The causes of obesity and hypertension are multifaceted. Socioeconomic status, access to healthcare resources, advertising, education about various programs available, and the nature of the program all impact the success rate of any weight-loss initiative. This provides an opportunity to determine the impact that reducing weight can have on comorbidities related to obesity that include hypertension, diabetes, and hyperlipidemia. Women who are successful in this battle will gain an increased sense of self-esteem and will have the skills and the knowledge to educate their children about selecting a proper diet and becoming more active to maintain an acceptable weight with the potential to reduce this healthcare epidemic (Remington, Wagner, & Mark, 2010).

A study by Kirby et al. (2012) found that the costs of caring for individuals with obesity and associated comorbidities are approximately 10% of all medical spending, which is about $147 billion annually. There is evidence-based medicine indicating that individuals suffering from obesity have a reduced quality of life and reduced lifespan. Reducing this ever-increasing epidemic will offer cost savings related to the chronic disease management of hypertension, diabetes, and hyperlipidemia per Remington et al. (2010). Further, a reduction in weight of 10%-15% can greatly increase the health status of an individual and can reduce the impact of comorbidities associated with obesity, thereby reducing medical expenses (Kushner & Sur, 2014).

It is true that there are many socioeconomic factors that lead to obesity. Further, marketing of fast foods, accessibility of nutritious foods, and availability of public spaces for physical activity also impact the prevalence of obesity and associated comorbidities such as hypertension. If public policy is to be developed that will assist in the reduction of obesity, public discussions must include holding the individual responsible when making choices and changing behavior to reduce the adverse impact of obesity and related comorbidities (Niederdeppe, Roh, & Shapiro, 2015). Callahan (2013) wrote:

Obesity may be the most difficult and elusive public health problem this country has ever encountered. Unlike the classical infectious diseases and plagues that killed millions in the past, it is not caused by deadly viruses or bacteria of a kind amenable to vaccines for prevention, nor are there many promising medical treatments so far. While diabetes, heart disease, and kidney failure can be caused by obesity, it is easier to treat those conditions than one of their causes. I call obesity elusive partly because of the disturbingly low success rate in treating it, but also because it requires changing the patterns, woven deeply into our social fabric, of food and beverage commerce, personal eating habits, and sedentary lifestyles. It also raises the most basic ethical and policy questions: how far can government and business go in trying to change behavior that harms health, what are the limits of market freedom for industry, and how do we look upon our bodies and judge those of others? (p. 39)

This statement resonates across the topic of obesity and comorbidities. Combating this disease is almost impossible as it permeates every aspect of our lives. Callahan (2013) reported Gallup survey results from 2011, indicated the average weight for a man was 196 pounds, and for a woman, the average weight was 160 pounds. Three strategies suggested for addressing this widespread issue include governmental public health regulation, social pressure on the obese, and childhood prevention of the disease. Callahan suggested that obesity is a reflection of our culture and attitude and acceptance of many of the things that cause obesity.

Genetics contributes to the risk for obesity. Family characteristics such as parenting style, socioeconomic level, poor diet, and overall environment can increase the risk of obesity. However, an absolute restriction of junk food can result in an interest in eating unhealthy food and result in obesity. Often when something is not available or restricted, the desire for that object or in this case unhealthy food options increase. Government and social interventions promoting healthy behavior should be considered. The selection of food is often associated with price. Making affordable healthy choices available may promote better food choices. Investing in recreational facilities that promote physical activity can offer options for exercise outside of a gym membership. Fast food is an easy option for busy families but has little nutritional value. Sugary drinks should be avoided, and reduced juice consumption in favor of a piece of fruit is preferable.
Portion size is also problematic. Servings in most restaurants are larger than would be provided at home. Planning meals at home will assist in the battle against obesity. Healthy habits to prevent obesity should be started in childhood so that better choices are made in adulthood per Wadden et al. (2002).

Healthcare practitioners need to continue to educate patients and need to participate in developing public healthcare policy that will benefit the community as a whole.

**Comorbidities: Hypertension**

Adults suffering from hypertension experience risk factors for cardiovascular disease, renal insufficiency, atherosclerosis, left ventricular hypertrophy, atrial fibrillation, and congestive heart failure. Hypertension is a major risk factor for stroke. The comorbidities associated with hypertension increase medical costs. Proper treatment and ongoing compliance with diet, medication, and exercise can reduce the adverse impact of hypertension (Lackland & Weber, 2015). Those individuals with higher systolic blood pressure were at greater risk for complications (Lackland & Weber, 2015). Hypertension is diagnosed when the blood pressure reading is 140/90 or higher. A normal blood pressure reading is 120/70. Other factors increasing risks are comorbidities such as high cholesterol, obesity, and diabetes. According to Rapsomaniki et al. (2014) smokers were also at increased risk of complications when diagnosed with hypertension. In 2011-2012, adults who smoked represented 29.1% of the U.S. population (Kirby, Liang, Chen, & Wang, 2012).

Obesity increases the risk for the development of hypertension, and the link between hypertension and obesity is well documented (Re, 2009). It is also known that women suffer disproportionately from obesity (Re, 2009). Body mass index (BMI) is commonly used to assess obesity. However, BMI is unable to account for body shape or distinguish fat mass from lean mass. Other metrics for assessing obesity include waist circumference, waist to hip ratio and waist to height ratio. Excess body fat and increased adipose tissue and the location of fat have determined what health consequences will result (Bastien, 2016). During the aging process, there is a loss of skeletal muscle mass and quality, a phenomenon called sarcopenia. When sarcopenia is associated with obesity; the risk of morbidity and mortality increases. Associated comorbidities result in functional decline and reduced quality of life (Batsis, Mackenzie, Barre, Lopez-Jimenez, & Bartels, 2014). Programs focusing on awareness and behavioral changes are prevalent according to Memish et al. (2014). Weight loss can be achieved. However, maintaining weight loss is difficult, particularly if individuals revert to a poor diet, reduced activity, and their emotional, and psychological issues are not addressed according to Memish et al. (2013).

Weight management per Weber, Schiffrin, and White (2014) can be effective in reducing and eliminating hypertension and associated debilitating comorbidities. Dietary guidance to select fruits and vegetables and to limit red meat results in weight loss and is successful in reducing or eliminating hypertension. Reducing salt intake is another lifestyle change that has a positive impact on reducing or eliminating hypertension. Starting or improving an exercise routine is important. Reducing or eliminating smoking and alcohol consumption can protect against cardiovascular incidents. These strategies are difficult to adopt according to Weber, Schiffrin and White (2014), and individuals may need assistance with nutritional services, behavioral modification, and a group initiative where they can interact with others experiencing similar problems. Ethnicity is a consideration, particularly for African American individuals, as they are often more susceptible to hypertension and should avoid foods that are traditional, but may be counterproductive to weight loss according to Kirby, Liang, Chen, and Wang (2012).

**Efforts at Weight Loss**

Losing weight can be an overwhelming undertaking. The social stigma associated with obesity leads to poor self-image and depression and reduces the likelihood of participating in exercise programs and other social events that would improve the overall psychological well being of an individual attempting to make lifestyle changes. Embarking on a weight-loss program is often best accomplished with professional guidance. There are two strategies for assisting obese patients. The first strategy is to attempt to normalize weight through a variety of behavioral and lifestyle changes. The second strategy according to Tylka et al. (2014) assists the individual in accepting their body. This is accomplished by making positive changes in diet, exercise regimen, and participation in social activities that will reduce the reliance on food for comfort. The ultimate result is an overall sense of wellbeing.

The focus should be on the impetus for behavioral change. An individual decides to take action based on several factors. These factors include benefits related to the behavioral change, the potential risk for developing a serious medical condition, and the obstacles that prevent making that change. If an individual perceives a greater risk to overall health, adherence to a proposed regimen of lifestyle change is greater than if the individual thinks there is little cause for concern (Green & Murphy, 2014). Addressing obesity at the community level and including churches in the process can enable focus on changes based on specific culture and attitudes. Similarly, approaches to addressing obesity may be different based on educational level of the individual. Written material may need to be at a reading level for those who have not attained higher education.
Race, Ethnicity, Cultural Differences

Race impacts the rates of obesity along with cultural differences according to Kirby et al. (2012). Obesity among Black women is as high as 51%. Hispanic women suffer from obesity at a rate of 43.4%. When Black and Hispanic obesity rates for women are compared to their White counterparts, there is a stark difference as 33.1% of White women are obese. Similarly, hypertension rates are higher for Black and Hispanic women. Hypertension in Black women occurs in 51.5% of the population. Hypertension in Hispanic women occurs in 65.3% of the population according to Lee et al. (2012).

Obesity and Life Expectancy

Obesity reduces life expectancy. An individual suffers from a chronic inflammatory state, which ultimately damages the vascular system (Persson & Bondke-Persson, 2013). There is concern regarding the increased risk for cardiovascular disease in women. Top causes of death for women in the United States include heart disease, which is the number-one cause, and stroke, which is the number-three cause of death (Persson & Bondke-Persson, 2013). One in three women does not perceive themselves to be at risk (Persson & Bondke-Persson, 2013). Certain types of cancer are strongly associated with obesity which include colorectal cancer and breast cancer. Factors that increase risk include hypertension, diabetes, and hyperlipidemia, lack of physical activity, poor nutrition, and smoking. It is important to create a connection between the clinicians and the community. This will ensure long-term interventions have positive results (Vaid et al., 2011).

A long-term intervention can be successful if opportunities are provided to the participant to overcome obstacles that may be financial or due to scheduling constraints according to Warner et al. (2013).

Patients who believe that medical staff can have a positive impact on reducing their obesity via interventions, behavior modification, increased exercise, and improved nutrition will have greater success than patients who do not have these beliefs.

Support groups such as Overeater’s Anonymous are effective (Baban & Craciun, 2007). Community and religious support groups must consider collaborating with medical facilities. It is important to focus on continuous education, counseling, and interventions that will lead to compliance with weight-management interventions. This strategy will have the potential to increase the longevity of the obese population and reduce the cost of chronic disease management programs implemented to address the comorbidities related to obesity.

It will be important for weight-loss programs to provide details about cost, success, and long-term compliance.

Obesogenic Impacts

Excess caloric intake and increased body fat make it more difficult to lose weight (Persson & Bondke-Persson, 2013). The term obesogenic is used to describe suburban neighborhoods where reliance on a car as the primary mode of transportation rather than walking increases risk factors for developing chronic medical conditions such as hypertension, diabetes, hyperlipidemia, and obesity. Active commuting is positively associated with fitness and inversely associated with BMI. The time spent sitting is also representative of an increased risk of these disorders. Safer neighborhoods with options for the pedestrian experience promote a healthier lifestyle. The importance of including more whole grains and less starchy vegetables as well as reducing portion sizes is important. Avoiding high-fat, high-salt, high-carbohydrate foods are also encouraged. Walking was promoted as the primary type of exercise according to Glasgow et al. (2013). People must have realistic goals regarding weight reduction according to Lee et al. (2012).

Primary care clinicians working with obese patients can be instrumental in assisting these patients, via education and behavior modification, to modify their weight status. Factors limiting intervention include interpersonal relationship factors. The clinician’s personal and professional experience impacts their ability to successfully address issues facing the obese patient. These issues include patient willingness and compliance, clinician decisions to intervene to assist in weight management, and the focus of the health system on assisting patients to adopt a healthy lifestyle. The reasons go from personal, which is a narrow perspective and varies from one patient to another, to the more expansive involving community and public policy. Overall beliefs, attitudes, and motivation are what determine whether or not the practice will address the concerns of the obese patient. It is via teams at the clinician level that success is achieved according to Rubio-Valera et al. (2014).

Clinicians’ active involvement with their obese patients results in successful weight-loss strategies. Clinicians that offer a supportive environment with opportunities for interaction beyond the office visit, such as the use of the patient portal and texts to clinicians and their support staff, will have patients who are more compliant with the proposed weight-reduction intervention according to Rubio-Valera et al. (2014). Interpersonal relationships, along with institutional factors, impact successful weight loss for obese patients (Rubio-Valera et al., 2014).

Only one-half of patients comply with medical advice according to Allen (2014). Motivation is the key to compliance. An individual determines whether the benefits of the suggested treatment outweigh the cost, risk, and inconvenience of complying with medical advice. To assist patients in making changes, plans of action must be individualized; information and education are essential. In
developing programs interventions need to be designed to include those with family history of obesity, specific cultural and ethnic groups and those most vulnerable who may be residing in a food desert with no options to purchase healthy food. Counselors must offer comments about any negative attitudes the patient may have related to their medical condition. It is important to clarify risks, help patients overcome barriers, and offer training for implementing behaviors that will have a positive outcome (Allen, 2014).

**Obesity and the Hispanic Population**

Mexico is second only to the United States in rates of obesity based on the research of Perez Ferrer, McMunn, Rivera Dommarco, and Brunner (2014). A review of obesity and education of Mexican women was assessed over a 25-year span for 60,331 participants. As Mexicans adopted a Western diet, obesity rates tripled. In urban areas, Mexican women with more education experienced a greater increase in obesity than their rural counterparts who had limited education; yet these rural Mexican women also experienced an increase in obesity, although to a lesser degree. Concerns were expressed about morbidity and mortality related to associated chronic diseases. This study was extracted from four cross-sectional surveys. There is a need to address public health policy related to nutrition in Mexico and to consider population approaches to addressing obesity (Perez Ferrer, McMunn, Rivera Dommarco, & Brunner, 2014). Healthcare practitioners need to continue to educate patients and need to participate in developing public healthcare policy that will benefit the community as a whole.

Appropriate programs are important to address these issues. Assisting in the development of these programs with incentives engages patients. Factors that contribute to ongoing participation and increasing sources of funding will be a primary objective. Controlling obesity will reduce many current medical complications such as hypertension, heart disease, and diabetes, which are costly to the organizations that provide disease management programs and treat patients suffering from these disorders. Reducing this ever-increasing epidemic will offer cost savings related to the management of hypertension, diabetes, and hyperlipidemia according to Remington et al. (2010).

**Conclusion**

As the incidence of obesity and hypertension increases, strategies for dealing with these diseases must be more focused. Assessing sleep patterns, activity, caloric intake, and meal times can assist in weight management and address related hypertension. Poor sleep patterns can result in changes in metabolism that contribute to the development of obesity and hypertension. Reduced sodium intake and reducing stress can also have a positive impact on these diseases (Levandovski et al., 2012).

In addressing obesity, it is important to recognize and acknowledge the individual’s responsibility in the development of this disease.

**References**


