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Cuidado Con El Corazón: Hispanic Heart Health and the ‘Hispanic Paradox’

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Executive Summary

Heart disease reigns as the leading cause of death for the Hispanic population in the United States. The number of Hispanic deaths and hospitalizations during the COVID-19 pandemic revealed the alarming consequences of unaddressed health disparities in the Hispanic population. Hispanics experience higher rates of heart disease risk conditions such as diabetes, obesity, and high cholesterol. Health disparities that impact the conditions of daily life for Hispanics have made managing risk conditions more challenging for the population. Efficiently addressing the risk conditions that make Hispanics vulnerable to heart disease requires a clear understanding of how social determinants of health are driving risks to Hispanic heart health.

In a post-COVID-19 world, writing off the risk factor burden of Hispanic populations due to the paradox is dangerous. Stark inequities of COVID-19’s impact call attention to the real danger of the higher risk factor burden for Hispanic populations. Higher heart disease risk factor burden in the Hispanic population is characterized by high rates of diabetes, obesity, high cholesterol, and hypertension.

The weight of these risk conditions accumulates into a higher risk factor burden for heart disease.

Despite declines in life expectancy for the general United States population in 2023, Hispanic life expectancy experienced over twice the decline experienced by white non-hispanics.[4][5] Hispanics are experiencing tangible harm as a result of unaddressed disparities affecting their risk for COVID-19 as well as heart disease.

Heart Health and the Hispanic Paradox

The Hispanic population of the United States continues to grow across the country to the tune of 62.1 million individuals,¹ with researchers estimating they will comprise 25% of the population by 2050.² As the Hispanic population grows and ages in the United States, addressing current inadequacies and knowledge gaps concerning Hispanic health is vital. Researchers found themselves perplexed in their work with Hispanic populations due in part to the “Hispanic paradox.”

The Hispanic paradox refers to the relatively low heart disease mortality experienced by Hispanic patients despite their struggle with heart disease risk conditions.[1] Despite experiencing higher rates of obesity, diabetes, high cholesterol, and other risk factor conditions, researchers find that Hispanics are not dying from heart disease at the same rate as other populations experiencing these risk conditions.[1][3]

Outgrowing the Hispanic Paradox Trends in population growth and aging for Hispanics in the United States add to concerning COVID-19 trends for Hispanic heart health. Any experts considered the youth of Hispanic populations to be a factor in the protection they enjoyed from heart disease.[1][2] Age is a defined risk factor for all populations when it comes to heart disease.[6] Heart functionality decreases with age, and the older population over 65 experiences more heart attacks and strokes.⁶ This means that in addition to risk conditions unique to Hispanics, more Hispanics will be facing increased heart disease risk from their old age. Older adults are expected to outnumber children in the United States as early as 2029. [2] The paradox observed in the Hispanic population of today may soon be shifted as the older population continues to grow.[2]

Understanding Heart Disease Risk

Our understanding of heart disease risk today stems from decades of research informing the way heart disease is treated and prevented. Sharp increases in heart disease deaths in the 1940s prompted President Truman to sign the National Heart Act.[7] This policy invested half a million dollars and established the National Heart Institute, laying the foundation for heart disease research in the United States. The findings of this early

research enlightened the population to risk factors such as smoking, sedentary activity, diabetes, high blood pressure, and obesity.[7]

Despite continued efforts to improve heart health, heart disease reclaimed its spot among the top causes of death for Americans.[5] Deaths from heart disease in 2020 surpassed the all-time record at a total of 928,741 and death rate adjusted to account for a growing aging population rose by 4.6% despite steadily declining since the 1960s.[5] It is important to recognize that these concerning trends do not occur in a vacuum.

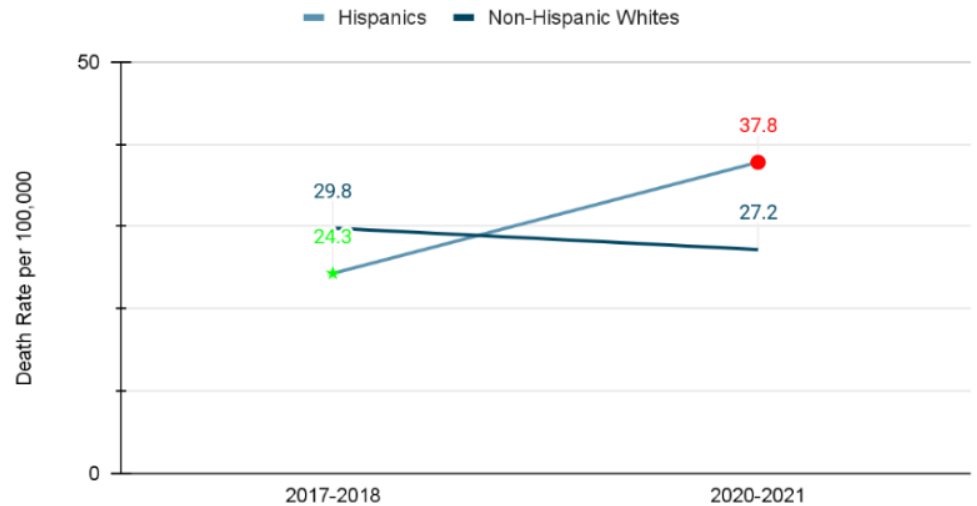
The COVID-19 pandemic had a notable impact on the burden of heart disease and its risk factors.[5] Hispanic communities had increased disease burden for COVID-19 and heart-related deaths.[4][5] Nearly 75 years after the foundation of heart disease research and the risk paradigm in the United States, the Hispanic population continues to struggle with risk conditions such as diabetes, high blood pressure, and obesity.[1][2][3][4][5]

Social determinants of health provide a useful lens to understand why Hispanics continue to struggle with risk conditions that elevate the threat of heart disease. The CDC defines social determinants of health as the nonmedical factors that influence health outcomes or the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems that shape the conditions of daily life.[8] This brief will explore how heart disease risk conditions are influenced by social determinants of health affecting Hispanics' vulnerability to heart disease.

Heart Disease Risk Conditions Among Hispanics

Understanding how social deter-

Diabetes Age-Adjusted Death Rates



minants of health uniquely influence risk conditions for heart disease among Hispanics begins with understanding the risk conditions they are struggling with.

Diabetes

The prevalence of diabetes for Hispanics consistently surpasses that of non-Hispanic white individuals.[4][5][8] Reports from 2017 and 2018 found Hispanics to be twice as likely as white people to be hospitalized for complications related to diabetes and 1.3 times more likely to die from diabetes.[8]

From 2018 to 2020, the Hispanic mortality rate for diabetes jumped by 13.5 points, amplifying the disparity.[5][8] This nine-point jump is over three times the increase experienced by white individuals during the same time period.[5][8]

Obesity

The high prevalence of obesity among diverse ages of the Hispanic population persists at elevated rates. Among younger Hispanics, 30.1% of Hispanic males and 23.3% of Hispanic females 2-19 years old are considered obese compared to rates of 17.7% for white males and

15.3% for white females in the same age group.[1] Obesity was also the most prevalent heart disease risk condition for Hispanic women and the second most prevalent among Hispanic men in the United States in 2023 reports.[1][5]

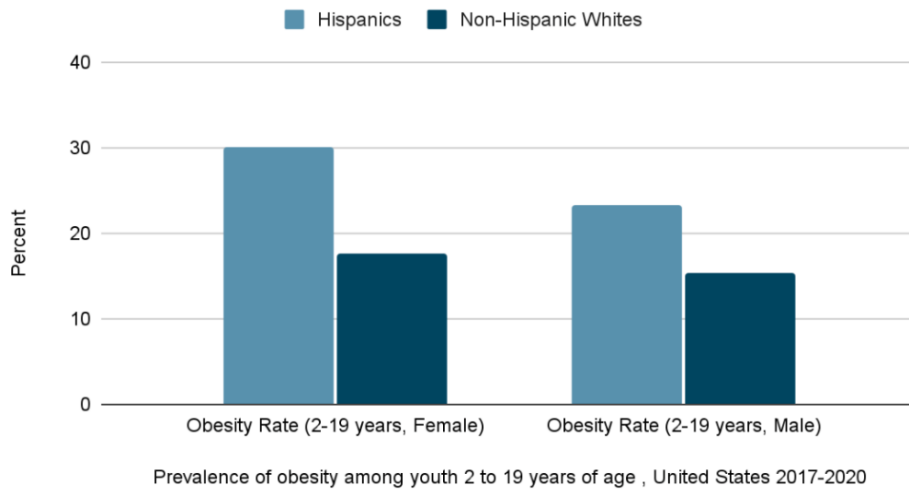
Hypertension and Hypercholesterolemia

Hypertension and Hypercholesterolemia (high cholesterol) are also among the risk conditions causing heart disease risk in Hispanics. Rates of hypertension among Mexican American youth were 16.9% compared to 10.7% among non-hispanic white youth.[5] In estimates for adults, evidence for high cholesterol was found in over half of Hispanic men and a third of Hispanic women.[3] Disparity in the number of Hispanics struggling with these conditions is well documented within research.[1][3-5][10-12] However, why these elevated rates of risk conditions persist for the Hispanic population is less clearly defined.

Social Determinants of Health Influencing Heart Disease Risk Conditions

Occupational Exposures (Work)
There are some occupational exposure risks that pose a unique

Youth Obesity Rate Comparison



threat to the Hispanic population. Advocates and researchers have reiterated the importance of research into the occupational exposures impacting heart disease risk for Hispanic populations.[10] In a study of urban Hispanic workers, occupational exposures to pesticides and metals were associated with an elevated prevalence of heart disease.[10][13] Occupational exposure concerns also stem from the COVID-19 pandemic, as Hispanic adults were found to be up to 7.5% more likely to be essential workers.[1]

Concerning occupational exposures threaten Hispanics, who are overrepresented in construction, maintenance, natural resource, and service jobs.[14]

Psychological Exposures (Live)

Psychological exposures that influence heart disease risk in the Hispanic population include chronic stressors, adverse life events, and structural discrimination in areas such as housing, immigration, and as discussed above, occupation.[1][15-18] Immigration policies that reinforce the systemic exclusion of Hispanic immigrants can extend to subsequent generations, affecting access to care and blocking resources such as insurance and safety net programs like the Child-

ren's Health Insurance Program.[15] Anti-immigrant rhetoric and bias can further impact social mobility and discourage those who can access support programs, like food stamps and housing vouchers, from doing so.[15][17] Heightened stress as a result of psychological exposures and discrimination has been found to increase heart disease risk.[1][15]

Economic Factors (Play)

Intersecting with the occupational and psychological exposures, Hispanics contend with socio-economic status and economic factors. Economic position is a recognized determinant of heart disease health, with upward economic mobility associated with reduced risk.[19][21] Hispanic Americans struggle against unstable financial conditions, lower median incomes, and overrepresentation in lower-paying jobs that lack access to employer-supported insurance.[19-21] The COVID-19 pandemic affected the economic security of Hispanics through hits to their employment and earnings[22] Reduced spending in fields with high rates of Hispanic employment, such as hospitality, entertainment, and leisure services, struggled to recover post-pandemic, amplifying the instability experienced by the

population.[22]

Barriers to Reducing Heart Disease Risk in Hispanics.

The social determinants of health discussed can complicate the heart health of Hispanics at the patient and system level. Disparity at each of these levels stacks upon the other continuing trends of elevated rates of risk conditions.

Patient-Level

The Hispanic population reports negative provider experience at a higher rate than non-hispanic white individuals, complicating delivery of care.[11] Individual adherence to medically prescribed treatments is also a point of struggle, as Hispanics with multiple risk conditions struggle to control them.[9][12][23] Heart disease risk conditions are considered out of control when patients have concerningly high blood pressure, cholesterol, or blood sugar levels, or when treatments are not being followed appropriately. Hispanic patients with multiple conditions deemed risks for heart disease struggled the most to control them.[12, [23-24] A 2021 analysis found that even among Hispanic stroke survivors who were aware of heart disease risk factors, less than half had healthy blood pressure, cholesterol, or blood sugar levels. [12][23] Additionally, those without prevalent heart disease were less likely to have controlled risk factors than those with heart disease.[23]

System-Level

At the system level, conversations often center on elements such as access to care and language barriers, which do play a role.[25-30] Under a social determinants of health framework, it is crucial to also understand the role of the occupational, psychological, and economic determinants discussed. The impact of these determinants on heart disease risk is more diffi-

cult to measure than blood sugar level and high cholesterol. Researchers looking to conduct studies on occupational or psychological risk factors struggle to find enough participants, gather all the information needed about the participants' lives, and have the same supervision of participants in the general environment that they do in more controlled environments.[1][10][13] All of these elements complicate obtaining data for the Hispanic population already facing limited resources, language barriers, fears surrounding job security, immigration status, low educational attainment, and issues of discrimination.[10]

Issues with treatment adherence and the control of risk conditions can appear simple to address on the individual level. However, when our view expands to see the system-level barriers Hispanics face, the need for tailored efforts to improve Hispanic heart health is clear.

The Urgent Need to Address Heart Disease Risk in Hispanics

Financial Burden

As the nation's top killer, heart disease averaged yearly direct and indirect costs totaling over 400 billion for 2019.[31] Disparities in hospital admissions for preventable heart failure among Hispanic beneficiaries of Medicare totaled over \$8 million dollars with 14% estimated excess.[32] The excess estimation comes from the analysis's finding of preventable instances of heart failure.

Estimated loss of wages for individuals impacted by a heart attack or stroke were \$13,463 and \$18,716 per individual, respectively, in comparison to individuals without these conditions.[33] The total income loss for the two conditions in 2018 was \$203.3 billion for heart disease and \$63.6 billion for stroke.[33]

Workforce Burden

Hispanic Americans are estimated to be 18% of the workforce and were overrepresented in positions that were considered essential during the pandemic.[14][20] In terms of economic contributions to the United States, Hispanics are credited with contributing a total that surpasses \$3.2 trillion.[34] The proportion of Hispanics in the workforce and the total economic output of Hispanics are both expected to grow as the population grows.[2][34]

Conclusion

Private and public healthcare entities spend a great deal of wealth every year in search of the most effective way to fight the impact of heart disease on the United States population.[7] Given the projected growth of the Hispanic population in the United States,[2] failing to respond to the heart disease risk condition burden they experience impacts the country in more ways than one.

Prevention efforts should evolve in tandem with emerging evidence of social determinants of health and their impact on heart disease risk. Policymakers and leaders should advance policies that help overcome disparities and foster heart health for all. We count on Hispanics in the workforce and economy. The cost of heart disease will weigh heavier and heavier on the purse of the American people if no action is taken to overcome the struggle Hispanics face.[35]

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