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Transnational Caregiving for Older Mexican Adults in the United States

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Abstract

In this paper, Dr. Marlon Maus explores health disparities among Mexican migrants and Mexican Americans in the US, focusing on healthcare access, caregiving for older family members, and the broader implications for Latino communities. The paper highlights the disproportionate risks faced by these populations due to historical discrimination and socio-economic factors, emphasizing the urgent need for equitable healthcare policies. It also underscores the strengths and resilience within Latino communities and calls for a transdisciplinary approach to address the challenges faced by informal caregivers. Cultural and linguistic competency in healthcare provision is essential for improving outcomes for older Latino adults.

Keywords: Health Disparities, Mexican Migrants Long-term Care, Caregiving, International Migration, Cross-border Population, Language Barriers, Healthy Aging.

I INTRODUCTION

As stated in the paper by Dr. Hoshino, this publication is an exploration of various aspects of transnational caregiving through examples presented by the authors. In this paper we review the unique situation of transnational caregiving, a process that occurs in populations that straddle a geographic, political, economic, and social border. To understand the nuances of this case-- of the Latino population, and especially the Mexican population, in the United States and in Mexico--we must look at it in the context of history and social movements. The present border between the two countries was created in the first half of the 19th century, following often through violent confrontations.

Much of the southern and western land in the US originally was part of New Spain. In the early 19th century, the U.S. bought the lands from France and began to expand steadily, often using military means westward in its pursuit of the idea of “Manifest destiny”, which was a cultural belief in that American settlers were destined to expand across North America.

The border was first established by treaties between the U.S. and Spain in 1819 and again reaffirmed later. Although Mexico attempted to create a buffer zone at the border that would prevent possible invasion from the north by encouraging thousands of their own citizens to settle in the region that is now known as Texas, this was futile and Texas declared its independence in 1836, which lasted until 1845 when the U.S. annexed it. After this there were innumerable conflicts culminating in the Mexican-American war in 1846. The result for the populations living in the area was that after Mexico lost more than 2,500,000 square kilometers, or 55% of its territory, hundreds of thousands of people, many of whom were Mexican nationals, were left living in the once disputed lands. Several towns sprang up along this boundary, and many of the Mexican citizens were given free land in the northern regions of Mexico to encourage the repopulation of the area (Wikipedia, 2023).

These historical events help explain how communities became unnaturally separated

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through political actions. After centuries, we can still appreciate the effects that the various migration pressures have had on this population, their communities, families, and most vulnerable members. One circumstance of the location and history of this population are the sheer numbers of people involved. As we will see below, when we consider this enormous population in the context of the demographic aging of the US, makes this one of the most important and pressing issues when looking at healthy aging and caregiving in the US.

There are many lessons to be gleaned from migration in general, but especially in this unique case, which has resulted in distinctive exemplars of caregiving that illustrate some of the problems and barriers for caregiving of the aging members of this population and also of the opportunities and strengths. It also, and this must be emphasized, shows the amazing resilience and adaptation that develops out of necessity. Reviewing some of the particulars of the aging Latino population in the US can serve as an exemplar for caregiving in other situations of migrant populations, some of which are explored in other papers of the publication.

1. Background

Populations are aging around the world. In the US specific subpopulations are aging at different rates and their percentage of the population is changing. According to the US Census Bureau, the total US population is projected to age over the coming decades, with an increasing proportion of the total being in the older ages (65 and over). The percentage of the population that is aged 65 and over is expected to grow from 15 percent in 2014 to 24 percent in 2060, an increase of 9 percentage points (Colby & Ortman, 2015).

The Latino population in the US is projected to double in the first half of the 21st Century from 12% in 2000 to 24% in 2050 (Krogstad, 2014b; Passel & D'Vera Cohn, 2008). The substantial growth is apparent in that the Hispanic population increased by 15.2 million between 2000 and 2010, accounting for over half of the 27.3 million increase in the total population of the United States (Ennis, Ríos-Vargas, & Albert, 2011). Population growth between 2000 and 2010 varied by Hispanic group. The Mexican origin population increased by 54 percent and had the largest numeric change (11.2 million), growing from 20.6 million in 2000 to 31.8 million in 2010. Thus, Mexicans accounted for about three-quarters of the 15.2 million increase in the Hispanic population from 2000 to 2010 (Ennis et al., 2011)(Fig. 1). Projections for growth are revised as data are acquired; Latino population growth is now projected to slow somewhat, but not enough to materially

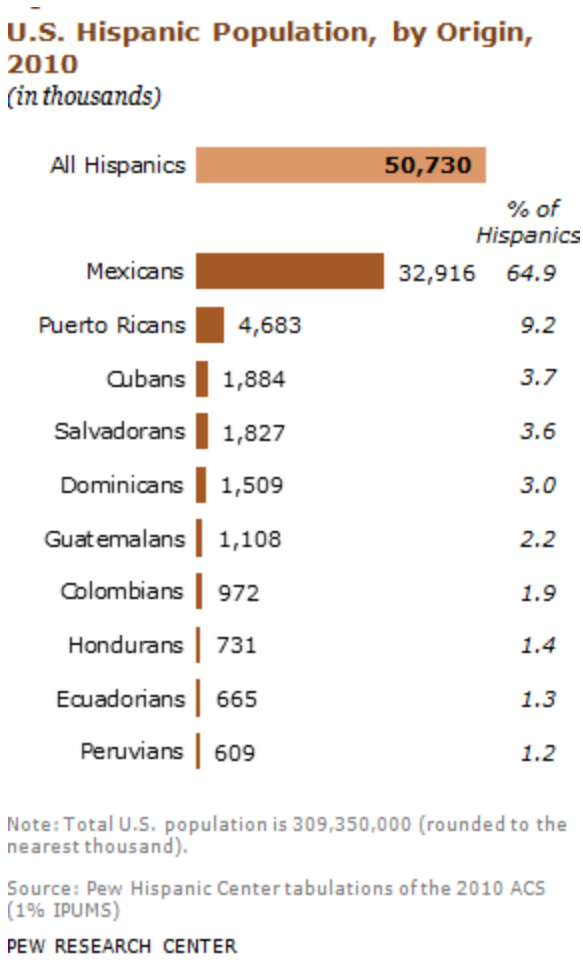

Figure 1 U.S. Hispanic population, by origin, 2010 (Motel & Patten, 2012)

affect the factors we look at in this review (Krogstad, 2014b)(Fig. 2).

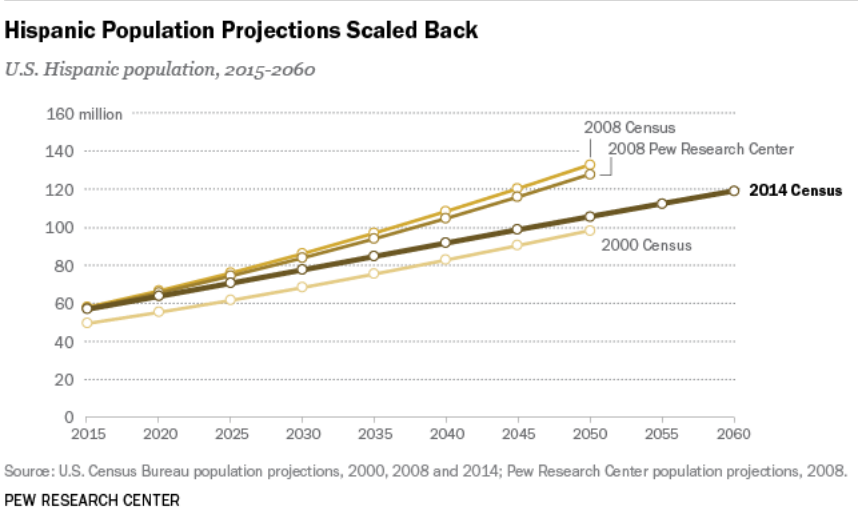

Figure 2 Hispanic population projections scaled back (Krogstad, 2014a)

Historically, the life expectancy of Latinos has been longer on average than White, Black, and Asian people. Before the Covid-19 pandemic, life expectancy for U.S. Hispanics was about 81.5 years, according to the Centers for Disease Control and Prevention. For whites and Asians, life expectancy was around 79 years, and for Blacks it was around 76 years. Those numbers have fallen considerably during the pandemic, however (Barna, 2021). For Latinos, average life expectancy dropped about three years (Fig. 3). Some of the reasons for the decline are social and economic inequities that place Latinos at high risk for COVID-19 exposure. As we will see below, Latinos have lower rates of health insurance than Black and white populations and are more likely to live in multi-generational households, where infectious diseases can spread more easily (Barna, 2021).

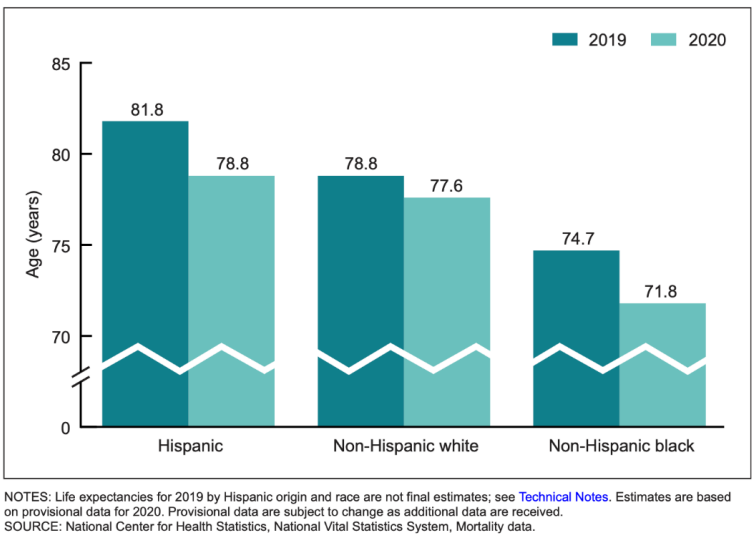

Figure 3 Life expectancy at birth, by Hispanic origin and race: United States, 2019 and 2020 (Arias et al., 2021)

The proportion of the older population that is Hispanic is projected to increase quickly over the next four decades. In 2050, around 20 percent of the population aged 65 and over is projected to be Hispanic, up from 7 percent in 2010 (Fig. 4). The proportion of the oldest-old population that is Hispanic is also projected to increase by about 10 percentage points between 2010 and 2050. In 2050, the non-Hispanic population aged 65 and older is projected to reach 71 million, up from 37.4 million in 2010, almost doubling. In comparison, the Hispanic population aged 65 years and older is projected to grow from 2.9 million to 17.5 million, an increase of more than six-fold. The 85 years and older are projected to be 15 percent Hispanic in 2050, up from 5 percent in 2010, an increase of more than ninefold, from 305,000 to 2.9 million(Vincent & Velkoff, 2010).

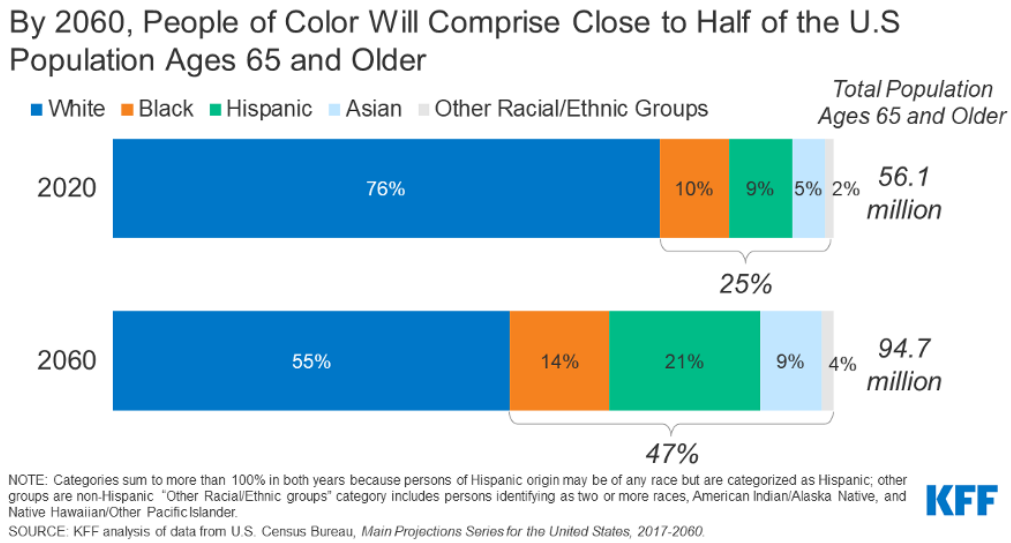

Figure 4 By 2060, People of Color Will Comprise Close to Half of the U.S Population Ages 65 and Older (Ochieng et al., 2021)

Within the population aged 65 and over, those over 85 are the fastest growing sector and will reach an estimated 18.2 million or 5% of the total population by 2050. Importantly, the minority older populations are growing at an even faster rate. The U.S. Census projects that between 1990 and 2030 the older white population will increase by 93%, whereas it projects a growth rate of 328% for older minorities, including Hispanics (555%) and black non-Hispanics (160%)(Day, 1992).

2. Specific Factors

We now look at some of the factors that affect the long-term care of Latinos as they age. Economically this is an important aspect for the future of caregiving since about 63% of the 12 million Americans receiving long-term care services are elderly, and 80% of national longterm care expenditures go to the elderly (Harris-Kojetin, Sengupta, Park-Lee, & Valverde, 2013; Health & Services, 2003). In 2020, Medicaid paid 54% of the over $400 billion spent on long-term care in the U.S. (Chidambaram, 2022).

Risk factors that are notable for this population are the result of both negative features and positive cultural characteristics that, as shown during the Covid-19 pandemic ,can become disadvantages especially in the context of the existing social determinants of health in the population. There are several protective factors, such as family support, multigenerational

households and healthier diets which have been described as the “Hispanic paradox”, which is a life expectancy that is higher than predicted when social economic factors are considered compared to other groups.

It is not equal for all Latinos, however, since among adults aged 65 and over, all foreign-born Latinos have an advantage over non-Hispanic whites. But some groups of Hispanics, such as US-born and foreign-born Mexicans between ages 25 and 64 have a mortality disadvantage relative to non-Hispanic whites, while older Mexicans exhibit a clear advantage (Fenelon, Chinn, & Anderson, 2017). However, during the pandemic these same protective factors contributed to the loss of two to three years of life expectancy due to increased incidence of the disease, increased severity, and lack of healthcare (Barna, 2021).

Obesity among Latinos is higher than in the general population. Prevalence is over 10% compared to 7% for the general population (Hales, Carroll, Fryar, & Ogden, 2020). There are many factors, including the change in dietary habits when first generations move from their native diet to the more processed and calorie rich diets more in the United States. This is particularly shown with the decrease in health status and life expectancy of the US born second generation (Lopez, Gonzalez-Barrera, & López, 2017).

3. Obesity, T2DM, Diabetic Retinopathy

In the United States, the prevalence of overweight among children increased between 1980 and 2004, and the heaviest children have been getting heavier (Ogden, Carroll, & Flegal, 2008). This suggests that the increase in obesity is in fact a life course phenomenon that starts in childhood, continues into adulthood, and continues into the senior years.

Obesity is a risk factor for many clinical conditions. One that is especially significant in this population is type 2 diabetes (T2DM), a disease that has also increased in prevalence in the Hispanic population. When undiagnosed or untreated, T2DM can lead to chronic, irreversible impairment of health.

While generally immigrants have better health profiles compared with those born in the United States, it has been shown that immigrants who arrive to the United States at younger ages are more likely to be overweight or obese with increasing length of residence than are immigrants who arrive to the United States at later ages. Immigrants to the US from Mexico, Central America, or the Caribbean are more likely overweight and to have diabetes than European migrants(Oza-Frank & Narayan, 2010). These Latino communities in the U.S. bear a disproportionate burden of diabetes mellitus (T2DM), with an estimated prevalence of 12.8% compared to 7.6% among non-Hispanic whites(Rodríguez & Campbell, 2017). Among people 18–74 years old of diverse Hispanic/Latino descent, those of Mexican descent are most affected, with a prevalence of 18.3% (Schneiderman et al., 2014).

In the past 20 years, from 2001 to 2020, in the United States, diabetes prevalence significantly increased among adults 18 or older. 37.3 million people have diabetes—that’s 11.3% of the US population with 28.7 million people who have been diagnosed with diabetes and 8.5 million who have not been diagnosed and do not know they have it. A total of 11.8% undiagnosed Hispanic versus 7.4% for non-Hispanic Whites. It is well established that when appropriate screening and timely treatments take place, diabetes complications can be significantly alleviated(CDC, 2022).

The Mexican Health and Aging Study (MHAS) is an ongoing nationally representative longitudinal study of adults in Mexico aged 50 years or older, and their spouses and/or partners regardless of age, beginning in 2001 with two follow-ups conducted in 2003 and 2012. With a final total sample is 18,465 individuals. 2012 of these participants were evaluated for factors associated with prediabetes, undiagnosed diabetes, and self-reported diabetes (Kumar, Wong, Ottenbacher,

& Al Snih, 2016). The authors propose that there is a high prevalence of prediabetes and undiagnosed diabetes among Mexican adults. This suggests the need for additional resources to prevent, identify, and treat this population with prediabetes and undiagnosed diabetes. Undiagnosed diabetes increases the risk of morbidity and mortality compared with not having diabetes, leading to high health care costs, loss of work productivity, and absenteeism at work (Tunceli et al., 2005).

The following presents an example of the morbidity caused by T2DM in the Latino migrant population. In national survey data different from the above study, for people aged 20 years or older the prevalence of diabetes among Mexican Americans is significantly higher with over 13.3% as compared to a prevalence of approximately 7.1% for non-Hispanic Whites in the United States, or 87% higher (Centers for Disease Control Prevention, 2011). T2DM has many complications, including one that is particularly devastating: diabetic retinopathy (DR). Diabetic retinopathy is the leading cause of preventable blindness in the United States (Garg & Davis, 2009). More than 40 percent of diabetics aged 40 and older have DR, many with an advanced, vision-threatening disease stage. Clinical trials show that early detection and treatment of DR can reduce vision loss by 90 percent- but approximately 60 percent of all diabetics do not receive timely eye examinations (AAO, 2016). Hispanic Americans age 50 and older (the majority of Mexican descent) are more likely to develop diabetic retinopathy, and especially the more threatening form of the disease with a prevalence rate of 8%, higher than blacks (5.4%) and non-Hispanic whites (5.1%) (Barsegian, Kotlyar, Lee, Salifu, & McFarlane, 2017; Lopez, Gonzalez-Barrera, & Cuddington, 2013).

We have chosen to use the example of DR to understand the factors that play into the long-term care of Latinos in the US. What are some of the factors that make Hispanics especially vulnerable to the complications of T2DM? Access to health care is a major factor. For most uninsured Latino adults, this lack of coverage is related to their socio-economic and immigration status, as well as language and socio-cultural barriers to access health services. California has the largest Latino population in the US, followed by Texas and Florida. In 2015, 8.6% of the Californian population was uninsured. This percentage was below the national level (10.5%) but the absolute number of Californians without coverage (2.9 million) represented almost 10% of the uninsured population in the U.S. (28.5 million). The likelihood of being uninsured is not independent of employer size and type, race/ethnicity, age group, citizenship, and family income. For instance, Latinos are more than two times more likely than other nonelderly racial/ethnic groups to be uninsured. 63% of the uninsured population are Latino, of which 64% are citizens, 34% have a family income below $25,000, and 12% are underage. Thus, 16.46% of the uninsured Californian population was Latino adults under the poverty line (Becker, Babey, & Charles, 2019; Fronstin, 2017).

For those who don't have a regular source of healthcare, the main providers are: public hospitals, through their emergency room departments; community clinics, which usually provide sliding scale primary care; and/or retail and on-line telehealth services, the majority of which may require cash payments, might not offer preventive services, can be very costly, and might be in English only. The result is that uninsured Latinos are less likely to have a usual source of health care and thus more likely to delay medical care. In the study, 55.2% of uninsured Latino adults had not had a routine check-up in the past year, and 47.4% had not had any doctor visit in the past year, compared to 26.3% and 20.2%, respectively, of those with insurance (Becker et al., 2019). This lack of access is one of the barriers to healthy aging and caregiving in the Latino population.

4. Cognitive and Mental Health Factors

Other risk factors that are of importance in the aging population include cognitive and mental health issues. Hispanics 65+ are more likely to have cognitive impairment than whites but less

likely than African Americans. The 2020 US Census–adjusted prevalence of clinical AD was 11.3%: 10.0% among non-Hispanic Whites, 14.0% among Hispanics, and 18.6% among non-Hispanic Blacks. It is estimated that by 2060 the total number of people living with AD in the US will increase to 13.85 million: the total will be 423% higher among Hispanics, 192% higher among Blacks, and 63% higher among Whites (Rajan et al., 2021).

Older Hispanics in California are predominately of Mexican origin(80%,) and very little is known about the frequencies and types of dementias in older California Hispanics. It has been shown that despite the high prevalence of dementia in older people, recent medical advances in the field, and media attention, the condition often goes unrecognized or is misdiagnosed during its early stages when treatment and management are probably most effective. Dementia is especially underdiagnosed and undertreated in the Hispanic and Black populations. In their study, Fitten et. al. found that comparison with data from predominantly white populations, the Latino proportion of AD cases was lower and that of vascular dementia cases was considerably higher than anticipated. They also found that the percentage among Latinos of clinically depressed older individuals was also high (Fitten, Ortiz, & Pontón, 2001).

Prevalence of depression among Hispanics in the United States is higher than the general population, and some studies measuring depression among ethnic minorities and white non-Hispanics in different parts of the US suggest that older Hispanics report the highest levels of depression (Sadule-Rios, 2012). However, other studies of Latino immigrants indicate that they also have better mental health outcomes than Latinos born in the United States and non-Latino Whites (Cook, Alegría, Lin, & Guo, 2009). Lower education attainment is also a factor determining the higher rates of cognitive impairment and cognitive decline found among Latinos (Zeki Al Hazzouri et al., 2011). It has been noted that Latino immigrants' risk of any psychiatric disorder, any depressive disorder, and any anxiety disorder increased with time in the United States (Cook et al., 2009). Therefore, during their lifetime, Latinos are more exposed to conditions associated with aging, including cognitive impairment, chronic diseases, and disability.

5. Access and Care Utilization

As discussed previously, the Latino population in the United States has been growing at a faster pace than the general population. From 2010 to 2019, the U.S. population increased by 18.9 million, and Hispanics accounted for more than half (52%) of this growth, according to a Pew Research Center analysis of new U.S. Census Bureau population estimates. (Krogstad, 2020). The older adult Latino population (65 years and over) was estimated at 2.8 million in 2009 and it is expected to reach 15 million in 2050 (Vincent & Velkoff, 2010). By 2030, more than 20 per- cent of the U.S. population will be aged 65 and older. (Johnson, 2020).

In an excellent summary, Andrade points out that most older Latinos- 54%- are foreign-born and many are from Mexico. As mentioned before, Latinos are a very varied population and have very different rates of citizenship, health insurance coverage and access to Medicare. In 2009, approximately 6% of older Latinos were uninsured, which is six times larger than the national average. And within this group there are important differences between foreign-born and native-born Latinos. Among the former, almost 10% lacked health insurance coverage, compared to only 1% of native-born (J. L. Angel, Rote, Brown, Angel, & Markides, 2014).

This demographic shift will increase the old-age dependency ratio, which is defined as the population ages 65-plus divided by the population ages 16-64. Due to the increasing share of the population that is 65 and older, the old-age dependency ratio is projected to increase, surpassing the youth dependency ratio in 2033 (Colby & Ortman, 2015). The result is that there will be fewer available caretakers for the growing older Latino population.

There are cultural, economic, and social factors that indicate that family support continues

to play an increasingly important role in the provision of informal care among older Latinos and Mexicans. Latinos are less likely than non-Hispanic Whites to use long-term care services and more likely to rely on family members for social support and caregiving (Hayes-Bautista, Chang, & Schink, 2012).

The result is that Latinos increasingly face challenges to provide needed care to aging adults. In general, older Latinos underutilize nursing homes and home health care services and primarily rely on their families for assistance (J. L. Angel et al., 2014). One important finding that helps understand the present and future trends of caregiving of the older Latino population is that while grown children of Mexican-origin (which includes both foreign-born and U.S. born) older adults play a critical role in providing active and financial supports to their aging parents, children of foreign-born parents have a greater burden. In fact, Mexican-born elders have higher rates of disability and are more dependent on a child for help and are much less likely to call upon other family members, relatives, and community based-providers for help than the U.S. born (J. L. Angel et al., 2014). This suggests that we must further explore the differences of foreign- and native-born Latinos to plan future interventions in the context of caregiving and caregiver burden.

Another factor that determines the choices and options available for Latinos in healthcare and caregiving is language proficiency. In studies of insured Latinos, low English language proficiency is associated with worse reports of the quality of primary care. Insurance status is the most used indicator of access to care; however, accessibility depends on many more factors, such as the various experiences reflecting a patient's ability to interact with the health care system. Latinos are more likely to report a lack of continuity of care, or no usual source of care. Latinos also give more negative ratings of specific aspects of primary care, including long wait times and worse listening skills by their providers (Pippins, Alegría, & Haas, 2007).

In 2009, most of the older Latino population was foreign-born (Passel, Cohn, & Lopez, 2011). According to census data, 6 million individuals aged 60 and over reported speaking Spanish at home. Among those, many have limited English proficiency (LEP), measured as speaking English "less than very well" (Dietrich & Hernandez, 2022). Considering the fast growth of the older Latino population, which may have limited English proficiency as well as cognitive decline, it will be increasingly difficult to provide culturally and linguistically competent health services to older Latinos.

6. Caregiving of Older Latinos

In an excellent study based on interviews in Mexico and the United States, Montes de Oca, et. al. looked at the strategies used by older adults to meet their formal and informal healthcare needs across the border. Some of their findings are important to understand the barriers faced by families that span the border. For example, only a small percentage of older adults indicated having the necessary conditions to move freely across the border and to be able to benefit from networks and healthcare systems in both countries. Older Mexicans in the United States who are undocumented depend largely on their children for care and support. Oder adults in Mexico whose children live in the United States face the challenge of the distance and reduced contact with offspring, reporting greater levels of sadness and depression and reduced feeling of wellbeing. For older adults living in Mexico, remittances from family in the U.S. are also important since many have inadequate access to healthcare and the pension system. The authors also reported that the number of available children, particularly daughters, is important to meet the informal-care needs of older adults (Montes de Oca, Sáenz, & Molina, 2012). This is also a reason why older Latinos tend to retire close to their family (Warner, 2012).

With many families split across the border, the children of older Mexicans must develop different strategies for providing care and financial resources to support and care for the health of

their aging parents. There is a relationship between the migratory experience of elderly parents as well as that of their children and the ability to care for them as they age. In a final statement that calls for action the authors state, “migrant workers nowadays have less possibilities of attaining a dignified and well-attended old age, since employment conditions in both countries are more precarious. It is thus evident that if attention to old age is already a considerable challenge it will be far greater 20 or 30 years hence” (Montes de Oca et al., 2012).

In a literature summary, Hayes Bautista et. al. describe how older adult Latinos also face a series of challenges to the use of long-term care, including health problems and conditions that contribute to use of in-home, nursing, and community health services. Other indicators include that disabled Latino older adults tend to remain in the community, while non-Hispanic whites are more likely to use a nursing home. In addition, Hispanics are more likely to rely on community or public clinics as their regular source of care. Due to cultural factors the extended family structure is the most important institution for Latinos regardless of their country of origin, length of residency in the United States, and social class. The family network provide supports for Latino elderly and strongly influences their self-esteem and spirit of Latino elderly. In their pilot study, the authors conclude that major disparities exist in the discharge of Latino elderly into long-term care. There is still a need to examine relationships between the Latino provider shortage and referrals to long-term care, role of family in decisions to enroll into long-term care, and cost and access to long-term care services (Hayes-Bautista et al., 2012).

There are several other areas where significant challenges for caring for older Latinos affect their families and caretakers. One significant public health problem--especially given that by 2030 all baby boomers will be age 65 or older--is the risk for developing degenerative-related dementias. Most research in this area has been on white non-Hispanic populations so the results may not reflect the experiences of Latino families and how they handle these behavioral symptoms. Studies that have focused on Latino families have reported elevated levels of behavioral symptoms among older Mexican-American participants with dementia compared with white non-Hispanic counterparts in other studies using similar methods (Hinton, Haan, Geller, & Mungas, 2003).

The result is that among Latino families there are increased rates of disability, caregiver depression problems and less access to or help from professional sources to address these problems (Hinton et al., 2003; Hinton, Tomaszewski Farias, & Wegelin, 2008). One trend described is that Mexican-American family caregivers in general had less understanding of the biomedical causes of dementia and tended to attribute behavioral changes to causes such as personality and stress rather than to the disease itself. For example, many families attributed Alzheimer's disease and related dementias to psychosocial stress or normal aging. Ethnicity, lower education, and sex were significantly associated with this type of explanatory model(Hinton, Chambers, & Velásquez, 2009; Hinton, Franz, Yeo, & Levkoff, 2005). If we hope to improve the ability of clinicians to provide culturally competent care to ethnically diverse older people and their families, we must better understand patients' and their families' ideas about the nature and cause of illness, or explanatory model.

Apesoa-Varano et. al. have studied the effects of behavioral changes, in particular an increase in aggressive behavior, on the home care for a demented family member in Latino families. They suggest that when medicalization, rather than a non-biomedical explanation, becomes the legitimate and acknowledged part of the family’s discourse, the strategy and work performed in dealing with the crisis is less likely to involve overt confrontation and reciprocal aggression between family members and the affected person. The diminished caregiver distress is a result of the family engaging in more subtle emotional work to de-escalate troublesome behavior through consistent interpretation within a biomedical framework(Apesoa-Varano, Barker, & Hinton, 2012)

The authors suggest that more emotionally ridden verbal negotiation results in the person

with dementia being exempted from responsibility for their violent acts yet are regarded as still capable of having and expressing legitimate desires and opinions in other respects. The blame for the troublesome behavior is thus placed on the disease as an autonomous biological process that is not reflective of the moral standing of the ill person (Apesoa-Varano et al., 2012).

7. Aging in Place

Aging in place is defined by the U.S. Centers for Disease Control and Prevention as: "the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level" (CDC). However, it is reported that current practices in human services, public health and health care fail to promote and sustain optimal functioning for Latino elders to "age in place," especially in low-income communities. Segregated communities, inequalities of income, and deterioration of neighborhoods all contribute to the lower ability of low-income Latino populations to age in place. This disparity must be addressed through "potential strategies for creating greater synergy across formal and informal systems of care and support to promote "aging in place" in low-income communities for Latino elders." The authors discuss three domains of concern to confront this issue: health, medical and social services; social support systems; and community context (Vega & González, 2012).

Increasingly there has been an interest in exploring technologies to support aging in place. However, there are limitations such, as the significant gap that exists between the potential benefits offered by technologies such as Artificial Intelligence (AI) and the barriers faced by older adults in the adoption of these technologies. Some factors include levels of education, which is critical not only for the older adults, but also for the technologists. What this means is that while increasing "technology literacy" of older adults can provide improvements in helping these users interact more successfully with technology, it is also essential that the technology creators understand better the older adult users of the technologies-- i.e., increasing "aging literacy" of technologists (Wang et al., 2019). This analysis is especially important when the users are older Latino adults where issues of education and literacy, language competency and cultural factors may further affect the adoption of technology. If there is an increased emphasis by policymakers and health systems on the use of technology to support aging in place, we run the risk that entire populations will be underserved. The success of a technology is determined by the ability of the end users to adopt and utilize it.

8. Policy and Caregiving

As mentioned, policy will be an important factor for successful aging. In the US there have been several new initiatives, such as the Community Living Assistance Services and Support Act (CLASS), which is part of the Patient Protection and Affordable Care Act. These initiatives are expected to provide support for independent and home-based living of individuals with limitations of the activities of the daily living. An example is the offer of cash benefits that could be used by individuals and families to pay for services that could facilitate their daily lives, such as paying for daycare centers and hiring personal assistants. If fully instituted, this could potentially address some of the emotional, physical, and financial barriers faced by Latino families, reducing the care-taking burden (Vega & González, 2012).

One factor unique to the Mexican population living on both sides of the border, which offers opportunities as well as complications, is the possibility of bi-national reciprocal arrangements between the United States and Mexico to provide care to native and foreign-born Latinos. Some possibilities include the portability of Medicare, at least for emergencies, which would benefit many Medicare beneficiaries living abroad, not only Latinos(Warner, 2012). Although there are many undocumented Mexican immigrants in the United States, the elderly Mexican-born population has

very different characteristics from the average immigrant. Most are U.S. citizens or permanent residents. The result is that most immigrants from Mexico over the age of 60 are or will be eligible for Social Security and Medicare. The Social Security is a nearly universal program in the United States which pays benefits to retired individuals and some family members, disabled persons and some family members, and survivors. In general, U.S. citizens may receive their Social Security payments outside the U.S. as long as they are eligible for them. Medicare is federal health insurance for anyone age 65 and older, and for some people under 65 with certain disabilities or conditions. It is limited in that in most situations, Medicare won't pay for health care or supplies received outside the U.S. Thus, older Mexicans eligible for Medicare who choose to live in Mexico would not receive health care except in very limited circumstances (Medicare.gov, 2023). Mexican citizens living in the US, or those individuals returning to Mexico who hold Mexican citizenship, can receive the Mexican equivalent of Medicare called the "Seguro de Salud" of the IMSS by applying and paying the annual quotas (IMSS, 2023). However, they may not be eligible for the Mexican Social Security since they may not fulfill the requirements of minimum work years (Emma Aguila, Lee, & Wong, 2023). In the United States and Mexico the access to public retirement benefits requires a minimum number of years of contributions through work and the amount of the pension benefit is based on earnings. Older individuals who do not have access to benefits may choose to remain working at older ages or may rely on income support from family members. This underlines the importance of instituting a bilateral social security agreement between the United States and Mexico (E. Aguila & Zissimopoulos, 2013).

There are incentives for the aging migrant Mexican population to cross the border to access different services, such as those returning to Mexico for an extended period returning to the United States for medical care, while continuing to receive their Social Security checks (Warner, 2012). Thus, while most older Latinos are permanent residents or have citizenship making them eligible for Medicare and Social Security, this may change in the future if there is a significant increase in the number of older Latino adults that age in the United States without pension or healthcare benefits. Research has found that Hispanics rely more than other groups on social security benefits to sustain their post-retirement years (Emma Aguila et al., 2023).

II CONCLUSION

In this paper we have reviewed some of the literature regarding transnational family caregiving and caregivers' wellness among Latinos, particularly Mexicans, in the United States and Mexico. We have seen that the older Latino populations are growing in both the US and Mexico consistent with global trends. These populations are not homogeneous, and there is great variation and diversity within and between Latino communities in both countries. However, in general, there is a disproportionate risk for poor economic and health outcomes in these communities. Many factors are responsible including historical and institutionalized discrimination. During the 2017-2021 polarized political period in the US, four-in-ten Latinos said they had experienced discrimination in the past year, such as being criticized for speaking Spanish or being told to go back to their home country. As a sign of the polarization of that period, nearly four-in-10 Latinos said that during the past 12 months, someone had expressed support for them because they are Hispanic or Latino. (Lopez, Gonzalez-Barrera, & Krogstad, 2018) This, as we have seen, translates into lower socio-economic status and poor health outcomes for older Latino adults and their caregivers.

It must be recognized poor health outcomes in one group, such as Latino populations, affects everyone in society not only the Latino populations. According to the WHO, there is ample evidence that social factors, including education, employment status, income level, gender and ethnicity have a marked influence on how healthy a person is. The wide disparities in the health

status of different social groups in all countries mean in that the lower an individual's socio-economic position, the higher the risk of poor health (WHO, 2018). There is much evidence that historically government policies have focused resources only on some segments of society. If we are to improve health for all people and to reduce unfair and unjust inequalities in health, action is needed across the social gradient (Marmot, 2013). In short, having members of any society with worse health outcomes or limited healthy aging affects the outcomes for all society. In the case of Latinos in the US, as a growing and aging population, the effect is magnified and becomes a major social and political imperative.

We must also emphasize that we are not looking just at deficits. There are many strengths and resilience assets and promotive factors that must be acknowledged and supported in the Latino population. Many solutions to problems can be found in the cultural and historical traditions that are part of the Latino community.

Latinos tend to be highly group oriented. As a group they generally place a strong emphasis on family as the major source of one's identity and protection against the hardships of life. Their strengths include characteristics of individuals (e.g., optimism, bilingualism) and families (e.g., family cohesion, intergenerational households, family support and stability) that increases the likelihood of positive outcomes. When faced with adversities, many Latino families rely on these strengths to provide a loving and nurturing environment (Cabrera, Alonso, Chen, & Ghosh, 2022).

Healthy aging is much more than just increased life expectancy. Even though Latinos have historically had a more favorable life expectancy than other groups, older Mexican-origin individuals suffer substantial disability and the health consequences of high rates of chronic diseases such as diabetes (R. Angel & Angel, 1999). The Covid-19 pandemic has further accentuated these challenges since there has been a decrease in life expectancy among Latinos greater than the non-Latino white population for various reasons (Barna, 2021).

While some of the greatest strengths of the Latino communities lie in the strong support by families and community for aging adults, these commitments put enormous pressures on the informal caregivers who are usually younger and predominantly female. The increased stress and mental and physical consequences must be addressed to support those in this role. The benefits, both economic and emotional, to older Latino adults and to society at large cannot be over emphasized. By recognizing the essential role played by care givers, policy makers can help make it possible to provide support for this essential function. This will require a collaboration between governments on both sides of the border, given the complicated situation of the cross-border population regarding citizenship, immigration status, residency and health care eligibility and access. Addressing these needs will also necessitate a transdisciplinary approach with stakeholders at many different levels and areas of expertise. It will require economic support, access to healthcare, mental health support, social supports such as childcare, and many more.

Another area discussed is the importance of cultural and linguistic competency of the healthcare providers. Some of the most significant barriers to accessing care for older Latino adults lie in a disconnect between the perceptions and understanding of the providers and the recipients. A lack of comprehension of the biomedical causes of disease, such as dementias, may result in greater stress for the families of patients and when combined with the limitations of communication by providers due to language barriers the result is more stressful and less successful care for older Latino adults.

Until significant changes occur at the many levels--personal, interpersonal, institutional, community and policy--it will be difficult to reach the goals set by national and international organizations: "Healthy and independent older people contribute to the well-being of families and communities. It is a myth to portray them as passive recipients of social or health services. Now, the number of older people increases exponentially in complex and uncertain socio-economic

conjectures and only tailored interventions will make it possible to enhance the contribution of this group to social development and prevent it from becoming a crisis factor for the health structure and the social security of the Americas. Healthy aging is a continuous process of optimizing opportunities to maintain and improve physical and mental health, independence, and quality of life throughout the life course" (PAHO, 2023).

For the Latino population in the US, particularly those of Mexican origin, the distinctive circumstances of communities and their unique historic, cultural, and social legacies contribute not only to enormous strengths and resiliency resources but also to barriers and disadvantages that are faced by Latino persons as they age. In this paper we suggest that the creative strategies that they use to deal with the emotional, physical, and economic strains associated with caring for their older members can serve as examples for other countries where the circumstances of migration and aging are interconnected.

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