HEALTH DISPARITIES BETWEEN CENTRAL AND SOUTH AMERICANS AND OTHER LATINOS LIVING IN THE UNITED STATES

By

EVANGELINA LOPEZ

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Approved by:

Dr. John Ruiz
Department of Psychology
Abstract:

This literature review provides an overview of the Latino epidemiological paradox and health disparities between Central/South Americans and other Hispanics living in the United States. Prior research has demonstrated that foreign-born Latinos have better overall health compared to those who aren’t foreign-born. Latinos also have a lower mortality rate compared to non-Hispanic Whites and African Americans. While it is unknown why these disparities exist, various hypotheses centered on the causes of the Latino paradox exist. These hypotheses will be addressed in the literature review and potential health protective factors that Hispanics/Latinos exhibit will be evaluated. In addition, health disparities exist between Latino groups, and this will be addressed as well. Due to the large size and growth of the Latino population in the U.S., understanding their health is a nationwide priority.
Introduction:

The Latino population in the United States has augmented about nine-fold since 1960, in which only 6.3 million Latinos were living in the U.S., to 55.3 million in 2014 (Brown & Stapler, 2016). Foreign-born Latinos living in the United States has increased by more than 20 times in the past half century, and the population of U.S.-born Latinos has also increased about six-fold (Brown & Stapler, 2016). According to the U.S. Census Bureau (2014), the Latino population is projected to be about 119 million by 2060. The largest population of Latinos living in the United States are Mexicans. Mexicans comprise of 66% of the Latino population, followed by Central and South Americans (13%), Puerto Ricans (9.4%), Cubans (3.9%), and people of other Hispanic origins (7.5%) (Centers for Disease Control and Prevention, 2011).

Latinos and Mexican Americans have substantial socio-demographic risks including low incomes, education, access to healthcare, and high rates of obesity and undiagnosed diseases. However, Latinos experience lower infant mortality, adult all-cause mortality, and lower incidence of heart disease and several cancers compared to non-Hispanic Whites (Ruiz et al., 2014). Lower socioeconomic status is attributed to poor health in the context of morbidity and mortality because individuals may lack access to healthcare. Nonetheless, while both Latinos and African Americans may have a lower SES profile compared to non-Hispanic Whites, African Americans surprisingly have a higher mortality rate, thus demonstrating that the Latino epidemiological paradox exists (Abraido-Lanza et al., 1999).

Nonetheless, limited research exists on the Latino epidemiological paradox, and the explicit causes are unknown. However, it is essential to understand the contributing factors to the Latino mortality paradox in order to understand why health disparities are present between
Latino groups. For instance, Mexicans tend to have better overall health, followed by Central and South Americans, then Puerto Ricans and Cubans. The goal of this literature review is to bridge the gaps in research and provide different health protective factors that Latinos may exhibit.

Methods:

The methods utilized to complete this literature review were to study prior research on the Latino mortality paradox to understand potential health protective factors and explore other health protective factors not notable in research. The subjects in all studies reviewed included Cubans, Puerto Ricans, Mexicans and Central and South Americans. They were relatively compared to non-Hispanic Whites and African Americans.

Literature Review:

While limited research exists on the Latino health paradox, different hypotheses have been tested. Two competing arguments that Abraido-Lanza et al. (1999) highlight in their article, *The Latino mortality paradox: a test of the "salmon bias" and healthy migrant hypotheses*, are that lower mortality is “real” in the Latino community due to favorable health behaviors and greater family support among Latinos, or lower mortality is non-existent because it is caused by migratory factors. In order to investigate whether migratory factors play a role in the epidemiologic paradox among the Latino population in the United States, Abraido-Lanza et al. (1999) tested the “Salmon Bias” hypothesis and the healthy migrant hypothesis. The salmon bias hypothesis proposes that Latinos often return to pass away in their country of birth, therefore, causing them to be “statistically immoral”. The healthy migrant hypothesis claims that the epidemiologic paradox among Latinos is caused by the selection of healthy Latino immigrants.
into the United States. Often, Latinos choose to come to the United States illegally in search of better opportunities for themselves and their families, and they must endure a physically coarse journey. In order to have the ability to tolerate the harsh journey, these Latino immigrants need to be healthy to survive. The overall purpose of the study conducted by Abraido-Lanza et al. (1999) was to test the salmon bias and healthy migrant hypotheses. If these two hypotheses could be rejected, then it would demonstrate that lower mortality among Latinos exists and other factors contributing to the paradox could be considered and evaluated. The groups evaluated were non-Latino Whites, Mexicans, Puerto Ricans, Cubans, Central/South Americans and other Latinos. Cubans and Puerto Ricans were not necessarily subject to the salmon bias because Cubans are unable to easily return to Cuba, and Puerto Ricans are accounted for in the U.S. mortality statistics since Puerto Rico is a U.S. territory. Abraido-Lanza et al. (1999) utilized the National Longitudinal Mortality Study data, a nationwide personal interview household survey conducted annually by the National Center for Health Statistics, to analyze mortality rates for the groups in which the salmon hypothesis was not applicable. These groups were Cubans, who encounter barriers against return migration; Puerto Ricans, whose deaths in Puerto Rico are recorded in U.S. national statistics; and U.S.-born individuals, who are not impacted by the salmon or healthy migrant effects. The sample of their study were 301,718 non-Latino Whites and 17,375 Latino Whites, who were 25 years or older. Abraido-Lanza et al. (1999) discovered that Cubans and Puerto Ricans had lower mortality rates than non-Latino Whites, and foreign-born Latinos had lower mortality rates than U.S.-born Latino Whites. This demonstrated that the salmon and healthy migrant hypotheses could not serve as explanations for the lower mortality rate among Latinos, and other factors are causing the lower mortality. One of the limitations in this study to consider is not all surveys requested respondents to provide their birthplace, which
made sample sizes much smaller to compare.

Although the salmon bias hypothesis and healthy migrant hypothesis were ruled out by the Abraido et al. (1999) study, controversy persists around the Latino mortality paradox. This is because lower socioeconomic is linked to poorer overall health, and even though Latinos may have lower socioeconomic status, they tend to have lower all-cause mortality rate. Therefore, Abraido-Lanza et al. (2005) conducted a second data analysis of the 1991 National Health Interview Survey to evaluate the health behavior and acculturation hypotheses, which are potential explanations for the Latino mortality paradox. The health behavior hypothesis claims that the Latino mortality paradox is caused by Latinos having favorable health behaviors and risk factor profiles than do non-Latino Whites. These health behaviors may be correlated to cultural values and practices found in the Latino population, such as dietary intake and adverse perceptions of smoking and drinking, which may decline due to acculturation. On the other hand, the acculturation hypothesis suggests that Health behaviors and risk factors become more hostile with greater acculturation. In this particular study, acculturation was defined as the “process by which immigrants adopt the attitudes, values, customs, beliefs and behaviors of a new culture” (Abraido-Lanza et al., 2005). Quantitatively, it was defined as the amount of time Latinos have lived in the United States. Greater acculturation is associated with an increase in alcohol consumption, smoking, and several other risky health behaviors as well as rates of overall cancer, infant mortality and other illnesses. Nonetheless, acculturation may also lead to some healthy behaviors like an increase in leisure-time physical activity.

Abraido-Lanza et al. (2005) studied specific health behaviors including smoking, alcohol use, leisure-time exercise activity and body mass index (BMI). These health behaviors were selected because they were responsible for more than half of the premature deaths in the United
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States, especially smoking, alcohol use and lack of physical activity. While controlling for sociodemographic factors, Abraido-Lanza et al. (2005) found mixed evidence to prove the plausibility of the health behaviors hypothesis since Latinos were less likely to smoke and drink alcohol compared to non-Latino Whites. However, Latinos were less likely to engage in physical activity, and they were more likely to have a higher BMI as opposed to non-Latino Whites, after controlling for age and SES. While the health behaviors hypothesis was similar to their findings, the acculturation hypothesis was only found to be partially true. After age and SES were adjusted, greater acculturation was connected to three unhealthy behaviors: a higher chance of alcohol intake and smoking as well as higher BMI. However, greater acculturation led to an improvement in exercise activity. Gender-specific analyses were conducted to provide generalizability, and the evaluations exposed that effects of acculturation on health behaviors differentiated between men and women perhaps due to gender norms in the United States (Perez-Stable et al., 2001). These findings suggest that health behaviors and acculturation hypotheses assist in partially explaining the Latino mortality paradox. The mechanisms that explain the association between acculturation and risky behaviors are unknown due to inconsistent findings. One of the limitations of the study conducted by Abraido-Lanza et al. (2005) was the difficulty of studying Latino subgroups, even with a national survey as monumental as the 1991 NHIS, because there are limited data for smaller groups, such as Cubans. Since this limitation did not allow the researchers to stratify Latino subgroups, the study was not able to account for differences between Latino groups in sociodemographic and other factors that could be related to health behaviors. Abraido-Lanza et al. (2005) uncovered a similar conclusion as found in Franzini et al. (2001). Franzini et al. (2001) discovered that if the causes of the Latino mortality paradox are primarily cultural, the paradox will only continue to persist if a large percentage of
Hispanics continue to be culturally different from the rest of the country. With this conclusion in mind, acculturation could potentially impact the Latino population’s health, either adversely or positively.

Furthermore, access to health care is connected to maintaining good health and managing disease; however, about one-third of Latinos living in the United States had less access to health care in 2006-2007 (Ruiz, Hamann, Garcia, & Lee, 2014). Latinos tend to not have a usual source of health care, and those who do, have reported lower satisfaction with the health care service they receive from their physician. Latinos often rely on spiritual health as both a “complement or alternative to US system-based medical care” (Ruiz and Steffen, 2011). However, they are also less likely to smoke than other racial/ethnic groups, and this may bring health benefits to the population. While these health benefits place Latinos at an advantage, one unfavorable aspect of their health is they are more prone to obesity. For example, Mexican men and women have obesity rates that are lower than non-Hispanic African Americans, but higher than non-Hispanic Whites (Ruiz et al., 2014). A new explanation is beginning to emerge with respect to acculturation and obesity amongst Latinos. For instance, since child feeding practices may impact obesity outcome since lower parental acculturation may be linked to valuing heavier infants (Caprio et al., 2008). Children’s personal level of acculturation may also impact their weight as they may change their diet and behavior. As demonstrated by Abraido-Lanza et al. (2005), acculturation provides a partial explanation for the Latino mortality paradox. In the case of dietary intake, higher acculturation leads to less exercise and worse eating habits (less fruits and vegetables and more soda and snacks throughout the day).
Vega, Rodriguez, & Gruskin (2009) assessed the demographic structure of the Latino population and the relation of nativity, age, income, and education to patterns of health and mortality. They sought to uncover the reasoning behind the overall better health of Latino immigrants compared to subsequent later generations. Vega, Rodriguez, & Gruskin (2009) discovered that selection, reverse selection, death record inconsistencies, inequalities in health status, transnational migration, social marginality, and adaptation to environmental conditions in the United States all played a role in the differences of mortality rates between Latinos. Increased mortality rates were due to diabetes, stomach cancer, liver cancer, cervical cancer, human immunodeficiency virus/acquired immunodeficiency syndrome, liver disease, homicide, and work-related injuries (Vega, Rodriguez, & Gruskin, 2009).

Although an explicit explanation for the Latino mortality paradox doesn't exist, it is interesting that there are substantial variations in longevity and the strength of the Latino paradox among Latinos. For example, Mexican and Central and South American persons live considerably longer than other Latinos, such as Puerto Ricans. Puerto Ricans may have an overall higher mortality rate, but they also tend to smoke more than other Latinos. In addition, Puerto Ricans are exposed to more Westernized ideals since they are a United States territory. Even though Mexican Americans experience higher rates of undiagnosed cardiovascular disease (CVD) and are less likely to treat their CVD, their incidence of cardiovascular harmful events is relatively similar or lower compared to non-Hispanic Whites. This specific occurrence favors the idea of the Latino mortality paradox, and explanations for this could include: risk factors for CVD are not valid for explaining disease in Latinos or cultural factors perhaps give Latinos resiliency to combat their disease progression. This demonstrates that cultural and biological factors are highly potential factors that cause the Latino mortality paradox.
Results

Various limitations exist in the studies reviewed, and one of the key limitations was that researchers were dependent on Hispanics/Latinos accurately reporting their country of origin or not reporting a country of origin at all. There is a huge population of undocumented Latinos, which may have caused Latinos to not report their country of origin or not wish to participate in national surveys. In addition, since Latinos of Mexican descent are the largest Latino population living in the United States, it is difficult to compare Mexicans to other Hispanics. Most Latinos practice similar cultural practices, such as strong family connections; however, they may also differ in specific familial practices.

Moreover, since foreign-born Latinos tend to have better overall health than U.S.-born Latinos, it is essential to evaluate the causes of immigration and consider the history and cultural health practices in Mexico and Central/South American countries. While it is unknown why there are disparities, common explanations could include usage of traditional medicine and family unity found in Latino culture.

The people who immigrate to the United States are often those who do not have access to education or a better lifestyle in their home countries. Often, they are of indigenous descent. Indigenous people in Latin America are known for utilizing traditional medicine opposed to conventional medicine. Traditional medicine could be a contributing cultural factor to the Latino health paradox.

Mexico has a population of about 127 million people, and most may not have access to official medical services, mainly of Western orientation. According to Zolla (1980), medical services are insufficient in Mexico, or were at least on 1980, to provide the greater part of the population with medical services. However traditional medicine has long existed throughout
Mexico as an alternative to conventional medicine. Traditional medicine, which has its source in knowledge gained from ancestral experience, has primarily been supported by the use of medicinal plants and serves as a therapeutic alternative (Zolla, 1980). Herbal medicine plays a significant role in the primary stages of health care as a curative element because it assists in the treatment of common diseases, such as dysenteries, gastrointestinal disturbances, respiratory diseases and infectious diseases (Zolla, 1980). These are all diseases that characterize the SES of underdeveloped countries. Since Mexicans appear to be the Latino population with the best overall health, and traditional medicine is widely used throughout Mexico, traditional medicine could be a potential contributing factor the Latino mortality paradox. Although Zolla’s (1980) research on traditional medicine was completed in 1980, traditional medicine continues to be practiced in Mexico. According to the World Health Organization, over 80% of the world’s population utilize forms of traditional medicine (Nigenda, Cifuentes, & Hill, 2004). With Mexico’s rural geography and having a high population of indigenous people, it could be implicated that there is a high usage of traditional medicine. Most traditional medicine therapists, or curanderos, are from indigenous societies. Traditional medicine therapists in Mexico are a type of medical specialists who classify and diagnose diseases, which gives them a diagnostic role and social prestige with completing the job similar to a Western physician (Nigenda, Cifuentes, & Hill, 2004). Since Mexicans utilize alternative methods for health care, like traditional medicine, it is probable they bring these practices with them when they immigrate to the United States. Therefore, even though they may have less access to health care in the United States, they may have already had limited access to health care in Mexico. This allows them to not depend heavily on healthcare access upon arrival to the U.S. and leads them to continue utilizing traditional medicine or other medicinal practices eminent in their culture.
Discussion

Latinos represent a large population of the United States, and should thus be widely studied to understand their health. A recent development is the initiation of the Hispanic Community Health Study/Study of Latinos (HCHS/SOL). The study was designed to look at health differences among Hispanics/Latinos from seven different backgrounds - Mexican, Puerto Rican, Cuban, Dominican, Central American and South American (Sorlie et al., 2010). HCHS/SOL is the largest health study of Hispanics/Latinos in the United States with over 16,000 Hispanic/Latino adults recruited at four Field Centers in New York, San Diego, Chicago and Miami. Essentially, the goal of the HCHS/SOL is to identify both the prevalence and risk factors for various diseases and disorders among Hispanics in the United States. The study will aim to answer why Latinos/Hispanics have increased rates of obesity and diabetes, why asthma is more common in some Hispanic/Latino communities and whether certain traditional Hispanic Latino customs of foods have favorable effects of health (Sorlie et al., 2010). HCHS/SOL is one of the few studies that could answer these questions and assist in preventing serious diseases because it will take extensive measures. The study will additionally address the role U.S. cultural practices have on the prevalence and development of disease. While these discoveries would eventually improve the health of Latinos, it will also influence health for the entire U.S. population.

HCHS/SOL is a great way to evaluate the overall health of Latinos living in the United States; however, further research should also concentrate on evaluating traditional medicine, and the statistics of Latino households utilizing these mechanisms. In order to fully comprehend the health patterns of Latinos, and the causes of these patterns, it is vital to understand the ways in which they are able to access health care.
Conclusion

Future research need to evaluate the Latino epidemiological paradox through cultural and biological lenses. Traditional medicine and acculturation are main areas of interest because acculturation has been proposed as a partial explanation to the Latino mortality paradox and traditional medicine is highly practiced in the country in which the most healthiest Latinos are from — Mexico. Immigration causes are also pertinent to researching the Latino population because a large portion of them living in the United States are immigrants. In addition, while the reasons Latinos immigrate to the United States are often similar, there may be differences between countries like Mexico and a country in South America, such as Colombia. Both countries may have issues involved drug cartels; however, Colombia’s situation is much more severe than Mexico’s. Additionally, there may be more immigrants from specific countries seeking asylum as refugees than from other countries. The knowledge of biological factors that may contribute to the Latino mortality paradox is limited, and the causes of these biological factors should be evaluated. For example, if the nutritional behaviors of Latinos positively impact their health, then it should be evaluated in what ways this occurs.

Though Latinos may have positive outcomes of health despite the adversities they face (e.g., low income and less access to healthcare), it is still important to consider ways to improve their communities since lower SES is still associated to poorer health. According to Morales et al. (2002), Latinos, especially Mexicans, appear to have defensive characteristics that counter the negative effects of low SES. However, it is demonstrated that Latinos with higher SES still have a better overall health than those with lower SES.
References


