants from coverage. This provides an opportunity for insurance coverage expansion and a healthier state overall. Covered California is the state's insurance marketplace, where individuals or businesses can purchase plans [39]. Yet, not until 2015 were adults eligible to enroll in Denti-Cal at an additional cost [40]. Providers who accept Denti-Cal remain limited and migrants still rely on the services of FQHCs for needed dental care [6]. California recently passed The Health for All Act (SB 1005) which allows individuals who are currently excluded from Medi-Cal or an exchange program to purchase insurance [41]. Barriers would likely still remain for vulnerable populations, yet it is a step in the right direction.

This study has implications for multi-level and systems approaches to improving dental care and oral health status more generally. From a policy perspective, the evidence that participants desired binational health care suggests that innovative models are needed for border residents. Findings related to feeling discriminated suggests that cultural-competency training for dental care providers and their staff, including improving language access, is a critical component for ensuring quality care.

Conclusions

This study identified predisposing factors and barriers that Mexican migrant women encounter when trying to access dental care services for themselves and their families. Qualitative data provided a rich foundation for future intervention planning. It informed the development of an oral health community education program [23] and insights into needed policy changes. Socially-constructed barriers should not be the reason why vulnerable populations continue to face health disparities. Oral health disparities are a significant public health problem, and there are opportunities for researchers, dental providers and policymakers to take action towards a more equitable and healthy future.

Acknowledgments This study was supported by a planning grant funded by the DentaQuest Foundation in partnership with the Centers for Disease Control and Prevention's National Community Committee through the Oral Health Initiative.

Compliance with Ethical Standards

Conflict of interest Author Finlayson, Palomo-Zerfas, and Nunez-Alvarez received research grant support from the DentaQuest Foundation to conduct this study. Authors Velez and Ayala declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

References

- US Department of Health and Human Services. Oral health in America: a report of the surgeon general. Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000.
- Vujcic M, Nasseh K. A decade in dental care utilization among adults and children (2001–2010). *Health Serv Res.* 2014;49(2): 460–80. doi:10.1111/1475-6773.
- US Department of Commerce. Profile America facts for features hispanic heritage month 2013: Sept. 15–Oct. 15. 2013. http://www.census.gov/newsroom/releases/pdf/cb13ff-19_hispanicheritage.pdf. 8 May 2016.
- DeNavas-Walt C, Proctor BD, Smith JC. Income, poverty, and health insurance coverage in the United States: 2009. US Census Bureau, Department of Commerce. 2010. p. 60–238.
- Centers for Control Disease and Prevention [CDC]. Oral health status and access to oral health care for US adults aged 18–64: National Health Interview Survey, 2008. *Vital Health Stat.* 2012;47(253):1–22.
- American Dental Association [ADA]. Action for dental health: bringing disease prevention into communities, a statement from the American Dental Association. 2013. http://www.ada.org/~media/ADA/Public%20Programs/Files/bringing-disease-prevention-to-communities_adh.ashx. 8 May 2016.
- Hunter LP, Yount SM. Oral health and oral health care practices among low-income pregnant women. *J Midwifery Women Health.* 2011;56(2):103–9.
- Office of Minority Health. Health status of Hispanic/Latina women 2011. <http://minorityhealth.hhs.gov/omh/content.aspx?ID=3722&lvl=3&lvlID=314>.
- California Health Interview Survey [CHIS]. AskCHIS search query summary 2009. <http://healthpolicy.ucla.edu/chis/Pages/default.aspx>. 8 May 2016.
- Quesada J, Hart LK, Bourgois P. Structural vulnerability and health: Latino migrant laborers in the United States. *Med Anthropol.* 2011;30(4):339–62. doi:10.1080/01459740.2011.576725.
- US Department of Health and Human Services. Health Resources and Services Administration. Section 330 of the Public Health Service Act (42 USCS § 254b), Authorizing Legislation. <http://bphc.hrsa.gov/policiesregulations/legislation/index.html>. 8 May 2016.
- Arcury T, Quandt S. Delivery of health services to migrant and seasonal farmworkers. *J Community Health Nurs.* 2007;25(3): 153–60. doi:10.1146/annurev.publhealth.27.021405.102106.
- Larson AC. Migrant and seasonal farmworker enumeration profiles study: North Carolina, Final 2000. <http://www.ncfhp.org/Data/Sites/1/documents/journalarticles/nc-msfw-enumeration-study-bph-hrsa-2000.pdf>.
- Finlayson TL, Gansky SA, Shain SG, Weintraub JA. Dental utilization among Hispanic adults in agricultural worker families in California's Central Valley. *J Public Health Dent.* 2010;70(4): 292–9. doi:10.1111/j.1752-7325.2010.00184.x.
- Denti-Cal. Denti-Cal California medical dental bulletin 2011. https://www.denti-cal.ca.gov/provsrvcs/bulletins/Volume_29_Number_21.pdf. 8 May 2016.
- Wides C, Alam SR, Mertz E. Shaking up the dental safety-net: Elimination of optional adult dental Medicaid benefits in California. *J Health Care Poor Underserved.* 2014;25(1):151–64. doi:10.1353/hpu.2014.0072.
- Gelberg L, Andersen RM, Leake BD. The behavioral model for vulnerable populations: application to medical care use and outcomes for homeless people. *Health Serv Res.* 2000;34(6): 1273–302.
- Small LF. Determinants of physician utilization, emergency room use, and hospitalizations among populations with multiple health vulnerabilities. *Health.* 2011;15(5):491–516. doi:10.1177/1363459310383597.
- Andersen RM. Revisiting the behavioral model and access to medical care: Does it matter? *J Health Soc Behav.* 1995;36(1): 1–10.
- Christancho S, Garces DM, Peters KE, Mueller BC. Listening to rural Hispanic immigrants in the Midwest: a community-based participatory assessment of major barriers to health care access

- and use. *Qual Health Res.* 2008;18(5):633–46. doi:10.1177/1049732308316669.
21. Horton S, Barker JC. Stigmatized biologies: examining the cumulative effects of oral health disparities for Mexican American farmworker children. *Med Anthropol Q.* 2010;24(2):199–217.
 22. National Rural Health Association. Rural America's oral health care needs 2013. file:///Users/velezdiane/Downloads/RuralAmericasOralHealthCareNeed%20(2).pdf. <http://www.ruralhealthweb.org/index.cfm?objectid=93082C39-3048-651AFE09F5038E3556D1>. 8 May 2016.
 23. Finlayson TL, Hoffman L, Palomo-Zerfas A, Gonzalez M, Stamm N, Rocha M. Boca Sana, Cuerpo Sano/healthy mouth, healthy body: a community-based participatory research (CBPR) oral health project 2014. A paper presented at the American Public Health Association Annual Meeting and Exposition, New Orleans, LA.
 24. San Diego Prevention Research Center [SDPRC]. Boca Sana, Cuerpo Sano 2013. <http://hhs.sdsu.edu/research/other-projects/boca-sana-cuerpo-sano-healthy-mouth-healthy-body/>. 8 May 2016.
 25. Elder JP, Ayala GX, McKenzie T, Litrownik AJ, Gallo L, Arredondo EM, Talavera G, Kaplan RM. Athree decade evolution to transdisciplinary research: community health research in California Mexico border communities. *Prog Community Health Partnersh Res Educ Action.* 2014;8(3):397–404.
 26. Vista Community Clinic. Community Health: Migrant health and community engagement 2012. <http://www.vistacommunityclinic.org/community-health/>. 8 May 2016.
 27. Byrd TL, Law JG. Cross-border utilization of health care services by United States residents living near the Mexican border. *Rev Panam Salud Publica.* 2009;26(2):95–100.
 28. Bergmark R, Barr D, Garcia R. Mexican immigrants in the us living far from the border may return to Mexico for Health Services. *J Immigr Minor Health.* 2010;12(4):610–4. doi:10.1007/s10903-008-9213-8.
 29. Ruiz-Beltran M, Kamau JK. The socio-economic and cultural impediments to well-being along the US–Mexico border. *J Community Health.* 2001;26(2):123–32.
 30. Acevedo-Garcia D, Bates LM. Latino health paradoxes: empirical evidence, explanations, future research, and implications. In: Rodriguez H, Saenz R, Menjivar C, editors. *Latina/os in the United States: changing the face of America*. New York, NY: Springer; 2008. p. 101–13.
 31. Syed ST, Gerber BS, Sharp LK. Traveling towards disease: transportation barriers to health care access. *J Community Health.* 2013;38(5):976–93.
 32. Ransford HE, Carrillo FR, Rivera Y. Health care-seeking among Latino immigrants: blocked access, use of traditional medicine, and the role of religion. *J Health Care Poor Underserved.* 2010;21(3):862–78.
 33. Blendon RJ, Buhr T, Cassidy EF, Perez DJ, Hunt KA, Fleischfresser C, Herrmann MJ. Disparities in health: perspectives of a multi-ethnic, multi racial America. *Health Aff.* 2007;26(5):1437–47.
 34. Harper PR, Gamlin HM. Reduced outpatient waiting times with improved appointment scheduling: a simulation modeling approach. *OR Spectr.* 2003;25(2):207–22.
 35. Gallucci G, Swartz W, Hackerman F. Brief reports: impact of the wait for an initial appointment on the rate of kept appointments at a mental health center. *Am Psychiatr Assoc.* 2005;56(3):344–6.
 36. UCLA Center for Health Policy Research. Mexican and Central American immigrants in the United States: health care access 2012. <http://healthpolicy.ucla.edu/publications/search/pages/detail.aspx?PubID=239>. 8 May 2016.
 37. Diaz-Perez MJ, Farley T, Cabanis CM. A program to improve access to health care among Mexican immigrants in rural Colorado. *J Rural Health.* 2004;20(3):258–64.
 38. González-Block MA, Vargas Bustamante A, De la Sierra LA, Martínez Cardoso A. Redressing the limitations of the Affordable Care Act for Mexican immigrants through bi-national health insurance: a willingness to pay study in Los Angeles. *J Immigr Minor Health.* 2014;16(2):179–88.
 39. Medicaid. Policy and Program Eligibility 2014. <http://medicaid.gov/medicaid-chip-program-information/medicaid-and-chip-programinformation.html>. 8 May 2016.
 40. California Department of Health Care Services. Beneficiary utilization and provider participation 2015. http://www.dental.ca.gov/WSI/Prov.jsp?fname=stakeholders_info. 8 May 2016.
 41. California State Senate. SB-1005 health care coverage: immigrant status 2015. http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201320140SB105. 8 May 2016.