

ABSTRACT

Challenges in Health Care: Cultural and Structural Barriers to Care for Hispanic Children

Victor Tran

Director: Allyson Irom, Ph.D.

Hispanics are both the largest and youngest major ethnic or racial minority in the United States, and the majority of the individuals in this group are the U.S.-born children of foreign-born parents. They have a distinct cultural identity and are socioeconomically disadvantaged compared to the general population of the United States. These factors present challenges to health care providers and policymakers. Cultural influences on beliefs and behaviors affect the health outcomes of Hispanic children by shaping the decisions that they and their parents make. Socioeconomic disadvantage makes access to health care more difficult for Hispanic children, especially in the United States, where the cost of health care is exceptionally high. As public policy makers work to increase the accessibility of health care, and medical professionals seek to emphasize cultural competence in their practice, understanding the peculiar challenges facing Hispanic children will assist in the formulation of more effective strategies for caring for this segment of the population. This thesis describes some of those challenges and assesses the efficacy of current and proposed solutions.

APPROVED BY DIRECTOR OF HONORS THESIS

Dr. Allyson Irom, Department of Modern Languages and Cultures

APPROVED BY THE HONORS PROGRAM

Dr. Elizabeth Corey, Director

DATE: _____

CHALLENGES IN HEALTH CARE: CULTURAL AND STRUCTURAL BARRIERS
TO CARE FOR HISPANIC CHILDREN

A Thesis Submitted to the Faculty of
Baylor University
In Partial Fulfillment of the Requirements for the
Honors Program

By
Victor Tran

Waco, Texas

May 2018

TABLE OF CONTENTS

Chapter One: Hispanics in the United States by the Numbers	1
Chapter Two: Cultural Challenges in Care	13
Chapter Three: Structural Barriers.....	26
Chapter Four: Current and Proposed Solutions	37
Bibliography	51

CHAPTER ONE

Hispanics in the United States by the Numbers

Introduction

Hispanics represent a significant minority of the population of the United States. They also represent the youngest major racial or ethnic group in the country (Patten). Providing health care to Hispanic children, therefore, can improve the health outcomes of a sizable portion of the U.S. population. However, caring for Hispanic children presents a number of unique challenges. Hispanics are a heterogeneous group, with many cultural beliefs and practices that can influence their health. They face several distinct structural barriers to receiving care. Understanding these challenges can allow health care professionals to serve this group more effectively. This thesis seeks to illuminate what some of the major challenges in providing health care to Hispanic children are, and to review proposed solutions to these challenges. To begin, however, this chapter will provide a general statistical overview of Hispanics in the United States, in order to establish a certain level of familiarity with the population of interest.

Hispanics in the United States: Share of the Population

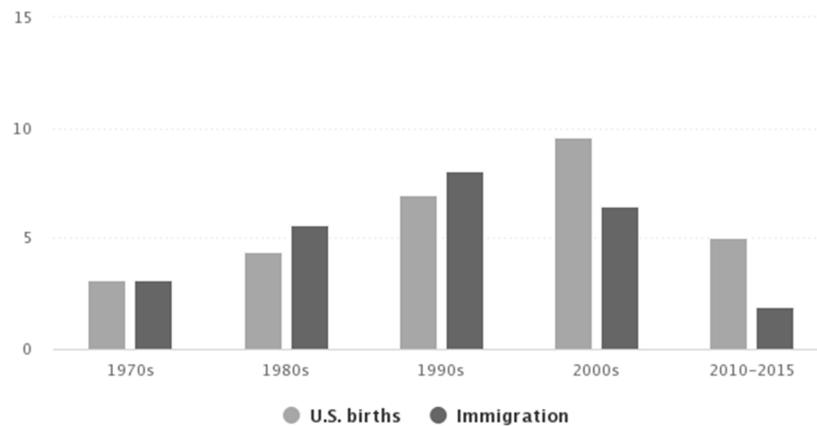
Hispanics comprise a sizeable minority of the U.S. population. The Pew Research Center estimates that Hispanics in the United States, as of 2015, number over 56 million individuals and represent 17.6% of the total U.S. population. This proportion represents an increasing share of the U.S. population. In 2000, Hispanics represented only 12.5% of the total population of the United States (Flores et al.).

While Hispanics born in the United States outnumber foreign-born Hispanics, 37.1 million individuals to 19.4 million individuals, the foreign-born Hispanic population has grown more rapidly in relative terms over the past half century. Since 1960, the foreign-born Hispanic population has increased by a factor of nearly 20, compared to an increase by a factor of roughly 6 for U.S.-born Hispanics. Since the year 2000, however, the share of U.S. Hispanics who are foreign-born has been declining, down to 34.4% in 2015 from 40.1% in 2000 (Flores et al.).

This change is attributable to both a continued increase in numbers of Hispanics born in the U.S. and a decrease in immigration of Hispanics to the U.S. In every decade since the 1970s, the number of Hispanics born in the United States has increased, from 3.1 million in the 1970s to 9.6 million in the 2000s. The number of Hispanics added through immigration, on the other hand, peaks in the 1990s at 8.1 million, followed by a decline in the decade of the 2000s at 6.5 million (Flores et al.). One study found that immigration from Mexico in particular no longer exceeds emigration to Mexico from the United States. From 2009 to 2014, the U.S. lost 140,000 net migrants to Mexico (Gonzalez-Barrera).

Sources of Hispanic population growth, by decade

In millions



Notes: U.S. births and immigrations reflect additions to the U.S. Hispanic population. Deaths and emigration not shown.

PEW RESEARCH CENTER

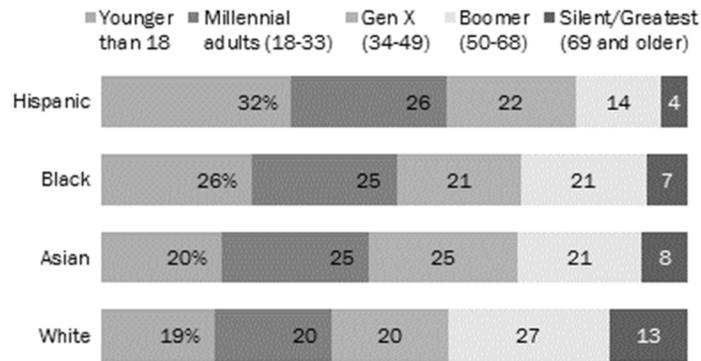
Figure 1: Increases in the Hispanic Population of the U.S. as the result of birth in the U.S. and Immigration to the U.S. (Flores et al.)

The Hispanic Population in the United States is Relatively Young

Hispanics represent the youngest major racial or ethnic group in the United States. Nearly six in ten Hispanics are Millennials or younger, with the Millennial generation being defined as those aged 18 to 33 in 2014. Black Americans represent the next youngest major racial group, with roughly 5 in every 10 individuals belonging to the Millennial generation or younger. About 45% of Asians and 40% of whites are Millennials or younger (Patten). For the nation as a whole, about 45% of individuals were 33 or younger in 2014 (*Annual Estimates of Population Age*).

The median age of Hispanics in 2014 was 28 years (Patten). The national median age of the U.S. population is estimated by the U.S. census bureau to be much older, at 37.9 years (*Annual Estimates of Population Age*). Additionally, the median age of the Hispanic population has risen more slowly in absolute terms than the median age of any other major racial or ethnic group in the United States. From 1980 to 2014, the median age of U.S. Hispanics rose 6 years from 22 to 28. During that same time, the median age of Asians, blacks, and whites in the U.S. rose 8, 9, and 12 years respectively (Patten).

Nearly six-in-ten Hispanics are Millennials or younger



Note: Whites, blacks and Asians include only those who are single race and not Hispanic. Hispanics are of any race. Figures may not add to 100% due to rounding.
 Source: Pew Research Center analysis of 2014 American Community Survey (IPUMS).
 "The Nation's Latino Population Is Defined by Its Youth"

PEW RESEARCH CENTER

Figure 2: Hispanics are the Youngest Major Racial or Ethnic Group in the United States (Patten)

The portion of the U.S. Hispanic population born in the country contributes significantly to the Hispanic population's relative youth. The median age of U.S.-born Hispanics is more than twenty years lower than that of their foreign-born counterparts. Of the Hispanic children under 18 years of age living in the United States, only 11% are foreign-born. Just over half of Hispanic children in the U.S. are members of the second generation, meaning they have parents born outside the country but are themselves U.S.-

born, and the remaining 37% are third generation or later. That the majority of Hispanics in the U.S. are members of the second generation is a recent development. In 1980, the majority of Hispanics in the U.S. were members of the third generation or later (Fry and Passel).

Socioeconomic Status of U.S. Hispanics

Hispanics are relatively socioeconomically disadvantaged compared to their non-Hispanic counterparts. In 2015, the median household income in the United States was \$56,516. Median household income for Hispanics of any race was lower, at \$45,148. However, between 2014 and 2015 the real median income of Hispanic-origin households increased by 6.1 percent, the largest proportional increase for any major racial or ethnic group (Proctor et al.).

Hispanics are more likely than members of the general population to live in poverty or to be unemployed. 43.1 million people, or 13.5 percent of the population of the United States, lived in poverty as of 2015. Of those, 12.1 million were Hispanics, representing 21.4 percent of the Hispanic population (Proctor et al.). Additionally, the unemployment rate of the Hispanic population in the U.S. in 2016 was slightly higher than that of the population of the country as a whole, 5.8% for the former and 4.9% for the latter (*Unemployment Rate*).

Hispanics historically trail non-Hispanics in educational measures, although they have made rapid progress in recent years. Though Hispanics in the United States trail other major racial and ethnic groups in attainment of a bachelor's degree, over the past two decades, the enrollment of Hispanics in college has increased significantly. In 2014, 35% of Hispanics between the ages of 18 and 24 were enrolled in a two or for year

college, compared to just 22% in 1993. Additionally, the high school dropout rate among Hispanics has decreased substantially, reaching a record low of 12% in 2014 compared to 32% in 2000 (Krogstad).

Health of U.S. Hispanics: Mortality

Hispanic males and females in the United States have the highest life expectancy at birth of any major racial or ethnic group. In 2015, Hispanic males had a life expectancy of 79.3 years at birth, and Hispanic females had a life expectancy of 84.3 years at birth. The life expectancy at birth for the population of the United States as a whole was roughly three years lower for both sexes than it was for Hispanics, 76.3 years for males and 81.2 years for females (*Health, United States*).

Data indicating that Hispanics in the U.S. have either similar or favorable mortality figures compared to non-Hispanic whites has led to the suggestion of the existence of a “Hispanic paradox” in the study of Hispanic health. The paradox arises from the fact that literature from the U.S. and elsewhere demonstrates that lower socioeconomic status is consistently associated with poorer health outcomes. Hispanics in the U.S. are socioeconomically disadvantaged compared to non-Hispanic whites, thus an advantage in mortality is paradoxical (Markides and Eschbach).

As previously stated, the Hispanic population represents the youngest major racial or ethnic group in the United States (Patten). Therefore, the age adjusted death rate is helpful in demonstrating a Hispanic advantage in mortality. Even when controlling for age, Hispanics in the U.S. as of 2015 have a death rate of 5.25 per 1,000 members of the population, compared with 7.33 for the population of the U.S. as a whole (*Health, United States*). This suggests that the observed advantage in mortality in Hispanics in the U.S. is

not simply the result of the fact that a greater proportion of the Hispanic population is young.

The leading causes of death for Hispanics were cancer and heart disease, with cancer responsible for 21.5% of deaths and heart disease responsible for 20.1% of deaths. While these are the same two leading causes of death as for both the non-Hispanic white and non-Hispanic black population, heart disease ranked first and cancer second outside the Hispanic population. Additionally, the relative burdens of cancer and heart disease were greater outside the Hispanic population. Cancer resulted in 23.7% of non-Hispanic white and black deaths, and heart disease resulted in 22.6% and 22.4% of non-Hispanic white and black deaths respectively (Heron).

Table 1 Leading causes of Death Among Racial and Ethnic Groups in the United States (Heron)

Cause of death (based on ICD-10)	White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Rank ¹	Deaths	Percent of total deaths	Rank ¹	Deaths	Percent of total deaths	Rank ¹	Deaths	Percent of total deaths	Rank ¹	Deaths	Percent of total deaths
All causes	...	2,237,880	100.0	...	308,960	100.0	...	18,008	100.0	...	61,570	100.0
Diseases of heart (I00-I09,I11,I13,I20-I51)	1	524,695	23.4	1	73,095	23.7	1	3,288	18.3	2	13,270	21.6
Malignant neoplasms (C00-C97)	2	502,933	22.5	2	69,090	22.4	2	3,153	17.5	1	16,524	26.8
Chronic lower respiratory diseases (J40-J47)	3	134,541	6.0	6	9,934	3.2	6	788	4.4	7	1,838	3.0
Accidents (unintentional injuries) (V01-X59,Y85-Y86)	4	117,151	5.2	4	14,135	4.6	3	1,996	11.1	4	2,646	4.3
Cerebrovascular diseases (I60-I69)	5	111,035	5.0	3	17,088	5.5	7	649	3.6	3	4,331	7.0
Alzheimer's disease (E80-E83)	6	84,990	3.8	9	6,567	2.1	11	304	1.7	8	1,680	2.7
Diabetes mellitus (E10-E14)	7	59,741	2.7	5	13,435	4.3	5	945	5.2	5	2,367	3.8
Influenza and pneumonia (J09-J18)	8	47,293	2.1	11	5,611	1.8	9	412	2.3	6	1,911	3.1
Intentional self-harm (suicide) (*U03,X60-X84,Y87.0)	9	38,723	1.7	16	2,426	0.8	8	489	2.7	10	1,188	1.9
Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27)	10	37,976	1.7	7	8,586	2.8	10	338	1.9	9	1,246	2.0
Chronic liver disease and cirrhosis (K70,K73-K74)	11	33,508	1.5	15	3,103	1.0	4	951	5.3	14	608	1.0
Septicemia (A40-A41)	12	31,512	1.4	10	6,386	2.1	12	289	1.6	12	753	1.2
Assault (homicide) (*U01-*U02,X85-Y09,Y87.1)	19	7,397	0.3	8	7,903	2.6	13	264	1.5	19	308	0.5

... Category not applicable.

¹Based on number of deaths. Ranks above 10 are provided for informational purposes when a cause is among the top 10 for at least one of the groups being compared.

A leading cause of death for Hispanics that was not a leading cause of death outside the Hispanic population was chronic liver disease and cirrhosis; while this ranked sixth as a cause of death for the Hispanic population, it did not rank in the top ten for either the non-Hispanic white or black population (Heron).

Homicide and suicide were leading causes of death in the non-Hispanic black and white populations that were not leading causes of death in the Hispanic population.

Although homicide ranked eighth for non-Hispanic blacks as a cause of death, it did not

rank in the top ten for Hispanics. Suicide ranked as the ninth leading cause of death in the non-Hispanic white population, but did not rank in the top ten for Hispanics (Heron).

In 2014, the infant mortality rate was lower among Hispanic mothers than among the population of the United States as a whole. For every 1,000 live births, Hispanic mothers experienced 5.0 infant deaths, compared to 5.8 infant deaths for all mothers in the United States. Non-Hispanic black mothers experienced a rate of 10.9 infant deaths for every 1,000 live births, significantly higher than any other major racial or ethnic group. The non-Hispanic white infant mortality rate, on the other hand, was 4.9 deaths per 1,000 live births (*Health, United States*, Table 10).

Health of U.S. Hispanics: Prevalence of Diseases and Risk Factors

According to the Center for Disease Control and Prevention's National Center for Health Statistics, in the United States, 69.5 percent of the population age 20 and over is overweight or obese, defined as having a BMI of 25.0 or greater. The proportion is greater in the Hispanic population, with 78.4 percent of Hispanic adults age 20 and older classified as overweight or obese (*Health, United States*, Table 58). This statistic is cause for concern because being overweight is associated with many adverse noncommunicable diseases such as cardiovascular diseases.

The incidence of all types of cancer is lower in the Hispanic population than it is in the population of the United States as a whole. In 2013, the age-adjusted incidence of new cases of cancer for all persons was 4.195 per every thousand individuals. The age-adjusted incidence of new cases in the Hispanic population was 3.274 for every thousand individuals. Only individuals who identified as Asian or Pacific Islander had a lower

incidence of total cancer. Hispanics had the lowest incidence of lung cancer and colorectal cancer (*Health, United States*, Table 36).

Incidence of HIV is somewhat higher in the Hispanic population than in the population of the United States as a whole. From 2010 to 2015, the number of HIV diagnoses in the United States ranged between 12.3 and 14.2 new cases per 100,000 individuals per year. In the Hispanic population, the number of new cases ranged between 16.3 and 18.1 per 100,000 individuals per year (*Health, United States*, Table 34).

The prevalence of diabetes is much greater in the Hispanic population than in the general population. Between 2011 and 2014, the CDC estimates that 16.8 percent of Hispanics age 20 and older were diabetic. The percentage of all persons 20 or older with diabetes between 2011 and 2014 was 11.9 percent (*Health, United States*, Table 40).

Rates of hypertension and hypercholesterolemia in the Hispanic population are similar to those of the general population. Between 2011 and 2014, the percentage of the U.S. population 20 years of age and over with hypertension was 30.4 percent. The percentage of Hispanics 20 and older with hypertension during the same time period was 28.5 percent (*Health, United States*, Table 54). The percentage of adults 20 and over with hypercholesterolemia was similarly close between the general population and the Hispanic population of the United States, 26.3 percent for the former, and 27.8 percent for the latter (*Health, United States*, Table 55).

Health Habits of Hispanics in the U.S.

Hispanics are significantly more likely than non-Hispanics to go twelve months without a health care visit, however estimates of the precise numbers vary. The CDC estimates that the proportion of Hispanics who had not had a health care visit in the last twelve months in 2010 was 23.5 percent. The proportion of the non-Hispanic population who had not had a health care visit was 14.0 percent. Health care visits as defined by the CDC include “visits to hospital emergency departments, home visits by a nurse or other health care professional, and visits to doctor offices, clinics, or some other place (*Health, United States*, Table 65).” Estimates by the U.S. Census Bureau for the number are much higher; it places the proportion of the Hispanic population that did not visit a medical provider in 2010 at 42.3 percent, and the proportion of the general population that did not visit a medical provider at 27.3 percent (O’Hara and Caswell).

One factor that may contribute to reduced medical visits by Hispanics in the U.S. is lack of a usual source of care. Between 2014 and 2015, a greater proportion of Hispanics reported not having a usual place of health care than non-Hispanics, 26.2 percent to 15.4 percent respectively (*Health, United States*, Table 62).

Hispanic men are slightly less likely than their non-Hispanic counterparts to smoke. From 2013 to 2015, 14.4 percent of Hispanic men were cigarette smokers, compared to 19.8 percent of non-Hispanic men. Hispanic women are significantly less likely than their non-Hispanic counterparts to smoke. The proportion of Hispanic women who smoke is less than half the proportion of non-Hispanic women who smoke, 7.2 and 16.4 percent respectively (*Health, United States*, Table 49).

Illicit drug use is also lower among Hispanics than it is in the general population. An estimated 10.1 percent of the general population over the age of 12 used an illicit drug in 2015, compared to 9.2 percent of Hispanics (*Health, United States*, Table 49).

Though general alcohol use is similarly lower among Hispanics, binge alcohol use is roughly the same. 42.4 percent of Hispanics reported using alcohol in 2015, which was lower than the 51.7 percent of all individuals over the age of 12 who reported using alcohol. 25.7 percent of Hispanics reported binge use of alcohol, however, which was similar to the 24.9 percent of all individuals over the age of 12 (*Health, United States*, Table 50).

Finally, Hispanics are slightly more likely to participate in leisure-time exercise than are members of the general population. While the proportion of all adults 18 and over in 2015 who participated in either aerobic or muscle-strengthening exercise meeting 2008 federal guidelines was 46.8 percent, the proportion of Hispanics was 53.5 percent (*Health, United States*, Table 57)

Conclusion

In summary, Hispanics represent a growing proportion of the U.S. population (Flores et al.). The majority of Hispanics are members of the second generation (Fry and Passel), and they represent the youngest major racial or ethnic group in the United States (Patten). Hispanics have relatively low socioeconomic status compared to the general population, both in terms of income (Proctor et al.), and in terms of education (Krogstad), but possess a paradoxical advantage in mortality (Markides and Eschbach). Incidence of certain diseases, especially diabetes, is higher in Hispanics than in the general population, while incidence of cancer is lower. Finally, though a greater proportion of the Hispanic

population does not visit the doctor or receive flu shots every twelve months, utilization of preventive screening by women is similar, and use of most substances such as illicit drugs is lower, and participation in exercise is higher (*Health, United States*).

CHAPTER TWO

Cultural Challenges in Care

Introduction

Culture consists of the customary beliefs, social forms, and material traits of a racial, religious, or social group (Merriam-Webster). It exerts influence over many aspects of the lives of individuals, and the health of those individuals is no exception. Cultural values can shape the way that individuals perceive phenomena such as mental illness, as well as many of the behaviors that they engage in. This chapter's focus is the effect that these norms, thoughts, and behaviors have on the health outcomes of Hispanic children in the United States.

Dietary Practices: A Cultural Inheritance That Shapes the Health Outcomes of Children

One ever-present aspect of culture that affects health is diet. Nutrition contributes substantially to the burden of preventable disease and early death (Ezzati et al.). A healthy diet is a recognized strategy for reducing cardiometabolic risk (Mattei et al.). Thus, if members of different cultural groups consume different levels of macronutrients (fats, carbohydrates, and proteins) and micronutrients (many vitamins), these differences would be noteworthy in understanding disparities in the health outcomes of members of those groups.

In light of the Hispanic paradox, it is worth considering whether or not diet may be a form of culture-based protection against the adverse health effects of lower

socioeconomic status (Mazur et al.). Of course, it is difficult to speak of a single Hispanic diet. There are as many diets as there are individuals, and Hispanic individuals represent a heterogeneous group from various cultural backgrounds and countries of origin. For this reason, determining dietary differences in various subgroups within the Hispanic population would be helpful.

The last nationally representative survey that contained detailed dietary information for several Hispanic subgroups was performed in the 1980s. Since that time, much has changed, including the demographic makeup of Hispanics in the United States, as well as an increase in obesity. Researchers in the *American Journal of Clinical Nutrition* used a sample of 12,406 U.S. Hispanics to estimate the intake of various nutrients and food groups by Hispanic and Latino subgroup. A combination of two 24-hour recall interviews and a food propensity questionnaire was utilized. Both methods are limited because they rely on self report, and are prone to underreporting, but their combined usage allows for inclusion of more accurately reported items in the case of the 24-hour recall, and less frequently consumed items in the case of the food propensity questionnaire. The results of the questionnaire and recall interviews were combined to give estimates of average daily consumption of certain food groups and macronutrients, as well as total energy consumption.

Researchers found that, in general, differences in diet across background might explain differences in health outcomes across background. For example, of the groups studied, Cubans had the highest rates of total energy consumption at 2235 kilocalories on average, highest rates of total fat consumption, highest average servings of red meat at 2.7 per day, higher sodium consumption, and highest average servings of refined grains at

6.5 per day. Cubans also reported the lowest average consumption of most micronutrients, and lower rates of consumption of fiber, fish, and fruit (Siega-Riz et al.). These findings may help explain the relatively higher rates of cardiovascular disease, and higher proportion of individuals exhibiting three or more CVD risk factors among Cubans (Daviglius et al.). Puerto Ricans had similar dietary profiles to Cubans, ranking second in daily servings of refined grains and red meat, second in fat consumption per every thousand kilocalories, and first in saturated fat consumption (Siega-Riz et al.). These findings may explain why Puerto Ricans had the highest rates of cardiovascular disease and CVD risk factors of the groups studied (Daviglius et al.). In contrast, individuals from South America had diets that generally follow American Heart Association guidelines (Siega-Riz et al.). In short, the researchers showed that groups of varying Hispanic and Latino background had dietary differences that may explain disparities in their health outcomes.

Though the study included only adults, it is reasonable to assume that the same cultural influences on health would extend at least partially to U.S. Hispanic children. The effect of parental behavior on child food preferences may begin even before the child is born. Taste and smell function in fetal life, and evidence suggests that certain flavors consumed by the mother may be present in amniotic fluid. Exposure to flavors continues in maternal breastmilk, although there is only limited evidence suggesting that these flavors actually influence acceptance of certain types of solid foods later in life. As the child grows, parents begin providing food to the child in a modified adult diet. Though preferences for certain tastes appear intrinsic (infants readily accept sweet foods and show preference for salty foods beginning at four months), preferences for other foods

with less intrinsic appeal are influenced by the amount of exposure the child receives. A child's rejection of new foods in most cases is simple neophobia. Continued exposure without coercion often leads to eventual acceptance of novel foods. In this regard, parents and other caregivers have an enormous effect on the eating behaviors of children early on, by determining which foods are available. Thus, the cultural background of parents, in shaping their own food preferences, can have a profound effect on the early diets of their children (Savage et al.).

Parents and other caregivers determine not only the types of food that children have access to, but also the quantity of those foods. While children can to some degree regulate the amount of food they take in, the environment created by parents affects this regulation. Offering large portions or modeling excessive eating behaviors, for example, can promote poorer self-regulation of eating. The amount of food that caregivers and parents present to a child is generally a product of the goals they have for the child. These goals are often culturally influenced. For example, a mother from a culture that considers overweight individuals less attractive, may attempt to restrict her daughter's feeding. On the other hand, a mother from a culture that views weight as a sign of health, may allow her child to feed excessively.

For most of human history, and in the great majority of places around the world, traditional feeding practices developed to reflect an environment of food scarcity. Commonly available foods were often low in energy, nutrients, and palatability. While the food environment especially in Western societies has changed dramatically, feeding practices have not (Savage et al.). Part of the reason for the persistence of these feeding

practices may be due to the culturally varying perceptions of healthy weight alluded to previously.

Perceptions of Healthy Weight

A study by researchers at the University of Texas Health Science Center San Antonio, conducted with a group of subjects from a primarily Hispanic, low-income population, found that most parents of overweight and obese children misclassified their child's weight status (Foster, Hale, et al.). These results are consistent with many other studies that find Hispanic mothers of overweight children underestimate their child's weight, and may be the result of a tendency of Hispanic parents to view excess weight as desirable during early childhood (Gauthier and Gance-Cleveland). It should be noted, however, that this tendency to mischaracterize the weight of overweight children is not unique to Hispanic mothers. Roughly a third of mothers of overweight children underestimate the weight status of their children, and the number is estimated to be much greater among low-income populations (Savage et al.). While perceptions of healthy weight may vary by culture, they also vary for a variety of other factors: whether the mother herself is overweight, whether the child is a son or a daughter, and the age of the child all appear to be significant factors in determining accurate weight-perception (Maynard et al.). Caution ought to be exercised to avoid overstating the role that culture plays in this phenomenon. Nevertheless, it is apparent that whether by controlling the type and amount of food available to children, or whether by influencing the goals parents set for feeding their children, culturally mediated beliefs and behaviors can have a profound affect on health in early childhood.

Acculturation

While the division thus far of the U.S. Hispanic population into subgroups based on country of origin is useful for determining dietary differences, as it is reasonable to assume that cuisines vary across different national backgrounds, this division is not without its problems. One such problem is that Hispanics with the same ancestral country of origin may still vary considerably depending on how much they have adopted the cultural beliefs and practices of their host country. This adoption is called acculturation, and for all the reasons that culture generally may affect health, acculturation status can play a part in influencing the health outcomes of Hispanic children as well.

Studies that aim to measure the effects of acculturation often use language as a proxy for acculturation status. This method of determining acculturation may seem an oversimplification. The process of adopting the culture of a host country is a continuous one that involves learning and accepting various beliefs, practices, and attitudes, of which the host country's language is only one part. Nevertheless, it appears a significant enough part that it is sufficient for approximating acculturation level. Lee, Nguyen, and Tsui, for example, demonstrated that in a sample of 4,170 foreign and U.S.-born Asians, interview language served as a better measure of acculturation than percent-lifetime in the U.S. and nativity. Separating the sample by interview language yielded the groups with the largest differences, and led the researchers to conclude that interview language may be used as an important covariate for health disparities (Lee et al.).

Division of Hispanic children by interview language to approximate acculturation highlights some differences between more and less acculturated Hispanic children. Foster, Read, and Bethel examined data derived from the 2004 Medical Expenditure

Panel Survey, linked with data from the 2002 and 2003 National Health Interview Survey, to determine how Hispanic children stratified according to acculturation vary by sociodemographic characteristics and medication use. The 7,539 children were separated into four categories based on the language of the interview (either English or Spanish) and on race/ethnicity (Hispanic, non-Hispanic white, non-Hispanic non-white).

Researchers then recorded the use of any prescription medicine for each child, as well as gathered information on the child's age, mother's citizenship, mother's education, family income, type of insurance, and whether the child had access to a usual source of care.

What they found was that more-acculturated children (Hispanic with English interview) were more likely to have mothers who were U.S. citizens than less-acculturated children (Hispanic with Spanish interview). More-acculturated children were also richer, were half as likely to have gone an entire year uninsured, and were more likely to have a usual source of care than less-acculturated children. However, more-acculturated children did report more days of school missed due to illness or injury, and more reported illnesses and injuries in general.

Regarding medication use, Hispanic, Spanish-interviewed children were less likely to use any medication than Hispanic, English-interviewed children, and white children. This difference was more pronounced in the use of antibiotics and psychiatric medications. Differences in the use of respiratory or CNS medications (drugs acting on the central nervous system) were mostly insignificant. The differences in medication use between the groups, upon multivariate analysis, were attributable in large part to differences in access to care. Simply put, less-acculturated Hispanics were less likely to

have a usual source of care and had fewer provider visits on average, and this largely explained their lower rates of medication use.

The researchers did, however, discover more interesting findings when they examined differences in specific medication types. For example, although the use of respiratory medications was lower in the less-aculturated group, there is evidence suggesting that the rate of asthma in less-aculturated Hispanic children, especially Mexican children, is lower than in non-Hispanic white children. When only children with current reported asthma were included for analysis, there was no difference in respiratory medication use among the groups. This finding is potentially encouraging, and consistent with the Hispanic paradox.

In contrast, differences in psychiatric medication use were not as easily explained by factors beyond acculturation. Researchers observed lower rates of psychiatric medication use in the less-aculturated Hispanic group even after controlling for access of care. Evidence indicates lower rates of ADHD diagnosis and reporting in the Hispanic population, accompanied by lower use of stimulant medications. Foster et al. believe that these lower rates are attributable mostly to the subset of Hispanics who are less-aculturated, since more acculturated Hispanic children had similar rates of ADHD diagnosis and stimulant medication use to those found among white children (Foster, Read, et al.). One possible explanation of this finding is a cultural difference in the understanding of illness, and this will be discussed at length shortly. In summary, acculturation is an important variable in understanding health disparities, which highlights the role of culture in the care of patients.

Cultural Understandings of Health and Illness

Patients and providers do not always understand illness in the same ways. While the provider's understanding of illness is largely biomedical, patients' understanding of disease can be a combination of biomedical knowledge, superstitions, and folk beliefs. Just as it is important to educate the public so that concerns unique to medical professionals may be common knowledge, so too is it important that medical professionals learn about the beliefs patients may hold that can distort their understanding of health and illness (Poma).

These beliefs are often culturally mediated and can affect the recognition and treatment of illnesses. To return to the example of ADHD, studies have documented lower rates of diagnosis and use of medication by Hispanic children, specifically those whose parents interview in Spanish (Foster, Read, et al.). There are several proposed explanations for this disparity. One is that Hispanic families may be less willing to seek help from professionals for ADHD symptoms, relying instead on extended families for support. Another is that Hispanic parents may be more reluctant to use mental health services, especially those parents who are less acculturated (Morgan et al.). Still another is that less-acculturated Hispanics may not interpret ADHD symptoms as a sign of disease (Foster, Read, et al.).

What this example highlights is that the beliefs of patients regarding health and illness affect how they interpret signs and symptoms and choose treatments, and that these beliefs may vary from the primarily biomedical understanding of health professionals. Opposed to the biomedical understanding of disease are folk beliefs. These range from belief in folk illnesses such as *susto* (a sickness brought on by an episode of

fright) and mal de ojo (a hex caused by an envious glance) to belief in folk remedies and healers (Juckett). While Hispanics are a heterogeneous group with different cultural backgrounds, there will be a degree of generalization when discussing folk beliefs. Some Hispanic individuals believe in illness that can only be handled by a “curandero” in specific rituals, and not by physicians and medicines. Such persons may also use supernatural means and prayer before visiting a health professional even for problems they do believe that physicians can solve. Often these methods are employed at the same time as medical treatment (Poma).

Along with belief in folk illness, many Hispanics also employ folk remedies. Herbal remedies are featured heavily in Hispanic folk medicine. These can range from relatively innocuous, such as the use of herbal teas for anxiety, to herbal oils used topically that can be toxic if ingested (Juckett). These traditional remedies need not necessarily conflict with medical treatment, but they do add a layer of complexity in dealing with illness. In the management of diabetes, for example, Hispanic adults identify both biomedical and herbal treatments, with negative attitudes toward insulin commonplace (Hatcher and Whittemore). In a case study of one Mexican American woman who was a recent immigrant to the United States, the patient managed her diabetes both with the recommended treatment of her physician and with a daily drink containing aloe suggested by her mother. She received her diagnosis shortly after witnessing a car accident during a trip to Mexico and attributed the disease to the trauma of the event. Although these beliefs may seem innocuous, they can complicate the management of diabetes. There is limited evidence suggesting the efficacy of aloe as a glucose-lowering agent, but potential side effects and lack of regulation preclude its

recommendation as a treatment (Lemley Megan and Spies Lori A.). While it is difficult to say whether her single case is a representative one, it highlights how traditional beliefs can add complexity to the care of Hispanic patients.

In order to discover the degree to which these traditional beliefs influence Hispanic parents' understanding of their children's diseases, Andrews, Ybarra, and Matthews conducted a study of Hispanic immigrant and migrant families in central Washington State. They focused primarily on gastrointestinal illness in children. Information provided by families regarding their child's illness was juxtaposed with information provided by health professionals.

In explaining diarrhea, families most often list food as the cause. This included both switching food or types of milk, as well as foods that had gone bad. Just over half of families reported uncleanliness and dirty hands as the cause for diarrhea. Over 40% of participants linked their child's diarrhea with folk illnesses, including *empacho*, *caida de la mollera*, and *susto* (Andrews et al.). These three folk illnesses are understood as indigestion caused by overeating, childhood irritability thought to be caused by abrupt withdrawal from the mother's breast, and an illness brought on by an episode of fright, respectively (Juckett). These causes listed by parents contrasted with those listed by health professionals, who cited viruses, bacteria, and parasites as the most common causes, followed by food allergy, change in formula, and unsanitary conditions.

Concerning treatment and prevention, in many cases the families studied gave biomedical reasons for their child's illness, as well as biomedical remedies. Washing the hands was the most frequent preventive measure identified by parents. Parents also believed that when diarrhea was caused by viruses and bacteria that it was transmissible

to other children, and that treatment by health professionals was sufficient. In cases where diarrhea was linked to folk illnesses, however, parents generally did not believe that it was transmissible, and did not believe that treatment by health professionals was sufficient.

Interesting findings included the general persistence of folk beliefs, seemingly independent of time of residence in the United States. This finding challenged previous assumptions that continued acculturation and education eventually lead to abandoning the use of folk medicine. Also of note was a discord between health professionals and families concerning education. When asked what they thought were the greatest challenges in treating Hispanic patients, many health professionals cited education as a top priority, and specifically mentioned an increased emphasis on the washing of hands. However, when families were asked about causes of diarrhea, and means of prevention, the answers they gave regularly mentioned cleanliness. What this may demonstrate is that folk beliefs are not necessarily barriers, since families were able to understand the biomedical explanations given by health professionals (Andrews et al.).

Treatment of illness begins with recognition of illness. The signs and symptoms recognized by health professionals, however, are not recognized by their patients universally. Patients often carry culturally mediated beliefs about what constitutes illness, what causes it, and how it is cured. Hispanics in the United States demonstrate complex systems of understanding health and illness, oftentimes part biomedical and part folk knowledge. The wide variety of treatments employed by Hispanics reflect this varied understanding.

Conclusion

Cultural competence is continually emphasized as a skill of great value to health care professionals. Especially in the case of Hispanic children in the United States, understanding aspects of the Hispanic culture can help to partially explain the health outcomes of patients. From the dietary practices and eating decisions that shape the health of children every day, to the beliefs that the parents of those children hold about well-being and illness, culture constantly exerts its influence on health. Studying this link between culture and health can both illuminate some of the unique challenges of caring for Hispanic children as patients, as well as offer insights on how to better work with families to provide quality care.

CHAPTER THREE

Structural Barriers

Introduction

While the previous chapter deals with how culture impacts health care outcomes for Hispanics in the U.S., the following information focuses on those challenges that are external to patients and their families, namely structural barriers that prevent access to medical professionals and resources. Much has been made of the cost of health care in the United States, as well as the political battles over laws governing health insurance and immigration. This chapter attempts to evaluate the effect of these barriers on providing care to Hispanic children.

The Rising Cost of Health Care

It is no secret that a great deal of money is spent in the U.S. on health care. In fact, at 3.2 trillion dollars, total health spending in the United States in 2015 was higher than in any other country in the world. Accounting for 17.8 percent of the U.S. economy, health spending continues to grow at a rate greater than the total U.S. economy. Annual growth in health spending in the two decades between 1995 and 2015 was 4.0%, while the growth of the total economy during the same time was 2.4%.

While these numbers may seem like cause for alarm, many factors have contributed to rising health spending in the United States, and not all of them are necessarily negative. Population growth, for example, contributes to an increase in total health spending as more people need care. Increased service utilization, and a rising

average age in the United States can also contribute to rising health spending. While increased disease prevalence driving greater health spending would be concerning, that would be less a problem with the cost of health care per se and more a problem with the health of the U.S. population in general. The cause of greatest concern, however, would be greater spending associated with an increase in the price of medications and services. A study in the *Journal of the American Medical Association* assessed the role of each of these factors in the rising cost of health care. It found that although demographic factors played a part, the greatest driver of greater health spending was increasing service price and intensity. Disease prevalence had a mixed effect on total health spending depending on the specific disease. While increases in the incidence of diabetes were linked to greater health spending, decreases in the incidence of cardiovascular disease were linked to reduced health spending. Simply put, Americans are spending more on health care primarily because the services they receive have become more complex and costly (Dieleman et al.).

Cost is prohibitive by nature. The function of an insurance copay, for example, is partly to dissuade visits to the doctor for trivial reasons. Costs that are too high, however, may discourage regular health maintenance visits that can help prevent much more expensive services down the line. This is especially true for those with less opportunity to meet those costs. In 2010, over one third of individuals in poverty went the entire year without a visit to a medical provider compared to less than one fifth of higher-income individuals (O'Hara and Caswell). As previously noted, compared to the general population, Hispanics are socioeconomically disadvantaged (Proctor et al.). This disadvantage is reflected in measures of family income, educational attainment,

occupational characteristics, and asset accumulation. Lower family incomes make Hispanic families less likely to be able to afford health care expenses, even if they have insurance (Escarce and Kapur).

As health care costs continue to rise in the U.S., increasing attention is being devoted to the challenge of making health care more accessible for larger segments of the population (Dieleman et al.). As the major racial or ethnic group most likely to forego visits to medical providers, Hispanics represent a group warranting special attention in this endeavor.

The Importance of Insurance

Insurance is one of the primary ways individuals manage health care costs. Health insurance reduces the amount that patients have to pay out-of-pocket for medical expenses, and has been shown to be the most important predictor of utilization (Escarce and Kapur). Insurance can thus promote regular and ongoing health care. For children especially, ongoing care is important for the maintenance of health by providing age appropriate vaccinations, screening for chronic conditions, offering developmental guidelines, and treating injury.

Policy solutions for the rising cost of health care tend to focus on reducing the number of uninsured individuals in the United States. In theory, promotion of more regular health care visits and preventive care should promote better long-term health, which can reduce costs in the future. The Health Maintenance Organization Act of 1973 required employers of greater than 25 employees to provide an HMO option for insurance if they already provided traditional insurance (“42 U.S. Code § 300e”). As HMOs often require selection of a primary care physician to act as a gatekeeper, they

intend to curtail costs by reducing the number of more complicated procedures and emphasizing maintenance of good health. The Health Insurance Portability and Accountability Act of 1996, often referred to as HIPAA, among many other actions, limited the restrictions of benefits for preexisting conditions in group health insurance plans (“29 U.S. Code § 1181”). Most recently, the Patient Protection and Affordable Care Act represented the largest expansion of coverage since the passage of Medicare and Medicaid (Blumenthal et al.). Efforts to extend coverage to the uninsured make U.S. Hispanics a group of particular interest, since they are the most likely major racial or ethnic group to be uninsured and have been historically for quite some time (*Health, United States*, Table 105).

Numbers of Insured

As of 2015, the proportion of uninsured persons under the age of 65 was more than twice as high in the Hispanic population as it was in the non-Hispanic population, 21.1 percent for the former and 8.2 percent for the latter. This disparity is reflective of a historic trend. In 1984, 29.5 percent of the Hispanic population had no health insurance, compared to 13.2 percent of non-Hispanics. For the next two decades, the number of all uninsured grew, peaking in 2010 at 32.0 percent in the Hispanic population and 15.2 percent in the non-Hispanic population (*Health, United States*). That the trend is reversing as more individuals gain insurance is an encouraging sign, but the disparity between Hispanics and other groups in health insurance coverage remains.

The reasons for higher proportions of uninsured persons in the Hispanic population are many. Most adults ages 18-64, and roughly half of children under the age of 18 in the United States receive private health insurance provided by an employer

(*Health, United States*). Hispanics, however, are less likely to work for employers that offer health insurance. Jobs paying lower wages, smaller firms, and industries such as agriculture, construction, domestic and food services, and retail trade are less likely to offer insurance as a benefit of employment. As Hispanics are more likely to work in these jobs and industries than their white counterparts, they are less likely to receive insurance from their employers. There is some evidence to suggest that Hispanics are less concerned with health insurance when seeking employment. A focus group study by the Commonwealth Fund found that many Hispanics were primarily concerned with gaining employment and maximizing their salary. Many of the group participants admitted that they did not ask about health insurance when applying for jobs (Escarce and Kapur).

Hispanics are more likely to receive their insurance, if they are insured, from public health insurance programs than non-Hispanics (*Health, United States*, Table 104). These programs are designed to aid low-income people. Hispanics, as a socioeconomically disadvantaged group, are thus more likely to be eligible to benefit from them. Public health insurance programs, however, do not close the gap in health insurance coverage between Hispanics and non-Hispanics. Many Hispanics live in states such as Arizona, Texas, Florida, and New Mexico that have more restrictive rules for Medicaid and CHIP eligibility. Medicaid and CHIP require a 5-year waiting period after attaining legal status for qualified non-citizens, though exceptions are made for many immigrants such as refugees and asylees. Undocumented immigrants are ineligible for benefits (Escarce and Kapur). As a sizable share of the Hispanic population consists of immigrants, these restrictions are expected to affect it disproportionately.

The focus of this thesis is the care of Hispanic children, and fortunately the disparities thus far described are minimized when the population under consideration consists of only children. Children are generally more likely to be insured than adults. This is due in large part to the fact that children have been historically more likely to qualify for Medicaid. CHIP (the Children's Health Insurance Program) since 1997 has extended coverage to children from low-income families that do not qualify for Medicaid. While only 14.1 percent of persons ages 18-64 receive their health insurance from Medicaid and other public sources, 39.2 percent of persons under 18 receive health insurance from Medicaid and CHIP (*Health, United States*). This helps to minimize the effect of the previously described disparity in employer-provided health insurance.

Also encouraging is a trend of expanding coverage. 2014 marked a record high of 94 percent of children having health insurance (Carson and Staley). This record high was broken just two years later in 2016, as the proportion of children with health insurance rose to 95.5 percent (*Health, United States*, Table 105).

Nevertheless, disparities remain. In 2014, while 95.4 percent of non-Hispanic white children and 95.3 percent of black children had health insurance, only 90.3 percent of Hispanic children had health insurance. Put another way, Hispanic children make up nearly 40 percent of children without health insurance, despite the fact that they comprise only 24.3 percent of all children in the United States.

Amongst Hispanic children, the number of uninsured varies by citizenship. Even after controlling for language, income, family, and residential characteristics, non-citizen Hispanic children are three times more likely to lack insurance when compared to citizen children. The citizenship status of parents seems less important than that of children, as

citizen children with a noncitizen parent in the household are not significantly more or less likely to be insured. Perhaps unsurprisingly, however, the greatest predictor of whether or not a Hispanic child is insured is the insurance status of his or her parent. Hispanic children without insured parents are 7.2 times more likely than Hispanic children with at least one insured parent to be uninsured. Controlling for insurance status of parents renders makes the language spoken by parents inconsequential (Carson and Staley).

In summary, lack of insurance represents a significant barrier to accessing health care because it makes health care more expensive and utilization less likely. While increasing numbers of individuals are gaining access to health insurance, those still without it face a significant obstacle in participating in regular health care and maintenance. Lack of health insurance disproportionately affects Hispanics and their children, which presents a unique challenge to health professionals caring for Hispanic patients.

A usual source of care is a health care provider where people usually seek advice about health or visit for treatment of routine illness. A usual source of care is important for a number of reasons. It facilitates the ability to make appointments at convenient times. It can reduce uncertainty about the cost of visits. Familiarity with the same health care provider can enhance patient comfort and satisfaction. Having a usual source of care also enhances continuity.

Private physicians' offices and health maintenance organizations make ideal usual sources of care. This is because an emphasis on primary care is also an emphasis on preventive care. Other sources of care, such as emergency departments, do not promote

continuity and often lead to less satisfactory experiences for patients (Escarce and Kapur).

As noted previously, Hispanics are the least likely major racial or ethnic group to report having a usual source of care. Hispanics who are primarily Spanish speakers in particular are more likely to lack a usual source of care (Foster et al.). This represents a barrier to health care access, as those without a usual source of care are more likely to have difficulty obtaining care or to forgo receiving medical services altogether (Escarce and Kapur).

The Effect of Laws Concerning Immigrants

19.4 of the 37.1 million Hispanics in the United States are foreign-born (Flores et al.). Because a substantial portion of the Hispanic population is composed of immigrants, laws governing immigration and receipt of benefits for immigrants are expected to more greatly impact Hispanic individuals.

In the discussion of insurance, it was noted that in many cases, legal noncitizens had a waiting period of five years before qualifying for Medicaid. This requirement is the result of the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, as part a broader reform of welfare in the United States (“Summary of Immigrant Eligibility Restrictions Under Current Law”). This is one example of how laws governing immigrants can act as formal barriers to accessing health care for Hispanics.

The effect of some legislation, however, is less direct. In recent years, states dealing with the issue of illegal immigration have passed bills requiring officers to make a reasonable attempt to determine the legal status of a person stopped, detained, or

arrested. The first such piece of legislation was Arizona's Senate Bill 1070, and although the Supreme Court struck down many of its provisions, the requirement concerning officers was upheld.

A similar law in Georgia, House Bill 87 (HB87), was passed in 2011. It provides authority for police officers to enforce federal immigration laws. HB87 does not directly target Hispanics. However, as an estimated 70 percent of illegal immigrants in the United States are Hispanic, it is reasonable to assume that they will represent a greater proportion of the individuals affected. Also of note is that the law specifically excludes health care workers from a statute criminalizing the transport and harboring of known illegal immigrants.

A study conducted in 2013 examined the effect of HB87 on visits by Hispanic patients to the Pediatric Emergency Department (PED). The reason for the focus on the emergency department is that it bears much of the burden of treating uninsured illegal immigrants. An estimated 45 percent of illegal immigrant children and 25 percent of legal resident children who have illegal immigrant parents are uninsured. These populations tend to rely on emergency departments and free clinics for episodic, rather than continuous, care. Researchers were interested in measuring both the number and acuity of visits before and after the passage of HB87.

Electronic medical records were reviewed for all patients to the PED self-identifying as Hispanic in the four-month period following implementation of HB87 (July-October 2011). These were compared with records from the same four-month period during the previous year, and the year before (July-October 2010 and 2009). Researchers found that before the passage of HB87, a greater proportion of patients self-

identified as Hispanic, 18.3 percent compared to 17.1 percent after passage of HB87. While the change was small, it was statistically significant ($p < .01$). The percentage of Hispanics presenting as high acuity, defined as a patient scored with a 1 or 2 on the Emergency Severity Index scoring system, increased after passage of HB87. The percentage of Hispanic patients admitted to the intensive care unit also increased after passage of HB87. This combination of decreased visits to the PED, increased acuity, and increased admittance rates was not observed in any of the other racial and ethnic groups studied. These results led the researchers to conclude that concern over the discovery of illegal immigration status may have contributed to dissuading Hispanics from utilizing PED services until their problems were more severe (Beniflah et al.). This represents just one possible scenario in which laws not directly governing health care (even explicitly excluding health care workers in this case) can still influence the utilization of services by the Hispanic population.

Conclusion

Several barriers may prevent Hispanics from accessing health care. The high cost of health care in the United States is discussed frequently as a barrier to low income persons of all races and ethnicities. To offset the burden of cost, providing an increasing share of the U.S. population with health insurance has been the focus of policymakers in recent years. As the major racial or ethnic group most likely to be uninsured in the United States, Hispanics represent a population of interest to meet this goal. Although the proportion of uninsured persons continues to decrease, and although these proportions are reaching historic lows in children, Hispanic children are still more likely than non-Hispanics to be uninsured. Along with the fact that they are also the most likely to lack a

usual source of care, and that they may be adversely affected by legislation concerning immigration, Hispanics face many structural obstacles to receiving care.

CHAPTER FOUR

Current and Proposed Solutions

Introduction

Some of the cultural and structural challenges of providing care to Hispanic children have thus far been discussed. This chapter focuses on two broad areas of solutions roughly corresponding to the two types of challenges identified. The first is solutions dealing broadly with cultural competence. Cultural competence is one of the fields that has emerged as a strategy for addressing racial and ethnic disparities in U.S. health care. It involves health professionals acknowledging the importance of culture, assessing cross-cultural relations, and being mindful of the dynamics that result from cultural differences at all times (Betancourt et al.). The second area of solutions consists of policy solutions with an emphasis on extending insurance coverage to children.

Cultural Competence Has Many Dimensions

Just as culture consists of a wide range of beliefs and behaviors, cultural competence can encompass a wide range of considerations at a few different levels. At the most basic level is the interaction between the patient and clinician. Health professionals that understand the cultural concerns of their patients are believed to be able to provide more satisfactory care. At higher levels are interactions with health care systems. Patients who can easily access information about health in the language they best understand, or easily find a member of the health care staff that shares their cultural

background may be more likely to understand health instructions and receive continuous care.

There are many commonly proposed solutions to create more culturally competent health care systems. Interpreter services, recruitment and retention of minority clinicians, training of current health professionals, coordination with traditional healers, use of community health workers, culturally competent health promotion, inclusion of family and community members, immersion into other cultures, and administrative accommodations are examples of possible measures to increase cultural competence (Brach and Fraserirector). Each of these will be discussed in turn.

As mentioned in the discussion on acculturation, Hispanics who prefer interaction in Spanish differ in a number of crucial ways from their counterparts who speak English (Foster et al.) Provision of interpreter services is, therefore, one of the ways in which health care providers can more effectively interact with patients in a culturally competent way. While professional interpreters are the most obvious option, they are not the only one. Members of the existing medical staff who speak another language may be pulled from other duties momentarily. Some professional interpreters may also be employed off-site, using video call technology.

Recruitment and retention of minority staff may help to improve patient satisfaction. As these staff members may share cultural values and a common language with minority patients, they can help to facilitate communication and create a more welcoming environment. Hiring minority search firms and subcontracting with minority health providers are possible ways to achieve greater minority representation.

Specifically recruiting and attracting employees who match the race and ethnicity of patient populations is also an option.

Training of staff members to understand different cultures can help to resolve problems that arise from cultural mismatches. There is considerable variation in minority groups. Thus, even minority providers may not share cultural understanding with patients of the same culture all the time. Training, then, is appropriate for health care professionals of all cultures. Increasing knowledge about various cultural groups or discussing how to communicate more effectively with groups possessing different cultural values are examples of possible training. This training can occur as a single event, such as during an orientation for new employees, or can be an ongoing program provided to staff (Brach and Fraserirector).

Coordination with traditional healers is another strategy for increasing cultural competence. Hispanics may utilize both biomedical treatments and traditional or folk treatments simultaneously (Poma). For this reason, it would be beneficial for clinicians to coordinate with traditional healers in the same way they might with other health care professionals to enhance continuity of care. This may of course not always be possible, especially if traditional practices contradict directly with biomedical understandings of disease.

Minority community health workers may be employed to reach out to other members of minority communities. These workers may provide services such as health education and serve as guides to help patients navigate the complexity of the health care system. They can also be employed to give regular reminders to patients about

appointments and increase the likelihood of patient follow-up. To reduce expense, with adequate training these community members may also serve as interpreters.

Culturally competent health promotion can involve public information campaigns that take into account culture-specific attitudes and values into their messaging. These promotional materials could encourage healthy behaviors and risk reduction, early detection and treatment, and proper care of diseases. Clinicians may also conduct culturally informed interventions.

Inclusion of family or community members is a strategy that may be effective with certain minorities that prefer family-centered approaches. Interacting with family members can help providers obtain adherence to treatment (Brach and Fraserirector). This practice may seem to run counter to the principle of patient autonomy, which emphasizes that each patient must be allowed to make his own choices about his own health care. A study by Blackhall et al., however, demonstrated that attitudes toward patient autonomy can vary by ethnicity. Korean-Americans and Mexican-Americans were significantly less likely than European-Americans and African-Americans to believe that patients should be informed of a diagnosis of metastatic cancer. Less than half of Korean and Mexican-Americans believed patients should be informed of a terminal prognosis and that patients should make decisions about the use of life support. These groups preferred instead that family members be informed and make decisions for the patient (Blackhall et al.). Inclusion of family members in the decision-making process can help to obtain participation from minority groups that prefer such approaches.

Immersing health care professionals into another culture can help to increase their cultural awareness. As they learn about that culture's beliefs, professionals may more

readily integrate those beliefs into their practice. Immersion into other cultures may also help to develop sensitivity and skills working with those cultures.

Finally, administrative changes can help accommodate patients from different cultures. Extending language proficiency so that at all levels of encounter the patient can communicate easily is one way this might occur. Another is by locating health systems near patients to facilitate ease of travel. Often these techniques are not utilized in isolation, and their combined use can be employed to target specific minority populations (Brach and Fraserirector).

Assessment of Culturally Informed Interventions

While it may seem intuitive that providing culturally competent care ought to improve outcomes in cases where culture creates discord, it is not self-evident that the benefits gained from improving cultural competence will be substantial enough justify the costs of achieving them. It can be tempting to assume out of hand that racial and ethnic minorities will benefit from culturally competent care. However, especially in cases where the increased cost of that care is passed on to patients, it is possible that these measures may be ineffectual and even counterproductive. Since cost is especially prohibitive to Hispanic patients, it is helpful to know whether culturally tailored interventions have a substantial effect on outcomes. Fortunately, several interventions have been performed in many places across the United States, and the impact of these interventions is open to assessment.

One such intervention took place at a large California urban health center, with a target population of low-income Mexican mothers and their children of 3-5 years of age. Higher rates of consumption of sweetened beverages by Hispanics is a cause of concern

that has been documented in the past (Siega-Riz et al.). Researchers designed a culturally competent program to improve health behaviors. The program included lessons delivered in Spanish and English on healthy drinking habits (such as replacing sweetened beverages with water and lower-fat milk), physical activity, and parental role modeling. Group activities such as walks, trips to the grocery store, and cooking classes with cultural foods were also part of the program.

While after the first week 10 of the 43 parent-child dyads dropped out of the program due to work commitments, those that remained completed the program with 100 percent attendance. Researchers found that immediately postintervention children were consuming significantly higher amounts of 1% as opposed to 2% milk, drinking significantly more water, and had reduced consumption of soda and other sweetened beverages by 82 and 73 percent respectively. While the milk and water behaviors persisted long after the program ended (15 months post intervention), soda drinking reverted to baseline 6 months after the program had ended. These results indicate the feasibility of similar programs in promoting a few healthy behaviors in children by combining aspects of culturally competent care, including language and education resources (Bender et al.).

The previous study examined an intervention performed on a small group to promote healthy behaviors. There is evidence suggesting, however, that cultural competence at higher levels can improve quality of treatment for large groups of patients. Lieu et al. examined the effect of cultural competence policies on the quality of asthma care in Medicaid-insured children. To determine whether or not a particular practice site had implemented cultural competence policies, researchers used a survey asking about

whether sites recruited ethnically diverse providers and bilingual providers, offered training on culture and communication, and attempted to minimize cultural barriers through printed materials. They measured patients' outcomes through telephone interviews with parents and written surveys provided to patients' primary care physicians. In general, patients who visited practice sites that actively promoted cultural competence reported lower underuse of preventive medication. This demonstrated that certain aspects of quality care could be associated with cultural competence policies, and that promotion of such policies may be an effective strategy for working with low-income populations (Lieu et al.).

While one might suppose that language concordance would be one of the most important dimensions of cultural competence, the evidence on the actual effect of providers who speak Spanish is mixed. In a survey of 22 providers and 462 Hispanic parents of pediatric patients, those who had language-concordant physicians did not report higher-quality well-child care. Surprisingly, quality instead was associated with providers' self-reported cultural competency (Arauz Boudreau et al.).

Similarly, a retrospective medical record review of 101 Spanish-speaking patients cared for by 6 language-concordant primary care physicians, and 205 Spanish speaking patients cared for by 44 language-discordant physicians, showed no significant differences in number of primary care visits or rates of recommended screening for cardiovascular risk factors and cancer (Eamranond et al.)

What these results may indicate is that culturally competent care is multifactorial. When interventions combined a number of techniques to increase cultural competence, health outcomes saw improvement. When language concordance on its own was

examined as a variable, however, many measures of quality of care were found to be unaffected. It seems, then, that the benefits of cultural competence are obtained when approaches take the many dimensions of culture into consideration.

Efficacy of Policy Solutions

While the many measures described in the previous section may help to resolve cultural challenges in health care, the other factors that create disparities for Hispanic children are structural in nature. Cost in particular is a challenge that cultural competence is not in a position to remedy. Because the majority of the rise in health care cost is attributable to an increase in the complexity and price of procedures (Dieleman et al.), the most direct way to reduce this cost will likely require innovation to be able to perform procedures in a more cost-effective manner. Until such innovation occurs, however, policymakers can help patients bear the burden of these costs by extending insurance coverage to those who do not have it.

While such solutions tend to be subject to contentious political debate, this is less often the case for solutions concerning children. Private insurance rates for persons age 18 and under have steadily declined over the past two decades from 72.6% in 1984 to 55.0% in 2015 (*Health, United States*, Table 102). These decreases have coincided with historic lows in rates of uninsured children, meaning that the number of children now using CHIP and Medicaid has increased substantially enough to offset losses in private insurance.

As of 2015, 44.2 percent of individuals under the age of 18 were insured by CHIP or Medicaid. CHIP in particular has been successful. Evidence indicates overwhelmingly that CHIP has increased insurance rates in its intended target population over the course

of its implementation. At the time of CHIP's enactment in 1997, states had the option of expanding coverage to children at 200% of the federal poverty level through Medicaid. Only six states, however, had done so. The federal government created CHIP with the intent of allowing states to create either stand-alone programs or extensions of existing Medicaid programs to insure more children. To make the policy more attractive, the federal matching rate for CHIP programs was higher than those for Medicaid. In order to prevent states from shifting individuals covered by Medicaid to a program with a higher matching rate, the federal government imposed a maintenance-of-effort requirement. By 2000, every state and territory had established its own program.

Increases in insurance rates were concentrated in the population of children in families at or below 200% of the federal poverty level. While private insurance among this group decreased from 34.4 to 24.9 percent from 1997 to 2011, Medicaid and CHIP enrollment increased from 41.3 to 60.4 percent during the same time, causing an overall decrease in the rate of those uninsured. Most researchers have also found that access to care and utilization of primary and preventive care appear to improve after enrollment. Additionally, there is evidence that racial and ethnic disparities in access and utilization present before CHIP enrollment are greatly reduced in new participants after enrollment.

CHIP was reauthorized and appropriated additional funds in 2009. In 2016, the federal matching rate increased by 23 percentage points from 70 to 93 percent as the result of provisions of the Affordable Care Act (Committee on Child Health Financing). This increase in the federal match rate was extended through Fiscal Year 2019, and extended federal funding through Fiscal Year 2023 (*Summary of the 2018 CHIP Funding Extension*). In general, CHIP has enjoyed bipartisan support because its cost is contained

by capping the amount paid by the federal government and allowing a great deal of flexibility for states to establish rules regarding eligibility and benefits (Committee on Child Health Financing).

More than half of Hispanic children are now covered by either CHIP or Medicaid. Gains in these programs have led to a reduction in the number of Hispanic children who are uninsured even after losses in private health care coverage. In spite of these advances, however, Hispanic children are still twice as likely as non-Hispanic white children to be uninsured. Two thirds of uninsured Hispanic children are actually eligible for coverage through Medicaid or CHIP. A few reasons have been posited for their continued lack of coverage. Firstly, state administered programs may vary in offering an enrollment experience in high-quality Spanish. Secondly, families may be concerned they will face immigration-related consequences, even if their children are eligible. Finally, the complexity of rules concerning eligibility may mean that parents are not aware their children can receive coverage.

A few states have significantly reduced their rates of uninsured Hispanic-children, and discerning what policies they used to achieve this may allow for application in other states. Of the 20 states that had significantly lower rates of uninsured Hispanic children in 2014 when compared to the national average, 16 covered children in Medicaid and CHIP above 255 percent of the federal poverty level (the national median). 18 waived the waiting period for lawfully residing children, and 17 extended Medicaid to low-income adults.

Nevada saw the largest decrease of any state in the rate of uninsured Hispanic children between 2013 and 2014 from 20 percent down to 13.3 percent. Interestingly,

Nevada did not provide CHIP and Medicaid to lawfully residing children in the five-year waiting period, and only covered children in families up to 205 percent of the federal poverty level. Nonetheless, extension of Medicaid for adults and launching of a state health insurance marketplace, “Nevada Health Link,” may have contributed to a “welcome mat” effect, whereby provision of health coverage options for parents increased the likelihood of their children also being enrolled in health coverage. Of note was the development of a state marketplace website in Spanish and use of bilingual navigators, which may have helped Hispanic adults in enrolling for coverage (Schwartz et al.).

In summary, CHIP and Medicaid provide insurance to the majority of the nation’s Hispanic children. Increases in enrollment in these programs has led to historic lows in the rates of uninsured Hispanic children. Although these children are still more likely than their non-Hispanic counterparts to be uninsured, the majority of those still uninsured are eligible for coverage. By extending coverage for their parents, it may be possible to continue to increase coverage for Hispanic children as well and reduce disparities between them and their peers.

Proposal for Future Inquiry

While cultural competence strategies offer much promise, it is still unclear whether those solutions impose a cost disproportionate to the benefit that they provide. An analysis of the typical expense associated with their implementation would be beneficial. Additionally, examining how it is those costs are paid for would also be a line of inquiry worth pursuing. If, for example, the cost of these policies is reflected in higher prices for services, they could be counterproductive.

Additionally, studies assessing the effectiveness of culturally informed interventions should attempt to test implementation on a larger scale and include a culturally neutral intervention as a standard of comparison. In the study by Bender et al. on the effectiveness of a culturally appropriate intervention for promoting healthy behaviors, researchers were able to demonstrate the effectiveness of the program they devised. However, due to the single group design, they could only show that participants saw improved behaviors postintervention compared to preintervention. It was not possible to say whether this intervention was actually more effective because it was culturally appropriate, due to the lack of comparison to a control intervention. Future designs may wish to create two alternate program possibilities to make this comparison possible.

In terms of policy, further research on the effect of health care reform laws on quality of care would be helpful. While data on rates of coverage are fairly easy to obtain, the effect of the many provisions of the Affordable Care Act and other legislation on quality and cost is more difficult to assess (Blumenthal et al.). The laws are relatively young, complex, and politically polarizing, and for this reason may take some time to truly be evaluated with clarity. The fact that they may be subject to rapid change by policymakers additionally complicates assessment.

A Brief Word on the Inspiration for This Project

Much of the inspiration for this project was informed by personal experience. My mother is a physician which might lead one to expect that all the decisions made about my health were biomedically informed. While this was true for the most part, my parents'

background as Vietnamese immigrants played a role in affecting health decisions as well. For example, traditional remedies such as eucalyptus oil applied topically for pain were kept around the house.

Our dietary decisions were also largely culturally informed. White rice was consumed as part of almost every meal. When a family member was informed by his physician that he needed to manage his blood sugar, he attempted to eliminate all foods high on the glycemic index other than white rice. He could not imagine going without the staple he had consumed for almost every meal the last half century. Fortunately, the effect of his modified diet was sufficient to keep his blood sugar under control. Nevertheless, this incident illustrates how culture can complicate management of health, even with a willing patient and a physician in the household.

Much later I had the opportunity to experience culturally informed care from the provider's side. While volunteering at a county clinic, I was able to shadow a pediatrician who had learned Spanish in her time at university in the Philippines. This skill was a valuable asset for her, as nearly half her patients were primarily Spanish speakers. My volunteering duties also allowed me to meet the clinic's interpreters, who performed a number of functions even when they were not in the exam room translating for patients. The wide variety of their responsibilities, from calling patients for appointments to providing health education over the phone, made them valuable members of the health care team.

One person's individual experience is not, however, statistically significant. I wished to discover whether the cultural influence on health that I observed was as powerful as I perceived it to be. I also wished to know how the care provided by the

medical professionals I interacted with might be made more effective. I chose the population of U.S. Hispanic children mostly as a result of my observation of that population during my time shadowing.

Conclusion

To care for children is to care for the future. As a large share of the U.S. population, and an even larger share of U.S. children, Hispanics should be of particular interest to those seeking to improve American health care. As the possessors of a unique culture in the United States, their care may be improved through cultural competence. As a socioeconomically disadvantaged group, they may be assisted by policymakers working to extend the benefits of health insurance to more individuals. It is a worthwhile endeavor to understand the many ways it may be possible to enhance the care of these members of the American family.

BIBLIOGRAPHY

- “29 U.S. Code § 1181 - Increased Portability through Limitation on Preexisting Condition Exclusions.” *LII / Legal Information Institute*, <https://www.law.cornell.edu/uscode/text/29/1181>. Accessed 11 Apr. 2018.
- “42 U.S. Code § 300e - Requirements of Health Maintenance Organizations.” *LII / Legal Information Institute*, <https://www.law.cornell.edu/uscode/text/42/300e>. Accessed 11 Apr. 2018.
- Andrews, Tracy J., et al. “For the Sake of Our Children: Hispanic Immigrant and Migrant Families’ Use of Folk Healing and Biomedicine.” *Medical Anthropology Quarterly*, vol. 27, no. 3, Sept. 2013, pp. 385–413. *anthrosource-onlinelibrary-wiley-com.ezproxy.baylor.edu*, doi:10.1111/maq.12048.
- Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2010 to July 1, 2016*. U.S. Census Bureau, Population Division, June 2017, <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>.
- Arauz Boudreau, Alexy D., et al. “Associations of Providers’ Language and Cultural Skills With Latino Parents’ Perceptions of Well-Child Care.” *Academic Pediatrics*, vol. 10, no. 3, May 2010, pp. 172–78. *ScienceDirect*, doi:10.1016/j.acap.2010.01.002.
- Bender, Melinda S., et al. “A Culturally Appropriate Intervention To Improve Health Behaviors in Hispanic Mother–Child Dyads.” *Childhood Obesity*, vol. 9, no. 2, Mar. 2013, pp. 157–63. *www-liebertpub-com.ezproxy.baylor.edu (Atypon)*, doi:10.1089/chi.2012.0118.
- Beniflah, Jacob D., et al. “Effects of Immigration Enforcement Legislation on Hispanic Pediatric Patient Visits to the Pediatric Emergency Department.” *Clinical Pediatrics*, vol. 52, no. 12, Dec. 2013, pp. 1122–26. *cpj.sagepub.com.ezproxy.baylor.edu*, doi:10.1177/0009922813493496.
- Betancourt, Joseph R., et al. “Defining Cultural Competence: A Practical Framework for Addressing Racial/Ethnic Disparities in Health and Health Care.” *Public Health Reports*, vol. 118, no. 4, July 2003, pp. 293–302. *SAGE Journals*, doi:10.1093/phr/118.4.293.
- Blackhall, L. J., et al. “Ethnicity and Attitudes toward Patient Autonomy.” *JAMA*, vol. 274, no. 10, Sept. 1995, pp. 820–25.

- Blumenthal, David, et al. "The Affordable Care Act at 5 Years." *New England Journal of Medicine*, vol. 372, no. 25, June 2015, pp. 2451–58. *Taylor and Francis+NEJM*, doi:10.1056/NEJMhpr1503614.
- Brach, Cindy, and Irene Fraserirector. "Can Cultural Competency Reduce Racial And Ethnic Health Disparities? A Review And Conceptual Model." *Medical Care Research and Review : MCCR*, vol. 57, no. Suppl 1, 2000, pp. 181–217.
- Carson, Jessica A., and Michael J. Staley. *Hispanic Children Least Likely to Have Health Insurance: Citizenship, Ethnicity, and Language Barriers to Coverage*. Carsey School of Public Policy, p. 6.
- Committee on Child Health Financing. "Children's Health Insurance Program (CHIP): Accomplishments, Challenges, and Policy Recommendations." *Pediatrics*, vol. 133, no. 3, Mar. 2014, pp. e784–93. *pediatrics.aappublications.org*, doi:10.1542/peds.2013-4059.
- Daviglus, Martha L., et al. "Prevalence of Major Cardiovascular Risk Factors and Cardiovascular Diseases Among Hispanic/Latino Individuals of Diverse Backgrounds in the United States." *JAMA : The Journal of the American Medical Association*, vol. 308, no. 17, Nov. 2012, pp. 1775–84. *PubMed Central*, doi:10.1001/jama.2012.14517.
- Dieleman, Joseph L., et al. "Factors Associated With Increases in US Health Care Spending, 1996-2013." *JAMA*, vol. 318, no. 17, Nov. 2017, pp. 1668–78. *jamanetwork-com.ezproxy.baylor.edu*, doi:10.1001/jama.2017.15927.
- Eamranond, Pracha Peter, et al. "Patient-Physician Language Concordance and Primary Care Screening among Spanish-Speaking Patients." *Medical Care*, vol. 49, no. 7, July 2011, pp. 668–72. *PubMed*, doi:10.1097/MLR.0b013e318215d803.
- Escarce, José J., and Kanika Kapur. *Hispanics and the Future of America*. Edited by Marta Tienda and Faith Mitchell, National Academies Press (US), 2006. www.ncbi.nlm.nih.gov, <https://www.ncbi.nlm.nih.gov/books/NBK19910/>.
- Ezzati, Majid, et al. "Selected Major Risk Factors and Global and Regional Burden of Disease." *Lancet (London, England)*, vol. 360, no. 9343, Nov. 2002, pp. 1347–60. *PubMed*, doi:10.1016/S0140-6736(02)11403-6.
- Flores, Antonio, et al. "Facts on U.S. Latinos, 2015." *Pew Research Center's Hispanic Trends Project*, 18 Sept. 2017, <http://www.pewhispanic.org/2017/09/18/facts-on-u-s-latinos-current-data/>.

- Foster, Byron Alexander, Debra Read, et al. "An Analysis of the Association Between Parental Acculturation and Children's Medication Use." *Pediatrics*, vol. 124, no. 4, Oct. 2009, pp. 1152–61. pediatrics.aappublications.org.ezproxy.baylor.edu, doi:10.1542/peds.2008-2746.
- Foster, Byron Alexander, Daniel Hale, et al. "Perceptions of Weight and Health Practices in Hispanic Children: A Mixed-Methods Study, Perceptions of Weight and Health Practices in Hispanic Children: A Mixed-Methods Study." *International Journal of Pediatrics, International Journal of Pediatrics*, vol. 2015, 2015, Aug. 2015. www-hindawi-com.ezproxy.baylor.edu, doi:10.1155/2015/761515, 10.1155/2015/761515.
- Fry, Richard, and Jeffrey S. Passel. *Latino Children: A Majority Are U.S.-Born Offspring of Immigrants*. Pew Research Center, 28 May 2009, <http://www.pewhispanic.org/2009/05/28/latino-children-a-majority-are-us-born-offspring-of-immigrants/>.
- Gauthier, Kristine I., and Bonnie Gance-Cleveland. "Hispanic Parental Perceptions of Child Weight in Preschool-Aged Children: An Integrated Review." *Childhood Obesity*, vol. 11, no. 5, July 2015, pp. 549–59. www-liebertpub-com.ezproxy.baylor.edu (Atypon), doi:10.1089/chi.2014.0152.
- Gonzalez-Barrera, Ana. *More Mexicans Leaving Than Coming to the U.S.* Pew Research Center, 19 Nov. 2015, <http://www.pewhispanic.org/2015/11/19/more-mexicans-leaving-than-coming-to-the-u-s/>.
- Hatcher, Erin, and Robin Whittemore. "Hispanic Adults' Beliefs about Type 2 Diabetes: Clinical Implications." *Journal of the American Academy of Nurse Practitioners*, vol. 19, no. 10, Oct. 2007, pp. 536–45. *PubMed*, doi:10.1111/j.1745-7599.2007.00255.x.
- Health, United States, 2016: With Chartbook on Long-Term Trends in Health*. National Center for Health Statistics, 2017.
- Heron, Melonie. *Deaths: Leading Causes for 2014*. Center for Disease Control, Division of Vital Statistics, 30 June 2016, https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_05.pdf.
- Juckett, Gregory. "Caring for Latino Patients." *American Family Physician*, vol. 87, no. 1, Jan. 2013, pp. 48–54.
- Krogstad, Jens Manuel. "5 Facts about Latinos and Education." *Pew Research Center*, 28 July 2016, <http://www.pewresearch.org/fact-tank/2016/07/28/5-facts-about-latinos-and-education/>.

- Lee, Sunghye, et al. "Interview Language: A Proxy Measure for Acculturation among Asian Americans in a Population-Based Survey." *Journal of Immigrant and Minority Health*, vol. 13, no. 2, Apr. 2011, pp. 244–52. *PubMed*, doi:10.1007/s10903-009-9278-z.
- Lemley Megan, and Spies Lori A. "Traditional Beliefs and Practices among Mexican American Immigrants with Type II Diabetes: A Case Study." *Journal of the American Association of Nurse Practitioners*, vol. 27, no. 4, Aug. 2014, pp. 185–89. *onlinelibrary-wiley-com.ezproxy.baylor.edu (Atypon)*, doi:10.1002/2327-6924.12157.
- Lieu, Tracy A., et al. "Cultural Competence Policies and Other Predictors of Asthma Care Quality for Medicaid-Insured Children." *Pediatrics*, vol. 114, no. 1, July 2004, pp. E102–10. *pediatrics.aappublications.org.ezproxy.baylor.edu*, doi:10.1542/peds.114.1.e102.
- Markides, Kyriakos S., and Karl Eschbach. "Aging, Migration, and Mortality: Current Status of Research on the Hispanic Paradox." *The Journals of Gerontology: Series B*, vol. 60, no. Special_Issue_2, Oct. 2005, pp. S68–75. *academic.oup.com*, doi:10.1093/geronb/60.Special_Issue_2.S68.
- Mattei, Josiemer, et al. "Diet Quality and Its Association with Cardiometabolic Risk Factors Vary by Hispanic and Latino Ethnic Background in the Hispanic Community Health Study/Study of Latinos." *The Journal of Nutrition*, vol. 146, no. 10, Oct. 2016, pp. 2035–44. *academic.oup.com*, doi:10.3945/jn.116.231209.
- Maynard, L. Michele, et al. "Maternal Perceptions of Weight Status of Children." *Pediatrics*, vol. 111, no. 5 Pt 2, May 2003, pp. 1226–31.
- Mazur, Robert E., et al. "Diet and Food Insufficiency among Hispanic Youths: Acculturation and Socioeconomic Factors in the Third National Health and Nutrition Examination Survey." *The American Journal of Clinical Nutrition*, vol. 78, no. 6, Dec. 2003, pp. 1120–27. *academic.oup.com*, doi:10.1093/ajcn/78.6.1120.
- Merriam-Webster. *The Merriam-Webster Dictionary New Edition (c) 2016*. New edition, Merriam-Webster, Inc., 2016.
- Morgan, Paul L., et al. "Racial/Ethnic Disparities in ADHD Diagnosis by Kindergarten Entry." *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, vol. 55, no. 8, Aug. 2014, pp. 905–13. *PubMed Central*, doi:10.1111/jcpp.12204.
- O'Hara, Brett, and Kyle Caswell. "Health Status, Health Insurance, and Medical Services Utilization: 2010." *Curr Pop Rep*, vol. 2012, 2012, pp. 70–133.

- Patten, Eileen. *The Nation's Latino Population Is Defined by Its Youth*. Pew Research Center, 20 Apr. 2016, <http://www.pewhispanic.org/2016/04/20/the-nations-latino-population-is-defined-by-its-youth/>.
- Poma, Pedro A. "Hispanic Cultural Influences on Medical Practice." *Journal of the National Medical Association*, vol. 75, no. 10, Oct. 1983, pp. 941–46.
- Proctor, Bernadette D., et al. *Income and Poverty in the United States: 2015*. United States Census Bureau, 2016, <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p60-256.pdf>.
- Savage, Jennifer S., et al. "Parental Influence on Eating Behavior." *The Journal of Law, Medicine & Ethics : A Journal of the American Society of Law, Medicine & Ethics*, vol. 35, no. 1, 2007, pp. 22–34. *PubMed Central*, doi:10.1111/j.1748-720X.2007.00111.x.
- Schwartz, Sonya, et al. *Historic Gains in Health Coverage for Hispanic Children in the Affordable Care Act's First Year*. 2016, p. 26.
- Siega-Riz, Anna Maria, et al. "Food-Group and Nutrient-Density Intakes by Hispanic and Latino Backgrounds in the Hispanic Community Health Study/Study of Latinos." *The American Journal of Clinical Nutrition*, vol. 99, no. 6, June 2014, pp. 1487–98. *academic.oup.com*, doi:10.3945/ajcn.113.082685.
- "Summary of Immigrant Eligibility Restrictions Under Current Law." *ASPE*, 23 Nov. 2015, <https://aspe.hhs.gov/basic-report/summary-immigrant-eligibility-restrictions-under-current-law>.
- Summary of the 2018 CHIP Funding Extension*. Henry J. Kaiser Family Foundation, 24 Jan. 2018, p. 1.
- Unemployment Rate and Employment-Population Ratio Vary by Race and Ethnicity : The Economics Daily: U.S. Bureau of Labor Statistics*. <https://www.bls.gov/opub/ted/2017/unemployment-rate-and-employment-population-ratio-vary-by-race-and-ethnicity.htm>. Accessed 25 Oct. 2017.