

**The Impact of Binational Barriers to Medical Care on
the Care Seeking Practices of Mexican Immigrants**

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Abstract

Barriers to health care access faced by Mexican immigrants in the United States have been well-documented, including lack of insurance, fear of deportation, and language barriers. However, little is known about this population's care seeking experiences pre-migration. In this article, I use a life-course approach to explore binational isolation from health care and the ways in which early life experiences pattern Mexicans' care seeking practices in the United States. This ethnographic research project took place in Tucson, Arizona in 2013-2014 and utilized semi-structured interviews with service providers and first-generation Mexican immigrants. The majority of participants faced significant barriers to medical care in Mexico, which resulted in low rates of care utilization and heavy reliance on lay modalities. Immigrants faced an even broader array of barriers to care in the United States, and their lack of prior health care access further discouraged care utilization and compromised their medical care experiences post-migration.

Introduction

Lack of access to medical care constitutes a social determinant of health that contributes to health inequities and disparities evidenced in immigrant, ethnic minority, and low-income populations (McGibbon, Etowa, & McPherson, 2008). Mexicans in the United States suffer a disproportionately heavy burden from many health conditions, including liver disease, diabetes, obesity, work related accidents, and some cancers (Howe, Lake, Schymura, & Edwards, 2009; Lazo, Bilal, & Perez-Escamilla, 2015; Unterberger, 2018). Yet, they have amongst the lowest rates of health care utilization of any US-based population (Ransford, Carrillo, & Rivera, 2010).

The lack of medical care utilization among Mexican immigrants reflects a broad host of “social, historical, and political barriers that must be navigated by patients” (Horrill et al, 2018, p.4). The political realities that affect the approximately five million undocumented Mexicans in the United States have been shown to produce structural vulnerabilities that limit health care access (Noe-Bustamente, Flores, & Shaw, 2019; Quesada, Hart, & Bourgois, 2011), including blocked access to health insurance coverage (Brown, Wilson, & Angel, 2015; Ziemer et al., 2014) and ineligibility for the vast majority of public health programs (Gómez & O’Leary, 2019). In addition, millions of Mexicans in the United States face barriers stemming from their social identity as members of an ethnic and linguistic minority, including fear of deportation and discrimination at health care sites (Hardy et al, 2012) and a lack of cultural and linguistic consonance with medical providers (Garcia & Duckett 2009; Palmer-Wackerly et al, 2020).

However, a deeper timeline of analysis that incorporates Mexicans’ pre-migration medical care experiences unveils an even broader spectrum of structural barriers to care in this

population. The role of historical trends in shaping current disparities is a central aspect of post-colonial theoretical lenses, which highlight the enduring legacies of colonial systems and historical lived realities on present day health inequities (McGibbon, Mulaudzi, Didham, Barton, & Sochan, 2013). The relationship between community history and health disparities remains sorely understudied, particularly in immigrant communities (Horrill et al, 2018; McDonald, 2011; Spallek et al, 2011). Indeed, it has been common practice among US scholars, who carry out the vast majority of research on Mexican immigrant health, to fix arrival to the United States as their baseline for investigation, thereby overlooking the potential impacts of early life health exposures faced in Mexico (Hidalgo, Garcés-Palacio, & Scarinci, 2012; Li, 2015).

In this article, I utilize a “life-course approach” in order to detangle the complex interrelationships between childhood health experiences and adult health seeking behaviors and outcomes (Singer, Ryff, Carr, & Magee, 1998; Spallek, Zeeb, & Razum, 2011). This approach is particularly relevant for immigrant populations in light of mobility-related disjunctures in relationships to place, foods, and health and social environs (Montes de Oca, 2011; Thurston & Visandjee, 2006). In fact, Duncan (2015) argues that it is “essential to consider migrant health as a truly transnational phenomenon—one that is often produced and experienced within the borders of more than one country” (37). The present study reveals that structural barriers to health care pre-migration leave an indelible imprint on the adult health-seeking practices of a subset of Mexicans—namely low-income Mexicans who migrated to the United States and mostly lack legal residency status.

By highlighting the close connections between early life isolation from medical care and adult health seeking behaviors, my intent is to “help redress the shortcomings of epidemiological generalizations” that may blur the root of health inequities by assuming that barriers to care access is a recent and US-based phenomenon for immigrant communities (Horton & Barker, 2010, 68). The implications of such misperceptions include a lack of recognition of undiagnosed and untreated conditions that burden Mexicans who lacked health care pre-migration. In addition, intervention programs that are designed to reduce only those health care barriers observed post-migration may be “mis-targeting” by failing to address obstacles stemming from pre-migration health experiences (Lesser & Koniak-Griffin, 2013; Li, 2015).

Theoretical Background: The Patterning of Life-Course

Research into health disparities has sought to locate the “axes of difference” that determine health outcomes and interrogate the ways in which the lived experiences of social categories such as race, socio-economics, and education levels become embodied in differential health outcomes (Krieger 2009). In recent years, there has been a call to action to complicate our understanding of such differences and recognize the “diversity within diversity,” that gets lost when population health is analyzed without regard to place, nativity, and immigration (Buttenheim, Goldman, Pebley, Wong, & Chung, 2010; Krieger, Baron, Cone, & Souza, 2010; McLafferty & Chakrabarti, 2009). According to post-colonial health theorists, the lack of documented health history among previously colonized peoples blurs our ability to clearly identify and address the diverse sources of health inequities in these populations (Anderson et al, 2003; Browne et al, 2011; Horrill et al, 2018).

By tracing the effects of early life factors onto adult health outcomes and practices, a life-course perspective can fill some of these knowledge gaps (Braveman, 2006). According to Braveman and Barclay (2009), “a major focus of life-course epidemiology has been to understand how early-life experiences (particularly experiences related to economic adversity and the social disadvantages that often accompany it) shape adult health” (p. 5164). Qualitative researchers are well-positioned to gain access to mobile communities and explore how moderators such as income, geography, childhood trauma, ethnicity, and early life health experiences surface in adult health outcomes and practices (Browne et al, 2011; Lesser & Koniak-Griffin, 2013). To date, qualitative life-course studies in US immigrant communities have highlighted the critical influence of pre-migration factors on diverse health outcomes including food insecurity (McClain, Dickin, & Dollahite, 2019), tooth decay (Horton & Barker, 2010), mental health (Li, 2015), and workplace injuries (Unterberger, 2018).

An Historical Portrait of Health Access in Mexico

The population of 11.2 million Mexican nationals currently living in the United States does not represent a cross section of Mexican society but is rather disproportionately composed of people from Mexico's poor and rural regions (Fussell, 2004; Massey, Durand, & Malone, 2002).

Today, poverty remains the central driving force of labor migration from Mexico, with seven of the top ten migrant sending states in 2017 ranking among Mexico's ten poorest states (Li Ng, Cárdenas Salgado, Espinosa, & Serrano, 2019). The same factors of rural isolation and poverty that drive Mexicans to emigrate from these regions have also produced centuries of incomplete and inequitable provision of biomedical care to local residents.

These patterns were established in the colonial period, when burdensome regulatory criteria imposed by the Spanish Crown prioritized inspection and medical licensing over the expansion of medical services (Few, 2008). The vast swaths of rural Mexico housing the indigenous majority were left unserved by the threadbare colonial medical establishment, encouraging state reliance on private doctors, lay healers, and the Spanish viceroy to respond to epidemics, lapses in public hygiene, and public education (Lanning, 1985). Following the Mexican Revolution of 1910, notions of social solidarity “promoted health care as an instrument to support the well-being of all Mexicans,” prompting the institutionalization of the Mexican Institute of Social Security for workers in the formal sector in 1943 and the Institute for Social Security and Services for State Workers soon after (Nigenda, 1997, p. 108).

Yet as Mexico approached the 21st century its public health infrastructure remained plagued by inequitable geographic provision of services, spending, and health outcomes (Barraza-Llorens, Bertozzi, & Gonzalez-Pier, 2002). Tens of millions of Mexicans still lacked insurance and the country faced a dual disease burden of rising mortality from chronic conditions bumping up against the stubborn intransigence of infectious disease (Frenk, Lozano Ascencio, & Bobadilla, 1994). Chronic underfunding led to long waits for emergency care and specialists, medication shortages, a scarcity of mental health services, and poor patient-doctor relationships (Napolitano, 2002; Campero, Herrera, Kendall, & Caballero, 2007). As of 1990, Mexico’s urban zones still had six times more doctors per inhabitant than the rural areas (Nigenda, 1996). Facing enduring barriers to care, Mexicans living in the poorest regions suffered an infant mortality rate ten times higher than that of the wealthiest sectors and medical expenses were financially devastating for millions of Mexicans (Barraza-Lloréns et al, 2002; Knaul et al, 2006).

Entrenched practices of lay modalities incorporating herbal medicine and spiritual healing continued unabated in Mexico from pre-colonial times, a testament to an enduring knowledge system derived largely from indigenous healing traditions (Gonzales, 2012; Finkler, 1991). Such practices have been particularly common in the rural areas, indigenous communities, and poor regions that have faced the most obstinate and long-standing isolation from medical care, as well as in informal urban settlements and receiving areas for internal migrants (Knaul et al, 2003; Lozoya, Velázquez Díaz, & Flores Alvarado, 1988). At the turn of the last century, 61% of a national sample of Mexicans stated relying on self-care to treat their most recent ailments (Leyva-Flores, Kageyama, & Erviti-Erice, 2001). In addition to home remedies, Mexicans have historically relied heavily on the self-dispensation of pharmaceuticals, as well as on expert traditional healers such as *curanderos* (spiritual healers) and *parteras* (midwives) and pharmacists, for diagnoses and treatment (Logan, 2010). Such modalities have offered convenience, affordability, and efficacy in addressing physical ailments and traditional etiologies such as *susto* (soul sickness) and *nervios* (nervous disorder; Gonzales, 2012).

In an attempt to redress health inequities and extend medical care coverage, in 2001 Mexican president Vicente Fox instituted Seguro Popular, the country's first attempt at universal health care coverage. The program succeeded in expanding health care coverage for certain medical specialties, built on long-standing work to endow Mexico with one of the top vaccine programs in the world, and greatly reduced childhood mortality and morbidity from infectious disease (Barraza-Lloréns et al, 2002). In addition, Seguro Popular gradually consolidated a greater percentage of health services into the public sector, swelling the ranks of insured Mexicans who

utilized health services more often than their un-insured counterparts (Knaul et al, 2012).

But critics have argued that Seguro Popular has served “to further fragment and stratify Mexico’s health system, exacerbating inefficiencies in delivery” (Kierans, Padilla-Altamira, Garcia-Garcia, Ibarra-Hernandez, & Mercado, 2013, p. 2). Deficiencies have been noted in critical areas of medicine including chronic disease, trauma care, and mental health (Medina-Mora et al, 2010). As of 2012, 35% of Mexicans still lacked health insurance and millions faced destabilizing financial challenges in securing care (Instituto Nacional de Estadística y Geografía, 2012; Ortiz-Rodriguez & Small, 2017). Noting these short-comings, current Mexican president Antonio Manuel López Obrador terminated Seguro Popular in 2019 and replaced it with the Health Institute for Wellbeing, promising to eliminate all fees and afford universal health care access.

How Historical Legacies are Reflected in Immigrants’ Health care Utilization

When analyzed through a life-course lens, intergenerational isolation from medical care has several implications for the health seeking practices of Mexicans lacking legal residency status in the United States. Mexican immigrants access health care less regularly than their US-born peers, even after controlling for insurance coverage and socio-demographic factors (Ortega et al, 2007). A possible contributing factor is the fact that the “lack of emphasis on preventive care in the socialized care systems of their home countries may play a role in the persistence of intrapersonal barriers post-immigration” (Hidalgo et al, 2012, p. 987). Indeed, access to regular preventive medical care during childhood is argued to afford individuals with biomedical knowledge and experience in navigating health care systems that increase their likelihood of seeking health care as adults (Tonniges & Leavitt, 2003; Sarmiento et al, 2005). Borrayo and

Jenkins, (2001) found that Mexican immigrant women's low rates of breast cancer screening was tied to the lack of preventive screening services and related knowledge in Mexico. Moreover, emergency room utilization, demonstrated to be very high in immigrant populations, has been shown to be inversely correlated to regular and sustained medical care access over the life-course (Akincigil, Mayers, & Fulghum, 2011; Gill, Mainous, & Nsereko, 2000; Browne et al, 2011).

In addition, it has been found that despite having more objectively unmet health care needs than the US-born population, immigrants report fewer subjectively unmet needs, suggesting that they have lower and unclear expectations of what care they should receive (Howe Hasanali, 2015). Despite the host of barriers to care post-migration, some studies have shown that certain immigrants actually increase their care utilization according to years spent in United States (Flores, Lang, Salmerón, & Bastani, 2011; Sarmiento et al, 2005). Tanner et al (2014) partially attribute this finding to the possibility that "as groups become more acculturated to the U.S., their perceptions of disease severity and threshold for when care is needed may change" (p.1693).

Low-income Mexicans' lack of prior experience with regular biomedical care also results in low levels of "health literacy," an understudied facet of immigrant health that has direct ties to health care utilization (Mantwill & Schulz, 2017). Several areas of low health literacy have been noted amongst Mexican immigrants, including non-medicalized illness cognition (Cha, Enriquez, & Ro, 2019) and lack of comfort with filling out forms and medical histories (Cristancho et al, 2008). Most critically, Mexican immigrants have been observed to face challenges in interpreting medical instructions and to have low rates of adherence with medical treatment and

medication protocols, findings that have been directly linked to a lack of health information (Ortega et al, 2007; Masland, Kang, & Ma, 2011; Villagran et al, 2011).

Lastly, when Mexicans settle in the US, many of them continue to utilize the trusted lay modalities they had practiced in Mexico (Ho et al, 2015). This trend reflects both blocked access to medical health services in the United States and a belief in the healing efficacy of these alternative treatment modalities and in the ability of traditional healers to address psychological and spiritual afflictions (Clark et al, 2010; Tafur et al, 2009; Ransford, et al, 2010). While immigrants who utilize traditional modalities often complement such practices with biomedical care, lay care plays an especially critical role in preventing illness via nutritional practices and minimization of emotional stressors, a reflection of many immigrants' preference for "natural" treatments (Greder & Reina, 2019; Villagran et al, 2011; Amirehsani & Wallace, 2013).

Methodology

Sample Design and Study Procedures

This anthropological study was designed to capture the diverse ways in which migration from Mexico to Tucson, Arizona impacts individual health, by exploring immigrant's lived daily experiences of health and well-being, as well as identifying the structural factors that shape such experiences. I entered the field as a certified interpreter/translator and academic researcher with two decades of experience working, studying, and traveling in Mexican origin communities. In recognition of the vast needs of immigrant serving agencies, I crafted my research approach to ensure reciprocity by volunteering as an interpreter, English teacher, and food distribution aid in exchange for the opportunity to conduct research. Due to these commitments, I maintained a

regular schedule of research at three primary sites over the course of 14 months in 2013–2014, enabling the development of close personal that facilitated sustained interactions.

The first phase of exploratory research consisted of semi-structured background interviews (n = 32) with service providers (hereafter service provider respondents) in the fields of health, traditional medicine, and legal and social services. Interview questions explored the conditions of daily life for Mexican immigrants, patterns of medical access and healing practices, and group-level health risks. In the second phase of research, I employed the “venue-based application of time-space sampling” model to identify four safe venues in which to engage with first-generation Mexican immigrants: a day-laborer’s center, a women’s empowerment group, and two free medical clinics (Muhib, Lin, Stueve, & Miller, 2001). Staff at these research sites gave me permission to conduct participant observation focused around health care service interactions in order to provide additional context to experiences of care utilization. I also conducted in-depth semi-structured interviews (n = 40) with adult immigrants from Mexico (hereafter immigrant respondents). Immigrant respondents were verbally consented and interviews were conducted in Spanish and audio recorded. The interview guide included questions on pre and post-migration stressors including childhood poverty, emotional trauma, immigration status, and targeted enforcement, as well as medical history and patterns of care-seeking. This project received approval from the University of Arizona Institutional Review Board (IRB00001751) in 2013.

Sample Demographics

The sample of immigrant respondents was evenly divided between men and women and between people who grew up in rural and urban locations. The majority were members of large and poor

households in Mexico, and many suffered from extreme material deprivation. Approximately one-half of this sample population originated from Arizona's bordering state of Sonora, while other highly represented states included Sinaloa, Oaxaca, and Chiapas. On average, participants were 42 years old and had a monthly income of \$1,400. At the time of the interview, immigrants had spent an average of 15 years in the US and almost 70% of them were undocumented.

Analysis

At the conclusion of the research period, I transcribed and translated the immigrant respondent interviews. All data, including transcriptions of the service provider interviews and notes from participant observation, were gathered for analysis and coded thematically using MAXQDA qualitative software. The binational consistency in respondent's lack of access to health care and high rates of self-care usage were two primary themes that emerged during the analysis. In order to protect privacy, pseudonyms are used for immigrant respondents throughout this paper.

Ethnographic Data Results

This study revealed a strong correlation between participants' health care experiences pre and post-migration. The majority of immigrant respondents stated that they faced multiple barriers to accessing health care, avoided usage of medical care until serious conditions arose, and filled gaps in medical care with lay modalities and self-care on both sides of the border. Service provider respondents noted that immigrants' lack of exposure to medical services in early life compounded barriers to medical care access in the United States to produce low rates of care utilization, challenges to service provision, and frequent presentation of unregulated conditions.

Isolation from Medical Care During Early Life in Mexico

The majority of immigrant respondents had scarce access to medical care as children and young adults in Mexico. Over 60% of the sample lacked health insurance in Mexico and many more experienced long lapses in medical coverage. Maricela, who described suffering from malnutrition as a child in rural Sonora explained “In those times only the middle class and formal workers had insurance.” Those who lacked insurance had to pay out of pocket for medical services and prescription medications, which deterred participants from seeking medical care. Adamira recalled that as a child in Puebla: “I had an accident when a car hit me on my bike, and they took me in an ambulance to the hospital. But when we got there they asked if we had money, and if you did not, then they did not help you.”

Immigrant respondents from rural areas and small towns reported that there were no public health centers nearby their homes. Since most participants did not have private transportation, biomedical care facilities were often hours or even days away by bus, on foot, or horseback. Arturo, who grew up in rural Oaxaca, recalls that: “In Mexico, we had health centers for those without money or insurance, and they could go there, and it was free. But I lived in a small community and had to walk for 40 minutes to get to town because the health center wasn’t located where I lived.” Moreover, immigrant respondents overwhelmingly lacked access to preventive medical care, diagnostic procedures, medical specialists, and mental health services.

Low Usage of Formal Medical Care in Mexico

Due to these challenges, many study participants stated that their families only accessed formal medical care in cases of serious illness and emergencies, such as broken bones and acute infections. Mario, a young man who grew up in coastal Sonora explained: “If it was something serious then we would go to the hospital. Or if you had a lot of symptoms at once it would be better to go to the doctor, because they could take care of it faster.” The lack of regular access to biomedicine and diagnostic services was reflected in participants’ large gaps in family medical histories left by ambiguous and unidentified causes of illness and death.

Many immigrant respondents said that barriers to biomedical care carried grave implications for themselves and their families. Rosie, who grew up in rural, central Mexico, explained that in her community, “people usually only discovered illnesses when it was already too late.” The health risks of isolation from medical care were particularly acute for infants, with almost 20% of immigrant respondents having lost one or more siblings to infant mortality. Josúe, a middle-aged man from the state of Zacatecas explained: “At that time there wasn't anything for us, like how now there is Seguro Popular and the benefits of going to see a doctor. My mom had 15 children and many of the others died within the first two to three months. I lost many siblings.”

Self-Care and Herbal Medicine Usage During Early Life in Mexico

Seventy-five percent of immigrant respondents stated having used lay care as their first recourse when maladies arose during childhood. Lay care incorporated traditional remedies prepared with a wide variety of herbs, animal by-products, and other botanicals as well as pharmaceuticals such as Vicks VapoRub, rubbing alcohol, and antibiotics. Participants utilized remedies prepared at home or in the community to heal a diversity of ailments ranging from common colds, gastrointestinal issues, headaches, and insect bites to grave conditions such as chronic illness, loss of consciousness, and physical trauma. In addition, some participants visited expert healers to address mental stress and traditional etiological diagnoses rooted in spiritual imbalances.

Immigrant respondents described having used lay care both because they lacked access to formal medical care and because their families believed in community and family-held healing traditions. Pedro, a middle-aged man from the southern state of Veracruz recalled: “Most people in Mexico work, work, work, and there is barely any medical attention to go around. So, when you feel bad you use whatever *hierbita*, or something else, a pill, that will make you feel better. That's what people know in Mexico.” Manuel described how his family's knowledge of healing bronchial infections filled a crucial gap in care provision in his rural hometown. He explained:

“you put a few drops of rattlesnake oil in their throats and [making crackling noise], they get better. Sometimes, when we were out on the ranch, kids would come walking in from the countryside from very, very far away.” Some immigrant respondents recalled their family members having a high degree of specialized knowledge. For example, Reyna explained that: “My mom knew a lot of *remedios caseros*. She would rub our feet and if we fell and cut ourselves, she would cut some poplar leaves and boil them and put that on our wounds ... My mom was really wise. I don't remember my sisters or I going to the doctor very often.”

Barriers to Health Care Access in the United States

Immigrant respondents cited facing familiar structural barriers to accessing health care once they settled in Arizona. The high cost of care stemming from lack of medical insurance and ineligibility for public health services was the most frequently mentioned barrier. Only 15% of immigrant respondents reported having public or private medical insurance and many cited being thousands of dollars in debt from prior medical procedures. Lack of transportation also continued to be a challenge due to a lack of private vehicles, unpredictable and night-time clinic schedules, the inconvenience of public transportation especially for those with children, and extreme heat during the summer months.

In addition, immigrant respondents faced a host of new structural barriers to health care in Arizona. First, immigrant respondents cited language and cultural barriers that made communicating with providers challenging and caused discomfort with filling out medical forms. Second, they expressed confusion over the “public charge” rules due to shifting government legislation on whether the usage of public services might damage future chances at naturalization. And lastly, immigrants feared being detained or deported in hospitals and other medical facilities. Claudio, an undocumented father from Sinaloa who was forced to seek hospital care for a severe broken leg following a car crash, explained: “I was scared when I was in the hospital and I told them ‘you know, I don’t have papers and I don’t want them to take me

away right now.” Such fears were intensified by the visible presence of US Border Patrol in hospital settings following the passage of exclusionary Arizona state legislation in 2009.

Low Usage of Medical Care in the United States

Immigrant respondents who utilized medical care services in Tucson cited primarily relying on a handful of mobile clinics operated by the University of Arizona and free “pop-up” clinics, emergency departments, and larger health facilities that offered sliding scale fees. The small minority of participants who were able to freely cross the border also returned to Mexico to take advantage of the affordability of medical care and pharmaceuticals in Mexico as well as the opportunity for continuity with long-term providers and access to medical records.

However, most immigrant respondents avoided accessing medical care unless absolutely necessary. In many cases, lack of care utilization resulted from tangible barriers, particularly the high cost of care. Hilda, an impoverished woman from rural Sonora explained that she could not seek medical care to address her kidney stones, saying: “With what I earn right now, I cannot afford the care I need and the three medications which would break down the stones and address my pain. I need to see a specialist, but I cannot afford that. So, I just hope nothing else comes up for me health-wise.”

Other barriers reflected the lasting imprint of immigrant respondents’ low levels of health care utilization in early life. A few immigrants cited having a limited understanding of their own health needs due to a lack of health care pre-migration. Guillermo, a legal US resident, explained: “I had never had a medical exam before in my life. The only two times have been here for immigration [processing]. So, you never really know if you might have something.” This lack of prior access to care, particularly to preventive medical care, oriented immigrant respondents to seek medical care only after serious conditions arose. José, a married father of four, asked: “why would I got to the doctor if I feel fine?” In addition, several immigrant

respondents stated resisting seeking care because they felt uncomfortable in medical facilities or worried about the potential side-effects of pharmaceutical and especially psychotropic medications. When Linda was diagnosed with high cholesterol, she refused to take the medications the doctor prescribed, saying: "I won't take the pills. They are bad."

Immigrant respondents cited a heavy adult illness burden, which was compounded by the lack of care utilization. The most commonly cited physical conditions were high blood pressure, diabetes, high cholesterol, gastritis, overweight, and injuries from car accidents and occupational hazards. Mental health concerns were an acute issue, with 70% of this sample citing depression and high rates of anxiety and traditional etiological diagnoses based in emotional and spiritual hardship. Immigrant respondents frequently noted somatic symptoms tied to these conditions.

Continued Usage of Self-Care and Herbal Medicine in the United States

While a few immigrant respondents stated no longer utilizing home remedies due to greater access to biomedical care or believing that biomedicine was safer and more reliable, the majority practiced some element of home-based care. Most commonly, they cited using botanical remedies, over the counter medications, healing foods, religious and spiritual healing, and expert healers such as *sobadores* (masseurs) or non-Mexican complementary and integrative health modalities, including acupuncture and chiropractic care. Most immigrant respondents noted that lay modalities remained an accessible option for them and that they easily located the basic healing supplies they needed. Family ties in Mexico also helped sustain lay practices. Ernesto, who was living in sanctuary to avoid deportation, said that since losing his insurance coverage, "when I get sick, my mom sends me ampicillin from Mexico and I inject myself."

As in Mexico, lay modalities were generally utilized to treat low level health concerns. However, some immigrant respondents cited using home remedies for more serious issues, particularly chronic diseases. Silvia, an undocumented woman with multiple health stressors, explained: "If I

feel like my blood pressure is really high, I will cut up garlic and put it in warm water and drink that. It really helps me, and my head doesn't hurt anymore.” Juan recalled his experience addressing a Staph infection without formal medical care:

I called my *camarada* and I told her ‘Hey, I have this [bump] and I can't handle it anymore. And I feel like I have a fever, but I got in the shower and it didn't do anything.’ She came over with a bag full of medicines and oxygenated water and gases, and everything ... And she gave me the anesthesia and she opened it with a knife. And when she opened it, a whole bunch of puss and blood came out.

How Early Life Factors Compounded Barriers to Care Post-Migration

Service provider respondents in this study sample drew several connections between immigrants' barriers to health care and health practices pre and post-migration. While recognizing that immigrants' low rates of health care utilization were due in part to the high cost of care, transportation issues, language barriers, and fear surrounding care utilization, they also noted that lack of access to care had been normalized for many Mexican immigrants. A local community health worker explained that lack of prior access made immigrants less likely to seek out care in the United States, saying: “It's not really that they had more access to health care in Mexico, especially in central and southern states, because most were from really poor villages where they only have a doctor once in a while ... It's kind of normal for them not to have this care.”

Service provider respondents reported that lifelong barriers to medical care produced many challenges to serving immigrant patients. First, they indicated that Mexican immigrants rarely accessed care and thus regularly presented with severely mismanaged conditions, such as advanced cancer, unhealed physical trauma, and unregulated cholesterol and diabetes indicators. A doctor who volunteered at a free clinic stated: “It's truly amazing the things you see that people suffer with and put off for years and years ... People wait until crisis mode, when they are out of all their medications and their blood sugar is totally out of whack.” Providers noted that

prenatal care often operated as a conduit to bringing immigrant women into the biomedical fold, making them more likely than men to seek out medical services for themselves and their children. Once there, other conditions were sometimes observed. An obstetrician recalled a patient with “a bizarre childhood cardiac defect which would have been detected and treated here but went totally undiagnosed or treated until she was pregnant and under care. She had to see a pediatric doctor because those are things that would always come up in childhood here.”

In addition, service providers noted that many immigrants were reticent to accept diagnostic care and medical interventions due to their unfamiliarity. A local nurse midwife noted: “even Pap smears are considered dangerous by them. They ask: ‘are you sure this is safe?’ Because it is not done in Mexico.” Service providers also observed that fear and discomfort surrounding biomedicine encouraged many immigrants to cope with pain and disease on their own. One provider said: “There is an assumption that we should be able to handle this ourselves, because otherwise life feels scary and unknown. [They ask]: ‘What will they do to me? What will they give me? If I am strong, I can handle this on my own.’” Such reticence was particularly challenging in the area of mental health care, due to stigma around mental illness in Mexico as well as fears over the potential side effects and addictive nature of psychotropic medication. A mental health provider explained: “In support groups, they say they want something natural and they resist the medicine, even those who have been coming for years. They tell the doctor: ‘Wait! I will feel better.’ They say it’s better to just endure it until their bodies explode.”

Immigrants’ preference for natural cures and self- managing of disease was noted by several health practitioners. Practitioners expressed differing opinions about the value of such practices, attributing them to either the practicality or the efficacy of self-healing modalities. A community health worker stated: “They just self-medicate. You don’t see it, but it exists by word of mouth. Most of them, if did it there, they keep doing it here. ...They don’t bother to go to the hospital and spend \$900 if they can cure themselves with these things at home.”

Discussion: Cumulative Impacts of Barriers to Care across the Life-course

Understanding how binational health experiences interact with the migration process is critical for researchers, policymakers, and service providers working to reduce the gamut of health assaults that Mexicans face in the United States (Montes de Oca et al, 2011). A life-course model has been applied elsewhere to identify early life factors that compound health risks often assumed to be products of structural factors occurring entirely within the confines of US borders (Li, 2015). Martínez (2012) challenged the notion that Mexicans' nutritional declines are based solely on US residence, arguing that globalization had dramatically reduced the nutritional content of Mexicans' diet pre-migration. Horton and Barker (2010) lent greater clarity to the poor oral health outcomes of Mexican farmworkers' children by linking farmworkers' low cariogenic diets during rural childhoods to their lack of knowledge about the need for dental care post-migration. Such qualitative research can play a critical role in filling the gaps in information created by a lack of continuous medical records and statistical data on mobile populations (Lesser & Koniak-Griffin, 2013).

The findings presented in this article indicate that many of the obstacles to care access faced by Mexicans in the United States are not new but are rather extensions of generations of inequitable care provision to the poor Mexican majority (Leyva-Flores et al, 2000; Martinez-Donate et al, 2017). The enduring legacies of the incomplete extension of colonial Mexico's public health apparatus remains visible in the health experiences of this sample of Mexican adults who grew up before the advent of universal health care programming. Immigrant respondents cited low rates of access to all types of health care pre-migration and reported primarily having utilized

medical care in cases of serious injury and illness. The rates of uninsured and infant mortality in this sample were far higher than national averages at the time of respondents' upbringing in Mexico, mirroring deep regional inequities in care distribution (Frenk et al, 1994). In lieu of regular access to medical care, immigrant respondents described managing their health problems with lay modalities practiced in the home and by expert healers, reflecting the entrenched nature of traditional health practices in Mexico (Gonzales, 2012; Lozoya et al, 1988).

Immigrant respondents cited facing many of the same barriers once in Arizona, noting the negative impact of lack of insurance and resulting high costs of care that affect non-citizens (Crocker 2015; Ziemer et al, 2014). Undocumented immigrants in the United States have been excluded from federally subsidized health services under the Personal Responsibility and Work Opportunity Reconciliation Act in 1996 and again under the Affordable Care Act in 2010. In Arizona, House Bill 2008 passed in 2009 denied immigrants access to federal, state, and local public health services in 2009. But immigrant respondents also faced new barriers to care once in Arizona, including fear that accessing health care could result in deportation or in repercussions under the public charge legislation, concerns that were heightened following the passage of exclusionary state legislation in 2009 (Crocker 2015; Gómez & O'Leary, 2019). Service providers in this sample noted that immigrants' US medical care experiences were compromised by poor health care access pre-migration. They indicated that the absence of prior care had limited immigrants' knowledge of their own personal medical history and given rise to undiagnosed conditions and unfamiliarity with medical and pharmaceutical protocols (Cristancho et al, 2008; Tonniges & Leavitt, 2003).

While scholars often attribute immigrants' care seeking practices to "culturally shaped attitudes and beliefs concerning the use of health care services" (Sarmiento et al, 2005, p.306), this study reveals that they are perhaps more accurately understood as the byproduct of generations of structural isolation from medical care. As such, immigrants' decision to delay accessing care until serious conditions arise may not reflect a culturally-based definition of health as the absence of illness (Greder & Reina, 2019), but rather demonstrate immigrants' low expectations and assumptions regarding the benefits of preventive medical care and their likelihood of receiving it (Howe Hasanali, 2015). Likewise, immigrants' overuse of emergency services may not result from US-based financial barriers alone. Rather, since immigrants have been found to over-utilize emergency room services even after establishing health insurance, such patterns may indicate a fundamental orientation toward interventive medicine shaped during an early life in which preventive medicine was not afforded (Akincigil et al, 2011; Hidalgo et al, 2012). This orientation toward interventive care has even been noted in immigrants' care-seeking patterns with traditional healers (Clark, Bunk, & Johnson, 2010).

Lastly, this study corroborates that Mexican immigrants utilize lay modalities at high rates and for a wide range of health issues due to their affordability and accessibility (Ho et al, 2015). While a significant body of research has documented this trend, scant attention has been paid to the correlation between the maintenance of such practices and their prominent role in health promotion and disease remediation among low-income Mexicans over centuries of poor access to biomedical care (Leyva Flores et al., 2001; Ransford et al, 2010). This historical contextualization helps explain that some Mexican immigrants practice these modalities even

after securing health care access, trusting in their healing efficacy and relying upon the empowering agency intrinsic to being able to heal oneself (Gonzales, 2012; Waldstein, 2010).

Study Limitations

This study sample represents a very low-income portion of the adult Mexican population and should not be assumed to be representative of younger Mexicans who were raised with access to public medical insurance nor to Mexicans in higher socio-economic brackets. Since one-quarter of this sample was recruited at medical sites, usage of medical care may be over-represented.

Implications of Research: Improving Access to Medical Care

The data presented in this article inform multi-layered and creative approaches to reducing the diverse range of barriers to health care access among Mexicans living in the United States (Cha et al, 2019). Prohibitive costs of care can be lowered via targeted insurance programs and discounted pay scales, as well as sustained financial support for the privately funded clinics that bear the burden of affording basic care to this population (Liebert & Ameringer, 2013). An additional solution would be the amendment of US federal immigration legislation in order to facilitate immigrants' ability to return to Mexico for care utilizing novel programs such as "health visas," or the expansion of the Mexican consular program *Ventanillas de Salud* that finances the medical repatriation of a limited number of immigrants with dire medical conditions (López, 2018). In order to dispel immigrants' fear of entering medical facilities, the US government should deny immigration officials jurisdiction to enter health care facilities (Hardy et al, 2012). Likewise, federal "public charge" policies must be restructured such that mixed

status immigrant families are no longer deterred from seeking care due to concerns over long-term negative repercussions to citizenship status (Katz & Chokshi, 2018).

However, addressing the lasting imprints of “health patterns that accompany migrants across borders” is equally essential to the successful reduction of barriers to immigrants’ health care access (Buttenheim et al, 2010, p.1275). Critical to this effort is a culturally and linguistically relevant educational program aimed to inform low-income Mexican immigrants about their fundamental human right to health care, the means to navigate available services, and the benefits of preventive medical care (Da Lomba, 2010). Moreover, the quality and effectiveness of US medical care provision would be improved by implementing a concerted effort to fill in past gaps in medical histories, offer a consolidated band of diagnostic and curative services, and work to better harness immigrants’ lay healing knowledge and holistic health definitions (Greder and Reina, 2019). Some Latin American countries have offered a hopeful model in fused traditional medicine-allopathic care facilities that draw in a wider swath of the public by offering care that is culturally relevant, integrative, and affordable (Caselli, 2012).

Declaration of Conflicting Interests

The Author declares that there is no conflict of interest.

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