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NEIGHBORHOOD RISK FACTORS FOR OBESITY IN THE DETROIT, MICHIGAN LATINO COMMUNITY

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ABSTRACT

Latinos, or individuals from the Caribbean, South America, and Central America (Santiago, 1996), are affected by a wide variety of health issues, and in particular, obesity. In the United States alone, more than 40% of Latino adults are obese, and almost 23% of Latino children between the ages of 2 to 19 suffer from obesity (Trust for America's Health and the Robert Wood Johnson Foundation, 2014). Latinos are ranked second behind African Americans in obesity rates in the United States (Ogden et al., 2014). This literature review will examine the historical and socio-economic factors that contribute to the high obesity rates for Latinos in Detroit, Michigan, and discuss how living in low-income areas can affect access to healthy food options.

LITERATURE REVIEW

Latinos constitute one of the lowest socio-economic groups in the United States. "Groups that were initially incorporated into the U.S. as colonized or conquered groups—Mexican Americans and Puerto Ricans—continue to have low levels of employment standing, income, alongside high rates of impoverishment" (Sáenz & Morales, 2015, p. 100). This statement also describes those Latino workers "who are undocumented [and] tend to not complain about the low wages given to them and the terrible work environments they're working in" (Sáenz & Morales, 2015, p. 100). Undocumented workers are often forced to take jobs Americans don't want, and routinely work long

hours for very low pay. Many live in neighborhoods with inadequate access to fresh fruit and vegetables and poor transportation systems, leading to high rates of obesity in the population.

Obesity may diminish one's quality of life by increasing the risk of developing coronary heart disease, diabetes mellitus, hypertension, dyslipidemia, gallbladder disease, respiratory problems, cancer, and other health issues (Centers for Disease Control and Prevention, 2015). Obesity also affects a person psychologically. According to Kushner and Foster (2000), "obesity creates an enormous psychological burden. In terms of suffering, this burden may be the greatest adverse effect of obesity" (p. 949-950). For those individuals who are obese, body image dissatisfaction and binge eating disorder are common, compared to the non-obese population. Both have been linked to depression.

A study done by Carpenter et al. (2000) showed that men and women experience different outcomes when it comes to the psychological impact of obesity. In a general population sample, excess weight among women resulted in an increased risk for suicidal thoughts, suicide attempts, and a higher risk for depression. Excess weight among men resulted in a lower risk for depression, suicidal thoughts, and suicide attempts. Research shows, however, that losing weight can improve the quality of life for people who are obese (Kushner & Foster, 2000).

In a study presenting national estimates of obesity in older individuals, Fakhouri et al., (2012) write that, "[o]besity prevalence was higher among those aged 65-74, compared with those aged 75 and over in both men and women" (p. 1). The results showed that between 2007 and 2010, 46.6% of Latino women in the U.S. were likely to be obese. Approximately 30.2% of Latino women aged 75 and over were also considered to be obese. The prevalence of obesity in Latino men aged 65-74 was 38.3%; the figure was 27.9% for Latino men aged 75 and older. Fakhouri et al., (2012) report that "[b]etween 1999-2002 and 2007-2010, the prevalence of obesity among older men increased" (p. 1).

Obesity rates in the Latino community are escalating because of two key factors: (1) the food choices made by the population, and (2) lifestyle changes as Latinos adapt to American culture. According to Darity (2008),

At a macrosystemic level, U.S. food policy is fundamentally at odds with the goal of healthful eating. Food is overproduced, and because of the abundant supply, food companies must compete aggressively for market share. Cheap, palatable, and accessible energy dense foods are mass-marketed and offered in portions vastly disproportionate to individuals' caloric needs. (p. 213)

These “cheap and accessible energy-dense foods” are available in both grocery stores and in restaurants. Because many low-income people lack the funds to eat healthy foods, they are forced to settle for low-cost, often unhealthy meals. High fructose corn syrup (HFCS), an additive in many inexpensive foods, poses a health-threat when consumed in large amounts:

HFCS is used instead of sugar (glucose) as a caloric sweetener in many foods and all soft drinks; however, it is digested, absorbed, and metabolized differently than glucose is. Fructose, unlike glucose, distorts levels of insulin, leptin, and ghrelin, the hormones that act as key signals in food regulatory processes and body weight, making dietary fructose a prime suspect in the obesity epidemic. (Darity, 2008, p. 214)

Lifestyle choices may also contribute to the risk of obesity. Focusing on physical activities allows us to compare caloric intake to the energy used by an individual. Darity (2008) defines obesity as a “chronic energy intake,” meaning that many individuals consume and obtain more energy than they use: “Technological advancement that reduces energy output, low-energy office occupations, and leisure preferences such as television viewing and computer use increase the probability of a physically inactive lifestyle” (p. 216). The more people—and in particular, children—rely on technology, the more they will lose the benefit of a physically active lifestyle and be left at higher risk for becoming obese.

Out of all the age groups that are effected by the obesity epidemic, children rank highest. Dependent upon adults for food and lifestyle choices, children are profoundly affected by their immediate environment. According to Bijlefeld and Zoumaris (2015),

The combination of diets filled with high-fat foods, sugary drinks, and too little exercise continues to keep obesity rates for American children and teens at about 17%. The... Centers for Disease Control and Prevention (CDC) [report]... that the prevalence of obesity among children aged two to five years decreased significantly, from 13.9% in 2003–2004, to 8.4% in 2011–2012. The CDC also noted that in 2011–2012, obesity prevalence was higher among Hispanics (22.4%) and non-Hispanic black youth (20.2%) than non-Hispanic white youth (14.1%). Non-Hispanic Asian youth had the lowest prevalence of obesity, at 8.6%. (p. 43).

A different study conducted by the CDC examined the increase in health issues among children. Bijlefeld and Zoumbaris (2015) write that,

The study showed that childhood diabetes doubled during the last two decades, gall bladder disease tripled, and sleep apnea increased five-fold, a substantial increase. Sleep apnea, a disorder in which a sleeping person repeatedly stops breathing for long enough to lower the amount of oxygen in the blood and brain, is more common among overweight children because fat gathers at the back of the neck and can block the airway.

Childhood obesity can lead to numerous health issues in adult life; the greater the health issues an individual faces as a child, the more likely that health problems will continue in adulthood.

Latino Culture in the United States

The Latino population in the U.S. is growing, and the number of Latinos in the workforce is increasing, as well. “The total ethnic Mexican population...in the U.S. grew from about 1.6 million in 1940, to 2.5 million in 1950, and reached 4 million by 1960” (Gutiérrez, 2013, p.1). According to Kochhar (2012), “Latinos are projected to account for three quarters of the labor force growth in the U.S. between 2010 and 2020” (<http://www.pewsocialtrends.org/>).

Lacking equal educational and employment opportunities, many Latinos live in low-income neighborhoods with poor access

to healthy food choices (Sáenz & Morales, 2015, p.115). Sáenz & Morales write that, “[u]nequal funding across public schools creates a situation where middle-class children are more educated compared to children living in poor neighborhoods, many of the children being Latino and African American” (p. 86). Schools in poor neighborhoods often lack the funding necessary to update textbooks or technology, provide transportation, and even maintain a well-trained teaching staff. According to the 2011 American Community Survey Public-Use File, Latinos are first when it comes to high school dropout rates (males 17.0%; females 11.7%), while whites have the lowest dropout rates (males 5.8%; females 4.3%). Latinos have the lowest high school completion rates (males 61.8%; females 64.5%); whites lead in high school completion rates (males 90.6%; females 91.6%). Latinos are also ranked lowest in the numbers of U.S. college graduates (males 12.3%; females 14.5%). Whites have the highest college graduate rates (males 32.7%; females 31.1%). The low rate of educational attainment prevents the Latino population from gaining upward mobility in the American economy.

Latino students have protested their lack of educational resources. In the spring of 2006, “Latino students in Las Vegas walked out of their classrooms to gain attention on issues such as immigration reform, xenophobia, homophobia, nativism, classism, sexism, ageism and racism” (Sáenz & Morales, 2015, p. 87). This action showed the students’ alienation from the school system, as “many students faced suspensions, some students were not given the opportunity to make up exams and some teachers purposely gave exams on the walkout days to penalize Latino students” (Morales, 2008). The American education system has not been particularly sensitive to Latino students’ needs.

Two aspects of Latino culture are particularly controversial in American society: *marianismo* and *machismo*. “Marianismo is the thought that mothers should be self-sacrificing for [their] family, while the fathers are associated with authority, protection and guidance of the family. Machismo is the pride that the man has for being aggressive as the head of the household” (Sáenz & Morales, 2015, p. 122). Some Latinos agree with these cultural practices, but most Latinos in the United States live by a third value, *familismo*, which is “about prioritizing the family over

individual needs and to form family beyond the nuclear to the extended” (Sáenz & Morales, 2015, p. 123). *Familismo* values putting family first, having a strong bond with grandparents, cousins, aunts and uncles; it also places a high value on treating friends as family members. “The concept of familismo has been a central element in describing Latinos living in the U.S. and in Latin America for over 40 years” (Sáenz & Morales, 2015, p. 123).

The value of *familismo* involves three dimensions: (1) *demographic/structural*, (2) *attitudinal/ normative*, and (3) *behavioral*. The demographic/structural dimension focuses on the family size and whether the parents are married, separated, or divorced. Sáenz and Morales (2015) write, “[t]he family structure of Latino families has been distinguishable from white families over the last several decades. ...Latina females are less likely to be married, more likely to be the bread winner of the household, and are more likely to have children at younger ages outside of marriages compared to white females” (p. 124).

The *attitudinal/normative* and behavioral dimensions are similar: “*Attitudinal/normative* refers to values that are placed on the family, and [the] behavioral touches on activities involving the achievements of family roles and relations among family members. Topics can include family closeness, recognition of the role of extended family, living in geographical nearness to either nuclear or extended family” (Sáenz & Morales, 2015, p. 124). Other topics examined in these dimensions include social actions such as immigrant settlement, education, and health and criminal activity. The family connection means the world to Latinos—nothing else is more important than the family.

During the Obama administration, every American citizen was required to have health insurance, yet many Latinos went without adequate coverage. “The lack of health insurance is lowest among Latinos born in the U.S., followed by Latino immigrants who are naturalized citizens, with Latino immigrants who are not naturalized citizens being more likely to not have health insurance” (Sáenz & Morales, 2015, p. 173).

The 2011 American Community Survey Public-Use File reports that “29.9% of Latinos are without health insurance in the United States.” This has an effect on the health of “Latino

children, [who] are more likely to have gone the last year without a healthcare visit, compared to white and black children” (Sáenz & Morales, 2015, p. 172). Even though Latinos have low rates of health coverage when compared to White and African Americans, Latinos do have “lower mortality rates and higher life expectancies than White Americans” (Sáenz & Morales, 2015, p. 158). This is an epidemiological paradox, for while Latinos may live longer than many people on average, obesity is more prevalent in Latinos, compared to other health issues. “The escalating levels of obesity among Latinos have the potential to have devastating impacts on the future health and economic well-being of Latinos” (Monteverde, 2010).

Detroit’s Latino Population

Detroit’s history can be traced back to its founding in 1701 (Martelle, 2012). The city became an urban industrial center in the early 1940’s, when Detroit contributed prominently to the World War II effort. “Chrysler (with U.S. funding) was building a tank factory and other existing facilities were being converted from making cars to producing trucks, machine guns, anti-aircraft weapons, boat engines, and even parts for submarines” (Martelle, 2012, p. 139). In 1943, riots occurred in Detroit due to the ongoing “exclusion of African Americans from jobs and housing. A pre-riot survey found that eighty-three percent of black people in Detroit felt they were not being given a full opportunity to help win the war” (Martelle, 2012, p. 147). The racial tension between white and black people during this period reflected segregation practices that caused many men and women of color to move from southern to northern states. The north did not, however, prove to be a land of opportunity. Martelle writes that “[i]n 2010, nearly four in ten Detroiters overall, and more than half of Detroit’s children, were living below the federal poverty line, making Detroit the poorest of the nation’s big cities” (Martelle, 2012). The loss of manufacturing jobs has meant that Detroit remains one of the poorest cities in the United States:

When jobs move out of neighborhoods, whether they are well-paying union factory jobs or minimum wage jobs, those financially capable to get up and move go with the job or can find work elsewhere.

...The problem is compounded by the spread of [Detroit's] geography and an inadequate public transportation system. ...Official unemployment peaked at 27.4% in July 2009. In 2010, of 468,000 adults between ages of 16 and 65, only 138,000 were employed" (Martelle, 2012, p. 225-226).

Under the strain of job losses, the Detroit economy has been slow to recover. Many schools have closed, limiting educational opportunities for the next generation. Detroit went from being an environment that was once attractive for people who wanted to find work, to an environment that lacks basic resources.

Lack of Food Resources in Detroit

The Governing States and Localities report indicates that in 2010, 33% of residents in the Metro-Detroit community, which included the cities of Detroit, Dearborn, and Livonia, were obese (Governing States and Localities, 2011). According to the 2014 Census, of the 680,250 people living in Detroit, 6.8%, or 100,037 of the population was Latino (U.S. Census, 2014). Food deserts, or neighborhoods that lack adequate food resources for the population, plague Detroit: "Food desert regions are often urban residential areas with many low-income residents, who generally eat less nutritious diets and experience much greater levels of food insecurity than those with higher incomes" (Hebda & Wagner, 2015, p. 57).

With few grocery stores in low-income Detroit neighborhoods, the residents must settle for what food is available. Detroit, like other impoverished communities, has a higher per-capita rate of fast food restaurants and small, family-owned markets with a limited selection of fresh fruit and vegetables. "It is well-documented that long-term consumption of calorically-dense junk food leads to obesity. This in turn raises the incidence of health problems such as heart disease, metabolic syndrome, osteoarthritis, liver disease, diabetes, cancer, and stroke" (Hebda & Wagner, 2015). The high cost of medical care means that many Detroiters cannot afford treatment. High unemployment, the lack of healthy food, a poor transportation system and inadequate educational resources mean that adults struggle to provide for their children.

A number of organizations are dedicated to improving overall health in the Detroit. The Detroit Food & Fitness

Collaborative (DFFC) is a collaborative made up of 40 organizations that are working to help Detroiters lead healthier lives (Detroit Food & Fitness Collaborative, n.d.). The DFFC is pursuing a number of goals that aim to improve life both on an individual and community basis. One organization, Active Living, seeks to “increase access to good food and physical activity for the citizens living in Detroit,” by helping Detroiters receive complete street access, so residents can use the roads with safety. Sidewalks and bike lanes are reconstructed so that pedestrians and cyclists can walk, jog, run, and have safe use of the streets (DFFC, n.d.). The Food Systems Work Group seeks to “improve access and consumption of fresh, and affordable food by expanding food choices that citizens can take advantage of” (DFFC, n.d.). This group pushes for an increase in food that is grown and processed locally and the creation of urban gardens and compost sites. The Schools Work Group works to provide fresh and good quality food to the children in Detroit’s public schools. Not only is this group helping the children of Detroit, they’re also participating in the national movement for school food improvement (DFFC, n.d.).

Future Research

This literature review forms the basis of a qualitative research project to examine attitudes about obesity in Detroit’s Latino community. Ten adult Latinos living in Detroit will take a survey with questions based on their lifestyle, thoughts about the community, and any changes they would like to see in regard to access of adequate food choices. The survey will be offered in English and in Spanish, with a translator present. Participants will be compensated with a \$20 gift card to a food store. To preserve confidentiality, participants will be asked to only identify themselves by a first name. The surveys will be classified by a numeric code to preserve the privacy of the respondents. It is hypothesized that data will support the thesis that a lack of access to healthy food, and the challenges posed by low income and poor transportation will be identified as major factors in the prevalence of obesity in Detroit’s Latino population.

REFERENCES

- Bijlefeld, M., & Zoumbaris, S.K. (2015). *Encyclopedia of diet fads: Understanding science and society, 2nd ed.* Santa Barbara, CA: Greenwood Press.
- Carpenter, K.M., Hasin, D.S., Allison, D.B., & Faith, M.S. (2000). Relationships between obesity and DSM-IV major depressive disorder, suicide ideation, and suicide attempts: results from a general population study. *American Journal of Public Health, 90*(2), 251-257. doi:10.2105/ajph.90.2.251
- Darity, W.A. (2008). *International encyclopedia of the social sciences*. Detroit, MI: Macmillan Reference USA.
- Detroit Food and Fitness Collaborative. (n.d.). *Detroit collaborative*. Retrieved January 07, 2017, from <http://detroitfoodandfitness.com/detroit-collaborative/>
- Fakhouri, T.H.I., Hughes, J.P., Burt, V.L., et al. (2014). Prevalence of obesity among older adults in the United States, 2007-2010. Centers for Disease Control and Prevention: National Center for Health Statistics. Retrieved May 02, 2017, from <https://www.cdc.gov/nchs/products/databriefs/db106.htm>.
- Governing States and Localities (2011). *Obesity rates for states, metro areas*. Retrieved March 2, 2017, from <http://www.governing.com/gov-data/obesity-rates-by-state-metro-area-data.html>.
- Gutiérrez, G.D., (n.d.). An historic overview of Latino immigration and the demographic transformation of the United States. Retrieved March 02, 2017, from https://www.nps.gov/heritageinitiatives/latino/latinothemestudy/immigration.htm#_edn2
- Hebda, C., & Wagner, J. (2015). Nudging healthy food consumption and sustainability in food deserts. *Letters in Spatial and Resource Sciences, 9*(1), 57-71. doi:10.1007/s12076-015-0138-2
- Kochhar, R. (2012). *Labor growth slows, Hispanic share grows*. Washington, DC: Pew Research Center. Retrieved March 28, 2017, from <http://www.pewsocialtrends.org/2012/02/13/labor-force-growth-slows-hispanic-share-grows-2/>
- Kushner, R.F., & Foster, G.D. (2000). Obesity and quality of life. *Nutrition, 16*(10), 947-952. doi:10.1016/s0899-9007(00)00404-4
- Martelle, S. (2014). *Detroit: A biography*. Chicago, IL: Chicago Review.
- Monteverde, M., Noronha, K., Palloni, A., & Novak, B. (2010). Obesity and excess mortality among the elderly in the United States and Mexico. *Demography, 47*(1), 79-96. doi:10.1353/dem.0.0085
- Morales, M.C. (2008). Immigrant movements and the struggle for diverse representations of citizenship. In D. Dentice and J.L. Williams (eds.), *Social Movements: Contemporary Perspectives*. Newcastle, IK: Cambridge Scholars Publishing.
- Ogden, C.L., Carroll, M.D., Kit, B.K. (2014). *Prevalence of childhood and adult obesity in the United States, 2011-2012*. JAMA, 311(8), 806-814. doi:10.1001/jama.2014.732
- Sáenz, R., & Morales, M.C. (2015). *Latinos in the United States: Diversity and change*. Cambridge, UK: Polity Press.
- Santiago, I. S. (1996). Increasing the Latino leadership pipeline: Institutional and organizational strategies. *New Directions for Community Colleges, 1996*(94), 25-38. doi:10.1002/cc.36819969405
- Trust for America's Health and Robert Wood Johnson Foundation. (2014). *Obesity prevention in Latino communities*. Retrieved March 13, 2017, from <http://stateofobesity.org/files/stateofobesity2014.pdf>
- U.S. Census. (2014). *Population and housing unit estimates*. Retrieved March 2, 2017, from <https://www.census.gov/programs-surveys/pepopest/data/tables.2014.html>