

COMMENTARY

Epidemiology and Other Factors Affecting Weight Loss in Hispanics

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Introduction

Obesity in the Hispanic population in the United States (US) is disproportionately higher when compared to that of other ethnicities (Figure 1). At a rate of almost 50%, Hispanics have higher rates of obesity than any other race or ethnicity in the US.¹ Factors contributing to obesity vary from genetics to the type of the food individuals consume. When looking at potential solutions and treatments for patients, the fundamental basis in obesity can include lifestyle changes. If this fails, medicine or surgery is most optimal for weight loss/recovery.

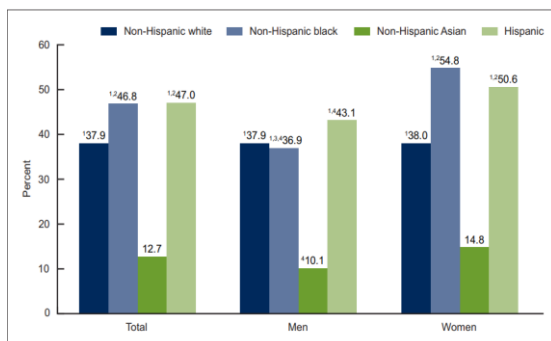


Figure 1. Prevalence of obesity among adults aged 20 and over, by sex and age: United States, 2015-2016

Reference:

<https://www.cdc.gov/nchs/data/databriefs/db288.pdf>

Factors Contributing to Weight Gain

Genetic Background and Eating Habits

Hispanics/Latinos have a higher risk of obesity compared to other Americans that may be related to their genetic background. With obesity on the rise worldwide, there is an urgent need to identify the factors that lead to weight gain and weight management. The United States, like other countries, has seen an increase in population sizes and Hispanic/Latino racial diversity in recent decades. Hispanic/Latino adults and children/adolescents in the United States bear a greater burden of obesity than non-Hispanic whites.² Some studies have suggested that genetic factors may play a role in the higher rates of obesity observed in the Hispanic/Latino population. For example, a study published in the journal PLOS genetics found that a specific genetic variant was associated with a higher body mass index (BMI) in Hispanic/Latino individuals.³ Another study published in the International Journal of Obesity found that genetic variations in fat mass and obesity associated (FTO) gene were more strongly associated with obesity in Hispanic/Latino populations than in non-Hispanic white populations.⁴ However, it is important to note that genetic factors are just one piece of the puzzle when it comes to understanding obesity, and that lifestyle factors such as diet and physical activity also play a significant role.

Eating habits and behaviors have been implicated in the clustering of obesity among socially connected people. For example, a study at the University of California San Diego and Connecticut incorporated adult Latinas participating in a lifestyle intervention that completed an egocentric network measure of weight and weight control behaviors.⁵ This study determined how participants and their social ties are related and associated with weight change in participants. Participants who reported more social ties and lost weight, were most likely to eat small portions and low-fat foods. Participants who reported more social ties who exercised, drank liquid meal replacements, took herbal supplements, and self-weighted were more likely to lose weight. Therefore, given that weight and weight control behavior of Latinas reflects that of their social ties, targeting existing social networks for lifestyle interventions may more effectively improve and sustain health-promoting behaviors and outcomes.⁶ Many factors can contribute to excess weight gain including eating patterns, physical activity levels, and sleep routines. Eating patterns emphasize a variety of vegetables and fruit, whole grains, a variety of lean foods, and low-fat and fat-free daily products. Physical activity recommends that children aged three through five years should be physically active throughout the day. Children aged 6-17 years need at least 60 minutes of moderate to vigorous physical activity every day. Adults need 150 minutes of moderate intensity physical activity a week.⁷

Mental Health and Activity Levels

There are factors that affect physical activity within the Hispanic population. As we all know, physical activity is crucial for maintaining good health and preventing chronic diseases. However, there are several barriers that prevent Hispanics from engaging in regular physical activity. Many Hispanics come from cultures where physical activity is not emphasized, and instead, they prioritize family and work. The diet of the Hispanic culture is influenced by the parents of young adolescents.^{9,10} Most of the foods Hispanics consume contain large amounts of salt and sugar which can lead to atherosclerosis, plaque build-up in the heart, and glucose can turn into fat if not used during exercise. Another factor that affects physical activity within the Hispanic population is access to resources. The exclusion of Hispanics pertains to the Illegal Immigration Reform and Immigrant Responsibility Act of 1996. Many Hispanics live in low-income neighborhoods where there are limited

resources for physical activity, such as parks, gyms, or safe walking paths.⁸ This lack of access can make it challenging for them to engage in regular physical activity. In the Hispanic adolescent population, 54.8% of girls tried to lose weight within the years of 2013 through 2016.⁷ Boys of Hispanic descent had a 8.2% difference from young women. Overall, it is essential to understand the factors that affect physical activity within the Hispanic population to create effective interventions that promote physical activity and improve health outcomes.

The most prevalent health condition affecting the Hispanic community is depression. Emotional behaviors contribute to many people becoming depressed and because of this, it leads to the loss of appetite. Ongoing stigma plays a huge role as to why many individuals do not seek the medical attention needed when they are stressed and overwhelmed which can also lead to weight loss. According to Washburn, et.al., the Hispanic population is severely affected by depression, a widespread psychiatric condition.¹¹ Many Hispanics also have other medical conditions leading to the consumption of certain medications, which can lead to depression, and contribute to weight loss. The following two phrases include information, according to Sadule-Rios, numerous Hispanics with depression who do not educate themselves or ask for medical advice sometimes may turn to illegal drugs which can also lead to the loss of appetite and weight loss.¹² Sadule-Rios also states that understanding depression and its causes can result in better evaluation procedures, early detection, and interventions, care, and services that are sensitive to cultural differences.¹²

Complications or comorbid conditions

Obesity

Obesity has a major impact in the Hispanic/Latino population. It starts by summing up the food they consume. Obesity often builds up a disease in the body, which can result in a myocardial infarction, strokes or possible death. According to Borlaugh, et al., obesity from the 1970's into the 1980's has increased from 15% to 40%. According to the study it has been estimated that 1 in 2 adults will be obese in the USA by 2023.¹⁴ Although cardiovascular disease (CVD) is not often linked to the possibility of obesity, many other references besides this one have suggested that it is a major possibility. As one may know the human heart pumps blood at a certain rate, in this

research it has been suggested that the increased need for energy due to obesity can be a great relation to why they are at such risk for cardiovascular disease. In the estimate, 40% to 50% of patients have diabetes and 15% to 25% are pre-diabetic.¹⁴

Diabetes

Ethnic minority women tend to have a higher risk of exposure to diabetes, obesity and other illnesses. In type 2 diabetes, the pancreas makes less insulin than normal, and your body becomes resistant to insulin. Something really common in type 2 diabetes is the way it affects Hispanic women and minorities as a whole, and it's involvement with obesity. Diabetes tends to affect minority groups because of their health care, cultural behaviors and other determinants of health. Research has shown that obesity plays a big role in the development of type 2 diabetes, being tied into about 98% of the cases.¹³ We as a whole have also been provided with research that proves 88% of adults with type 2 diabetes are considered obese.¹³

Weight-Loss Methods

Lifestyle modifications

Exercise plays a crucial role in combating obesity among Hispanics. Regular physical activity offers numerous benefits that can contribute to weight management and overall health for Hispanics. There are many reasons for obesity in the Latino community and this may be due to the lack of knowledge about physical activity or access to other resources such as a workout program.¹⁵ Hispanics should approach this by accompanying an exercise prescription describing frequency, intensity, type, and time with a minimum of 150 minutes moderate weekly activity.¹⁶ Along with that, a high-quality diet should coexist to make the benefits substantial. Research recommendations in recent US & UK guidelines typically advise increasing aerobic physical exercise, such as swift walking to reach a goal of 150 minutes per week or more. Additionally, this is equal to 30 minutes a day, for at least 5 days each week. Doing so benefits Hispanic individuals for general health that are independent of weight loss. Some evidence concludes that a greater amount of physical activity following 30 to 45 minutes per day is required to prevent obesity and for long-term weight maintenance for those who have lost weight, 60 to 90 minutes per day is essential.¹⁶ Progressively, the next step is to get the right nutritional education and carefully monitor what is

being consumed.¹⁵ There are several methods for dieting to lose weight. One method is by reducing calorie intake by 500 below regular requirements or by using a dietary plan which consists of 1200 to 1500 kcal/d for women or 1500 to 1800 kcal/d for men to accomplish this goal. The second method should be to burn more calories than the body consumes in a week or day. Certain foods that are recommended for diets are: whole grains, vegetables, fruits, fish, nuts, and low-fat dairy products.¹⁷ Correspondingly, there is an aiding factor that helps with the process and it is to include physical activity while dieting as it is an essential component to comprehensive lifestyle intervention for obesity management.¹⁵

HEALTHY SWITCHES FOR LATINO DISHES

| INSTEAD OF THIS | TRY THIS |
|------------------------------|--|
| Adobo spice (high in sodium) | Thyme, rosemary, pepper, Mrs. Dash salt-free seasoning |
| Frying | Baking, grilling, air-frying, pressure cooking |
| Lard | Olive or canola oil |
| Taco shell | Lettuce wrap |
| Flour tortilla | Corn tortilla |
| Soda and other sugary drinks | Water or sparkling water |
| Beef | Ground turkey |

Reference:

<https://www.rwjbh.org/blog/2021/march/addressing-diet-and-weight-issues-in-the-latino/>

Medicinal Therapies

According to Lu, et al. the Semaglutide (Ozempic) is an effective FDA-approved drug for chronic weight management in adults with obesity or over-weight.¹⁸ However, there are concerns about its cost, access, and affordability, particularly in underserved and underrepresented communities, such as the Hispanic community.¹⁸ In this study, researchers found that 57.1% of Semaglutide-eligible adults who had attempted to lose weight in the past 12 months were Hispanics.¹⁸ Cohen, and Gadde, researched other drugs that can help with weight loss therapy that have been approved in the United States are known as orlistat, lorcaserin, liraglutide, phentermine or topiramate, and naltrexone/bupropion.¹⁹ In addition, they stated that although considered a weight loss medication, Naltrexone/Bupropion results in an increase in in-office and ambulatory blood pressure compared to placebo.¹⁹ The most common medications used for weight loss are Naltrexone and Liraglutide although side effects are possible. The common side effects for Naltrexone include nausea, constipation or diarrhea, insomnia and dry mouth. As for Liraglutide, side effects include nausea, vomiting, diarrhea, constipation, headache, dizziness and low

blood sugar in patients with diabetes. On the other hand, it is a good option to help in weight loss more in general with patients dealing with hypertension and obesity. The result of these medications are an intended result, safe, and effective.

Bariatric Surgery

Bariatric surgery is a type of emaciating surgery that is used to rehabilitate obesity. According to Centers for Disease Control and Prevention (CDC), nearly 34% of the U.S. adult population is considered obese with a BMI of ≥ 30 , while 6% of Americans are considered extremely obese with a BMI > 40 .²⁰ In Hispanic and black populations, the obesity rates are even higher than other ethnicities with 50% of blacks being obese while Hispanics were closely behind with 39%.²⁰

In order to combat obesity in the U.S. and amongst Hispanics, many clinicians have recommended bariatric surgery as an alternative to common weight loss therapies. Benaiges et al. (2015) states that bariatric surgery works by reducing the size of the stomach, which restrains the portion of food that can be consumed.²¹ Additionally, the Mayo Clinic indicates that bariatric surgery is effective in maintaining long-term weight loss.²¹ Bariatric surgery requires lifestyle changes and new acquired habits, which can lead to improved quality of life. The Mayo Clinic also indicates that aside from weight loss, improvements in blood pressure, heart disease, sleep apnea, diabetes, nonalcoholic fatty liver disease (NAFLD) or nonalcoholic steatohepatitis (NASH), gastroesophageal reflux disease (GERD), and joint pain, can be observed.²² A study conducted by Smith et. al., indicates disparities amongst Latinos including, limited access to insurance coverage, low referral rates by primary doctor, cultural attitude towards obesity and distrust within the healthcare system reduces the access to bariatric surgery in these communities.²³ Conversely, Edinburg Consolidated Independent School District, a local school district of the Rio Grande Valley with a predominantly Hispanic population, has tackled this issue head on with its coverage of bariatric surgery included in its health plan.²⁴ Thanks to this surgery, many Hispanics are seeing and feeling rapid changes in their health and quality of life.

The Kaiser Permanente electronic health records states that after three years, Hispanic patients who got gastric bypass surgery lost 59% of their total weight.²⁰ This means that patients who lost 59 percent of their excess weight lost an average of 81.5 pounds. Bariatric surgeries can provide long-term weight loss.

The amount of weight you lose depends on your type of surgery and your changes in lifestyle habits. It may be possible to lose half, or even more, of your excess weight within two years.

Conclusion

Although treatment plans can be beneficial for some, it is important to remember that genetic predispositions to obesity and diabetes play an important role in the development of these diseases. Not all lifestyle modifications will work for everyone who is diagnosed with obesity, but there are openings for treatments such as medicinal therapies and surgery. Listening to the patient and their feedback on why or how they are in their current position is necessary to individual's treatment. Blaming/shaming a patient will cause disdain for the health care community, which is not helpful.

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