

A Tridimensional View of the Hispanic Health Paradox: Its Relationship with Faith, the Enclave Theory, and Familism

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ABSTRACT

This paper examines the "Hispanic (American) Health Paradox," the juxtaposition of Hispanics' longer lifespan than the average American amid numerous inequities regarding social determinants of health. Hispanic Americans endure multiple health disparities with a higher incidence and prevalence of chronic conditions. They also experience multiple psychosocial and physical health challenges, including higher rates of food insecurity, poverty, segregation, discrimination, and limited or no access to medical care. Nevertheless, Hispanics enjoy better physical well-being and lower mortality rates when compared to non-Hispanics in the United States (Ruiz et al., 2021). This project aims to analyze the sources of this group's biosocial advantages and resilience, allowing them to have a longer lifespan amidst their lower health status and increased risk for chronic conditions. It explores the political and social justice implications of these inequities. It also examines the strategies to close the gap on Latinos' current health care disparities via public policy aspects of federal and state legislature. A narrative review method was utilized to examine the existing literature on this paradoxical effect. Keywords based on Medical Subject Headings (MeSH) used to search resources for relevant studies included: Hispanic health paradox (health paradox, immigrant paradox), ethnic minorities (Latinos, LatinX), health disparities (disproportionate health, health inequities), social justice (healthcare stakeholders, health inequities solutions, inequities recommendations), mental health, physical health, and comorbidities. A quality assessment of full-text peer-reviewed articles yielded 80 articles to compile this narrative review. The research revealed that, despite glaring disparities in social determinants of health, Hispanic Americans have overall experienced better health outcomes through a culture that emphasizes spirituality, community support, and strong family ties.

Keywords: Hispanic health paradox, Hispanic mental health paradox, Hispanic homelessness paradox, social determinants of health, social inequity, health disparities, Latino

INTRODUCTION

A Hispanic person is defined as "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race" (Statista Research Department, 2021). In this paper, the terms 'Hispanic' and 'Latino' will be used interchangeably, although nuances in the different meanings of the two terms exist. Latinos are the largest ethnic minority group in the United States. It is estimated that almost 112 million Hispanics will be residing in the country in the next four decades, constituting the fastest-growing minority group. The most sizable portion of Latinos is of Mexican descent, amounting to over 35 million in 2018. Puerto Ricans and Cubans comprise the second and third largest Hispanic groups, totaling 6 million and 2 million individuals, respectively (Statista Research Department, 2021). This article seeks to address the health and social disparities that burden Hispanics, the risk factors for these inequities, and the most relevant social determinants of health (SDOH) that contribute to these inequalities. The Hispanic health paradox was examined in three realms: physical health, mental health, and homelessness. Despite the existing inequities in these areas, the research revealed that members of this ethnic group often enjoy longer and better-quality lives. Lastly, potential policy and access improvements were explored to help bridge the gap in services and health outcomes.

Health disparities were defined as "differences in health which are not only unnecessary and avoidable but, in addition, are considered unfair and unjust" (Braveman, 2006, p. 168). SDOH, according to the Healthy People 2020's definition, "are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" (Office of Disease Prevention and Health Promotion [ODPHP], 2021). Social, economic, and physical conditions in these various environments and settings, such as school, church, workplace, and neighborhood, have been referred to as "place." (Office of Disease Prevention and Health Promotion [ODPHP], 2021).

Hispanics tend to experience many difficulties and obstacles influenced by economic and biosocial factors such as financial instability and occupation, limited academic advances, disparate culture, language barriers, lack of social support, structural discrimination, immigration status, and insufficient healthcare access. These obstacles perpetuate a cycle of untreated or poorly managed chronic conditions, leading to a continuous "fight or flight" state with cortisol-mediated immunosuppression (Velasco-Mondragon et al., 2016). The American Public Health Association advised that Hispanics' lack of access to community-based health determinants results in poor diet, sedentarism, substance use, and chronic stress, contributing to the physical and mental health burdens facing them. Inadequate access to affordable housing, transportation, and green spaces limits Latinos' ability to develop healthy and active exercise routines while placing them at a lower socioeconomic status with negative implications regarding reliable food access, stable and well-paying jobs, and academic and career opportunities, all of which make up the basics of health justice and equity (Krisberg, 2021). Hence, there is a critical need for legislative changes and the involvement of the pertinent stakeholders to modify current policies and laws toward reducing these discrepancies in SDOH.

METHODOLOGY

A narrative review of the literature was conducted between 2020 and 2022 to identify sources discussing the Hispanic health paradox. The databases MEDLINE, PubMed, ScienceDirect, Elsevier, Google Scholar, CORE, and Bielefeld Academic Search Engine (BASE) were searched

using the keywords “Hispanic health paradox,” “health paradox,” “immigrant paradox,” “ethnic minorities,” “Latinos,” “Latin X,” “health disparities,” “disproportionate health,” “health inequities,” “social justice,” “healthcare stakeholders,” “health inequities solutions,” “inequities recommendations,” “mental health,” physical health,” and “co-morbidities.” Articles were deemed relevant and included in the initial evaluation based on the review of titles, abstracts, and conclusions. The inclusion criteria required full-text availability and publication between 2002 and 2021. Articles were excluded if they were published before 2001. A total of 800 relevant articles were generated from the initial search. Paper titles and abstracts were subsequently studied and analyzed, and 100 articles were then selected from the search. A total of 80 research articles were selected for this narrative review. Supplementary information was gathered from governmental and public health agency websites and included as relevant and timely sources, generating 20 articles.

Findings were organized and discussed in four main categories: barriers to optimal health status and social determinants of health (food, physical environment, economic instability, education, healthcare, community and social contexts); health outcomes and their corresponding paradoxes (physical health, mental health, homelessness); and sources of Hispanic resiliency (faith, the enclave theory, familism).

FINDINGS

Barriers to Optimal Health Status and Social Determinants of Health

Food: Living in a Food Desert or Living with Food Insecurity

Food deserts are areas typically found in low-income neighborhoods where access to more nutritious options, such as fresh fruits and vegetables, is limited due to the absence of grocery stores or financial attainability. Currently, the United States has over 24 million people living in food desert areas, with the most significant disparity among Hispanics, who have access to only one-third of the grocery stores that non-Hispanics do. Further, Hispanics are exposed to up to three times more fast-food restaurants than those who reside in non-food desert neighborhoods (DoSomething.org, 2021). For this reason, low-income Latinos in these food desert neighborhoods have a higher prevalence of poor dietary intake, empty calories, and saturated fats, carving a direct line to the high incidence of obesity, diabetes, chronic cardiovascular conditions, and up to twice the likelihood of death due to uncontrolled pre-existing chronic conditions compared to residents of non-food desert neighborhoods (DoSomething.org, 2021). For example, the multivariate logistic regression model by Hernandez et al. (2017) demonstrated that food insecurity was most prevalent in minority groups, especially Hispanics, with women exhibiting higher rates of obesity compared to food-secure women across all races and ethnicities. In addition, this study's covariate-adjusted model revealed an over 40% association between food insecurity and obesity and 30% odds of being overweight among Hispanic women (Hernandez et al., 2017).

Potential behavioral mechanisms of the previous relationships include what MacNeil et al. (2017) indicated in their study of low-income Latina women and caregivers of young children. These women reported unaffordable prices, lack of transportation to health-food grocery stores, and lack of financial attainment or inability to utilize the Supplemental Nutrition Assistance Program (SNAP) as primary determinants of their grocery shopping patterns (MacNeil et al., 2017). In other words, Latino families are limited in accessing healthy foods due to the lack of available grocery stores, their neighborhood's environmental factors, and

financial limitations. Cabral (2018) conducted a One-Way ANOVA that deduced a statistically significant relationship between Hispanics' educational attainment and food insecurity in California. Currently, Latinos face significant barriers to advancing academically compared to individuals of other ethnicities due to language, immigration, and other social issues, putting them at higher risks of food deficiency and hunger.

FOOD: HUNGER

Besides food deserts in Hispanic-dense neighborhoods reducing the ability for Latinos to access healthy foods, lack of financial means is another leading contributor to the current hunger, obesity, and malnutrition issue among this ethnic group. Among the pediatric Hispanic population in the United States, over 35% of children are considered overweight or obese – the country's highest proportion of childhood obesity. However, due to the food insecurity that most Hispanic households endure, almost 40% of children experience hunger and malnutrition, revealing a simultaneous yet contrasting phenomenon (National Council of La Raza, 2011).

One mechanism that explains these issues is the job instability that most Hispanic caregivers experience, resulting in living below the poverty line. Moreover, many have inadequate access to medical care and experience forced living in neighborhoods with poor community support systems. Most parents reported that their limited household income caused multiple restrictions in rent and electricity payments, and the only means to cut down and save money was to buy low-quality food or less food overall. For this reason, most of them described federal nutritional programs such as WIC or SNAP as an essential means of avoiding hunger and buying otherwise unaffordable, healthy essential foods such as milk, eggs, and fruit (National Council of La Raza, 2011). However, not all Hispanic caregivers can enroll in these federally subsidized programs and lack the proper community, and social support needed to obtain food stamps and quality health care.

In summary, Hispanics face many barriers to obtaining healthy foods, and when available, work instability and poverty cause hunger and food insecurity, with higher incidence and prevalence among children. In addition, only some Latino caregivers obtain the necessary social support to enroll in federal nutritional programs to help them maintain a consistent and healthy diet – and this is the exception, not the norm.

PHYSICAL ENVIRONMENT: HOUSING AND SAFETY

Hispanics are typically forced into poor and low-income neighborhoods that carry with them negative implications for safety, social and community support, and air quality. Lack of neighborhood safety, described as the perception of unsafe areas and high crime rates, has been associated with obesity among children and adults even after adjusting for socioeconomic factors. In addition, several reports have demonstrated strong associations between high crime rates and sedentarism among women only (Suglia et al., 2016). Unsafe Latin-dense neighborhoods are also associated with poor social network development and poor community support. A lack of neighborhood safety reduced social connections among residents and negatively impacted physical health via increased Body Mass Index (BMI) (Suglia et al., 2016).

In addition to the lack of community support mentioned above, perceived residential distrust also decreases the probability of outdoor physical activity and reduces opportunities for community engagement and support to promote healthy behaviors. Furthermore, the constant

perception of threats and insecurity causes chronic activation of the "fight or flight" system with perpetual stress hormone secretion, precipitating cortisol-mediated immunosuppression, and a diabetes-like state with adverse effects on the cardiovascular system. Lack of residential safety also has detrimental effects on the mental health of Hispanic men, manifesting as a higher incidence of depression and substance abuse (Squires et al., 2012). As a result, Hispanics' high crime rates in neighborhoods hinder their ability to prevent obesity and exercise safely. This is compounded by a threat to their immune system through perpetual cortisol-mediated immunosuppression, resulting in central fat deposition and a diabetes-like state with adverse effects on the cardiovascular system.

Similarly, Xiao & Graham (2019) described the relationship between chronic neighborhood stressors and hypertension prevalence. Their study investigated chronic neighborhood stressors, such as lack of safety and social networking, associated with the increased prevalence of high blood pressure among Hispanics. In addition, premenopausal Hispanics who perceived their neighborhood as unsafe had higher abdominal adipose deposits and higher BMI than those who viewed their residential areas as safe (Xiao & Graham, 2019). In summation, high residential crime rates in Latino neighborhoods increase susceptibility to cardiovascular conditions such as hypertension, obesity, diabetes, and insulin resistance.

Xiao & Graham (2019) also found that Hispanic-dense neighborhoods (more than 50% Latinos in the area) are disproportionately exposed to poor air quality: almost 10% higher fine particulate matter with a diameter of fewer than 2.5 μm ($\text{PM}_{2.5}$), with 30% more types of nitrous oxides compared to majority Caucasian neighborhoods (less than 25% Latinos in the area). $\text{PM}_{2.5}$ is a major public health concern as studies investigating short-term exposure of up to only 24 hours in length found a solid correlation to increased respiratory co-morbidities and premature death, resulting in an increased need for emergency room visits and restricted activities of daily living (California Air Resources Board, 2021). Due to the small diameter of this particulate matter, it has been strongly implicated in damage to the delicate bronchioles and small functional lung cells, which partially explains the respiratory pathology seen in high concentration exposures, including asthma exacerbations and chronic bronchitis. Similar effects have been documented with exposure to nitrous oxides such as nitric oxide, nitrogen dioxide, nitrous acid, and nitric acid (United States Environmental Protection Agency [EPA], 2021). Consequently, Hispanics are more susceptible to respiratory illness and worse pulmonary outcomes due to the poor air quality and high pollutant exposure in their built environment.

Regarding housing, Hispanics have a higher likelihood of crowded living situations. Mora et al. (2016) reported on the mental health effects that crowded housing imposes on Latinos, citing an association between more than five individuals sleeping in the same room, lack of a safe place to store belongings, and lack of bed storage with depression scores higher than ten on each category per the Center for Epidemiologic Studies Depression Scale (CES-D). The study also found strong associations between severe anxiety scores higher than 27 based on the Personality Assessment Inventory (PAI) and those without a key for their house or room (Mora et al., 2016). Therefore, the mental health of Hispanics is jeopardized when multiple people share the same room and lack adequate storage, leading to an increased probability of depression and anxiety. Besides mental health problems, crowded living conditions among Latinos also affect sleep quality, generating increased susceptibility to many chronic conditions.

Housing and neighborhood turmoil and perceptions of infrastructure problems were linked to more significant sleep disruption and reduced quality of overnight rest (Chambers et al., 2016). Hispanics are thus at risk of multiple preventable chronic conditions associated with poor sleep outcomes, including inferior quality living conditions and frequently disturbed sleeping periods.

PHYSICAL ENVIRONMENT: GREEN SPACES

Hispanics also endure environmental injustices regarding green spaces in their built environment. One study by Rigolon et al. (2018) reported inequities in scores for park systems and their quality based on income and ethnic groups, noting lower scores in low-income Hispanic-predominant cities. One probable cause of this inequity was the change in the political economy of parks with reduced local tax contributions and greater dependency on national nonprofits and public support. With Hispanics persisting as a low-income ethnic group with little to no advocacy agencies in their neighborhood, they faced many barriers to accessing national sources of financial support for green spaces in their cities (Rigolon et al., 2018). For this reason, the Latino-predominant cities continue to exhibit a high incidence of cardiovascular disease, diabetes, and obesity secondary, in part, to a sedentary lifestyle.

One of the most thoroughly studied neighborhood social features is *poverty*, which has severe implications for obesity and a sedentary lifestyle. Neighborhoods with little to no governmental financial support typically have fewer resources for green spaces. The absence of parks, playgrounds, and sidewalks contributes to higher obesity rates. This scarcity is also associated with higher crime rates, poor social infrastructure, diminished community, social cohesion, social capital, and overall low aesthetic features of limited recreational areas (Suglia et al., 2016). The neighborhood poverty theory establishes the clear connection between absent green spaces, sedentarism, and obesity in Hispanics.

PHYSICAL ENVIRONMENT: LACK OF TRANSPORTATION AND PHYSICAL MEANS TO HEALTH AND HUMAN SERVICES

In the United States, over 3.5 million people annually cannot access medical care due to lack of transportation, such as inability to buy or rent a vehicle; insufficient transportation systems; long commuting time to health care facilities; transportation expenses; and unfavorable policies that affect ease and availability of transportation (American Hospital Association [AHA], 2021). Wolfe et al. (2020) reported that those most affected are Latinos living below poverty levels, Medicaid patients, and those with disabilities. Therefore, transportation barriers disproportionately affect low-income Hispanics, resulting in adverse effects on medical plan compliance, timely and adequate access to medical care, management of pre-existing chronic conditions, and reliable preventative care.

ECONOMIC INSTABILITY: FINANCIAL STATUS AND OCCUPATION

Hispanics have twice the likelihood of poverty compared to Caucasians. Some of the contributing factors to their poor financial status include work instability, occupation type, and dependent children in the household with low educational attainments (Gradín, 2012). Moreover, the recently elevated rates of Hispanic immigration have created changes in the current employment situation towards greater instability and informality with no employment benefits and little to no short- or long-term assurances (Flippen, 2012). For example, with the current COVID-19 pandemic, Latinos make up a disproportionately substantial percentage

across essential working positions with the risk of continuous, first-line exposure to potentially infected individuals. Despite making up a little over 15% of the American population, Latino employees comprise around one-third of all construction workers, one of the first fields to return to regular working hours during the pandemic. This situation is compounded with no sick paid days off, no insurance coverage, or short- and long-term disability benefits (Williams et al., 2020). With no paid time-off, Hispanics face a dilemma trying to quarantine yet provide a consistent income to their families. This reality proves that low-paying jobs held by many Hispanics create financial instability and pose a threat to their economic vitality.

Additionally, Hispanics with Limited English Proficiency (LEP) are often employed in jobs with high occupational risks and little to no worker's compensation than those who speak English fluently. One explanation is that undocumented Latinos have no choice but to hold low-paying, high-risk jobs. Many have already suffered dangerous situations during their migration path and are monolingual Spanish-speakers (Dávila et al., 2011). What is more, immigrant workers have lower rates of reporting work-related injuries due to their fear of retaliation from employers based on immigration status and their LEP (Madera & Chang, 2011). Therefore, Hispanics have jobs with absent or limited employee benefits and perform dangerous jobs that threaten their health. Deficient employment opportunities for Hispanics, especially recent immigrants, put them at risk of contagious illness, unintentional injury, and living below the poverty line with low-paying jobs and no short- and long-term disability benefits in case of occupational accidents.

ECONOMIC INSTABILITY: INCOME INEQUALITY

Hispanics experience financial and income racial disparities and are at the lower end of the wealth accumulation than other racial groups. Income inequality partially explains this effect, but it does not fully explain the *Racial Wealth Gap*. Wealth is not just money accumulation, but it also includes compensation from medical insurance, tuition funds, retirement benefits offered at work, and financial opportunities for physical, mental, and social well-being (McKernan et al., 2013). Recently, the wealth gap has been widening, with the collective wealth of Whites being six times that of Latinos. As the income and wealth for Whites continue to increase, the wealth of Latinos diminishes, and they continue to accrue more debt with the same or lower income. Consequently, the rich become more affluent, while the poor plunge deeper into poverty.

Similarly, Hispanic families are less likely to own a house and a retirement fund than Whites, hindering their ability to profit from wealth-producing assets. Less than 50% of Latino families were homeowners in the last decade, compared to 75% of Whites (McKernan et al., 2013). In addition to home ownership, recent literature attributes this wealth gap to educational advancement. Findings demonstrated that the White-Hispanic wealth gap at the mean and median distributions are attributable to educational attainment (Thompson & Juarez, 2015). Not surprisingly, most Whites achieve higher educational levels than Hispanics, who typically only complete high school or vocational and technical training.

Despite Hispanics experiencing a favorable shift in opportunities for higher education and women having the same or higher levels compared to men across all races, the distribution of those with advanced degrees continues to be disproportionate for Latinos. For example, per the American Medical Association, only 3% of current physicians are Hispanic, including first-

generation immigrants and first-generation born in the United States, of which just over 3% (0.9%) are women (Rice, 2011). Therefore, Hispanics experience income and wealth inequalities secondary to lower academic achievements and thus decreased opportunity to buy a home and enjoy the benefits that Whites do from wealth-producing means. This situation perpetuates the low-income and financial instability that restricts Hispanics' living conditions below poverty lines (U.S. Department of Health and Human Services Office of Minority Health [OMH], 2021).

EDUCATION: VOCATIONAL SCHOOL AND HIGHER EDUCATION

Despite the recent increase in Hispanics obtaining higher education levels, there is increasing evidence of policy and school system deficiencies that allow Latinos to suffer academically compared to other ethnic groups (Carrasco Ramos, 2018). For example, Mahatmya et al. (2016) investigated teachers' perceptions and expectations that their students' future academic advances and current interest in school would have on their professional growth. It was found that K-12 grade teachers' cultural competency was related to their perceptions of students' educational attainments (Mahatmya et al., 2016). Unfortunately, most teachers had limited or no cultural awareness regarding Hispanics, negatively affecting their perceptions (Taylor et al., 2016). Consequently, the current United States' school system and teachers' low perceptions of Hispanic students' interest in school and low expectations for their future academic accomplishments continue to shape the negative educational and professional patterns seen today.

Immigration status also influences Hispanics' education attainment and professional development. Covarrubias and Lara (2013) investigated the impact of citizenship status on academic advancements for persons of Mexican descent. It was concluded that anti-immigrant policies targeting specific minority groups hinder professional degrees, especially undocumented students. Also, increased political influence by Latin migrants sponsored by political parties posing as objective representatives of Hispanics contributes to the misrepresentation of Mexican American students. In conjunction with illegal migratory statuses, immigrants encounter more significant barriers to furthering their academic goals (Covarrubias & Lara, 2013). Because of anti-immigrant policies, Hispanic students with no citizenship or legal residency face additional obstacles to higher education compared to non-Hispanics, with negative implications on their finances, employment stability, and professional growth.

EDUCATION: LANGUAGE AND LITERACY

Language is defined as either a written or spoken form of communication. Literacy includes the knowledge and expertise one has regarding different skills, "such as oral, print, numeracy and cultural competency" (Office of Disease Prevention and Health Promotion [ODPHP], 2021). Currently, the United States has over 25 million individuals with Limited English Proficiency (LEP), making up almost 10% of the nation's population. Latinos constitute more than 60% of the American population, of which one-third are LEPs (Dunlap et al., 2015). These individuals are mainly immigrants with lower educational levels, whose household primary language is not English (Scamman, 2018). Thus, monolingual Hispanics encounter barriers to advancing academically, professionally, and accessing quality health care.

Hispanic immigrants in hazardous jobs are less likely to see improvements in their work-related safety since they are LEPs with limited literacy in corporate and workplace language, and therefore, prevention programs and campaigns are not delivered (Lin et al., 2018). This makes Hispanic LEPs vulnerable as employees with communication barriers to reporting injuries, securing safer job opportunities, and obtaining linguistically competent job safety training. Hispanic LEPs, especially those with limited health literacy, also encounter obstacles when accessing health care. Health illiteracy creates a barrier for LEPs to navigate insurance plans and obtain or use medical insurance. Health illiteracy also limits their understanding of medical plans and the importance of medication, treatment compliance, and follow-up. Monolingual Latinos are less compliant with doctors' instructions and treatment plans when using an interpreter or speaking with a monolingual English provider (White, 2014). As a result, LEP Hispanics experience unique access barriers to timely and quality medical care, and when care is received, patient compliance is reduced in the absence of linguist-congruent patient education and limited health literacy. As expected, medication compliance is a major public health concern strongly associated with poor health outcomes and increased health care costs.

Further, bilingualism or speaking Spanish perpetuates academic and social inequities for American Latinos who feel excluded from the dominant group, based only on their native or predominant language spoken at home. Still, the 2019 Census Bureau reported that over 70% of Hispanics speak a language other than English at home (U.S. Department of Health and Human Services Office of Minority Health [OMH], 2021). García's (2009) study demonstrated that American schools maintain educational inequities for American Latinos by racializing the Spanish language and equating being bilingual with being non-White. Therefore, the United States' school system and society minoritize the position of American Latinos while engendering an attitude of ethnic exclusion with adverse effects on educational attainments, professional opportunities, and financial stability (García, 2009).

HEALTHCARE: INADEQUATE OR NO INSURANCE COVERAGE

Hispanics have the highest uninsured rates of any racial group in the country. In 2019, the Census Bureau reported that three-quarters of non-Hispanics can afford and access private insurance compared to only half of the Hispanic population. Likewise, almost 20% of Hispanics were uninsured compared to a little less than 7% of non-Hispanics (U.S. Department of Health and Human Services Office of Minority Health [OMH], 2021). Reasons accounting for underinsurance or being uninsured include limited English proficiency, living below the poverty level due to employment instability, employment with jobs not offering medical insurance benefits, citizenship status, and cultural hurdles (Flores et al., 2006). Naturally, Latinos in the United States are thus at higher risk of suffering long-term effects of preventable and treatable chronic conditions and delaying seeking medical care. Much of this health coverage discrepancy can also be explained by Hispanics' low socioeconomic status and low academic advancements. Moreover, Sohn (2017) demonstrated the continued trend of minorities losing medical coverage more quickly than Whites. Latinos have significant insurance losses in adulthood, with far more disproportionate losses in the fourth and fifth decades of life. This trend has been aggravated by the recent COVID-19 pandemic, which exacerbated Hispanic unemployment rates, elevated essential workers' occupational exposure to the virus, and delayed medical care resulting in worse health outcomes.

HEALTHCARE: LACK OF CULTURALLY COMPETENT CARE

Ginzberg (2019) documented the association between Hispanic-dense areas and an increased need to improve medical services and healthcare access. An explanatory mechanism of low medical care quality in these geographical locations was the critical underrepresentation of Hispanics in health care fields, particularly those at advanced professional levels (Ginzberg, 2019). Indeed, Hispanics' limited or inaccessible medical care is further complicated by the low care quality they *can* access with providers they cannot relate to or feel culturally detached from, leading to less effective treatment and lower medication adherence rates. LaVeist et al. (2011) estimated the country's financial cost of this Hispanic health inequity, and it was calculated that direct costs surpass \$200 million, and indirect costs, such as decreased productivity time, amount to over \$1 trillion in the past decade alone. Proper adjustments need to be made to address the current inflation (LaVeist et al., 2011). Much of this expenditure on differences in health care among Hispanics and non-Hispanics could be redirected to lessen the gap in services needed by Latinos and potentially improve the poor health outcomes among this ethnic group.

Betancourt et al. (2003) regarded cultural incompetency in health care as a contributor to health disparities among Latinos. It was concluded that lack of cultural awareness resulting from sociocultural barriers at the organizational (leadership) level; structural obstacles with care processes; and low-quality patient-physician encounters were the leading causes of these differences for Latinos. Abrishami (2018) also illustrated barriers to overcoming health care disparities among Latinos by documenting health care providers' behaviors as contributing factors at the organizational and individual levels. Providers' deviations from or inadequacy in patient-centered standard practices were attributable causes of decreased empathy and culturally appropriate care (Abrishami, 2018). In other words, multiple levels of public health infrastructure in health care play a part in Latinos' disparities when accessing services at the medical level and the social and cultural level. Similarly, the research found that among 200 experienced primary care doctors, 120 had a significant implicit bias against Hispanics (Blair et al., 2013). This data confirms the previous reports on health care providers' influence on Hispanics' health disparities, especially concerning cultural awareness and proficiency.

COMMUNITY AND SOCIAL CONTEXTS: IMMIGRATION STATUS AND RACIAL DISCRIMINATION

Institutional discrimination, as seen in the health care setting, the housing market, or the workplace, has been noted to have negative consequences for Hispanics since it perpetuates their low-income status, resulting in children being raised in poor households with poor developmental, educational, and health outcomes. According to Ayon (2015), immigrants have a 4% higher likelihood of living in poverty than U.S. citizens, and 11% higher if the household has children younger than 18. Naturally, poverty has many causes. However, systemic discrimination is at the heart of Latinos' limited health care access, which feeds into a cycle of recurring poverty (Ayon, 2015). In the United States, racial health disparities continue to be a factor in inequity even when poverty is not a factor. Colen et al. (2018) confirmed that these disparities are more evident in higher socioeconomic levels than among the poor. Throughout their 33-year-long study of the socioeconomic dynamics among parents and their children of different ethnic groups, it was noted that only for Whites, upward movement along socioeconomic levels was associated with decreased acute and chronic discrimination in the health care setting. On the contrary, for Blacks and Hispanics, higher socioeconomic status

carried a higher likelihood of health discrimination and unfair treatment when compared to Caucasians. Once again, this alludes to the possible relationship between race and medical health provider biases, which are based in health care settings' historical foundations of racism (Colen et al., 2018).

These perceptions of discrimination and health inequities among Latinos were studied by Becerra et al. (2015), lending insight into the relationship between Latinos' acculturation and their and their perception of health care treatment quality. They reported an inverse relationship between Latinos' level of acculturation and incidence of perceived discrimination and barriers to accessing health information. Furthermore, it was noted that Hispanics who identify as immigrants and who could not pay for services needed or rendered perceived lower levels of treatment quality, which they attributed to their race and economic status. Therefore, this study peeled a twofold layer of the social roots of Hispanics' barriers to accessing health care (Becerra et al., 2015). Becerra et al. (2013) also investigated Latinos' knowledge, thoughts, and perception regarding discrimination and their relationship to mental health. Based on their multinomial logistic regression model, it was concluded that those who perceived discrimination also had a higher incidence of daily fear of deportation, perceived life now as brutal compared to before, maintained a worse outlook for their future generations, and reported substantially lower quality of life (Becerra et al., 2013).

Latinos' self-identity as immigrants and its implications on health care quality have yet another deeper layer: *undocumented* immigrant status. Being undocumented further exacerbates Latinos' healthcare barriers in conjunction with lower-income, poor or non-existing insurance coverage options, increased daily life stressors, and under-utilization of medical resources compared to documented immigrants. Chavez (2012) also reported that undocumented Latinos rely more on clinic-based care. For this reason, Hispanic immigrants face unconventional obstacles to accessing health care compared to any other race or cultural group, shedding light on the importance of community-based clinics and culturally congruent primary care since that may be the only medical care these immigrants obtain (Chavez, 2012). Rhodes et al. (2015) explored the effect of local immigration laws on prenatal care utilization for Hispanics. They focused on the 2012 section 287(g) of the Immigration Act in North Carolina that allowed local police officers to enforce federal immigration laws. It was found that prenatal care of obstetrics was sought later in pregnancy secondary to increased distrust in the medical community and health care providers and increased fear of deportation. Pregnant undocumented Hispanics acknowledge the need to sacrifice their own and their babies' health to remain in the country and avoid adverse legal consequences for themselves and their families. This belief serves to demonstrate the lack of information undocumented Latinos have regarding their legal rights and their eligibility to obtain medical care regardless of migratory status (Rhodes et al., 2015).

COMMUNITY AND SOCIAL CONTEXTS: STRESS, MENTAL HEALTH, AND DOMESTIC VIOLENCE

Separation from family members, low-paying, high-stress jobs with little or no benefits, and unstable legal status are some drivers of poor mental health among Hispanics (Guarnaccia et al., 2005). Similarly, Perreira and Ornelas (2013) reported a 30% higher incidence of post-traumatic stress disorder (PTSD) among foreign-born teens and their parents, especially those experiencing poverty and other traumatic experiences in their country of origin. Not

surprisingly, PTSD was more prevalent in those who continued to experience discrimination, poverty, and marginalization upon arrival to the United States (Perreira & Ornelas, 2013). Consequently, mental health among Latino immigrants has additional factors that contribute to increased physical, emotional, and mental illness risks.

Zvolensky et al. (2019) examined the explicative role of anxiety sensitivity associated with perceived racial discrimination and its relationship with anxiety and depression among Latinos attending a Federally Qualified Health Center (FQHC). Interviews among 202 participants demonstrated that perceived racial discrimination was indirectly related to poor mental health, including depression, social anxiety, generalized anxiety, and other mood disorders. Despite results suggesting that anxiety sensitivity might contribute to Latinos' perceived racial discrimination and mental health, the results also indicate that the two factors above have bilateral relationships (Zvolensky et al., 2019).

Fortuna et al. (2016) studied mental health, migration stressors, and suicidal ideation among 567 Latino immigrants from various communities, primary care, and behavioral health care clinics in the United States. Over one-third of the participants reported lifetime suicidal ideation (S.I.) associated with exposure to discrimination, low perception of ethnic identity, and a shared sense of belonging. Compared to lifelong S.I., less than 30 days of S.I. was tightly associated with depression and PTSD, and was found to directly correlate to years lived in the country of migration and unstable citizenship status. In other words, mental health complaints among Latino immigrants have different causes and time patterns, affecting governmental and social behaviors atypical to mental health concerns for individuals of other races, non-minority ethnic backgrounds, and non-immigrants foreign to migratory issues (Fortuna et al., 2016).

Derr (2016) described immigrants' utilization of mental health services in the United States with substantial evidence for underutilization by these minority groups. Despite the awareness of various social, psychological, and symptomatic concerns for mental health problems among Latinos, Derr (2016) confirmed that this minority group uses mental health resources at a lower rate than non-immigrants. It was found that there was profound underutilization of these resources among men, the uninsured, and undocumented individuals. In addition, structural barriers to use these services included lack of insurance, discrepancies between the cost of service and patient's financial ability to afford it, and language barriers. Not surprisingly, social support for Latino immigrants is a fundamental tool to maintain mental well-being, relying on family, friends, and spiritual leaders. It is also worth noting Latino immigrants' ability to seek help toward mental well-being elsewhere given the vast number of barriers their country of migration poses for them compared to those native to it (Derr, 2016).

On the other hand, Latin culture has long been affected by unhealthy practices that stain Hispanics' mental health, such as heavy alcohol drinking. Sánchez (2015) conducted a study that found that among 278 Latinos, over one-third engaged in heavy drinking within 30 days, with men reporting a higher frequency of daily alcoholic intake than women. His study indicated a higher likelihood of heavier drinking among five triggering factors, including gender, country of origin, marital status, living arrangement, and acculturation. Moreover, multivariate analyses were remarkable for a direct relationship between gender, country of origin, educational level, marital status, living arrangement, children in the household, length of stay in the United States, spirituality, acculturation, and depression with heavy alcohol

intake, alcohol dependency, and unprotected sex when intoxicated. It can be argued that migratory stressors for male-dominant figures in Hispanic culture carry additional mental health burdens for fathers, husbands, and sons that predispose them to compensate for social, financial, and migratory difficulties and uncertainty with readily accessible yet harmful solutions.

Sánchez (2015) revealed Latino men's maladaptive patterns, given the societal and health system barriers for accessing mental health services. Analogous to Hispanic men's direct relationship between alcohol use and stress, Goldbach et al. (2015) conducted a study that shed light on Latino teenagers facing similar situations in the United States. 901 Hispanic teenagers aged 11-19 participated in his study of alcohol intake frequency and stressors. It was noted that almost a quarter of the participants reported alcohol use within the last 30 days with higher stress scores for factors such as acculturation issues, community and gang violence, family finances, discrimination, and family- and drug-associated stress. Therefore, the two studies above indicate that Hispanics' mental health concerns are strongly associated with the social and physical environment regarding the host country, with increased obstacles to service utilization. As a result, readily accessible harmful venues to cope with these stressors, such as alcohol intake, are seen as feasible solutions (Goldbach et al., 2015).

Poor mental health is a significant medical and social barrier to wellness among Hispanics, precipitating domestic violence toward Latina women. While domestic and intimate partner violence affects individuals of different racial backgrounds and socioeconomic and educational levels, Latinas are particularly vulnerable as they experience additional challenges. Reina and Lohman (2015) conducted a study in Central Iowa among Latina immigrants and concluded that this population is at risk of structural and institutional barriers that prevent Latina women from responding appropriately to intimate partner violence. These barriers included institutional discrimination, unstable housing, and economic inequality (Reina & Lohman, 2015).

Health Disparities and Outcomes

Hispanic Physical Health: Cancer

The American Cancer Society (2020) states that Latinos' leading cause of death is cancer. Infection-related cancers such as liver cancer arising from viral infections, stomach cancer secondary to chronic bacterial infections endemic to developing countries, and cervical cancer resulting from chronic human papillomavirus infection emerge twice as often in Hispanics compared to non-Hispanics. Infection-causing pathogens and processes can easily be treated if diagnosed promptly with appropriate pharmacological management and vaccine administration (American Cancer Society, 2020). Hence, this type of epidemiological data shows the unfortunate cancer progression affecting Hispanics, which can be attributed primarily to social factors related to migration, decreased access to health care, and failure to take preventative measures. In other words, this data demonstrates that environmental, social, and community challenges burden Hispanics with 100% preventable cancer diagnoses. Still, incidence numbers continue to rise, with over 170,000 new cancer diagnoses expected this year alone among Hispanics in the United States.

For example, the most common cancer among Hispanic males is prostate cancer, followed by colorectal and lung cancer. On the other hand, Hispanic women are diagnosed primarily with

breast cancer, uterine corpus cancer, and colorectal cancer. Differences in cancer risk are associated with different exposures to cancer-producing infections, behavioral risk factors, and screening prevalence (Arem & Loftfield, 2017). This data serves to emphasize that highly preventable cancers; for which screening measures are in place, such as colorectal cancer, disproportionately affect both Hispanic males and females with a well-known lower than an average colorectal screening – about 30% less, compared to whites (Centers for Disease Control and Prevention [CDC], 2015).

Hispanic Physical Health: Metabolic Syndrome

Metabolic syndrome or syndrome X is a group of medical conditions that occur together: high blood pressure, high blood sugar levels, excessive and unhealthy fat around the waist, and increasingly high cholesterol levels. There is a higher prevalence of syndrome X among Hispanics and Latinos. As a result of these four pathological conditions, individuals with syndrome X have higher risks of heart disease, strokes, and type 2 diabetes (Mayo Clinic, 2021). Prevalence-wise, in the United States, about one-third of the population has metabolic syndrome; the highest prevalence is among Hispanic adults (over 20% of those aged 18-44, and over 50% of those aged 45-74). Hispanic adults also have a higher prevalence of poorly controlled blood pressure compared to non-Hispanics in the United States. All age groups, except children and adolescent Latinos, are severely burdened by uncontrolled hypertension and its chronic detrimental health consequences (Campos & Rodriguez, 2019). Per the Centers for Disease Control and Prevention [CDC] (2015), the burden affects over 65% of the Hispanic population. Further, Heiss et al. (2014) noted that excessive abdominal fat deposition was present in over 90% of Hispanic women and over 70% of Hispanic men. Hence, this study evidences the increased presence of metabolic pathology among Latinos compared to any other racial group. For this reason, one can argue that metabolic syndrome disproportionately affects Hispanics with subsequent higher risks of diabetes and cardiovascular consequences of long-term diseases. Metabolic syndrome poses a more significant health burden among Hispanics, a burden not seen or affecting other ethnic groups in the overall population (Heiss et al., 2014).

Latinos in the U.S. have a lower death rate overall but a 50% higher death rate from diabetes than non-Hispanics. Heiss et al. (2014) detected that over 70% of Hispanic men and over 60% of Hispanic women had increased blood sugar levels. Then, it is not surprising that the prevalence and incidence of type 2 diabetes are higher among Hispanics than the national average in the United States. Aguayo-Mazzucato et al. (2019) described a worsening diabetes epidemic among the Latino population. They attributed these disproportions to sociocultural factors, such as lower socioeconomic status, decreased access to theoretical advances and health care, and biogenetic susceptibility to obesity and insulin resistance (Aguayo-Mazzucato et al., 2019). Similarly, based on information from the National Health and Nutrition Examination Survey, among 1,241 Hispanics older than 20, more than 70% were found to be overweight, over 40% obese, and over 55% having abdominal obesity. Further, more women were obese compared to men. Finally, this survey reported, not surprisingly, that among these Latinos, obesity had a direct relationship to higher rates of diabetes, hypertension, high cholesterol, heart disease, and arthritis. This survey demonstrates congruent data with the previous reports regarding syndrome X (Forrest et al., 2017).

Dyslipidemia is also disproportionately prevalent among Hispanics in the United States. Per Rodriguez et al. (2014), among 16,415 Latino participants aged 18-74, over 65% had

dyslipidemia. The researchers demonstrated that any dyslipidemia type is related to older age, body mass index, and sedentarism. Similarly, there was an association of higher dyslipidemia prevalence among monolingual Spanish speakers with lower educational attainment (Rodriguez et al., 2014). Therefore, an increased pathological prevalence of high cholesterol and unfavorable socioeconomic factors affect this minority group. Another report by Rodriguez et al. (2015) evidenced the high rates of unawareness among Hispanics about their high cholesterol status and subsequent low treatment rates. Among 207 Latino participants, almost 50% were not aware of their diagnosis, and only about one-third received adequate treatment. His study was also remarkable for younger adults, women, and lower-income participants, and being uninsured and recent migratory status were associated with higher rates of uncontrolled dyslipidemia (Rodriguez et al., 2015). For this reason, Hispanics have a higher risk of developing metabolic syndrome and being untreated or poorly managed if diagnosed at all (Vidot et al., 2016). Vidot et al. (2016) also investigated the risk of metabolic syndrome in relation to alcohol consumption among 15,000 18-74-year-old Hispanics. Chi-squared and logistic regression models of acquired data detected significant associated risk of developing central obesity, hypertension, insulin resistance, and dyslipidemia from low and heavy drinkers, independent of beer versus liquor beverages. As discussed, Hispanics engage in heavy drinking due to multifactorial reasons, further increasing their predisposition to chronic yet entirely preventable conditions, such as those clustered in metabolic syndrome (Vidot et al., 2016).

Hispanic Physical Health: Heart Disease

Coronary artery disease (CAD) is the occlusion of arteries delivering blood to the heart, resulting in heart attacks, heart failure, and sudden death. CAD prevalence among Hispanics over the age of 40 is 10% if there are no pre-existing risk factors and rises to 70% if they have diabetes, high cholesterol, and a history of tobacco use. One study among Mexicans demonstrated that women older than 65 had higher heart attack rates than men in the same age group. Moreover, Hispanics have a higher incidence of ischemic and hemorrhagic strokes than other racial groups in the United States (Balaguer, 2019). Hispanics are particularly vulnerable to strokes and heart attacks – not only at an earlier age than non-Hispanics, but with a bleaker prognosis given the previously mentioned barriers to accessing health care prior to and after detrimental residual complications of untreated CAD. Finally, Hispanics have a higher incidence of heart failure at a younger age than non-Hispanics with a higher frequency of concomitant diabetes, high blood pressure, and higher BMI.

The precocity of disparities in high cholesterol and subsequent CAD diagnosis at an early age among Hispanics is evident. Essilfie et al. (2016) demonstrated that despite similarities of heart attack risk among young Hispanics and other ethnic backgrounds, Latino youth have higher triglyceride levels and higher non-HDL cholesterol (indicative of a higher likelihood of severe CAD) as well as higher glucose levels. Besides emphasizing the disproportionately early age and added predisposition of young Hispanics to more grave CAD status, this study shows that elevated triglycerides may be associated with life stressors experienced during migration and the challenges of living in a new country (Essilfie et al., 2016). One can argue that these predispositions superimposed on migration stressors are only perpetuated throughout adulthood, explaining the early onset of CAD complications among Hispanic adults.

Hispanic Physical Health: Prenatal Care

Possessing a status as an undocumented, recent immigrant, or Spanish monolingual are some of the most influential factors in causing delayed prenatal care by Latina women in the United States, with well-documented grave consequences for mothers and newborns alike. Chu et al. (2019) studied over 24,000 post-partum Hispanics over six years. It was shown via a population-based cohort study that political rhetoric, anti-immigrant communication, publications, and sentiment are heard and felt by Latinas who, due to fear, shame, discrimination, or perceptions of social exclusion, changed the time and frequency of health care sought. This situation resulted in significant delays in seeking prenatal care, fewer prenatal visits, and lower hemoglobin levels in Hispanic patients. Low hemoglobin levels in pregnancy correlate to low hemoglobin levels in newborns, who physiologically undergo a sharp drop of hemoglobin shortly after birth, for which optimal maternal levels are needed to buffer the immature and now independent neonatal cardiovascular system (Chu et al., 2019).

The findings documented by Chu et al. (2019) overlapped with the effects of the Affordable Care Act, which contributed to a decrease in the prevalence and incidence of inefficient prenatal care among all cohorts *except* Latina immigrant women. This research augments the increasing body of evidence demonstrating the added social stressors and social exclusion that Latinas suffer increase their and their babies' risk of poor maternal outcomes of 100% preventable pathology and complications – risks typically not experienced by pregnant women of majority ethnic groups. Similarly, ever-expanding data indicate that pre-pregnancy and antenatal stress is associated with poor birth outcomes (March of Dimes, 2015). Mukherjee et al. (2016) demonstrated that prenatal depression was higher among Hispanics than non-Hispanic whites. Higher stress predicted higher depression scores among Hispanics. This increased stress indicates the added emotional and mental health vulnerability and risks that pregnant Hispanic women experience, which affects their children's health and overall well-being during the post-partum period (Mukherjee et al., 2016).

Hispanic Physical Health Paradox

As Ruiz et al. (2016) defined it, the Hispanic health paradox is an epidemiological phenomenon by which Latinos, despite all the social, emotional, and cultural hardships experienced in the United States, in addition to biological predispositions for chronic disease, enjoy a lower mortality rate and better physical health than non-Hispanic whites. As a prime example, Hispanics have a lower incidence of the most common type of cancers, such as breast, lung, colorectal, and prostate – non-infectious cancers that affect non-Hispanic whites at higher rates. Prenatally speaking, new Hispanic mother immigrants have better pregnancy outcomes such as decreased preterm labor, low birth weight, and mortality rates than non-Hispanic whites. The importance of discussing the Hispanic health paradox is to emphasize the positive long-term health status among Hispanics despite little to no support from their new country of residency regarding medical, social, financial, or emotional security. This exploration aimed to stir curiosity about how much better Latinos in the United States could be if they could access health care, financial stability, and meet all their social needs as non-Hispanic whites do. Furthermore, the Hispanic health paradox influences first-generation immigrants and new Hispanic American children from immigrant families.

Hispanic Mental Health: Stress and Trauma

Latinos, simply by being immigrants, and the vast majority refugees, are at a higher risk for mental health problems compared to their counterpart non-immigrant, non-Hispanic whites. Ellis et al. (2019) eloquently described the trauma, stress, and cultural challenges refugees endure when seeking a better life in the United States. The United States, back in 1980, initiated the U.S. resettlement program. This resettlement program is the largest globally, and it is a life-saving solution for the most vulnerable refugees in the world. The United Nations High Commissioner for Refugees [UNHCR], working alongside U.S. governmental agencies and NGOs, welcomes and supports refugees, encompassing 27 countries in the Caribbean and Latin America. However, despite the many opportunities for incoming Hispanic refugees and the tremendous federal support available, only 3% of 30,000 refugees between 2018 and 2019 were Latinos (The U.N. Refugee Agency [UNHCR], 2021). Nevertheless, the U.S. Border Patrol reported over 1.5 million encounters with migrants desperate for a resettlement opportunity just along the U.S.-Mexico border during the 2021 fiscal year, alluding to immigrants' desperate attempt to seek health care and safety during a global crisis (Gramlich & Scheller, 2021).

Ellis et al. (2019) reported that most refugees are forced to leave their homes with little time to formulate a formal plan for entry into the host country. This move will equate to financial, linguistic, emotional, and cultural gaps added to the hardships of the migratory journey itself: days to months of walking, traveling on trains, encountering dangerous or violent people, and meeting only basic survival needs. These adversity sources are superimposed on the original unmet needs that initially prompted their emigration. Devastatingly, the migratory experience for most Hispanics is often accompanied by fear, trauma, torture, and rape. For this reason, Ellis et al. (2019) argued that one's status as a refugee has long-lasting social and psychological consequences. In other words, Hispanic immigrants and refugees would benefit from special consideration regarding the risks for severe mental illness, not only with the acute stressors of recent migration regarding adaptation to the host country, but long-term consequences of grueling, traumatic experiences, and the development of PTSD.

As mentioned previously, Hispanics are subjected to a higher degree of discrimination and material hardships due to perceptions about the language spoken, the line of work they join, their literacy and numeracy, academic advances, living arrangements, and obstacles to accessing health care. With the governmental support available by the United States and added federal support undocumented in this literary review but widely documented elsewhere, one can conclude that the discrepancy between available sources and the multidirectional barriers to address the gaps in social determinants of health by Hispanics highlight another level of risk factors for mental illness in this ethnic group. Besides their vulnerability as refugees, while transitioning into their new lives in the United States, Hispanics encounter yet another set of mentally distressing challenges: systemic and structural violence.

Before further discussion, it is crucial to clarify the core differences between these similar yet distinct terms. Systemic violence deals with institutional processes that negatively affect one's spiritual and biosocial well-being. On the other hand, structural violence deals with the specific damage or harm social or political frameworks may inflict on someone. Both types of violence against Hispanics are typically at the hands of those in positions of authority and power in the legal realm, financial institutions, academic institutions, and health care facilities (Criminal Justice Research, 2021). The authority is inherent in these types of violence and added

challenges Latinos face contrasts with the typical powerless and often voiceless position of these minority group members in America. Thankfully, violence is one of the most modifiable behaviors, and some factors can be improved upon and erased through proper intervention and modification in this country.

Hispanic Mental Health Paradox

Like the Hispanic physical health paradox, there is much evidence of Latinos' enhanced mental health outcomes in the United States compared to their U.S.-born counterparts, despite the multiple barriers and stressors Hispanics endure. Mykyta et al.'s (2019) study of almost 300 adult Latinos assessed for several mental illnesses, including depression, anxiety, and PTSD associated with perceived discrimination, material hardships, problematic childhood experiences, and social support. In this group of Latinos, almost 50% did not have healthcare coverage, one-third did not complete high school, and only about 20% had domestic earning. Nevertheless, the study extended the Hispanic health paradox to mental health, which potentially is advantageous to Hispanics (Mykyta et al., 2019).

Ramírez-Esperanza et al. (2019) published supporting evidence for the Hispanic mental health paradox, particularly among Latina women. This study gathered data of Latinas compared to White-European mothers in their daily lives, where Latinas were found to have a higher frequency of laughter during more in-depth conversations than their non-Hispanic counterparts. The results supported Latinas' positive interactions and evidenced mental well-being in their day-to-day lives despite the multiple challenges and threats to their mental well-being previously mentioned (Ramírez-Esparza et al., 2019). Based on the extensive evidence for White-Europeans as privileged members of society, studies like this represent a tangible paradoxical advantage of widely known underprivileged members in the United States, such as Hispanics. More often, something as laughing demonstrates that positive mental and emotional well-being persists amid such biosocial challenges. It also shows a potential for further expansion of laughter and other mental health indicators for proper support and help by the host society.

Hispanic Homeless Paradox

The Hispanic homeless paradox describes the healthier outcomes and less likelihood of Hispanics experiencing homelessness than their non-Hispanic counterparts facing the same biosocial conditions. Castañeda et al.'s (2020) intersectional study of Hispanic health and homelessness paradoxes demonstrated that, despite the high prevalence of minorities in the homeless American population, Hispanics are underrepresented, comprising just over 3% of homeless individuals. This statistic is in stark contrast to African Americans, who make up 40% of the population of homeless people but represent only one-quarter of the total population (National Alliance to End Homelessness, 2020). These statistics, however, might be attributed to the underutilization of shelters and homeless resources by Hispanics or their underrepresentation in surveys or research projects (Castañeda et al., 2020). Still, it is essential to emphasize that Hispanics, compared to African Americans whose generational establishment in the U.S. has deeper roots, are mostly immigrants or immigrants with unique challenges. Despite the multifactorial risks that increase Hispanics' vulnerability to homelessness, data has shown that Latinos often modify their living arrangements to accommodate family and friends in their houses to avoid homelessness among their relatives and loved ones. Furthermore, a study (Security.org, 2021) in Los Angeles, California, one of the counties with the densest

homeless population in the country, demonstrated that Hispanics use non-traditional living arrangements to avoid living out in the streets. Similarly, Castañeda et al. (2020) reported that besides Hispanics' unique housing arrangements, they enjoy better health by being bonded by close family members and friends. The literature demonstrates that Hispanics enjoy better mental and physical health, an advantage that lowers their homeless probability despite being part of a low socioeconomic group.

Possible Sources of Hispanic Resiliency

Faith

Despite the material, emotional and physical hardships of migration, Hispanics have reported high scores of resilience and quality of life. As Lusk et al. (2019) described, Latino immigrants had strong associations to faith, which was used as a coping mechanism to find purpose and positive outcomes to the abuse, kidnapping, exploitation, and pain in their journey to the United States. Faith among Hispanics can be at the core of the paradoxes mentioned above; persistent positive thoughts and emotions are implicated in better mental and health outcomes despite the multiple factors that threaten both. As a defining element in the physical health, mental health, and homelessness Hispanic paradoxes, faith can be attributed to the higher levels of life satisfaction among older Latino immigrants than their US-born non-Hispanic counterparts.

Congruent with the Hispanic health paradox, Calvo et al. (2017) described in a cross-sectional study of almost 10,000 participants over the age of 60, Hispanic immigrants who had solid social ties around them enjoyed better health and were more satisfied with their lives despite the challenges mentioned above and limitations to resources. It may be true that faith and positive social experiences with fellow Latinos in the United States are at the core of the three discussed paradoxes.

Additionally, Allshouse et al. (2018) investigated the incidence of metabolic syndrome and faith among Hispanic women. In a study of over 2,000 women, Hispanics reported that faith "brought them strength and comfort in times of adversity, that they prayed often, and that their faith was sustaining for them" (p. 2). Among Latinas with lower faith levels, the progression of metabolic syndrome was faster than their counterpart Hispanics with higher faith levels (Allshouse et al., 2018). It is evident that despite the limited access to proper health care and long-term medical management, higher levels of faith are associated with better disease prognosis, resulting in improved health outcomes.

Finally, Gallegos and Segrin (2019) observed a direct relationship between spirituality and faith and lower reports of loneliness among Hispanics despite life stressors precipitated by migratory journeys alone and being the only family member in the United States. The data indicated that stronger spirituality associations were linked to better health outcomes and lower reported loneliness for Latinos (Gallegos & Segrin, 2019). For this reason, faith and spirituality demonstrate health outcomes not only for physical but also mental health.

The Enclave Theory

Sociologically speaking, an ethnic enclave is a geographical area with a high density of a specific ethnic group with critical economic implications (Lim et al., 2017). Hispanics who aggregate in these neighborhoods or workplaces have economic advantages due to increased job opportunities and the ability to support each other with business plans and Hispanics'

collective growth and prosperity. Furthermore, Logan et al. (2002) described the positive influence of enclaves on immigrants beyond economic and social growth and collaboration. It has been documented that enclaves can positively impact immigrants' interpersonal relationships and stability. Strong interpersonal relationships can create a nest to support each other's health, finances, and advancement opportunities by exchanging valuable information about resources (Logan et al., 2002). For this reason, the enclave theory demonstrates compelling evidence regarding the success towards growth and social determinants of health that Hispanics can experience when surrounded by collective support and positive attitudes. Hispanics' community-centered values and intrinsic neighborly nature improve biosocial outcomes compared to other minority groups. However, Hispanics face obstacles and hardships when transitioning to broader layers of society; for example, at the state and governmental level. Thus, questions arise regarding the magnitude and longevity of Hispanics' health outcomes if given further support and positive reception from the host country.

Escobar et al. (2020) conducted a study that exemplifies the health benefits of Hispanic enclaves regarding colon cancer prognosis and outcomes. This study among low-income Hispanics in California demonstrated that Hispanics – primarily Latino men in enclaves – were more likely to receive chemotherapy for colon cancer with subsequent higher survival rates. This study was particularly beneficial among men, suggesting broader spousal and familial support (Escobar et al., 2020). These findings provide compelling evidence for the association between health benefits and the supportive community of enclaves, offering yet another potential explanation of the Hispanic health paradox and the benefits of horizontal relationships among Hispanics.

Familism

Diaz & Niño (2019) illustrated that Latinos' family-oriented culture, otherwise known as familism, could contribute to the paradoxical advantage seen in Hispanics' enhanced physical and mental health and lower rates of homelessness. Data supported the direct relationship between familism and lower reports of depression and anxiety (Diaz & Niño, 2019). Strong family associations are beneficial to mental health, as relatives and friends are accommodated to avoid homelessness, as mentioned prior. Corona et al. (2017) further corroborated these findings with data demonstrating an inverse relationship between close family support and feelings of loneliness, depression, and physical symptoms. In other words, familism was a stress buffer among Latinos. Indeed, this report documented the strong association between familism and higher reported health and self-esteem. Stein et al. (2015) further described the positive impact of familism on Hispanic youth in the United States. Family among Latinos becomes an incubator for values such as loyalty, unity, and obedience, resulting in improved outcomes for young Latinos with more consistent school attendance, fewer depressive symptoms, and a positive perception of opportunities for college enrollment (Stein et al., 2015). Thus, the literature indicates the strong relationship between cultural Hispanic values and productive outcomes, strengthening the evidence for the Hispanic health paradox.

In addition to benefits for mental health such as the decreased impact of stress on Hispanics, Ramirez et al. (2015) described the positive impact of familism and Hispanic culture's values, such as sympathy and collectivism, on adherence to physicians' treatment plans and positive attitudes towards breast cancer genetic testing. It was reported that Latinas, unlike women of other racial groups, were open to being tested and considered it "very or extremely important," despite being among those with limited health literacy (Ramirez et al., 2015). Another

paradoxical element is Latinas' respect for healthcare providers despite the barriers to quality care, the systemic discrimination, and the cultural incongruence of the current health care system. In the Hispanic culture, health care providers are considered authority figures to be honored and trusted despite robust evidence regarding multiple gaps in the current health care provider service to reciprocate Latinos' trust. Despite these odds, this report described the strong influence of physicians' recommendations for testing toward consent from the patient. Latinas' cultural values such as familism, allocentrism, and *simpatia* (positive social exchange) influenced their decision to be tested and have a positive and respectful perception of their doctor's recommendations (Ramirez et al., 2015). This scenario indicates that Latinas' values of allocentrism have a bilateral effect: health-related decisions are based on their family's and social group's benefit, but they also unite and give collective consent for the physician's recommendations to respect those they consider authority figures.

DISCUSSION

There is a growing collection of public health and clinical evidence supporting the direct relationship between the vulnerable state of most, if not all, SDOH among Hispanics and a higher incidence and prevalence of chronic conditions. Scientific evidence shows barriers to optimal physical and mental health for Latinos, with added burdens and hardships resulting from being a recent immigrant, being closely related to one, or being a refugee fleeing threatening conditions of the native country. These barriers include food insecurity because of residing in a high food desert location; the increased prevalence of malnutrition and hunger; housing insecurity and residence in an unsafe, low-income neighborhood with few or no green spaces; transportation challenges to reach social support facilities; and economic instability and occupational inequality. Each of these barriers directly impacts the physiological and psychological health of Hispanics. These inequalities further shed light and exacerbate health disparities of highly preventable and readily treatable chronic conditions and malignancies compared to U.S.-born and non-Hispanic individuals.

Similarly, this literature review explored the social, structural, and cultural barriers that the U.S. poses for Hispanics, with a growing body of evidence for increasing barriers to access one of the most basic human rights: health care. Multidimensional and multifactorial causes are linked to Hispanics not accessing timely medical or psychological help or accessing only low-quality care, further exposing the association between being a member of this racial minority and a higher likelihood of disease complication and, therefore, worse prognosis. Despite the recent public health sector effort to integrate social realities into health care delivery, much more ground needs to be explored and covered to fully and comprehensively integrate critical elements that would bring social and health justice to this vulnerable ethnic group. For example, the lack of culturally competent medical care profoundly impacts the quality of care Hispanics obtain. For this reason, cultural sensitivity, humility, and competency should be addressed with similar or higher importance regarding additional, non-medical related factors, such as implicit bias, structural and systemic racism, and Latinos' identity amidst discrimination. In addition, community and migration contexts unique to Hispanics should also be considered in association to added or novel barriers to accessing health care and resources available for only an elite few or primarily U.S.-born individuals. Community and migration should also be considered from public health and medical viewpoints since these are unique elements that contribute to increased risk factors for physical and mental health problems.

This literature review highlights the scientific evidence of unparalleled positive results amid many barriers, challenges, and opposition. The paradoxes described in this report demonstrate that science has corroborated the existence of intangible human factors surrounding Hispanics. Against all odds, they exhibit behaviors that bestow long-term happiness: an eagle eye's view of pain, trauma, abuse, and suffering; an immeasurable degree of love for one another; and an incredibly productive social support system that confers a high degree of protection against the harmful realities they need to endure in multiple biosocial spheres of life. This situation is the prime example of resilience, human value, and the impact of faith and interpersonal relationships on longevity and enhanced health outcomes. Nevertheless, this report intends to call attention to the multiple ways this vulnerable ethnic group could be more effectively helped and supported in the United States.

Structural and legal interventions are needed to address root causes driving the social and health injustices mentioned throughout. Our health system needs to revise how SDOH have been and continue to be addressed and evaluate the effectiveness and positive impact of community-based modes of health care access, such as the Federally Qualified Health Center, to close gaps in care. Targeting Hispanics with educational initiatives in their native language led by community leaders and trusted partners could potentially bridge the gaps in health inequities, systemic and structural violence, and social injustices. Health care professionals can recommend public health measures that shed light on the needs of their everyday interactions with vulnerable Hispanic patients, precipitating the development of interventions upstream in governmental policies. Similarly, these professionals could create changes downstream with their patients and influence the information received, which guides their medical decisions, mental health, and biosocial factors outside of the scope of the clinic setting. In the same vein, federal, state, and local authorities could include community-based organizations as pillars for policy modification and novel interventions. Overall, attention and priority need to be given to the public health sector when approaching a multidimensional solution.

There should also be an emphasis on the current and future research on interventions impacting the root causes of the physical and psychological health inequities that Hispanics experience. For example, identifying inequities rooted in language barriers, decreased health care literacy, and systemic racism can help adapt the current way services, education, and medical plans are delivered to decrease the burden of chronic untreated medical conditions. Furthermore, financial injustice and occupational disparities can be targeted at the root cause of high school graduation rates among Hispanics, and educational support with community-based mentors and opportunities for advanced degrees could help ameliorate the perpetual burden of poverty, food insecurity, and underrepresentation in the scientific, political, and decision-making realms.

Additional recommendations include integrating research-practice relationships where public health and medicine utilize science to implement creative changes rooted in health equality and social justice. The Hispanic health paradox – through resilience, social unity, family values, faith, and happiness – carries with it the unique perspective with which the United States should forge innovative social, political, financial, and cultural improvements toward good outcomes for all people who have made the U.S. their home.

CONCLUSION

Addressing barriers to optimal social determinants of health is vital to reducing health inequalities and social injustice toward Hispanics. Therefore, the United States, a country that historically has welcomed immigrants and thrived with diversity since the first pilgrim migration, must return to its foundational values of justice for all and fight to improve population health for Hispanics and all burdened and vulnerable groups. The paradoxical favorable health outcomes, both physical and mental, and stable housing are a testament to the positive health that Latinos can enjoy with minimal social, governmental, or cultural support. For this reason, the tridimensional impact of the Hispanic Paradox is a critical reminder that this minority group needs creative, wise, effective, and equitable interventions from their host country to mend the constellation of fractures in the current biosocial system in which they reside.

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