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A Grounded Theory Study of Knowledge, Perceptions, and Attitudes of Obese Haitian American Adults Toward Bariatric Surgery

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A GROUNDED THEORY STUDY OF KNOWLEDGE, PERCEPTIONS, AND ATTITUDES OF OBESE HAITIAN-AMERICAN ADULTS TOWARD BARIATRIC SURGERY

DISSERTATION

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Odiane Homy Medacier

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by

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ABSTRACT

Background: African-Americans (AA) have higher rates of obesity and obesity-related diseases but are less likely than other groups to undergo bariatric surgery. Haitian-Americans, a subgroup of African-Americans, have a high prevalence of obesity and its co-morbidities; they have a cultural belief that a "moderate amount" of body fat is considered healthy, and having any type of surgery, unnatural. The problem is Haitian-Americans are obese and suffer from many obesity-related illnesses but there is a lacuna of study addressing the utilization of bariatric surgery in this population.

Purpose: A grounded theory study to explore the critical factors that influence knowledge, perceptions, and attitudes of obese Haitian-American adults toward bariatric surgery.

Philosophical Underpinning: This qualitative inquiry is guided by the classical Glaserian grounded theory methodology and informed by the philosophical underpinnings of symbolic interactionism and pragmatism.

Methods: Data were collected through individual semi-structured interviews of twelve obese Haitian-American adults and confirmed by a focus group of five Haitian-Americans who underwent bariatric surgery. Participants were chosen via purposive, snowball, and theoretical sampling. Data analysis and collection occurred simultaneously and consisted of constant comparative analysis; open, axial, and selective coding; and categorizing for concepts and relationships. Field notes and memos contributed to the richness and rigor of the data.

Results: The grounded theory analysis of the individuals interviews, which was confirmed by the focus group session revealed three conceptual categories: Identifying, Determining, and Understanding. A basic social process of Acquiring Knowledge emerged from these categories.

The viewpoints of the obese Haitian-American participants resonated as they discussed their obesity, their knowledge, perceptions, and attitudes toward bariatric surgery.

Conclusions: The basic social process of Acquiring Knowledge could inform the care and management of obese Haitian-American adults who may benefit from or are contemplating bariatric surgery. It further increases the current body of knowledge regarding the knowledge, perceptions, and attitudes of obese Haitian-Americans toward bariatric surgery and provides a framework for educating this population.

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DEDICATION

I praise God, my father, Jesus Christ, my savior, and the Holy Spirit, my guide for this achievement. All the glory unto you!

This work is dedicated to Reverend Dr. Adenet Medacier, my husband and my inspiration. I am eternally grateful for your unwavering support and encouragement throughout this process. From thirty years ago, when we were dating, we both vowed that we would not stop going to school until we received our doctorate degrees. You received yours few years ago and you gently nudged me to get mine, and for that I am grateful. I am grateful for your keen eyes and attention to details, for offering to read, even when I didn't ask. For your understanding when I had to miss some functions. I thank God for you.

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CHAPTER ONE

Obesity is a chronic disease, prevalent in both developed and developing countries, that affects children as well as adults. It does not discriminate and knows no borders, and as such, affects all ages and ethnic groups. However, certain ethnic and racial groups appear to be particularly predisposed. African-Americans have particularly high predispositions to the development of obesity. One effective way of combating obesity is through bariatric surgery; however, a study by Mainous, Johnson, Saxena, and Wright (2013) finds that despite the high prevalence of obesity and obesity-related morbidities in African-Americans, there is paucity in the use of bariatric surgery among this ethnic group. Over the past five decades, the United States has seen a significant influx of Haitians, mainly in four major states, New York, Illinois, Florida, and Washington D.C. (Unaeze & Perrin, 2000). Generally, in research studies, Haitians and people of other Caribbean and African nations living in the United States are included among African-Americans.

Haitians for the most part believe that a moderate amount of body fat is considered healthy; whereas thin people are traditionally considered sickly and malnourished (Unaeze & Perrin, 2015). To be considered obese in the Haitian culture, an individual has to be morbidly obese. Given this worldview, Haitians might find it difficult to consider bariatric surgery as a mean of addressing obesity, whereas, finding effective ways to tackle the obesity crisis is a key public health strategy in this current era. Studies by Adler and Stewart (2010), Birkmeyer and Gu (2012), and Mainous et al. (2013) have focused on utilization of bariatric surgery by different ethnic groups, but so far, no study has addressed the utilization and effectiveness of bariatric surgery among

Haitian-Americans. Consequently, using the interpretivist paradigm of qualitative research undergirded by the Glaserian grounded theory method, this study proposed to analyze the critical factors that influence knowledge, perceptions, and attitudes of obese Haitian-American adults toward bariatric surgery.

Problem and domain of the inquiry

Background of the Study

The rising trend of obesity in the United States and worldwide is particularly troubling because obesity is a major cause of preventable illnesses and deaths. Health care professionals generally agree that people with obesity are more likely to develop chronic medical conditions, such as cardiometabolic complications, that are associated with mortality. Such complications include hypertension, insulin resistance, type 2 diabetes, certain cancers, osteoarthritis, dyslipidemia, cardiovascular disease, and sleep apnea. For these aforementioned reasons, obesity also conveys a significant economic burden on society (Brown, Fujioka, Wilson, & Woodworth, 2009). Ogden, Carroll, Kit, and Flegal (2013) estimated that 68% of adults in the United States (U.S.) are overweight and obese, among them African-American (AA) adults are nearly 1.5 times as likely to be obese compared with white adults. This means that approximately 47.8% of African-Americans are obese compared with 32.6% of whites. It is well-documented that African-Americans are disproportionally affected by obesity and its related co-morbidities.

In 2000, the World Health Organization (WHO, 2000) defined obesity as an abnormal or excess fat accumulation that may impair health and is measured by a body mass index (BMI) $\geq$ 30 kg/m2. BMI is the most common value used to measure obesity

because it is inexpensive and simple to obtain and provides a convenient level measure of obesity. It is computed as the weight in kilograms divided by the value of the height in meters squared. In adults, individuals with BMI between 25 and 29.9 are considered overweight, while those with BMI at 30 and above are obese (WHO, 2000). Similarly, The Centers for Disease Control and Prevention (CDC, 2014) describe being overweight or obese as having a weight that is higher than what is considered as a healthy weight for a given height. Two principal risk factors that lead to obesity are poor nutrition and lack of physical activity combined. How an individual eats, how active he or she is, among other factors affect how the body uses calories and whether the individual gains weight. When the individual takes in more calories than he or she burns off, weight is gained. Obesity is a complex, multifactorial chronic disease, that is influenced by the interaction of several factors, such as genetic, endocrine, metabolic, environmental (social and cultural), behavioral, and psychological components and carries many physiologic, psychological, and social consequences (Fitch, Everling, Fox, Goldberg, Heim, Johnson, Kaufman, …Webb, B., 2013).

The American Obesity Treatment Association (AOTA, 2015) stresses that obesity is more than a cosmetic problem; it advances that emotional and social suffering can be related to the emphasis that American society places on physical appearance which often equates attractiveness with slimness, especially for women. It notes that obese people often face prejudice or discrimination in the job market, at school, and in social situations because of the stigma that obese people are gluttonous, lazy, or both. Furthermore, it has shown a correlation between morbid obesity and depression, partly from chemical changes in the body, but also because of a common trend of lower self-esteem. Finally, it

has proven that people with higher rates of obesity tend to have lower paying jobs, get passed over for promotions more frequently, and are more likely to get fired. These health and societal consequences of obesity were also studied by Bhimjiyani, Knuchet-Takano, and Hunt (2015), who concluded that a small consistent reduction in obesity can lead to a significant public health gain. However, management of obesity remains one of the most complex issues that health care providers and their patients face and has catapulted bariatric surgery to the forefront of the treatment modalities for its longer-term effectiveness.

Prevalence of Obesity

In the past 15 years, a large body of evidence has been accumulated, documenting the temporal increases in the prevalence of obesity across the globe. Since 2003, the World Health Organization (WHO) had declared obesity a serious global health concern that is reaching epidemic proportions. In 2014, the WHO reaffirmed that obesity had nearly doubled worldwide since 1980, has reached epidemic proportions, is a risk factor for many high-risk health problems, and that the true cost of the burden of this disease continues to escalate each year (WHO, 2016). Burkhauser, Cawley, and Schmeiser (2009) and Komlos and Brabec (2010) concurred that the prevalence of obesity has been rising for the last five decades and has more than doubled in the past thirty years.

Obesity is the second leading cause of preventable death in the United States after smoking. Annually, obesity-related diseases account for 400,000 premature deaths (Ayloo, 2016). This astonishing revelation has prompted many world-renowned organizations to engage in increasing discussion of potential policy actions to address this public health crisis. Notably, in 2000, the World Health Organization declared that

obesity is a chronic disease, prevalent in both developed and developing countries and affecting children as well as adults. The American Heart Association has issued a call for action to curb the consequences of this growing epidemic, which may soon overtake tobacco use as the leading cause of preventable death in the United States and calls for further public health initiatives to be developed and implemented for the prevention, early detection, and treatment of obesity (Poirier et al., 2006). One of the goals of Healthy People 2020 (2011) is to increase the proportion of adults who are at a healthy weight, inversely reducing the proportion of adults who are obese. For the first time in 2013, the American Medical Association (AMA) called obesity a disease and summarized that recognizing obesity as a disease will help change the way the medical community tackles this complex issue that affects approximately one in three Americans. Furthermore, the CDC (2014) advanced that the single best predictor of type 2 diabetes was overweightness or obesity; almost 90% of people living with type 2 diabetes are overweight or have obesity and compared with non-Hispanic Whites, members of racial and ethnic minority groups are more likely to have diagnosed diabetes. Paradoxically, poverty and lower levels of education have also been linked to obesity (NIH, 2006).

Obesity worldwide. Once considered a problem only in the U.S. and other high-income countries of the Western world, obesity has become a major contributor to the global burden of disease (Finucane et al., 2011). The worldwide increase in the incidence of obesity and related chronic diseases has largely been driven by global trade liberalization, economic growth and rapid urbanization, which continue to fuel dramatic changes in living environments as well as in diets and lifestyles that promote positive energy balance (Hawkes, 2006). Positive energy balance occurs when an individual's

caloric intake exceeds his or her energy expenditure, leading to weight gain. Although globalization has clearly led to substantial improvements in quality of life and food security, and a reduction in the level of poverty for many countries, unintended consequences of globalization have led to an increased consumption of sugar-sweetened beverages and foods that are low in nutritional value and high in energy. Combined with reductions in physical activity, these factors are driving the global obesity epidemic (Fuster & Kelly, 2010). This poses one of the greatest global challenges to health care systems in this century. Interventions and policies that can curb or reverse the increase, and mitigate the health effects of high BMI by targeting its metabolic mediators are now needed in most countries.

According to James (2008), the WHO formally recognized the global effect of the obesity epidemic during a special obesity consultation in 1997. In 2014, WHO declared that worldwide obesity has more than doubled since 1980, more than 1.9 billion adults, 18 years and older, were overweight, and of these over 600 million were obese. This translates to 39% of adults aged 18 years and over were overweight in 2014, and 13% were obese. Most of the world's population lives in countries where overweightness and obesity kill more people than underweightness (WHO, 2014). Yet, Finucane et al. (2011) had already recognized the significant increase in the global prevalence of obesity over the last 30 years by observing that the estimated worldwide trends in population mean BMI between 1980 and 2008 had increased by 0·4 kg/m² per decade for men and 0·5 kg/m² per decade for women (Figure 1). They remarked that among women, obesity prevalence increased in all regions. The greatest magnitudes of increase (>20%) were observed in central Latin America, North America, and North Africa and the Middle

East. The Caribbean, Oceania, and Southern Africa had magnitudes of increase ranging from around 14% to 18%. Other regions had increases ranging from >3% in East Asia to close to 7% in Western Europe. For men, obesity increased in all regions except South Asia. The greatest magnitude of increase was observed in North America, with an increase of >18%. In central Latin America, Southern Africa, Oceania, North Africa and the Middle East, Western Europe, and the Caribbean, prevalence increased by >9–15%. In the remaining regions, prevalence increased by between 1.4% in East Africa and >6% in Eastern Europe. Over the next two decades, the largest proportional increase in the number of adults who have obesity is expected to occur in low to medium income countries, where estimates range from increases of 62–205% and 71–263% for overweight and obesity (Finucane et al., 2011, p. 8).

This data triggered a note of alarm for a U.S. research team from Emory University in 2001 (Reynaldo Martorell and Morgen Hughes) and the Centers for Disease Control and Prevention (CDC) (Laura Kettel Khan and Lawrence Grummer-Strawn) to analyze data from national nutrition surveys in the last 15 years to determine obesity levels and trends in developing countries. Their study compared overweight and obesity rates in women from 38 developing countries with rates in the United States and concluded that levels of overweight and obesity were extremely low in South Asia. In poor countries, such as those in Sub-Saharan Africa, obesity levels were low, with the condition concentrated among urban and educated women. In more developed countries, including those in Latin America and the Central Eastern Europe/Commonwealth of Independent States (CEE/CIS) region, obesity levels were higher and more equally distributed in the general population. Gregory, Temple Newhook, and Twells (2013)

estimated that in 2011, 13.1% of Canadian adults had Class I obesity (BMI 30.0 -34.9 kg/m2), 3.6% had Class II obesity (BMI 35.0 -39.9 kg/m2), and 1.6% had Class III obesity (BMI ≥ 40.0 kg/m2).

Caprio, Daniels, Drewnowski, Kaufman, Palinkas, Rosenbloom, & Schwimmer (2008) expounded on the influence cultures around the world play on the manner in which the risk for obesity varies by social status. By their account, cultures vary with respect to which body type is associated with wealth and health, with low-income societies generally believing that a larger body size whereas high-income societies generally believing that a thinner body is an indicator of wealth and health. Because, individuals with low socio-economic status (SES) in low-income countries are at risk of undernutrition, this risk creates a cultural value favoring larger body shapes; a value that may accompany immigrant groups upon their arrival to the U.S. (Caprio et al., 2008). Weight and body image have different meanings in different communities, with different cultures having different standards and norms for appropriate body size and shape. Some cultures celebrate a fuller body shape more than others, among Asian and Caucasians, for example, the ideal body shape is a lean one. Whereas, the African-American, Caribbean, and Latino cultures do not view being lean as always the ideal (Temple University, 2007). And in the Haitian culture, it is generally accepted that people who are larger in size are healthier (Colin, 2005). Unaeze & Perrin (2015) corroborates this notion that Haitians consider fat people healthier and happier, whereas thin people are believed to be in poor health caused by psychological and emotional problems.

Obesity in the United States. Prevalence rates of obesity are continuing to increase throughout Western societies, with the highest rates currently reported in the

United States of America, where it ranks as the second leading cause of preventable deaths. The U.S. has the highest BMI among high-income countries, prompting the surgeon general and the Chairman of the U.S. Joint Chiefs of Staff to declare that as one in four military service applicants is rejected, obesity has become a threat even to U.S. national security (Lustig, Schmidt, & Brindis, 2012). National survey data shows that the obesity epidemic began in the U.S. over 40 years ago, with the estimated prevalence having more than doubled from 1980 to 2010 (Finucane et al., 2011). Other studies have corroborated this finding, Ogden, Carroll, Kit, and Flegal (2013) and Ng, Fleming, Robinson, Thomson, Graetz, Margono…Gakidou (2014) estimate that 68% of adults in the U.S. are obese, among them, African-American adults are nearly 1.5 times as likely to be obese compared with white adults. This means approximately that 47.8% of African-Americans are obese compared to 32.6% of whites. A study by Ng et al. (2014) of U.S. adults found that the prevalence of obesity rose from 19% in 1980 to 34% in 2013. Although overall estimates of obesity prevalence in the total U.S. population have steadied since 2003, they remain alarmingly high and have continued to rise in men, non-Hispanic black women and Mexican-American women (Flegal et al., 2012).

Obesity in African-Americans. African-American adults are nearly 1.5 times as likely to be obese compared with White adults (Ng, et al., 2014). Approximately 47.8 percent of African-Americans are obese (including 37.1 percent of men and 56.6 percent of women) compared with 32.6 percent of Whites (including 32.4 percent of men and 32.8 percent of women) (Ogden, Carroll, Kit, Flegal, 2013). More than 75 percent of African-Americans are overweight or obese (including 69 percent of men and 82.0 percent of women) compared with 67.2 percent of Whites (including 71.4 percent of men

and 63.2 percent of women) (An, 2014). The high obesity rate among AA was also observed by the CDC in a 2015 published report on the Prevalence of Self-Reported Obesity among U.S. Adults by Race/Ethnicity, from 2012-2014 and is depicted in Table 1. The data were collected through the Behavioral Risk Factor Surveillance System (BRFSS), an ongoing, state-based, telephone interview survey conducted by state health departments with assistance from CDC. It declared that non-Hispanic blacks have the highest prevalence of self-reported obesity (38.1%), followed by Hispanics (31.3%) and non-Hispanic whites (27.1%). According to that report, non-Hispanic blacks have the highest age-adjusted rates of obesity (47.8%) followed by Hispanics (42.5%), non-Hispanic whites (32.6%), and non-Hispanic Asians (10.8%). The report also observes a strong relation between obesity and socioeconomic status (SES), defined as age, education, and income level. Among non-Hispanic Black and Mexican-American men, those with higher incomes are more likely to have obesity than those with low income. Higher income women are less likely to have obesity than low-income women (CDC, 2015). The increasing prevalence of obesity in this population suggests that culture may have unique contributing factors to this chronic condition.

An exhaustive search of the literature reveals a paucity of data on obesity prevalence specific to Haitian-Americans living in the Unites States. However, Haitian-Americans and African-Americans have often been combined as one group (Blacks) in studies, although their social beliefs and practices differ based on their distinct cultural backgrounds. The prevailing literature shows African-Americans to be disproportionately more affected by obesity and its related co-morbidities. Nonetheless, Cheema et al. (2014) caution that Haitian-Americans do not have the same clinical characteristics as

African-Americans, therefore, results found on African-Americans may not be imputed to Haitian-Americans and failure to recognize such differences may have catastrophic effects on the health of Haitian-Americans. As such, this proposed study may bridge this gap in the literature regarding obesity in Haitian-Americans.

Table 1

Prevalence of High Body Mass Index (Obesity) for Adults Aged 20 Years or Older by Sex, Age, and Race/Hispanic Origin, United States, 2011-2012

		% (95% CI)				
		≥20 y Crude	Age Adjusted(b)	20-39 y	40-59 y	≥60 y
Obese (All Grades, BMI ≥30)						
All race/Hispanic origin groups (c)						
	All	35.1(32.3-38.1)	34.9 (32.0-37.9)	30.3 (26.6-34.4)	39.5 (36.1-43.0)	35.4 (31.3-39.6)
	Men	33.7(30.9-36.6)	33.5 (30.7-36.5)	29.0 (23.9-34.6)	39.4 (36.0-42.9)	32.0 (27.5-36.9)
	Women	36.5(32.9-40.3)	36.1 (32.6-39.8)	31.8 (28.3-35.5)	39.5 (35.1-44.2)	38.1 (32.2-44.5)
Non-Hispanic white						
	All	33.4(29.7-37.3)	32.6 (29.0-36.5)	26.2 (21.6-31.4)	38.7 (34.2-43.3)	34.0 (29.4-39.0)
	Men	33.1(30.4-36.0)	32.4 (29.6-35.3)	24.6 (19.1-31.2)	41.1 (37.5-44.8)	31.8 (26.6-37.5)
	Women	33.7(28.1-39.8)	32.8 (27.4-38.8)	27.8 (21.9-34.7)	36.3 (29.4-43.7)	35.9 (28.5-44.0)
Non-Hispanic black						
	All	47.8(44.4-51.4)	47.8 (44.4-51.3)	46 (40.3-51.8)	49.3 (44.5-54.2)	48.5 (42.5-54.6)
	Men	37.0(33.2-41.0)	37.1 (33.1-41.3)	34.9 (28.5-41.9)	38.2 (32.8-43.9)	39.2 (30.6-48.5)
	Women	56.7(52.2-61.1)	56.6 (52.2-60.9)	55.8 (47.3-64.0)	58.6 (50.5-66.2)	54.8 (47.5-61.9)
Non-Hispanic Asian						
	All	10.9(8.3-14.3)	10.8 (8.2-14.2)	11.4 (7.3-17.6)	11.4 (8.0-16.0)	8.9 (5.0-15.3)
	Men	10.4(7.4-14.3)	10.0 (7.1-14.0)	12.0 (6.7-20.6)	11.0 (6.7-17.6)	4.9 (1.6-13.8)
	Women	11.4(7.5-17.0)	11.4 (7.5-17.0)	10.9 (6.0-18.9)	11.8 (6.6-20.0)	11.9 (6.1-22.1)
Hispanic						
	All	42.0(38.3-45.7)	42.5 (39.0-46.0)	39.0 (33.2-45.2)	46.0 (39.8-52.3)	42.8 (36.0-49.8)
	Men	40.7(35.9-45.7)	40.1 (35.8-44.6)	42.0 (33.7-50.8)	39.9 (31.3-49.2)	37.3 (30.4-44.7)
	Women	43.3(38.5-48.1)	44.4 (40.0-48.8)	35.8 (30.0-42.0)	51.9 (45.0-58.7)	47.1 (38.3-56.1)

Data from the National Health and Nutrition Examination Survey; estimates are weighted. b Age adjusted by the direct method to the 2000 Census population, using the age groups 20-39, 40-50, and 60 years and older. c Includes race/Hispanic origin groups not shown separately.

Obesity in the Caribbean. Obesity is mainly seen as a rich-country problem, unfortunately, but evidence has shown that this public-health hazard is also assailing low- and middle-income countries. There have been numerous published reports from several Caribbean nations such as Jamaica, Barbados, Trinidad and Tobago, and St. Lucia concerning the steady rise in the prevalence of obesity from primary school age through adolescence and adulthood (Gardner, Bird, Canning, Frizzell, & Smith, 2010; Luke et al., 2006). A 2012 PAHO/WHO report suggests that more than half of the population in Trinidad and Tobago fall within the parameters of being either overweight or obese. In 2014, the Caribbean Community (CARICOM) confirms that lifestyle diseases have emerged in the Caribbean as the principal public-health challenge in recent decades since great inroads were made in tackling infectious diseases that plagued the region. The chronic diseases result largely from poor food choices and low levels of physical activity, which lead to obesity. They come at a high cost in already fragile economies, to individuals and to the region's nation states in terms of human suffering, expensive treatment and loss of production. Since 2007, CARICOM had announced that obesity in women—about 25% of the adult female population—was almost twice as prevalent as their male counterparts and that obesity topped the risk factors for the chronic non-communicable diseases (NCDs) that accounted for more than half the deaths in the region in the late 1990s. These reports confirm the high prevalence of obesity in the Caribbean nations.

Obesity in Haiti. By Haslam and James' (2005) account, the only remaining region of the world where obesity is not common is sub-Saharan Africa. In 2008, data from the Central Intelligence Agency (CIA) ranked Haiti number 137 out of 191

countries for obesity, translating to 7.9% of the population (CIA, 2014). The prevalence of overweight and obesity in Haiti is low compared to the rest of the Caribbean and the world; however, data from the 2010 World Bank report "Promoting Nutrition Security in Haiti," cite that 16.1% of Haitian children fall into the category of overweight and obese. Karabanow (2012) observed that there exists a weight paradox in Haiti, whereby it is established that low-birth weight children (due to maternal under nutrition) or who suffer nutritional deficiencies in early childhood are actually at higher risk of later developing obesity. For that reason, obesity data in Haitian women are of particular interest due the correlation between maternal obesity and child obesity, which in turn leads to adult obesity (Karabanow, 2012).

Economic Impact of Obesity

The connection between rising rates of obesity and rising medical spending is undeniable. The costs of obesity and its associated comorbidities are staggering, both in terms of health care expenditure and quality of life, underscoring the importance of implementing treatment strategies. Low income and middle-income countries (LMCs) currently carry the majority of the obesity and chronic disease burden and are predicted to continue to do so in future decades (Kelly, Yang, Chen, Reynolds, & He, 2008). LMCs include low-income countries such as those in sub-Saharan Africa, lower-middle-income countries such as India and parts of Southeast Asia, and upper-middle-income countries such as China and most of South America (The World Bank, 2016). The costs related to the treatment of obesity and its various comorbidities will be particularly detrimental to public health and the economy of LMCs. Many of these countries have limited health-care resources, and their infrastructures are not sufficient to manage escalating rates of

these conditions alongside the coexisting burdens of undernutrition and infectious diseases.

The overall economic impact of obesity in the U.S. is substantial; Hammond and Levine (2010) estimated the total annual economic costs (cost of managing obesity, lost productivity, and weight-loss products and services) associated with obesity to be in excess of $215 billion. The magnitude of this problem underscores the importance of further research in treating obesity. Finkelstein, Trogdon, Cohen, and Dietz (2009) estimated that the increased prevalence of obesity is responsible for almost $40 billion of increased medical spending through 2006, including $7 billion in Medicare prescription drug costs. Although pharmaceutical, medical, and surgical interventions to treat obesity are available, these treatments remain rare. As a result, the costs attributable to obesity are almost entirely a result of costs generated from treating the diseases that obesity promotes.

In the U.S., provision of care to patients with type 2 diabetes and related sequelae led to a spending of $113 billion in direct medical costs in 2007 and medical costs attributable to obesity were estimated at $147 billion per year in 2008 (Huang, Basu, O'Grady, & Capretta, 2009). Roehrig and his colleagues (2009) reinforced that annual medical costs for people with diabetes total $190.5 billion. These authors assert that although not all of these costs are attributable to obesity because excess weight is the single greatest predictor for developing diabetes (Roehrig, Miller, Lake, & Bryant, 2009) They indicated, if not for obesity, these costs would be much lower, as would costs for other conditions caused by excess weight. These statistics concluded that amid calls for health reform, the real cost savings are more likely to be achieved through reducing

obesity and its related risk factors. The overarching message is that a solution must be found to curb the rate of obesity.

Management of Obesity

Although there is agreement about the health risks of obesity and the need to control weight, there is less agreement about its management. Some have argued against treating obesity because of the difficulty in maintaining long-term weight loss, and because of the potentially negative consequences of weight cycling (increased risk for heart disease, cancer and diabetes, damage to arteries, less energy, muscle wasting, and higher levels of body fat), a pattern frequently seen in obese individuals (Jensen, Ryan, Apovian, Ard, Comuzzie, Donato…Yanovski, 2013). As the authors explain, the usual pattern of weight loss in patients undergoing a lifestyle intervention or medication-assisted weight loss is that maximum weight loss is achieved at 6 months, followed by plateau and gradual regain over time. For bariatric surgery patients, it may take much longer for weight to plateau. A challenge to maintaining weight loss is a resultant effect caused by diet-induced weight loss, which can result in elevated levels of hormones that increase appetite. Meeka, Lewis, Reimanna, Gribblea & Parka (2016) explain that after successful weight loss, circulating levels of these hormones do not decrease to levels recorded before diet-induced weight loss, thus highlighting the need for long-term strategies to prevent obesity relapse. Others further argue that the potential hazards of treatment do not outweigh the known hazards of being obese. Nevertheless, most experts agree that treatment of obesity should start with comprehensive lifestyle management—i.e., diet, physical activity, and behavior modification. As with all chronic medical conditions, effective management of obesity must be based on a partnership between a

highly motivated patient and a committed team of health professionals. The National Institutes of Health (2012) indicates that multidisciplinary programs reliably produce and sustain modest weight loss between 5% and 10% for the long-term and identified five primary evidence-based approaches to treating obesity, supported by the current body of literature: dietary modification (e.g., caloric and fat restriction); an increase in physical activity; behavioral therapy that includes self-monitoring, stress management, stimulus control, problem solving, contingency management, cognitive restructuring, and social support; pharmacotherapy; and finally, surgical procedures.

A combination of the first three methods is appropriate throughout the spectrum of obesity treatment, whereas pharmacotherapy should be considered only for individuals with greater degrees of obesity when the other interventions fail (National Institutes of Health, 2012a; National Institutes of Health, 2012b; Makds & Foster, 2011). A recent consensus statement from five international diabetes societies recommends that surgery should become a more routine treatment option for type 2 diabetes. They also propose lowering the threshold from a BMI of 35 down to 30. Furthermore, the growing use of the term “metabolic surgery” instead of weight-loss or bariatric surgery is also evident (Harvard Heart letter, 2016). Obesity is a complex and chronic disease that requires a long-term approach to management; although, patients experience many struggles, fluctuations, and nonadherence in their weight loss attempts, emphasis should be placed on the many health benefits of weight loss such as reduction in diabetes, coronary heart disease, reduction in lipids profile and improvements in sexual functions, mobility, urinary stress incontinence, reduction of pain, and quality of life. Therefore, finding

effective ways to tackle the obesity crisis, over the long-term, has been identified as a key public health strategy.

Saber and El-Ghazaly (2015) and Colquitt, Pickett, Loveman, and Frampton (2014) among others have concluded that in patients with morbid obesity associated with comorbidities, overwhelming evidence supports bariatric surgery as the only current therapeutic modality associated with clinically significant and relatively sustained weight loss. Per Saber and El-Ghazaly (2015), it is currently the only modality that provides a significant, sustained weight loss for morbidly obese patients, with resultant improvement in obesity-related comorbidities. An updated Cochrane review from 2014 conducted by Colquitt, Pickett, Loveman, and Frampton (2014) that included 22 trials with 1,798 participants concluded that surgical treatment of obesity yielded greater improvement in weight loss and weight-associated comorbidities than nonsurgical interventions. Gregory, Temple Newhook, and Twells' 2013 study concurred with the notion that given the limited long-term efficacy of pharmacological and behavioral interventions, bariatric surgery has emerged as a prominent and durable alternative to combating obesity and its related sequelae, because of its ensuing significant and long-lasting weight loss.

Padwal, Chang, Klarenbach, Sharma, and Majumdar, (2012) revealed that in recent years, bariatric surgery has become increasingly viewed as the preferred treatment option for obesity. Well-performed bariatric surgery, in carefully selected patients and with a good multidisciplinary support team, substantially ameliorates the morbidities associated with severe obesity. In 2013, ASMBS joined the American College of Surgeons (ACS) and the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) and independently created credentialing guidelines to guide hospitals and

institutions in the credentialing process for bariatric surgery, with the implicit goal of ensuring that surgeons meet minimum criteria to safely perform bariatric surgery, to improve outcomes and significantly reduce patient mortality (Inabnet III et al., 2013).

Among the established treatment modalities for the management of obesity, bariatric surgery has been established as the most effective long-term treatment for obesity and obesity-related comorbidities. Despite this overwhelming scientific evidence, Mainous et al. (2013) discovered that AAs are less likely than other ethnic groups to undergo bariatric surgery, although minorities are disproportionally more affected by higher rates of obesity and obesity-related diseases such as type II diabetes and hypertension. The authors advanced that access to health insurance only explained part of the discrepancy. Cultural and racial factors were also mentioned as possible barriers to this weight loss treatment. The study authors stipulated that the acceptance of and even desire to attain overweight status might just be one of many social factors that are in play, and recommended a more concerted effort to increase the use of this strategy among those refractory to standard weight loss strategies. Martin, Beekley, Kjorstad, and Sebesta (2010) conducted a study regarding eligibility and access to bariatric surgery utilizing two nationally representative health databases and found that 1) African-Americans are less likely to obtain bariatric surgery when compared to their non-Hispanic White counterparts and that 2) men are less likely to obtain surgery when compared to their female counterparts. These discoveries further reveal the gap in the literature concerning the uptake of bariatric surgery among obese minority populations, in particular obese Haitian-Americans.

The Advent of Bariatric Surgery

For many decades surgeons have performed a number of operations in the treatment of clinically obese patients. These operations are referred to as bariatric surgery, a term coined from the Greek words for weight and treatment (Goodman, 2006). Bariatric surgery, which includes several approaches to shrinking the stomach so patients eat less, has been shown to help with weight loss and reversing health conditions that come with obesity, such as diabetes and high blood pressure. In 1954, Kremen and Linner introduced Jejunoileal Bypass, the first effective surgery for obesity in the United States. The procedure induced a state of malabsorption, which led to significant weight loss (Saber & El-Ghazaly, 2015). However, many patients developed complications secondary to malabsorption (e.g., steatorrhea, diarrhea, vitamin deficiencies, and oxalosis) or due to the toxic overgrowth of bacteria in the bypassed intestine (e.g., liver failure, severe arthritis, skin problems). Subsequently, many patients required reversal of the procedure, and the procedure has been abandoned. This led to a search for better operations.

Modifications in the original procedures and the development of new techniques was re-introduced in the 1960s, but it wasn't until 2001 when the FDA approved the LAP-BAND that surgery became a more accessible option in the battle against obesity. It was then that weight reduction surgery quickly became a popular procedure and remains so today (Saber & El-Ghazaly, 2015). But there are still plenty of misperceptions about it, including how it works, who can have it, and its long-term consequences. First it must be noted that like any surgery, weight loss surgery is not something to be taken lightly. By definition it is invasive and comes with the risk of complications. But for some people it

may be truly necessary to improve their health and even save their lives. Currently there are three common approaches for bariatric surgery: (a) gastric restriction (adjustable gastric banding, sleeve gastrectomy), (b) gastric restriction with mild malabsorption (Roux-e-Y gastric bypass), and (c) a combination of mild gastric restriction and malabsorption (duodenal switch). Bariatric surgery can be performed by an open technique and by a laparoscopic technique. The laparoscopic approach has currently become the more popular approach (Saber & El-Ghazaly, 2015).

There are several different surgical procedures performed that work through restricting food intake, changing the way in which food is absorbed or metabolized, or both. Physicians performing restrictive operations such as the laparoscopic adjustable gastric banding (LAGB) reduce the opening to the stomach or stomach size. Other procedures such as the biliopancreatic diversion, with or without duodenal switch, restrict the amount of calories and nutrients the body absorbs. The most commonly performed procedure at this time, which has both a restrictive and malabsorptive component, is the Roux-en-Y Gastric Bypass (RYGB). RYGB connects the upper stomach to the lower part of the small intestine, so that food bypasses a large portion of the gastrointestinal tract in which digestion and nutrient absorption normally take place. Increasingly, surgeons are performing a sleeve gastrectomy (SG) procedure in which a portion of the stomach is removed, leaving a sleeve or tube through which food can pass. Over the past several decades, researchers have sought to understand the benefits and risks of different bariatric surgery procedures (National Institute of Diabetes and Digestive and Kidney Diseases, March, 2015).

Patient selection for bariatric procedures is addressed along a stringent line as that for the selection of patients for medical weight-management programs. In an effort to alleviate confusion, in 1991, the National Institutes of Health (NIH) Consensus Development Conference Panel developed the first generally accepted criteria for bariatric surgery treatment; however, more recently, other organizations have come along with more updated guidelines. The American Society for Metabolic and Bariatric Surgery (ASMBS), the largest national society for bariatric surgery, in 2013 recommended these basic criteria for suitability for bariatric surgery:

- Body mass index (BMI) ≥40 without a weight-related comorbid condition
- BMI ≥35 with at least one weight-related comorbid condition (diabetes, obstructive sleep apnea, hypertension, hyperlipidemia, or metabolic syndrome)
- Preoperative requirements are partially dependent on the policies of the patient's insurance company; however, the surgeon and the bariatric team are free to modify these requirements as long as the insurance company's base requirements are met. The following are commonly required before bariatric surgery:
- Attendance at a bariatric seminar
- Nutritional evaluation
- Psychological evaluation
- Evaluation by a consulting physician (e.g., primary care physician, cardiologist, pulmonologist, endocrinologist, or other member of the

patient's care team) (American Society for Metabolic and Bariatric Surgery, 2013)

Bariatric surgery can fail with unchanged lifestyle or eating behaviors, according to ASMBS (2013) as many as 50 percent of patients may regain a small amount of weight (approximately 5 percent) two years or more following their surgery. National Institute of Diabetes and Digestive & Kidney Disease (NIDDK) (2015) longitudinal studies find that most bariatric surgery patients maintain successful weight-loss long-term. 'Successful' weight-loss is arbitrarily defined as weight-loss equal to or greater than 50 percent of excess body weight. (NIDDK) (2015) explains that weight regain happens when patients eat high-calorie soft foods that easily pass through the opening to the stomach. Yet others gain weight because they do not change their eating habits and do not lose much weight to begin with. Successful results depend on the patient's willingness to adopt a long-term plan of healthy eating and regular physical activity, but better understanding of the factors that lead to postsurgical weight loss success is recommended.

Surgical complications. Whereas bariatric surgery can provide significant, sustained weight loss for morbidly obese patients, however, these surgeries are not without risks, which are also a drawback factor for patients not considering this option (Salluzzo, Duffy & Nadzam, 2016). The 2008 guidelines by the American Society for Metabolic & Bariatric Surgery (ASMBS) stipulated that mortality rate associated with standard bariatric surgical procedures in an experienced center should not exceed 1.5-2% ((ASMBS, 2013). In 2008 Saber et al. ranked the surgical mortality rate at less than 0.5% at centers specializing in bariatric surgery and opine that mortality rates exceeding 2%

suggest a risk-to-benefit ratio that probably is unacceptable. They defined failure as an inability to ameliorate comorbidities or prevent their recurrence, but failure rates based on weight loss are controversial. They deemed that gastric bypass appears to have a failure rate of approximately 20%. Despite the morbidity and mortality risk associated with bariatric surgery, American Obesity (2008) ascertains that the few reports on the follow-up of subjects undergoing these procedures suggest overall improvement in quality of life. Even more convincing than this finding is that most subjects who undergo these procedures, irrespective of their postoperative complications and difficulties, indicate that they would undergo the procedures again if necessary (American Obesity, 2015).

Utilization of Bariatric Surgery

Expert consensus reveals that lifestyle and pharmacologic therapies for weight loss have limited efficacy in obese patients and that bariatric surgery has been shown to achieve greater weight loss and longer weight loss maintenance than that obtained by these combined approaches. Nonetheless, bariatric surgery should still be considered as a treatment of last resort after dieting, exercise, psychotherapy, and drug treatments have failed. Nearly 350,000 bariatric procedures were performed globally in 2008, with an estimated 220,000 in the United States alone (Geraci, Brunt, & Marihart, 2014) and the following studies have documented the resultant effects of these procedures. A 2012 prospective, controlled Swedish study involving 4,047 obese patients, half of whom had undergone bariatric procedures, followed up over 14.7 years, found that compared to usual care, bariatric surgery was associated with a significantly reduced number of cardiovascular deaths and a lower incidence of cardiovascular events in obese adults

(Sjöström et al., 2012). The Swedish Obese Subjects (SOS) study, an ongoing, prospective study of 2010 obese participants who underwent bariatric surgery and 2037 obese patients who received usual care in the primary health care system, found that compared to the control group, obese adults who underwent surgery experienced a reduced number of cardiovascular deaths and a lower incidence of heart attack and stroke (Romeo et al., 2012; Sjöström et al., 2012).

Lidar et al. (2012), in a retrospective study of morbidly obese patients who underwent bariatric surgery found that patients experienced a significant decrease in low back and radicular pain after surgery, a common complaint among obese patients, which led to improvements in quality of life. Patients also experienced a marked increase in the L4-5 intervertebral disc height (Lidar et al. 2012). Serrano et al. (2016) conducted a study on the utilization of bariatric surgery by Hispanics in the United States and concluded that bariatric surgery is highly successful in Hispanic obese patients. Further analysis by Gregory et al. (2013) revealed that in recent years, bariatric surgery has become increasingly viewed as the preferred treatment option. Karlsson, Taft, Rydén, Sjőstrőm, and Sullivan (2012) summarized that scientific evidences reveal that bariatric surgery is associated with significant and sustainable weight loss, substantial improvements in obesity-related diseases, particularly type II diabetes and improvements in quality of life. These evidences and the unsatisfactory treatment results found so far with conservative management of obesity have increased the interest in individuals choosing the more extreme measure of bariatric surgery, which has proven to be a more effective modality.

However, some contraindications to bariatric surgery include illnesses that greatly reduce life expectancy and are unlikely to be improved with weight reduction, including

advanced cancer and end-stage renal, hepatic, and cardiopulmonary disease. Patients who are unable to understand the nature of bariatric surgery or the behavioral changes required afterward, including untreated schizophrenia, active substance abuse, and noncompliance with previous medical care, are also considered poor candidates for bariatric surgery. However, they are still beleaguered by the current gap in obesity therapy because only 1% of patients who qualify for bariatric surgery receive it—due to limited access, patient preference, and the cost of surgery (Helwick, 2015).

Bariatric surgery in African-Americans. Few studies have been undertaken regarding the use of bariatric surgery by race, and the available data reveal that although Blacks have a higher prevalence of obesity, bariatric surgery has been under-utilized among this vulnerable population. This means AAs are reportedly less likely to undergo bariatric surgery for weight loss than Whites (Mainous et al, 2014; Lynch, Chang, Ford, & Ibrahim, 2007). The purpose of the study by Mainous et al. (2013) was to explore the utilization of bariatric surgery by African-Americans. It measured numbers gathered between 1999 and 2010 and found that 22% of Black women and 11% of Black men were eligible for bariatric surgery, compared with 12% of White women and 8% of White men, but twice as many eligible White women and men than Black women and men received bariatric surgery. These authors determined that the increasing prevalence of obesity and the scarce usage of bariatric surgery in this population suggest that access to health insurance explained part of the discrepancy and that culture may have unique contributing factors.

This latter conclusion is supported by bestselling African-American novelist Alice Randall (2014) who asserts that the reason AAs do not avail themselves of bariatric

surgery is because "many black women are fat because we want to be" (p. 3). Randall's shocking observation, this "acceptance of" and even "desire to" attain overweight status might just be one of many social factors that are in play. Mainous et al. (2014) conceded in their study exploring utilization of inpatient bariatric surgery in AAs that a significant racial difference exists in the use of bariatric surgery among eligible adults.

Bariatric surgery in the Caribbean and Haitians. Caribbean nations are not spared from the global spread of the obesity epidemic; however, not many patients get the benefits of bariatric surgery. Since the prevalence of diabetes mellitus and hypertension is very high in the Caribbean nations, it may well be argued that bariatric surgery should be generally available commonplace in these islands; yet, only two studies by the same authors, on the prevalence and efficacy of bariatric surgery in the Caribbean were found. In 2012 Dan et al. conducted a study to establish that bariatric surgery could be safely and efficiently undertaken in a low-volume center outside the "designated centers" with comparable patient outcomes even in a third world setting. Their final analysis showed that two hundred and eighteen patients underwent bariatric surgery during the 8-year study period (2003 to 2011) for the whole island of Trinidad and Tobago; 22 patients were lost to follow-up. The final analysis consisted of 196 patients; 172 Roux-en-Y Gastric Bypass, 15 sleeve gastrectomy, and nine gastric banding. The major finding of the present study is that laparoscopic bariatric surgery can be performed in a low-volume center in a third world setting with low complication rates, leading to the conclusion that:

> Obesity is highly prevalent in the Caribbean and bariatric surgery is a safe and effective therapy for this modern epidemic. Bariatric surgery provides

> effective weight loss, dramatic resolution for many obesity-related diseases. This study demonstrated that bariatric surgery is safe and effective in this low-volume center in a third world setting. "Patient numbers" should not be exclusively considered as a factor to determine and/or predict safety of bariatric surgery in surgical practice. Furthermore, patients should not be deprived access to this most important treatment exclusively based on number of procedures but rather on outcome." (Dan et al., 2012, p.3)

Dan et al. (2011) conducted a retrospective review of charts of all obese patients with Type-2 DM who had undergone Laparoscopic Roux-en-Y gastric bypass (LRYGBP) over a 4-year period in Trinidad and Tobago, to determine if there is a beneficial effect of bariatric surgery in the management of diabetes mellitus (DM) in obese patients in a Caribbean setting. A questionnaire was prospectively used via telephone to determine the quality of life. Of 146 patients who underwent LRYGBP, 40 were found to have clinically significant DM. Patients of age < 50 years and females had a higher preponderance of DM. Patient body weight decreased significantly from a pre-operative 131.2 ± 21.6 [Mean ± Standard Deviation (SD)] to 99.4 ± 16.6 after surgery ($p < 0.0001$). There was also a significant reduction of BMI from 47.0 ± 7.9 to 34.7 ± 5.8 ($p < 0.0001$). There was complete resolution of clinically significant DM in 85% of patients, while in 15% there was a significant reduction in the dosage of anti-diabetic medications. Perioperative complications were minimal, and there was no mortality. Ninety-six percent of the patients reported a drastic improvement in their quality of life.

The authors concluded that bariatric surgery for obese diabetic patients resulted in complete resolution, improved diabetes control and overall improvement in the quality of

life. Therefore, they recommended that bariatric surgery can be safely performed in the Caribbean multiethnic setting where there is a high prevalence of obesity and DM. No peer-reviewed study was found for other Caribbean countries. Advertisements associated with medical tourism-inviting people from other countries to travel to Jamaica and the Bahamas for their bariatric surgeries were evident. There exists a gap in research studies for the Caribbean populations. This gap is even more evident for the Haitian population where, despite the overwhelming evidence linking a high rate of diabetes type 2 and other chronic diseases in Haitians to obesity, couple with the cultural penchant toward a higher BMI, the perusal of the literature has revealed a complete absence of studies on the use of bariatric surgery in Haitians. Therefore, because of this gap a study that explores the critical factors that influence obese Haitian-American adults' knowledge, perceptions, and attitudes toward bariatric surgery may provide nurses with the insight on how to better care for, address, and educate obese Haitian-American adults with regard to management of obesity.

Economic Impact of Bariatric Surgery

Despite the extensive literature on the clinical effects of bariatric surgery, little research has been published on the economic impact of the procedure. Many private and public insurers cover the cost of bariatric surgery for enrollees meeting specific criteria, which are most often aligned with recommendations from the Institute of Medicine (NIH, 2012). These recommendations include nutritional and behavior modification counseling, as well as a psychological evaluation prior to surgery. Bariatric surgery has the potential to result in significant long-term savings to society in terms of healthcare costs, productivity, and quality of life (Martin, Beekley, Kjorstad, and Sebesta, 2010). In

the United States, bariatric surgery costs vary based on geographical location. A cash prices survey by Obesity Coverage in 2015 indicates that the average cost of gastric bypass surgery dropped by about $800 compared to 2014; $15,000 to $35,000 is the pricing range across the United States, $23,000 is the average surgery price, and $25,571 is the average cost of gastric bypass. Lowest prices are offered outside of the United States, creating a market for medical tourism to become very popular (Obesity Coverage, 2015). The widening body of data presented below has demonstrated the overall cost-effectiveness of bariatric surgery when examined from a worldwide, system wide or longer term perspective.

An Australian study by Keating et al. (2009) compared the results of weight-loss treatments in patients who had been diagnosed with type 2 diabetes mellitus in class I/II obesity, estimating the lifetime costs and quality-adjusted life-years (QALYs) for individuals who had undergone surgically induced weight loss and for patients who had utilized conventional weight loss treatment. The investigators found that for surgical and conventional therapy patients, the mean discounted lifetime costs were, respectively, 98,900 and 101,400 Australian dollars per patient (1 Australian dollar = 0.74 U.S. dollars). Compared with conventional therapy, surgically induced weight loss was associated with a mean health care saving of 2,400 Australian dollars (Keating et al. 2009).

Cremieux, Buchwald, Shikora, Ghosh, Yang, and Buessing conducted an analysis of a large employer claims database and found that with a mean initial investment of $17,000 –26,000 for a bariatric procedure, third-party payors would recoup all costs within 2 years for laparoscopic surgery and 4 years for open surgery (Cremieux,

Buchwald, Shikora, Ghosh, Yang, and Buessing, 2008). Encinosa, Bernard, Du, and Steiner (2009) further stipulated that the positive financial effect of bariatric surgery can also be expected to increase, because recent data have shown significant declines in surgical complication rates (21%) and hospital charges (13%) for patients undergoing surgery (Encinosa, Bernard, Du, and Steiner, 2009). This lead Martin, Beekley, Kjorstad, and Sebesta (2010) to conclude that the costs associated with our failure to adequately address this issue will be staggering in terms of excess mortality, uncontrolled morbidity, lower quality of life, and stress on an already financially overburdened healthcare system.

Defining Haitian-Americans

Haitian culture is quite distinct and less familiar to most Americans than many other cultural groups (Latino cultures, for example). Haitian culture and language are also quite distinct from these of other Caribbean peoples. Often these distinctions are not recognized. Most people in the U.S. have very little information about Haitian culture and history, and their perceptions of it are often influenced by simplistic Hollywood depictions **(**Jacobson, 2003**).** Haitians and other people of African and Caribbean origins living in the United States are commonly included in the Black/African-American demographic in national statistical data and reports (Lauredan & Leiderman, 2007). References to African-Americans usually include all Black people living in the United States of America. African-Americans (AA) or Blacks constitute the second largest racial and ethnic minority in the United States. Agyemang (2005) highlights that most studies conducted on AA failed to distinguish among ethnic minorities within the Black population, and this practice hides the cultural, behavioral, and environmental diversities among populations of African descent including their diet, religion, migration

experiences, education, language, health beliefs and practices. Hence, these communities are under-represented in the literature. Although, the panoramic socioeconomic status and health reports of these communities often mirror those of the larger African-American populations.

Studies by Lynch and Kaplan (2000) and Adler and Stewart (2010) observe that the factors that influence the socioeconomic position of individuals and groups within industrial societies also influence their health. Socioeconomic position has continuous and graded effects on health that are cumulative over a lifetime. In the United States, educational attainment and income are the indicators that are most commonly used to measure the effect of socioeconomic position on health (Marmot and Wilkinson, 2006). Health disparities between African-Americans and other racial and ethnic populations are striking and apparent in life expectancy, death rates, infant mortality, and other measures of health status and risk conditions and behaviors, for instance, African-Americans in 2009 had the largest death rates from heart disease and stroke compared with other racial and ethnic populations (CDC, 2013).

Demographic profile. The Haitian-American population living in the United States has increased significantly in the last 25 years. More than 2 million people of Haitian descent live in the U.S. (Lauredan & Leiderman, 2007), and according to the 2010 U.S. Census, Haitian-Americans constitute 1.5% of the total U.S. foreign-born population and more than 700,000 of them, the largest group, reside in Florida. While often thought of as one of the United States' newer immigrant communities, Haitian immigration to the United States began almost as soon as the United States became a country. Haitian emigration waves are often prompted by regime change as well as

heightened discord within the political sectors. The first wave dates back to the 1790s when many of Haiti's affluent population as well as some slaves left following the revolts that ended slavery and won independence for Haiti. They settled in France (most of the educated and affluent) and the U.S. in Louisiana, Virginia, Maryland, New York, and Massachusetts. A second wave happened between 1915-1934 during the U.S. occupation in Haiti, followed by a mass exodus between 1957-1986 during the reign of the Duvaliers (Papa Doc and Baby Doc) and more recently in 1991, during the upheaval of Aristide (Unaeze & Perrin, 2000). While earlier waves of Haitian immigrants were educated and skilled professionals, later waves included people from all levels of Haitian society including the uneducated and illiterate searching for a better, more stable way of life and to improve their socioeconomic status.

A 1989 study by Sobal and Stunkard identified a relationship between obesity prevalence and socioeconomic status, measured as educational level or income. According to a study by Camarota in 2015 that examines immigrant and native welfare use, using the Census Bureau's Survey of Income and Program Participation (SIPP), in 2012, 51 percent of households headed by an immigrant (legal or illegal) reported that they used at least one welfare program during the year, compared to 30 percent of native households. Welfare in this study includes Medicaid and cash, food, and housing programs. Welfare use varies among immigrant groups. The large share of immigrants with low levels of education and resulting low incomes partly explains their high use rates. In 2012, 76 percent of households headed by an immigrant who had not graduated high school used one or more welfare programs, as did 63 percent of households headed by an immigrant with only a high school education. The welfare system is designed to

help low-income workers, especially those with children, and this describes many immigrant households. This dream is not without its challenges, as elaborated by Cheong and his colleagues in 2007, Haitian-Americans migrating to the United States are challenged with economic, linguistic, and cultural barriers to integration into American society that affect their health care access, health care utilization, and health outcomes.

Nutrition and dietary habits. Haiti is commonly known as a country ravaged by poverty and malnutrition, and the constant political strife, economic chaos, and a series of natural disasters. These have taken an enormous toll on the Haitian people. The majority live an impoverished life, surviving on roughly $1 U.S. per day (World Bank, 2016). Paradoxically, a 2010 World Bank report, "Promoting Nutrition Security in Haiti", cautions about a propensity to obesity in Haiti. The report admonishes that adhering to a healthy diet presents unique difficulties in the Haitian culture where a carbohydrate rich diet and oil-based foods are favored and consumption of fruits, vegetables, and protein is limited because of the lack of agricultural productions. Grains, such as rice and corn, are a staple of the Haitian diet, and rice is eaten at almost every meal; it is often cooked with beans and served with an oil-based sauce. Fried foods are also very popular, and many meals include fried plantains or fried meats, such as pork or turkey.

In Haitian culture, good nutrition means eating a lot and overweightness is seen as beautiful. Haitians tend to see obese individual as wealthy and highly favored by God therefore, put them on a pedestal. Tell someone that he's gained weight, and he'll most likely answer that it's the grace of God. They feel sorry for those who are skinny. In a country, where food is generally scarce, people would prefer not to hear that they're losing weight. Telling someone that they've lost weight might mean that they're looking

sickly. Presently, Haitians in Haiti are not facing the same weight issues as in the U.S.A. One day, when Haiti becomes something other than an underdeveloped country, Haitians might become obsessed with being overweight. In Haiti, it is considered a desirable attribute to have some meat on one's bones. The notion of being fat hints at being well-fed, not experiencing hardship. This perspective on nutrition and health continues into adulthood; since weight is associated with health, therefore, good nutrition means eating a lot. This lack of appropriate knowledge about nutrition practices contributes to inappropriate caring that leads to obesity. Hence, cultural norms are creating a negative impact on nutritional habits and subsequently on the health of individuals.

It is also a well-known factor that socio-economic status, food consumption, dietary diversity, and choices are linked to behavioral factors, including the selection, purchase, and use of available foods at the household level. Both income and education have been associated with food consumption patterns, where higher income households tend to choose healthier diet and lower income household make poorer food choices which in turn lead to obesity (Sobal & Stunkard, 1989). This dietary lifestyle was exposed by a U.S. Demographic Health Survey (DHS), 2005-2006, among women 15-49 years of age, where those who are the least educated and poorest are more likely to consume grains and oil-based foods and less likely to consume more nutritious foods, like animal-based and vitamin-A rich foods, compared to wealthier and more educated women. In the Haitian households, many dietary misconceptions start from infancy where Haitians, in general, believe that weight is associated with health, hence, a healthy baby is a fat baby, and new mothers are encouraged by elder women to feed newborns inappropriate foods very early on. This perspective carries over into adulthood.

Health disparities and inequalities. Fernandes, Padilla, Carballo, and Pereira (2006) agreed that depending on countries of origin and/or ethnic background, some migrants have a higher risk than host populations of a variety of health problems. The reasons for this high risk profile involve such elements as cultural and social adaptation to new food and dietary patterns, dramatic changes in lifestyle, adaptation to and coping with stress, and, of course, ethnicity and any ethnic predisposition that might exist for these diseases. Haitian-Americans are an at-risk population that suffers disproportionate amounts of chronic disease and adverse health outcomes, including obesity (Jolliffe, 2004; Strauss & Pollack, 2001). Self-identified health issues include joint problems, vision problems, hypertension, arthritis, and diabetes (Saint-Jean & Crandall, 2005). Fontaine and Bartlett (2000) signaled that those with less access to care, such as disadvantaged minorities and the poor are more likely to be obese and suffering from obesity related illnesses. These facts were also supported by Swallen, Reither, Haas, and Meier (2005) who indicated that as with many chronic illnesses, people living in poverty and ethnic populations seem to be disproportionately affected by obesity. All these factors combined contribute to a high predisposition risk of obesity and its co-morbidities in the Haitian-American population. Khan et al. (2009) opined that obesity and its negative effects on health are difficult to manage when resources are abundant; the challenge to achieve weight control becomes even more difficult when people lack basic resources.

A study conducted by Rosen in 2007 to determine the prevalence of type II diabetes based on fasting blood sugar in the Miami Haitian community and to measure the incidence of the metabolic syndrome, concluded that the 33% prevalence rate of

diabetes in the Haitian-Americans living in Little Haiti is high compared to the general population and places Haitian-Americans closer to the risks found among Pima Indians, which has a prevalence rate of 50%. This high rate of diabetes suggests the presence of obesity further places Haitian-Americans at high risk for cardiovascular disease and other complications associated with diabetes and obesity.

Another study by Huffman et al. in 2011 sought to examine dietary differences between African-Americans (AA) and Haitian-Americans (HA) with and without type 2 diabetes (DM2) using the Healthy Eating Index, 2005 (HEI-05), and the Alternate Healthy Eating Index (AHEI). The study used cross-sectional design, n = 471 (225 AA, 246 HA) and recruitment was by community outreach. The eating indices were calculated from data collected with the Harvard food-frequency questionnaire. The study concluded that AA had lower HEI-05 scores than HA; HA females and AA males had higher AHEI than AA females and HA males, respectively, (p = .006) adjusting for age and education. Participants with diabetes had higher adherence to the HEI-05 and lower adherence to the AHEI than participants without diabetes. The findings underline the importance of separating ethnicities and disease state when assessing diet. Their finding highlights the need to consider ethnic differences in health studies, contrary to the fact that ethnic differences have been commonly overlooked for the black populations living in the United States.

Statement of the Problem

Bariatric surgery has been established as the most effective long-term treatment for morbid obesity and obesity-related comorbidities. Despite its success, there is a paucity of data on the utilization of bariatric surgery among obese Haitian-

Americans. Ethnic minorities are more susceptible to obesity because of their cultural and ethnic divergences regarding construction of the ideal weight. Obesity is closely linked to long-term health problems (Bhaskaran et al., 2014) and is associated with a decreased life expectancy of up to 10 years (Whitlock et al., 2009). However, even a modest amount of weight loss can improve obesity-related comorbidities and health outcomes according to Knowler al. (2002). Whereas, exercise and diet have been proven inadequate and temporary against the fight of obesity, bariatric surgery has garnered overwhelming scientific evidence as an efficacious tool in treating obesity. Despite this preponderance of evidence, Mainous et al. (2014) asserted that AAs are still less likely to undergo bariatric surgery, although they suffer disproportionately from obesity and have higher rates of obesity-related diseases. The problem is that Haitian-American adults are an at-risk sub-population that suffers disproportionate amounts of adverse health outcomes, including obesity, and could benefit from bariatric surgery. However, there is a paucity of data on the use of bariatric surgery among ethnic minorities, especially Haitian-Americans, creating a gap in the literature. Therefore, it is imperative to investigate the critical factors that affect knowledge, perceptions, and attitudes of obese Haitian-American adults toward bariatric surgery in the hope of mitigating the effects of obesity and its related co-morbidities and mortality.

Purpose of the Study

The purpose of this qualitative Glaserian grounded theory study is to seek data to generate a substantive theory on the critical factors that influence knowledge, perceptions, and attitudes of obese Haitian-Americans toward bariatric surgery. This study can contribute to knowledge of Haitian-Americans knowledge, perceptions and

attitudes toward bariatric surgery and provide an understanding of the process this population uses to understand and manage obesity and may inform the nursing profession and society.

Research Question

Glaser (1998) advocated that participants in grounded theory research should identify the research problem that will inform the questions to be investigated, which means the researcher must be prepared to put professional interests aside in the interests of participants identifying their concern in a particular situation. Classic grounded theory is undergirded by the notion of "trusting in emergence"; nevertheless, for the purpose of this scholarly work, the researcher must formulate tentative questions that are left open to the emergence of others under the directions of the participants. This direction is in line with Strauss and Corbin's (1990) philosophy that the research question identifies the phenomenon to be studied, it lends focus and clarity about what the phenomenon of interest is. The research question that will guide this study is: "What are the critical factors that influence knowledge, perceptions, and attitudes of obese Haitian-American Adults toward bariatric surgery?"

Other related questions include, "What processes do obese Haitian-Americans utilize to manage their obesity?" "What are the perceived barriers to weight loss surgery in Haitian-American adults?" and "How does the health belief of Haitian-American adults affect their knowledge, perceptions, and attitudes toward bariatric surgery?"

Philosophical Underpinnings

There are two main paradigms or philosophical camps in scientific research, quantitative or positivist paradigm and the qualitative or Interpretivism paradigm, also

called social constructivism. Interpretivism is a theoretical perspective that underlies qualitative research inquiries for culturally derived and historically situated interpretations of the social life-world. "The interpretive approach argues that research should explore socially meaningful action through the direct detailed observation of people in natural settings in order to arrive at understandings and interpretations of how people create and maintain their social worlds" (Neuman, 1997, p. 68). It uses methods that try to describe and interpret people's feelings and experiences in human terms rather than through quantification and measurement (Terre Blanche & Kelly, 1999, p. 123). Interpretivism is used to obtain an understanding of the world from an individual perspective (Rossman & Rollis, 2003). The roots of Interpretivism are associated with the works of Max Weber who suggested that the human sciences were concerned with understanding (Crotty, 1998). Multiple realities exist in which context gives meaning to a phenomenon, therefore theories emerge inductively through methods such as observation and interview (Welford, Murphy, & Casey, 2012).

Research that is seeking descriptive information from individuals that reflect the way they have come to experience a particular phenomenon is attainable through the interpretivist paradigm. The Interpretivism paradigm or qualitative method, also called social constructivism, has its roots in the philosophy of Plato and his teacher Socrates, who held that the truth, even if it is only dimly shadowed by human approximations of it, can only be approached through careful reflection and dialogue with others. Human beings, that is, construct their realities and truths by talking together about them (Venkatesh, Thong, & Xu, 2012).

Many philosophers contend that the interpretivist paradigm came to develop as a result of protests against the positivists' fixation on numbers and statistics. According to Creswell (2008), qualitative researchers believe that "truth is both complex and dynamic and can be found only by studying persons as they interact with and within their sociohistorical settings" (p. 89). Therefore, qualitative research advocates that phenomena can best be understood and sorted out by embedding the research in the situation rather than quantifying data that require a construction of a fixed instrument or a set of question (Speziale & Carpenter, 2003). Furthermore, it is context and time bound (Polit & Beck, 2008). Qualitative study is generally conducted in the naturalistic setting rather than in the artificial laboratory (Burns & Grove, 2006). The researcher interacts with the participants and explores perceptions, feelings, thoughts, beliefs, expectations, and behavior to obtain knowledge about the phenomena of interest; thus, the researcher has an active part in the study (Burns & Grove, 2006). This approach encompasses well-planned steps before the researcher enters the settings in which observations and inquiries would be made (Speziale & Carpenter, 2003).

The focus of qualitative research is usually broad not reductionist because the intent is to give meaning to the whole (Polit & Beck, 2008). In this approach, data are collected through in-depth conversations, diary keeping, extensive interviewing, extended observation, and focus groups interviews to acquire insights regarding these subjective realities, so no attempts are made to control interaction (Polit & Beck, 2008). Qualitative data take the form of words so researchers keep detailed notes and record the interviews rather than identifying categories that help to sort and organize the data (Creswell, 2003). The intent for the organization of the data is to have individualized interpretation that

describes the phenomenon being studied (Creswell, 2008). Moreover, the researcher spends substantial time going back and forth through the notes that would help to identify important connections (Polit & Beck, 2008). Interpretivism supports the constructivist notion of a dynamic reality (Streubert & Carpenter, 2011).

Constructivism

The constructivist epistemology arises from the interpretive paradigm, which assumes that reality is constructed inter-subjectively through the meanings and understanding developed socially and experientially (Lincoln & Guba, 2013). "Meaning is not discovered but constructed; different people construct meaning in different ways, regardless of similar phenomenon … subject and object emerge as partners in the generation of meaning" (Crotty, 1998, p. 8). Charmaz (2012) advanced that neither the data nor theories are discovered but were constructed through our past and present involvements and interactions with people, perspectives, and research practices (p. 10).

Essential Characteristics of Qualitative Research

A number of defining characteristics of qualitative research have been found in the literature consulted for this study namely that it assumes multiple realities, its data is in the form of rich verbal descriptions, researcher is immersed and in direct contact during the data collection, the data collection is highly interactive, data collection methodology evolves and is flexible, which is a tentative approach to the methodology. Furthermore, it emphasizes the holistic perspective; the research is context sensitive and illuminates the invisibility of everyday life, it makes the familiar strange; it constructs meaning from the participants' point of view (informants rather than subjects); it explores

open questions rather than testing hypothesis; and finally, it employs purposive sampling and gatekeepers (Glaser, 1978, 1998).

All research is based on some underlying assumptions about what constitutes "valid" research. A scientific paradigm connects and categorizes a variety of research techniques through underlying philosophical assumptions surrounding appropriate research practice. Within each paradigm, the nature of knowledge is assumed to be different. Embedded within each paradigm are its theoretical assumptions of ontology, epistemology, axiology, rhetoric, and methodology. The researcher must understand the importance of each of these assumptions and identifies a theoretical perspective that best suits their research.

Individuals who deny the existence of an objective reality assume a relativist ontological position (Guba & Lincoln, 1994). Relativists claim that concepts such as rationality, truth, reality, right, good, or norms must be understood as relative to a specific conceptual scheme, theoretical framework, paradigm, and form of life, society, or culture … there is a non-reducible plurality of such conceptual schemes (Bernstein, 1983). In other words, the world consists of multiple individual realities influenced by context Constructivism emphasizes the subjective interrelationship between the researcher and participant, and the co-construction of meaning (Hayes & Oppenheim, 1997; Pidgeon & Henwood, 1997). Researchers, in their "humanness," are part of the research endeavor rather than objective observers, and their values must be acknowledged by themselves and by their readers as an inevitable part of the outcome (Appleton, 1997; de Laine, 1997; Guba & Lincoln, 1994; Stratton, 1997). In seeking a

research methodology that would provide an ontological and epistemological fit with our position, we were led to explore the concept of a Glaserian grounded theory.

Axiology addresses the role of values. Hence, the researcher includes his or her interpretation along with the interpretation of the narrative, while values are openly discussed by the researcher. Rhetorical allows for the determination of the language of the research. This allows the researcher to document data in literary, informed style, while using the personal voice and qualitative terms with very limited definitions. In addition, methodological assumption identifies what the process of the research is; the researcher studies the topic with its context, and uses an emerging design while using inductive logic (Creswell, 2008a). The assumptions of qualitative research are depicted in table 2 below.

Table 2

Five assumptions of qualitative research

Type	Definition
Ontology (nature of reality)	Multiple realities that are socially constructed by individuals. These realities are relative in that no reality is considered truer than any other; they may be more or less well informed within the context of the social actors' lives.
Epistemology (Knowledge)	Gained through the understanding the meaning of the process or experience. The researcher interacts with the object of research and can affect the object. Findings are created through interaction between the researcher and the researched.

Axiology (role of values)	Addresses the role of values. The researcher includes his or her interpretation along with the interpretation of the narrative, while values are openly discussed by the researcher.
Rhetorical (language)	Allows for the determination of the language of the research. Allows the researcher to document data in literary, informed style, while using the personal voice and qualitative terms with very limited definitions.
Methodology (research strategy)	Identifies what the process of the research is, the researcher studies the topic with its context and uses an emerging design while using inductive logic.

The qualitative paradigm encompasses many different methods including: ethnography, grounded theory, case studies, participatory action research, and phenomenology. This study will utilize a qualitative approach, framed by an epistemology of constructivism and the theoretical perspectives of symbolic interactionism and pragmatism within the Grounded Theory Methodology (GTM), to lend more insight and give voice into the views of obese Haitian-American Adults toward obesity and bariatric surgery as an efficacious management of obesity.

Grounded Theory

The grounded theory (GT) methodology is one of the most utilized qualitative research approaches and widely used in nursing. Lincoln and Denzin (1994) placed the discovery of grounded theory in the second modernist phase of qualitative research. Indeed, they identified it as one of several monographs that attempted to bring more

formalization and systematization to qualitative methods during the post war years. Used extensively in the discipline of sociology, it is credited to Barney Glaser and Anselm Strauss in 1967 and is based on the symbolic interactionist perspective of human behavior. The distinctiveness of this theory is that the theory emerges from within the data, whereas, in many of the other research methodologies, the researcher creates a research problem and investigates with a prevailing theoretical framework in mind. However, in grounded theory, it is not the case. The researcher enters the field with an open mind and allows the data to guide him. Once the data has been collected, he identifies the patterns in data.

A researcher needs to develop theoretical sensitivity to understand the variables, and relationships in data. Once these have been identified the researcher can create codes, concepts, and categories. The foundation for new theories lies in these categories. Martin and Turner (1986) define grounded theory as an inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data. Charmaz (2006b) further explains that grounded theory methods are a set of flexible analytic guidelines that enable researchers to focus their data collection and to build inductive middle-range theories through successive levels of data analysis and conceptual development. Creswell in 2008 asserts that the use of grounded theory permits the researcher to study the meanings that events have for people acting in a social context. This theory is further advanced by Goulding (2001), who communicated that grounded theory enables researchers to systematically study human interactions in a way

that embraces the interrelationship between actions, the conditions in the environment shaping the action, and the consequences of taking action.

According to Strauss and Corbin (1990) grounded theory is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other. An individual does not begin with a theory and then prove it. Rather, the individual begins with an area of study and what is relevant to that area is allowed to emerge (Strauss & Corbin, 1990, p. 23).

Whereas all research is grounded in data, but few studies produce a grounded theory. Strauss and Corbin (1998) explicitly pointed out that the value of the grounded theory lies in its ability not only to generate the theory but also to ground that theory in data. Denzin and Lincoln (1994) indicated that grounded theory method of research consists of systematic inductive guidelines for collecting and analyzing data to build theoretical frameworks that explain the collected data. Grounded theory research does not begin with a theory and then attempt to "prove" or "disprove" it. Instead, it begins with an area of study and allows what is relevant within that area to emerge. Hence, the main goal in grounded theory studies is to understand the meanings behind human behavior. In sum, grounded theory is "an inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data" (Martin & Turner, 1986, p. 141). Grounded theory is useful in providing rigorous insight into areas that are relatively unknown by the researcher.

Herbert Blumer advanced the following three key tenets of grounded theory: people act toward things based on the meaning those things have for them; these meanings are derived from interaction with other people, and meanings are managed and transformed through a process of interpretation and self-reflection (Anderson & Allard, 2004). Therefore, grounded theory may be particularly helpful when looking at causality through the lens of human agency—for example, obese Haitian-American adults' decision making toward bariatric surgery. The process begins with the researcher asking a question or series of questions designed to lead to the development or generation of a theory regarding some aspect of social life and decision making. (e.g., what are the critical factors affecting obese Haitian-American adults' knowledge, perceptions, and attitudes toward bariatric surgery? What are the roles of knowledge, perceptions, and attitudes on choosing weight loss surgery among obese Haitian-American adults? These generative questions should guide in identifying an initial sample of people to observe or talk to (e.g., Haitian-American adults) and lead to the first iteration of theoretical sampling. In this investigative study the researcher will attempt to uncover obese Haitian-Americans' social process of making healthy decision regarding health and healthy behaviors. Questions should always be open-ended. At the end each interview for data collection, the researcher analyzes it. The process of analysis allows the researcher to begin to develop a theory with regard to the research question. Based on this initial theory, the researcher decides how next to sample; this is the theoretical sampling (e.g., speak to obese Haitian-American adults with varying educational and experiential backgrounds).

Characteristics of grounded theory. Grounded theory enables one to understand a participant's subjective experience of the phenomena and to develop a theory from the collected data through identified themes. Over the years, adaptations have been made to the process and three major strands of grounded theory emerged, though Morse et al. (2009) suggested there are many more versions of the methodology, the most popular choices are: Glaserian (1978, 1998, 2001, 2003, 2005); Straussian (Strauss and Corbin (1998) or Corbin and Strauss (2008); and Charmazian (2006, 2009) (Hood, 2007, p. 163). Each strand maintains the core principles of theoretical sampling, constant comparison, and theory development but differs in other areas such as the literature review, the final data analysis, and the role of the researcher.

The traditional Glaserian or classic grounded theory builds theory on the basis of what "really exists in the data" (Annells, 1996a). He advocates that participants should identify the research problem, which means one must be prepared to put professional interests aside in the interests of participants identifying their concern in a particular situation. Classic grounded theory is undergirded by the notion of "trusting in emergence," constant comparison of data, and sensitivity to the fact that knowledge development begins with knowledge generation rather than knowledge verification. Classic grounded theory is aphilosophical; it does not study philosophy in depth. The focus of classic grounded theory is on identifying group patterns of behavior, and the aim is conceptualization and generation of a theoretical explanation of a substantive area. This type of grounded theory wants to look at the whole and is respectful of the timelessness of the grounded theory (Artinian, Giske, & Cone, 2009; Glaser, 2007). Classic grounded theory researchers are simultaneous inductive-deductive thinkers.

These researchers deal with hypothesizing and detail analysis at the same time. Glaser (1978) list four features of GT:

1. A theory must have fit: A grounded theory is faithful to the everyday realities of a substantive area, i.e., a grounded theory must be carefully induced from diverse data
2. A theory must have relevance: Grounded theory arrives at relevance because it allows core problems and processes to emerge. The grounded theorist must search for and discover the relevance of his or her data.
3. A theory must work: A theory should be able to explain what happened, predict what will happen, and interpret what is happening in an area of substantive or formal inquiry.
4. A theory must be readily modifiable: The generation is an ever modifying process, and nothing is sacred if the analyst is dedicated to giving priority attention to the data.

Finally, there are three hallmarks that are unique to and sum up Glaserian GT (Glaser, 1982):

1. If there are many equally justifiable interpretations of the same data, find the core variable (the main concern and its recurrent solution) as the first stage of the study, and delimit to the core variable.
2. To “get through to exactly what is going on in the participant's recurrent solution of their main concern,” the researcher suspends his or her preconceptions, remains open, and trusts in “emergence of concepts from the data.”

3. Avoiding descriptive interpretations in favor of abstract conceptualizations by the method of constant comparison, which facilitates the discovery of stable patterns in the data (i.e., “emergence of concepts”).

The Strauss and Corbin model (Strauss & Corbin, 1998; Corbin & Strauss, 2008) provides intricate details about specific research techniques and procedures. Their axial coding model, which studies conditions and dimensions of a situation, appeals to many potential grounded theory researchers. Often, the researcher may not end up with a theory that explains what is meaningful to the participants managing a problem, but they will be carefully guided through the research process. Glaser (1998) criticizes it on the grounds that it emphasizes “forced conceptual description” (p. 5). Nonetheless, this form of grounded theory appeals to researchers that want a clear philosophical base for theory development. It is undergirded by the perspectives of symbolic interactionism and includes an intricate coding paradigm. Structured detail reassures the novice researcher and provides clear boundaries of what to look for in specific situations, how, where, when, and why. It employs a line-by-line coding analysis. The drawbacks are it is very constraining and detail oriented; therefore, the participant voice may not be heard.

Charmaz’s theory (2006, 2009) is a constructivist version of grounded theory that offers a more flexible approach. It values individual's storytelling and allows for analysis of an individual's interpretation of an experience. Charmaz (2006) argued that there are multiple realities in the world and “generalization is partial, conditional and situated in time and space” (p. 141). Co-constructing data with your participants and recognizing the subjectivity that influences their lives is in keeping with Charmaz’ s grounded theory and she advocates for an abstract account of an experience. In her approach what is more

meaningful are the participant's narrative, rich, accurate detailed descriptions, themes, not concepts and categories, are attractive, as is the notion of locating participants in a world where the emphasis is on external locus of controls and freedom to situate participants under the banner of constructivism. Charmaz' s grounded theorists are more at ease with interpretive analysis. While the epistemological and methodological preferences of the three strands of grounded theory differ in some ways, they agree somewhat on the tenets of symbolic interactionism and pragmatism as the theoretical underpinnings of grounded theory methodology (Blumer, 1969; Mead, 1964),

Symbolic Interactionism

Symbolic interactionism is a theoretical perspective that emphasizes understanding the world by interpreting human interaction, which occurs through the use of symbols, such as language. It was born from the thoughts of social psychologist and pragmatist George H. Mead (1863-1931) and the phrase was later coined by his student, Herbert Blumer (1900-1987). Symbolic interactionism is a sociological perspective that aids in examining individuals' actions within their cultural world (Crotty, 1998). Symbolic interactionism posits that meaning is derived from interactions and established through an interpretive process (Hodgson, 2000). Its theory believes that people behave and interact based on how they interpret or give meaning to specific symbols in their lives.

The emerging central notion of this perspective is the putting of oneself in the place of another (Crotty, 1998). It creates a framework for a researcher to enter the reality of those being studied, understand and construct the meanings that objects, words or gestures have for the actors as individuals, members of groups and communities, while

they are engaged in purposeful and reflexive interaction (Berg, 2007). It captures the essence of the human being as a social being—a creator, a product, and a shaper of society (Talisse & Aiken, 2008). Thus, researchers come to know and can advocate reality through observation and interactions with participants within their environment. It provides the theoretical underpinnings for grounded theory. Strauss' background in symbolic interactionism contributed to the following aspects of grounded theory: the nature of experience and undergoing as continually evolving; the active role of persons in shaping the worlds they live in; an emphasis on change and process and the variability and complexity of life; and the inter-relationships among conditions, meaning, and action.

Its major assumptions, as described by Charmaz (2012, p. 7), are that society, reality, and the self are constructed solely through symbolic interaction, a dynamic and interpretive human process of creation, action, reflection, and change. Methodologically, symbolic interactionism directs the researcher into making the participant's viewpoints regarding actions, objects, processes, and society the focal point of inquiry (Herman-Kinney & Verschaeve, 2003). This interpretivist view is based on the assumption that not all knowledge that is valuable in understanding human beings is quantifiable or measureable. Blumer (1969) argued that the complexity of human life does not lend itself to the fragmentation of human experience in a laboratory or other contrived setting. Interpretivists view the human being as a dynamic and constantly evolving entity, so their research designs often use contextual, temporal, and naturalistic qualitative methods (Herman-Kinney & Verschaeve, 2003, p. 217). Qualitative research methods used in the pursuit of in-depth knowledge about human's social actions are thought to have

originated in one particular tenet of symbolic interactionism: sympathetic introspection). The action involved in placing oneself into the experience of another has evolved into several methodologies used by interpretivist symbolic interactionist researchers, among them: participant observation/field methods/ethnography, interviewing, the life history method, participatory action, case studies, and grounded theory (Herman-Kinney & Verschaeve, 2003, p. 225).

Symbolic interactionism is often considered foundational for a study where meanings are being explored (Denzin & Lincoln, 2011). Blumer (1969) posited that meaning is derived solely from social interactions and modified through interpretations of signs and symbols embedded in social encounters. Symbols are abstract representations of social objects that enable people to communicate both verbally and nonverbally and understand each other's intentions and actions. Since social action and interaction are symbolic in nature, people interpret the objects in their environment and the behaviors of others around them and, rather than reacting directly, respond on the basis of their interpreted meaning of those objects and actions (Blumer, 1969; Meltzer, 1972). In circumstances in which people define the situation differently, conflict may arise until they are able to develop overlapping conceptualizations. Furthermore, a person's verbal and nonverbal communications might contradict one another, causing confusion or conflict for the receiver.

Symbols are socially derived and modified through interaction, rather than inherently attached to objects and events. Although symbols arise from social interaction, at the same time, they shape social interaction and create social realities. Languages are powerful symbol systems that structure the nature of what can be seen and

considered (Blumer, 1969). The centrality of language as a symbol system has many implications for a study investigating nurses' perceptions and understanding of engaging in social justice. Qualitative data are chiefly composed of either spoken (recorded interviews) or written (field notes, memos, documents) language. These experiences must be interpreted through language in order to be analyzed. It is incumbent upon the researcher, therefore, to explore fully the meanings participants assign to the words they chose so that their meanings are not imposed on the participants' true intents. Attempting to understand the meanings through which individuals interact and construct their worlds requires an emic research perspective, that is, the researcher must enter the everyday worlds of participants. Blumer (1969) proposed that the only way to understand the experience of another is through significant symbols and thus requires that researchers, who begin their endeavor as outsiders, take on the perspectives of their participants in order to learn about their behaviors and attitudes (p. 35).

Pragmatism

Pragmatism is another key underpinning of grounded theory. Munhall (2012) asserted that in pragmatism differences in perspectives provide a basis for reciprocal problem-solving. Thus, thought is considered to be a product of interaction between people and the environment and this is an instrument for problem-solving, prediction and action. Pragmatism refers to theoretical perspectives that emphasize the practical giving primacy to usefulness over theoretical knowledge. The need to get out into the field, if one wants to understand what is going on. The importance of theory, grounded in reality, to the development of a discipline. Early pragmatists, Dewey (1925), Mead (1956), and later, James (1977) agreed that knowledge is a meaning-making activity created through

human action and interaction. It follows then, that the object of study in pragmatism is almost always a form of action. A study is well-framed by pragmatism when the theory generated is the product of an experiential transaction between researcher, participants, and the contextual environment; and, more importantly, has practical, useful consequences for the discipline of nursing.

Pragmatists posit that understanding is based on consequences (Star, 2012). James (1977) saw little value in modes of thinking that did not somehow make a difference in daily life. He defined pragmatism as the attitude of looking away from principles, categories and supposed necessities—and looking toward fruits, consequences, utility, and facts (James, 1977, p. 48). Glaser and Strauss (1967) recommended that researchers enter the field without preconceived or a priori ideas of the subject area, of what may be discovered, or where it may lead. This leads pragmatist researchers away from an *a priori* logic or philosophical analysis with pre-set categories to be verified by the study (Creswell, 2013, p. 28).

Pragmatism supports the current study's intent to inductively develop a substantive theory on the knowledge, perceptions, and attitudes among obese Haitian-Americans toward bariatric surgery. Inductive processes begin with collecting data and then adopt a "wait-and-see-what-happens" posture (Creswell, 2013, p. 86). "What happens" from a pragmatist perspective, is typically an anomaly in the data that captures the researcher's attention. According to Dewey (1925), the anomaly prompts the researcher to reflect on and, ultimately, to interpret the interruption/anomaly in order to arrive at a new fact (action). This perspective supports the researcher's role as the analytic instrument used to render concepts, patterns, categories, and themes from the

data. This analytic cycle of experience-interruption-reflection-interpretation-action is unique to pragmatism (Starr, 2012). It is an assumption that prompts the pragmatist researcher to reflect on and journal (memo) interpretations of the interviews or fieldwork and to continually revise the interview questions based on the emergent categories and themes developed to capture the participants' perspectives (Creswell, 2013). Pragmatism offers an understanding that the only way we, as reflective-meaning-making-action-oriented beings, are going to come to consensus about what "is," is to participate in conversation with one another and, "in so doing, possibly alter the focus of that conversation by introducing new beliefs and knowledge" (Bacon, 2012, p. 200).

Pragmatism suggests that power of various sorts, in our interactions and experiences with others, is unequally distributed (Addams, 2002). This perspective was important in this study of obese Haitian-Americans' knowledge, perceptions, and attitudes toward bariatric surgery, because it required the researcher to be cognizant of the various ways in which power manifests between them and the participants, the ways in which each may be privileged (or not), as well as, to remain open to divergent and potentially 'confounding' ideas toward the researcher's beliefs about the phenomenon. Pragmatists see individual experience as socially transacted and transformative processes encompassing the self and the world (Talisse & Aikin, 2008). Human experiences transform the person, the society, and the environment.

A central point of pragmatism is that the knowledge generated by experience be practical and useful (Corbin & Strauss, 2008; Munhall, 2007). Therefore, the practical aim of this qualitative, grounded theory study is to generate a theory or theoretical framework on the critical factors that influence knowledge, perception, and attitude of

obese Haitian-Americans toward bariatric surgery. A substantive mid-range theory may assist in building solid platforms for the care and management of obese Haitian-American adults. It may increase the current body of professional knowledge on that population and help nurses to better effectively act by identifying and addressing situations that could potentially leave this population unduly vulnerable to health inequities and disparities. The pragmatist theoretical perspective encourages an interpretive rendering of health equality for this population by nurses, rather than merely replicating care from other groups (Charmaz, 2012).

Relationship of Grounded Theory to this Study

The strengths of grounded theory include its potential to capture context and complexity in social action, to investigate emerging topic areas or to shed new light on existing topics. Glaser and Strauss (1967) further demonstrate that the sort of theory produced by grounded theory methods makes sense to people involved in the situation being researched, increasing the potential for grounded theory to be used in applied research for a practitioner audience, i.e., obese Haitian-American adults. The qualitative approach, framed by an epistemology of constructivism and the theoretical perspectives of symbolic interactionism and pragmatism within the grounded theory methodology (GTM) will best suit this study because it will lend more insight and gives voice into the critical factors that influence obese Haitian-Americans' knowledge, perceptions, and attitudes toward bariatric surgery, an area that little is known about. The qualitative methodology is chosen because it employs an emergent research design in which investigators primarily use inductive reasoning and naturalistic approaches to obtain rich, contextual and detailed narrative data regarding the realities and viewpoints of the

participants on this specific phenomenon. The Glaserian approach of grounded theory would best suit this study because it permits a general idea of the area under study allows the use of structured questions to lead a more forced emergence of theory (Stern, 1994).

Qualitative research is useful for describing or answering questions about particular, localized occurrences or contexts and the perspectives of a participant group toward events, beliefs, or practices. A helpful process for exploring a complex research area about which little is known (Creswell, 2007) and for culturally derived and historically situated interpretations of the social life-world (Crotty, 1998). Qualitative methods are acknowledged as being more suited to understanding subjective and transformative life changes of persons living with chronic illness. Hence, the significance and strength of qualitative research is in its ability to generate new knowledge utilizing interpretive techniques.

In particular, Glaser's grounded theory is used wherein the lines of inquiry focus on understanding obese Haitian-Americans' knowledge, perceptions, and attitudes related to bariatric surgery. The main goal in grounded theory studies is to understand the meanings behind human behavior (Rose, Spinks, & Canhoto, 2015, p. 1). As obesity is a major health care burden based on its morbidity and mortality rates and its economic impacts, generating an inductively substantive theory that is grounded in the data collected from obese Haitian-American adults will advance professional nursing knowledge. Scientific inquiries that attempt at developing a theory are important within the context of nursing's professional commitment to care for obese Haitian-American adults. Methodologically, symbolic interactionism will guide this research to make participants' viewpoints regarding obesity, co-morbidities, bariatric surgery, culture, and

society the focal points of the inquiry (Herman-Kinney & Verschaeve, 2003). Blumer (1969) maintained that the complexity of human life does not lend itself to the fragmentation of human experience in a laboratory or other contrived setting. Interpretivists view the human being as a dynamic and constantly evolving entity, so their research designs often use contextual, temporal, and naturalistic qualitative methods (Herman-Kinney & Verschaeve, 2003, p. 217). Grounded theory, within the interpretivism paradigm, is an important method for studying topics of a social and cultural nature. Fernández and Lehmanm (2005) agreed that for research to maintain most relevance in emerging areas of the socio-cultural domain, "researchers must adopt the methodology of grounded theory where the emerging theory helps explain, in conceptual terms, what is going on in the substantive field of research" (p. 2). Hence, generating a theory about obesity and bariatric surgery among Haitian-Americans that is grounded in data from informed participants may shed light on an obscure topic that is culturally acceptable in associating being obese with healthy, attractive and nurturing.

Significance of the Study

This study proposes to explore the gap that currently exists in nursing research and add to the body of knowledge. Generating a nursing theory on this topic might aid in informing prevention and care efforts specific and culturally relevant to this subgroup. It may also be a catalyst to the development of successful and culturally based community-support services and programs where nurses could seek to establish roles within nontraditional settings to assist Haitian-American patients in managing their obesity. Furthermore, a new narrative could evolve from this study that depicts a deeper

understanding by nurses of the critical factors that affect knowledge, perceptions, and attitudes of obese Haitian-Americans toward bariatric surgery.

As population diversity expands, it is necessary from a nursing perspective to provide ethnic minority groups with effective quality prevention, interventions, and programs to reduce health care disparities and inequalities. Monitoring the health of this growing segment of the U.S. population is important to nursing because the health of immigrants impacts national health outcomes (Ozra-Frank & Venkat Narayan, 2010). Furthermore, nurses should be cognizant of their patients' complex lives and support them in identifying, adopting, and maintaining health-restoring behaviors that work for them (Buchholz, Huffman, & McKenna, 2012). Hence, the results of this study could provide an impetus to influence nursing education, nursing practice, public policy, and research related to the development and implementation of culturally sensitive prevention and interventions to decrease the rate of obesity and its related comorbidities among Haitian-American adults.

Implications for Nursing Education

Nurse educators must be aware of the knowledge and perceptions of obese Haitian-Americans and cultural influences that may exist toward weight and weight surgery so that they are able to incorporate in their teaching specific strategies for obesity care specific for this population. Improved knowledge and awareness regarding the scope of the problem of obesity and bariatric surgery in Haitian-Americans might guide the development of related educational and practice competencies for nurses entering the profession. A substantive mid-range theory could assist in building solid platforms to develop patient interventions, education, and advocacy for obese Haitian-American

adults in a culturally sensitive manner; and increase the current body of professional knowledge for that population.

Implications for Nursing Practice

Individuals not wishing to upset the status quo often adhere to the same care with patients of diverse backgrounds despite their lack of relevance or effectiveness. The astute nurse must recognize the need for cultural sensitivity and inclusion of culturally relevant information into nursing care. Although there is as much diversity within a particular cultural group as there is across groups, it is important to remember that cultural groups may share similar values. With this thought in mind, a practical theory on the knowledge, perceptions, and attitudes of Haitian-Americans toward bariatric surgery may assist nurses in planning optimal culturally competent care for obese Haitian-Americans. Novel knowledge sourced from the voice of service recipients (i.e., Haitian-Americans) may help nurses practice more meaningfully and more effectively, with cultural humility, to produce improved health outcomes for patients and greater nurses' job satisfaction.

Implications for Nursing Research

As nursing research seeks to increase the breadth of knowledge in the field, nurse researchers must understand that paucity in research for any population equates to inequality and disparity of treatment of this population. This narrative is especially relevant to nurses as they are patients' advocates. The generation of new knowledge on obese Haitian-Americans may encourage more research, thereby, adding more researches to the profession and closing the gap in literature and advancing the health of this population. This study may also provide the impetus necessary to support a greater

understanding of the social determinants of health, health marginalization of groups and exclusion of individual and population.

Implications for Nursing Health/Public Policy

As obesity is the major epidemic of our generation, the public and private healthcare sectors are clamoring to find the perfect recipe for its long-term management. Hence, this study may inform nurses' advocacy of appropriate patient care of obese Haitian-American adults. As nurses become better knowledgeable of Haitian-Americans' underlying causes of obesity and their impetus for its management, they will be better informed to advocate on behalf of this at-risk population for more favorable policies that will directly address this issue by reducing morbidity and mortality. Having health care policies and interventions that are culturally sensitive and adaptable to the needs and concerns of underserved population may help nurses better frame the issues of health inequalities to effect positive social and economic policy changes on the local, national, and global health care scene.

Scope and Limitations of the Study

The scope of this study is to explore the knowledge, perceptions, and attitudes of obese and non-obese Haitian-Americans toward bariatric surgery. A purposive sample of participants will be selected, and a subsequent snowball sample of Haitian-Americans participants will be recruited to participate in one-on-one interviews. A theoretical sample of obese or formerly obese Haitian-Americans will serve as experts to the knowledge, perceptions, and attitudes of Haitian-Americans toward bariatric surgery.

Possible limitations to the study are in line with any qualitative approach research study, namely that participants may not be able to fully share their feelings and

experiences as it may be too hurtful or painful. Since the purpose of qualitative research, grounded theory research specifically, is not to determine cause-and-effect relationships, but to explore a particular phenomenon in depth (Creswell, 2013), as such, consumers of this study are reminded that the sample will be limited to Haitian-Americans. Their conceptualization of obesity and their ability to express this must be viewed within this context. Therefore, this study may not be transferable to others; other studies may not reflect similar findings. One must also take into consideration the potential confounding factor of the social desirability effect during the participant interviews, where participants may tend to exaggerate or misrepresent knowledge or perception in order to cast themselves as having a stronger experience with the phenomenon than was actually warranted.

Researcher bias is a common limitation of qualitative inquiry. This researcher recognizes that their own experiences may affect the final narrative. Through constant comparison of the data and memoing, the researcher will be able to articulate assumptions about the data, which in turn is compared and contrasted to emerging data. As a result, researcher bias was either confirmed or rejected by the data, and in effect, minimized (Charmaz, 2012, p. 181). A final limitation of the study is the researcher's inexperience with grounded theory methodology. The expertise of the dissertation chairperson and committee members will be integral in maintaining the rigor and integrity of the study.

Chapter Summary

This chapter discussed the historical background of bariatric surgery and obesity. It presented the problem statement, purpose of the study, research questions, the

philosophical underpinnings, and the study's importance/significance to nursing with respect to education, practice, research, and health/public policy. This chapter also delineated the scope and limitations of the study. It was demonstrated that generating knowledge on obese Haitian-Americans health care by exploring the critical factors influencing their knowledge, perceptions, and attitudes toward bariatric surgery is critical for healthcare to become more meaningful, explicit, and beneficial to that underserved population. This qualitative grounded theory inquiry is guided by the philosophical tenets of pragmatism and symbolic interactionism. The research problem and research questions were shown to be consistent with the aforementioned philosophical tenets and methodology. Chapter Two presents the literature review necessary to orient this study within the larger, scholarly discourse on the knowledge, perceptions, and attitudes toward bariatric surgery among Haitian-American adults.

CHAPTER TWO

Review of the Literature

The purpose of this qualitative, Glaserian grounded theory study is to generate a theory on the critical factors that influence knowledge, perceptions, and attitudes of Haitian-American adults toward bariatric surgery. A substantive mid-range theory may assist in building solid platforms for the care and management of obese Haitian-American adults and increase the current body of professional knowledge for that population. The main goal of using the grounded theory approach is to explore social and cultural processes where little or nothing is known about the subject with the goal of developing a theory (Creswell, 2013).

Suddaby (2006) encourages researchers using grounded theory not to begin the research weighted down by lots of prior theories. This, however, does not mean entering the field with a "blank mind", but instead it underlines the primacy of the data in grounded theory development (Suddaby, 2006, p. 634). This raises questions about the role of the traditional literature review in a grounded theory study. One approach is to integrate literature into the findings section of the report, where it can be used to show the areas of management knowledge to which the research has contributed through critiques of earlier studies and comparison with the research findings. Another option is for the literature review to retain its more traditional place early in the report to show the study's context while incorporating an additional critical review in the findings section. Suddaby (2006) admonishes that whatever option is adopted, the researcher should avoid treating grounded theory as an "excuse to ignore the literature" (p. 634). Charmaz (2006) pointed

out that the trick here is to use the literature review without letting it stifle creativity or "strangle your theory" (p. 166).

Using First Search, Lilinet Online, and ProQuest Direct search engines, the following computerized databases were used for this search: ABI Inform (index of Business and Management), ArticleFirst, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Dissertation Abstracts, Educational Resource Information Center (ERIC), Health Reference Center - Academic, Medicine, Modern Language Association (MLA), and Periodical Abstracts (PerAbs): Covering business, economics, literature, religion, psychology, and women studies. The key words used in the search were: Haitian-American, obese, obesity, knowledge, perception, attitude, weight loss surgery, bariatric surgery. Citations were limited by language to English and French and by subject to exploration of the concepts. A limitation was imposed to find literature published since 2009 with classics sought by reviewing citations in the published works. A random selection process delimited the profusion of theoretical references that were found.

The literature review will be divided by categories into the historical context addressing major theoretical and research literature addressing the history of obesity with its cultural connotations, the management of obesity, the health outcomes of bariatric surgery, and finally the psychological predictors of successful outcome after bariatric surgery. The researcher's experiential context is discussed and focuses on researcher's personal interests and biases related to the study topic. Finally, synthesis of the literature reveals what is known and not known about obese Haitian-American and their knowledge, perceptions, and attitudes toward bariatric surgery.

Historical Context

The term obesity appeared in the English language in the 17th century and only as a descriptive literary term for excessive fatness or corpulence (Oxford English dictionary, 2001). "Corpulence was favored and associated with affluence, power, and influence as reflected in the portly figures of the industrial barons and the feminine figures of Auguste Renoir (1841- 1919) from the early decades of the past century" (Guerrini, 2006, p. 423). Since weight is believed to be dependent on such factors as climate, agriculture, and hunting, the scarcity of food throughout most of history had led to connotations that being fat was good, and that corpulence and increased flesh were desirable as reflected in the arts, literature, and medical opinion of the times (Eknoyan, (2006).

Only in the latter half of the 19th century did being fat begin to be stigmatized for aesthetic reasons, and in the 20th century, its association with increased mortality was recognized. Chronic food shortage and malnutrition have been the scourges of humankind from the dawn of history. Only after the technological advances of the 18th century did a gradual increase in food supply became available. These advances initially resulted in improved public health and increased longevity along with increased in body size, which soon followed by an overabundance of easily accessible food, coupled with reduced physical activity that now account for the increased prevalence of obesity (Eknoyan, 2006). Once considered a problem only in high income countries, overweight and obesity are now dramatically on the rise in low- and middle-income countries, particularly in urban settings. In 2015, the World Bank Gender Statistics assigned the prevalence of obesity in Haiti at 16.6% a significant increase from 7.2% in 2014. (World Bank Gender Statistics, October 2015). Nesse and Williams (1996) summarized, as such,

the story of obesity is indelibly related to that of the history of food. It is a classic example of the diseases that have been argued to be side effects of the evolutionary process.

As a disease, with well-defined pathologic and pathophysiologic complications, obesity is just about a century old (Pool, 2001). In fact, the impact of obesity on quality of life (QOL) began to be appreciated and recorded in the 18th century, but only in the middle of the 19th century it was recognized as a cause of ill health, and then only in the first decades of the 20th century were its morbid complications and increased mortality documented (Schwartz, 1986). What has made this gradual medicalization of obesity alarming is the exponential increase in its incidence over the past 60 years, which led the World Health Organization to declare it a global epidemic and worldwide public-health crisis (WHO, 2006). Obviously, the pathogenesis of obesity is more complex than a simple paradigm of available food and the effort spent to obtain it. Factors beyond diet and exercise influence obesity and make the consequences of bad diet and limited exercise much worse than they would be otherwise. Whatever these confounding genetic or pathophysiologic factors may be, in the final analysis, the imbalance between energy intake and output, otherwise stated as the easy availability of high-caloric foods and reduced physical activity, apparently accounts for the current epidemic of obesity.

Cultural anthropologists report variations in amount of body fat since the beginning of time. History is replete with instances of preoccupation with weight, for example, the Spartans are reported to have ostracized a man for being fat, and Socrates is reported to have danced each morning to keep his weight within reason (Beller, 1977). The scarcity of food throughout most of human history and consequent connotations that

being fat was good and that corpulence and increased "flesh" were desirable are reflected in the arts, literature, and politics of the times. Attitudes towards obesity started to be altered in the 18th century and began to change significantly in the 19th century, principally for esthetic reasons. However, only in the latter part of the 20th century did being fat become stigmatized. Hence, the catch phrase "before becoming bad, fat became ugly" coined by Eknoyan (2006). Consequently, the passion for slimming was steadily mounting and reached a frenzy by the middle of the twentieth century.

Maguire and Haslam (2009) elucidated that from around 1980, in the UK, and 1970 in the U.S., something happened that rapidly altered the epidemiology of overweight and obesity among all classes and groups within society. By their analysis, no single issue or event was to blame for this explosion. Rather, myriad factors (government policies, social developments, technical innovations, and cultural shifts) coincided subtly and simultaneously, and over 25 years, the current obesity problem was born.

Guerrini noted that the health consequences of obesity—notably, fatigue, gout and breathing difficulties — began to be noted in the medical literature around the 18th century (Guerrini, 2000). Paradoxically, in most of the 19th century and well into the early 20th century, medical opinion held that carrying an extra 20 to 50 pounds of excess flesh was healthy; "it was even considered prudent" (Guerrini, 2000, p. 425). The origin of the concept of obesity in the U.S. can be traced back to the insurance industry around 1912; they sounded the first alarm against excess weight and introduced the tables of height and weight. These tables defined average and acceptable standards of weight for U.S. adults. By the 1920s, studies on the experience of industrial policyholders of the

Metropolitan Life Insurance Company were analyzed for differential mortality by weight and associated with specific diseases (Dublin & Lotka, 1937). By the 1930s, the medical profession made a reversal of opinion on the desirability of excess flesh and established excess fat as a health problem, even the field of psychiatry capitalized on this development with the Freudian psychology in the 1940s. Furthermore, the Build and Blood Pressure Study became the basis for revised insurance company tables in 1959. These new tables replaced average weight standards with ideal weights. Obesity was then defined by weight in excess of 20% above ideal body weight. By this time, medicine had begun to document the strong association between weight, morbidity, and mortality; individuals were placed at increased risk of disease if they fell outside the ideal weight range, and the high end of the range being classified as obesity. Using these tables, the prevalence of overweight and obesity in the adult female population was calculated at 40% (Hutchinson, 1959).

The earliest reference to obesity in the field of nursing was found in 1966 in the Nursing Mirror and Midwives Journal, and nine papers were found in nursing journals between 1966 and 1971. Most were written by physicians and covered topics related to etiology and weight loss. Only one paper published in 1967 by a registered nurse Dowling "Your Obese Patient May Not Be Able to Reduce," addressed the role of nurses in promoting weight control. Nursing-directed research on the topic of obesity was not found in the literature until Laffery published a study in 1986, but nursing is now making significant contributions to the study of obesity. Much of the current nursing research assumes the biomedical definition of obesity introduced by the insurance industry in 1959, but it is not limited to this definition. Nursing also is expanding the focus beyond

etiology and treatment to family, cultural, and community factors influencing health behaviors in the obese population (Davidson & Knafl, 2006). Subsequently, by the 1960s, the study of obesity began in earnest which became the impetus for the growing 30 to 50 billion dollar weight loss industry that exists today (Wood, 2006).

In contrast, the belief by most Haitians that a healthy baby is a fat baby still persists, and this perspective on nutrition and health continues into adulthood. Since weight is associated with health, good nutrition means eating a lot (Jacobson, 2003). A noted physician in Haiti, Philippe Desmangles observed that while in developed countries the tendency is for thinness to the point where young women throw up their meals regularly, thus creating anorexia, in Haiti there is a custom of buxom women. Thin women are often called by nicknames and forced to look for medications to gain weight. He remarked this is understandable, in a country where food may seem like a privilege of the elite, hence, the best way to show everyone that they are not poor is by being obese. In a country of scarcity, excess weight is viewed as a sign of wealth and therefore good health, unfortunately, not associated with the series of complications on health. Dr. Desmangles also declared that a pharmacopoeia exists in Haiti, with a series of products intended for weight gain. And by his estimate, these products sell very well, alongside other home-grown remedies (Desmangles, 2007).

Management of Obesity

The 21st century epidemic of obesity emphasizes the need for an effective range of treatment option for management of this health care crisis. Weight control is the primary goal of therapy in obese patients for primary and secondary prevention of co-morbidities. Since 1998, The National Institutes of Health recommends that obese

patients lose 10% of their initial body weight and endorses the hallmark of obesity management that encourages a program of lifestyle modification, composed of diet, exercise, behavioral changes, strategies for weight maintenance, followed by pharmacological interventions, and bariatric surgery, as a last resort (NIH, 1998). Although the long-term success in sustaining these weight reductions is limited, the benefit in the associated comorbidities such as diabetes, hypertension, and dyslipidemia appears to be maintained (Hodara & Kacharava, 2013). These authors illustrate this point in their case study report that evaluates a patient's cardiovascular risk; the metabolic abnormalities that are coming into play in the development of his cardiovascular risk factors and which primary prevention interventions should be implemented in his case. They concluded that the patient should be enrolled in an intensive lifestyle modification program, with emphasis on diet, exercise and behavioral changes, and with the goal to obtain a 10% weight reduction. Weight reduction drugs are not indicated without concomitant lifestyle modifications, are not likely to result in sustained weight loss, and are fraught with side effects, so he is unlikely to benefit from them. According to current guidelines, our patient is not a candidate for bariatric surgery. They noted in their final recommendations that the growing prevalence of obesity has become a critical problem worldwide. Further public health initiatives need to be developed and implemented for the prevention, early detection, and treatment of obesity.

The National Nutrition Surveillance Centre, in partnership with the Health Service Executive (HSE) (2009) conducted a literature review to explore key findings from national and international research relating to obesity, and the interrelationship between obesity, physical activity and nutrition and other determinates. The outcome of

this review concluded that combined diet and regular exercise does appear to be the most effective therapy for weight loss and also weight loss maintenance. Behavioral change is now recognized as an important component of any response to obesity and should be incorporated into treatment for weight loss and weight maintenance. This review acknowledges that more national and international research is required to determine the best strategies for obesity prevention and treatment. Widespread promotion of regular physical activity is essential not only for weight loss and maintenance, but for many aspects of health.

Finally, Martins, C., Strømmen, M., Stavne, O. A., Nossum, R., Mårvik, R., & Kulseng, B. (2011) conducted a Quantitative non-random study with 206 participants to compare 1-year weight loss and changes in risk factors and comorbidities after bariatric surgery and three conservative treatments. 179 participants completed the study. All treatments resulted in significant weight loss, but bariatric surgery (40 ± 14 kg, 31 ± 9%) led to the largest weight loss ($P < 0.0001$). There were no differences in weight loss between B and C (22 ± 13 kg, 15 ± 8% vs. 18 ± 12 kg, 13 ± 8%), but these resulted in larger weight loss compared with D (7 ± 10 kg, 5 ± 8%). There were no differences in changes in total LDL cholesterol, triglyceride or glucose between groups; however, the increase in HDL cholesterol was significantly larger in groups A and C. There were no differences in comorbidities resolution between groups A and B, C and D combined (except hypertension, which was better in group A). In conclusion, although bariatric surgery leads to a greater weight loss at 1 year compared with conservative treatment, in patients with morbid obesity, clinical significant weight loss and similar improvements in risk factors and comorbidities resolution can also be achieved with lifestyle interventions.

These three studies solidify the prevailing recommendations of management that encourages a program of lifestyle modification, composed of diet, exercise, behavioral changes, strategies for weight maintenance, followed by pharmacological interventions, and bariatric surgery, as a last resort. Current treatment programs are failing to make much inroad into the problem. Given NIH's recommendation that obese patients lose at least 10% of their body weight (NIH, 1998); interventions that would help maintain weight loss over the longer term have a valuable role in reducing the overall health burden. Hence, the explosive use of bariatric surgery in the past 15 years.

Health Outcomes of bariatric surgery.

Weight loss surgery has many potential benefits to include significant weight loss and resolution of comorbidities such as type 2 diabetes, hypertension, and hyperlipidemia. Weight loss surgery can help patients live a longer, healthier life. Numerous studies have suggested that individuals report improvements in psychosocial functioning with weight reduction. The most consistent finding in this area is the association between surgical weight loss and improved quality of life. More than 95% of the patients who had bariatric surgery at UCLA reported markedly improved or improved quality of life after surgery in an anonymous survey. The long-term benefits of these procedures were demonstrated in the following four studies.

A small randomized trial by Mingrone et al. (2012) was piloted to study whether bariatric surgery was superior to medical therapy as a treatment strategy for diabetes in obese patients. In this single-center, nonblinded, randomized, controlled trial, 60 patients between the ages of 30 and 60 years with a body-mass index (BMI, the weight in kilograms divided by the square of the height in meters) of 35 or more, a history of at

least 5 years of diabetes, and a glycated hemoglobin level of 7.0% or more were randomly assigned to receive conventional medical therapy or undergo either gastric bypass or biliopancreatic diversion. The primary end point was the rate of diabetes remission at 2 years (defined as a fasting glucose level of <100 mg per deciliter [5.6 mmol per liter] and a glycated hemoglobin level of <6.5% in the absence of pharmacologic therapy). At 2 years, diabetes remission had occurred in no patients in the medical-therapy group versus 75% in the gastric-bypass group and 95% in the biliopancreatic-diversion group ($p < 0.001$ for both comparisons). Age, sex, baseline BMI, duration of diabetes, and weight changes were not significant predictors of diabetes remission at 2 years or of improvement in glycemia at 1 and 3 months. At 2 years, the average baseline glycated hemoglobin level (8.65±1.45%) had decreased in all groups, but patients in the two surgical groups had the greatest degree of improvement (average glycated hemoglobin levels, 7.69±0.57% in the medical-therapy group, 6.35±1.42% in the gastric-bypass group, and 4.95±0.49% in the biliopancreatic-diversion group). A meta-analysis of the study results found that in severely obese patients with type 2 diabetes, bariatric surgery resulted in better glucose control than did medical therapy. Preoperative BMI and weight loss did not predict the improvement in hyperglycemia after these procedures. In the short-term, bariatric surgery has been associated with improvement in type 2 diabetes mellitus. The authors made three key recommendations, namely, to conduct similar studies in larger multicenter facilities to confirm its findings, utilize more sufficient power to analyze safety or to detect differences in other important end points, such as rates of death or cardiovascular events and differences in long-term

morbidity between the two surgical procedures, and finally, eligibility criteria must include cutoffs for dyslipidemia and arterial blood pressure.

On the other hand, Serrano et al. (2015) performed a retrospective review of obese Hispanic patients treated at one institute between 2008 to establish the outcomes of bariatric surgery on Hispanic patients. They identified self-reported Hispanic patients who underwent a laparoscopic gastric bypass (LGBP), sleeve gastrectomy (LSG), or gastric band (LGB) procedure. The primary endpoint was excess weight loss (EWL) at 6, 12, 24, and 36 months. Secondary endpoints included improvement of obesity-related metabolic parameters at 1 year. They performed a repeated measures analysis of variance to calculate statistical significance throughout the study time period. Subsequently, they identified 2002 Hispanic patients who underwent bariatric surgery (1,235 LGBP, 600 LSG, and 167 LGB) at the institute from 2008 to 2014. Follow-ups at 6, 12, 24, and 36 months were 62.2%, 54.5%, 36.2%, and 19.8%, respectively. Mean preoperative BMIs were 47.0 _ 7.2 kg/m2, 46.1 _7.8 kg/m2, and 44.9 _ 6.0 kg/m2 for the LGBP, LSG, and LGB cohorts, respectively. Excess weight loss was significantly more pronounced in the LGBP and the LSG groups than in the LGB group; this difference was accentuated over time ($p < 0.0001$). Obesity-related metabolic parameters and the need for comorbidity medical therapy decreased in all three surgical groups. Therefore, they concluded that bariatric surgery is highly successful in Hispanic obese patients. In the largest series to date, LGBP and LSG seem to yield more effective EWL and reduction of Cardiometabolic parameters than LGB among Hispanics; however, outcomes are still markedly reduced when compared with those in non-Hispanic populations. Serrano et al. (2015) performed their study specifically because their preliminary search revealed

despite its success, there is a paucity of data on the outcomes of bariatric surgery on Hispanic patients and their investigation concluded that bariatric surgery is highly successful in Hispanic obese patients. In the largest series to date, LGBP and LSG seem to yield more effective EWL and reduction of Cardiometabolic parameters than LGB among Hispanics; however, outcomes are still markedly reduced when compared with those in non-Hispanic populations. Since the study raised questions about the disparity of success of bariatric surgery in Hispanic patients when compared with that in non-Hispanic patients, the authors recommend further study into bariatric surgery outcomes on Hispanic populations.

Furthermore, in Galioto et al's (2015) quantitative, semi-experimental study, a total of 85 adult bariatric surgery patients underwent computerized cognitive testing and fasting blood draw for glucose, insulin, and glycated hemoglobin (HbA1c) at baseline and 12 months postoperatively, to examine whether improved glucose regulation, as measured by insulin sensitivity (homeostatic model assessment of insulin resistance (HOMA-IR)) and glycated hemoglobin (HbA1c) levels, would be related to improved cognitive functioning one year following bariatric surgery. Significant improvements in both cognitive function and glycemic control were observed among patients. After controlling for baseline factors, 12-month homeostatic model assessment of insulin resistance HOMA-IR predicted 12-month digits backward ($\beta = -.253$, $p < .05$), switching of attention-A ($\beta = .156$, $p < .05$), and switching of attention-B ($\beta = -.181$, $p < .05$). Specifically, as HOMA-IR decreased over time, working memory, psychomotor speed, and cognitive flexibility improved. Decreases in HbA1c were not associated with postoperative cognitive improvements. After controlling for baseline cognitive test

performance, changes in body mass index (BMI) were also not associated with 12-month cognitive function. Small effects of improved glycemic control on improved aspects of attention and executive function were observed following bariatric surgery among severely obese individuals. Future research is needed to identify the underlying mechanisms for the neurocognitive benefits of these procedures.

Finally, a nonrandomized, prospective, controlled study to explore the association between bariatric surgery, weight loss, and cardiovascular events by Sjöström, L., Peltonen, M., Jacobson, P., Sjöström, C.D., Karason, K., Wedel, H. …Carlsson, L. M. (2012) compared 2010 obese participants who underwent bariatric surgery and 2037 contemporaneously matched obese controls who received usual care. Patients were recruited between September 1, 1987, and January 31, 2001. Date of analysis was December 31, 2009, with median follow-up of 14.7 years (range, 0-20 years). Inclusion criteria were age 37 to 60 years and a body mass index of at least 34 in men and at least 38 in women. Exclusion criteria were identical in surgery and control patients. Surgery patients underwent gastric bypass (13.2%), banding (18.7%), or vertical banded gastroplasty (68.1%), and controls received usual care in the Swedish primary health care system. Physical and biochemical examinations and database cross-checks were undertaken at preplanned intervals. The study concluded that compared with usual care, bariatric surgery was associated with reduced number of cardiovascular deaths and lower incidence of cardiovascular events in obese adult, and alerted on the need to explore weight loss independent effects of bariatric surgery. The relationships between baseline insulin and other end points, including overall mortality, diabetes, and cancer, need to be documented. Post hoc findings on relative and absolute treatment benefits should be

confirmed by prospective controlled trials specifically designed to study treatment effects on predefined end points, such as well-documented cardiovascular events or death in high-risk subgroups specified at baseline. It may well take at least 10 years to obtain such results, and meanwhile, clinical decisions must be based on best evidence available.

These four studies demonstrate the efficacy of bariatric surgery in maintaining weight loss and controlling diabetes and other co-morbidities. In general, with all the studies taken into account, rates of adverse events and reoperation were not well reported. The main reason given being the follow-up period in most of the trials reviewed was only 1 or 2 years, therefore, the long-term effects of bariatric surgery could not be definitively established. Nonetheless, there is a complete absence of such studies on obese Haitian-Americans; hence, the need to study the potential benefits of bariatric surgery in this population.

Psychological Predictors of Successful Outcome of Bariatric Surgery

After bariatric surgery, a lifelong threat of weight-regain remains. Behavior influences are believed to play a modulating role in this problem. Some patients undergoing bariatric surgery are less successful than others, and the reasons for this disparity in weight loss continue to be studied. Identifying patient characteristics that may help discover who will be at risk for poor outcomes is important. Many psychosocial factors such as, emotional adjustment, adherence to the recommended postoperative lifestyle regimen, weight loss outcomes, and co-morbidity improvement and or resolution can affect long-term outcomes of bariatric surgery (ASMBS, 2016).

A narrative review by Wadden, Webb, Moran, and Bailer (2012) examines weight losses achieved with Lifestyle modification that includes 3 primary components: diet,

exercise, and behavior therapy, as well as new developments with each of the 3 components. More than 5100 overweight participants with type 2 diabetes were randomly assigned to an intensive lifestyle intervention (ILI) or a diabetes support and education (DSE) group. The ILI was designed to induce a mean reduction in initial weight of 7% or more and to increase physical activity to at least 175 min/wk.9 During the first 6 months, participants attended 3 group sessions and 1 individual visit per month and replaced 2 meals per day with a liquid supplement (e.g., Slim Fast shakes), with a goal of consuming 1200 to 1800 kcal/d (with heavier participants receiving more calories). For months 7 to 12, ILI participants attended 2 group sessions and 1 individual visit each month, and used meal replacements for 1 meal per day. In years 2 to 4, participants were offered 1 individual on-site visit and 1 phone (or e-mail) contact per month, with periodic group sessions to help participants achieve the 7% weight loss goal or to reverse weight regain. This trial identified three 3 major phases of any successful weight-loss program: pre-inclusion screening phase, weight-loss phase, and maintenance phase (which can conceivably last for the rest of the patient's life but ideally lasts for at least 1 year after the weight-loss program has been completed).

Three literature searches were performed by Sogg, Lauretti, & West-Smith (2016) on behalf of the American Society for Metabolic and Bariatric Surgery (ASMBS), the largest national society for this specialty, to outline recommendations for the psychosocial evaluation of bariatric surgery patients, appropriate qualifications of those conducting these evaluations, communication of evaluation results and suggested treatment plan, and the extension of behavioral healthcare of the bariatric patient to the entire span of the surgical and postsurgical process. They determined that psychosocial

factors and adherence to the recommended postoperative dietary and lifestyle regimen have significant potential to affect postoperative outcomes. It is recommended that bariatric behavioral health clinicians with specialized knowledge and experience be involved in the evaluation and care of patients both before and after surgery. The evaluating clinician plays a number of important roles in the multidisciplinary treatment of the bariatric patient. Central among these is the role of identifying factors that may pose challenges to optimal surgical outcome and providing recommendations to the patient and bariatric team on how to address these issues.

As a final point, Chambers and Swanson (2012) investigated factors that can help in long-term weight maintenance through qualitative interviews. Participants were 20 adult volunteers (aged 30-67) including lifelong weight maintainers, active weight maintainers who have maintained weight loss, and weight gainers. Thematic analysis was used to highlight differences between weight groups. The results suggest that successful weight maintainers, irrespective of current weight band, adopt a staged behavioral approach to weight management that allows them to maintain a fairly stable weight. Encouraging the use of such strategies in those who typically regain weight after dieting may aid them in maintaining weight loss. It is recommended to conduct this study with a larger sample of various socio-economic statuses and include more men.

These above studies reiterate ASMBS' (2016) recommendations that bariatric behavioral health clinicians with specialized knowledge and experience be involved in the evaluation and care of patients both before and after surgery, to ensure successful weight loss maintenance post bariatric surgery. However, these requirements may also pose a barrier for Haitian-American patients who culturally have a great deal of stigma

about mental health care (Gopaul-McNicol, Benjamin-Fatigue, & Francois, 1998). These authors contend that Haitians may not accept psychotherapy because for some Haitians, mental health problems are considered taboo, shameful, and should be hidden from people outside of the family. Solving personal problems is viewed as a family or religious matter (Gopaul-McNicol, Benjamin-Fatigue, & Francois, 1998). Therefore, the recommendations for presurgical and postsurgical psychological evaluation may prove to be yet another barrier for Haitian-Americans to not engage in bariatric surgery.

Experiential Context

My experiences as an obese Haitian-American woman have instilled in me the desire to participate in a research endeavor that sheds light on the complexity of obese Haitian-American adults' constructions of health, obesity, and its management within dominant and/or alternative cultural discourses. Having been exposed to a number of bodily discourses in my professional and social life as well as to the body- and health-related pressures of the Haitian and Haitian-American cultures, I developed a deep interest in understanding the ways in which Haitian-Americans perceive and react toward the dominant obesity discourse to construct their ideas about health, obesity, and caring for self.

As the researcher recognizes his or her own biases toward the topic of study, it must be expressed in order to evaluate how accurately the research method is executed both in process and data analysis activities. While most qualitative inquiry designs require the investigator to epoche (a state of being without presuppositions), "bracketing" in phenomenology, or employ reflexivity to suspend experiential and perceptual bias in order to avoid prejudicing data collection, analyses, and/or the study findings (Creswell,

2013), grounded theory methodology incorporates a different approach call memoing (Charmaz, 2012; Glaser, 1998). Memoing controls distortion during the constant comparative data analysis, when researcher may experience "...non-grounded ideas occurring from personal biases, personal experiences of an idiosyncratic nature" (Glaser (1998) p. 182), by sensitizing the researcher to her or his personal biases and provides another important function in controlling the quality of data analysis. It is difficult for researchers to enter a study inquiry without awareness of the impact that their own assumptions, beliefs, or values may have during any phase of the study.

In this case, I identify with the participants at many levels of the inquiry, namely, as a lifelong overweight/obese Haitian-American. In addition, from 2000 to the latter part of 2008, I was a member of a surgical team that performed this type surgery and acquired an intimate professional knowledge of bariatric surgery procedures. As a nurse practitioner for the anesthesia team, I was responsible for their perioperative risks stratification or as we called it "Preop Anesthesia Evaluation and Clearance" by conducting complete history and physical, review of all pertinent preoperative laboratory and diagnostic tests, ordering missing tests and interpreting results, thereby evaluating the physical and emotional readiness of these patients for surgery. I became very intimate with the preparation, details, requirements, and frustrations of these patients. Moreover, I was often seen as the last gate between patients and their surgeries and patients were for the most part eager to recount their journey into bariatric surgery thus far. Furthermore, I have numerous friends and coworkers, from other minority cultures who also underwent bariatric surgery. It was puzzling that throughout my years in that position, I never

encountered a Haitian-American patient, and that bewilderment was the beginning of the formulation of this current study.

From the stated experiences above, I am reminded that in grounded theory, the researcher is called, on an ongoing basis, to give considerable thought to her own experience and to explicitly claim the ways in which her position or experience relates to the issues being researched. To achieve this, researchers keep a reflective journal that will assist them in the process of reflection and interpretation. Hertz (1997) outlines examples of the different selves or roles one might bring or represent with them to the research endeavor that are likely to influence the process, the final document's rhetoric may include the personal assumptions of the researcher and the philosophical bases from which interpretation has occurred (Allen, 1996; Cotterill & Letherby, 1993).

Chapter Summary

This chapter discussed a review of the literature on the historical context of obesity, cultural connotations, medical consequences and benefits of bariatric. In addition, the management of obesity and characteristics of patients who chose bariatric surgery were also addressed. The theoretical gaps concerning the knowledge, perceptions, and attitudes toward bariatric surgery among Haitian-American adults were delineated. Finally, a frank discussion of the experiential context that addresses the researcher's personal involvement with this topic was presented. Next, Chapter three will highlight the research design that will be utilized to conduct this study.

CHAPTER THREE

METHODS

The purpose of this qualitative, Glaserian (classic) grounded theory study is to generate a substantive theory on the critical factors that influence knowledge, perceptions, and attitudes of obese Haitian-Americans adults toward bariatric surgery. A substantive theory could assist in building solid platforms for the care and management of Haitian-American adults who are faced with the challenging and life-threatening condition of obesity and increase the current body of nursing knowledge for that population. The previous chapter provided a literature review that highlights the many aspects of obesity and weight loss surgery as a poorly researched area in the Haitian-American population and highlighted the importance of culture on health beliefs and practices, and health care disparities in obesity care. Chapter Three will discuss the proposed research design, research strategies, and rigor.

Research Design

The qualitative research paradigm is an inductive research process that uses a variety of coding system to move the analytic process from specific observation to broader descriptions, conceptual categories and finally abstracted theories; it generates non-numerical data (Polit & Beck, 2012). Grounded theory is "an inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data" (Martin & Turner, 1986, p. 141). Among the interpretive and qualitative research methods, grounded theory offers unique benefits especially to a novice researcher. The qualitative paradigm which utilizes an inductive approach to

inquiry is chosen to study the factors influencing knowledge, perceptions, and attitudes of Haitian-American adults toward bariatric surgery. This approach is preferred because it employs an emergent research design in which investigators primarily use inductive reasoning and naturalistic approaches to obtain rich, contextual, and detailed narrative data regarding the realities and viewpoints of the participants on this specific phenomenon.

The use of the grounded theory methodology grants the researcher the flexibility to explore the social context of obesity and extrapolate the knowledge, perceptions, and attitudes of Haitian-Americans toward bariatric surgery. As indicated by Goulding (2001), grounded theory enables researchers to systematically study human interactions in a way that embraces the interrelationship between actions, the conditions in the environment shaping the action, and the consequences of taking action. Grounded theory is presented here as a method of choice as it is detailed, rigorous, and systematic, yet it also permits flexibility, freedom, and suitability for the investigation of complex multifaceted phenomena, and it is also well equipped to explore socially related issues. Furthermore, grounded theory provides the researcher with greater freedom to explore the knowledge, perceptions, and attitudes of obese Haitian-Americans toward bariatric surgery and allow issues to emerge (Glaser, 1978, 1992, 1998).

After Glaser and Strauss' introduction, grounded theory developed in several directions with variations (Tan, 2010) and currently consists of three main types of designs. The emergent design, consistent with Glaser's (1992) ideas, relies on exploring a basic social process without preset categories. It emphasized openness and creativity in interpretation of data and criticized Strauss and Corbin's approach as forcing data and too

prescriptive. Glaser's approach was criticized as too open and difficult for novice researchers to follow (Buckley & Warning, 2009). The systematic procedure of Strauss and Corbin (1998) involves using predetermined categories to interrelate the categories, visual diagrams, and specific propositions or hypotheses to make the connections explicit. They emphasized rigorous and prescriptive routines in data analysis (Tan, 2010). In their design, Corbin and Strauss (1990) suggested three stages of coding: open coding, axial coding, and selective coding. The constructivist approach of Charmaz (2000) focuses on subjective meanings by participants, explicit researcher values and beliefs, and suggestive or tentative conclusions. Charmaz (2006) suggested a social interaction approach in using grounded theory that emphasized the researcher's interaction and involvement with participants in constructing theory. She also proposed three stages of coding: initial coding, focused coding, and theoretical coding.

This researcher adopted the methodology of Glaser, in favor of the Straussian School or Charmaz, primarily because the Glaserian method maintains a focus on its more pure origins and due to its more emergent nature over the more prescriptive edicts of the Straussian style or the Charmazian constructivist style (Stern, 1994). The main differences between classic or Glaserian GT and the other grounded theory methods are best summarized by its three "unique hallmarks" (Onions, 2006):

1. Many equally justifiable interpretations of the same data. The researcher must find the core variable (the main concern and its recurrent solution) as the first stage of the study, and delimit to the core variable.
2. To "get through to exactly what is going on in the participant's recurrent solution of their main concern," the researcher suspends his or her

preconceptions, remains open, and trusts in "emergence of concepts from the data."

3. Avoiding descriptive interpretations in favor of abstract conceptualizations by the method of constant comparison, which facilitates the discovery of stable patterns in the data (i.e., emergence of concepts).

Figure 1 below depicts the process of Glaserian grounded theory's emergent design. The emergent design, consistent with Glaser's (1992) ideas, relies on exploring a basic social process without preset categories. It emphasized openness and creativity in interpretation of data

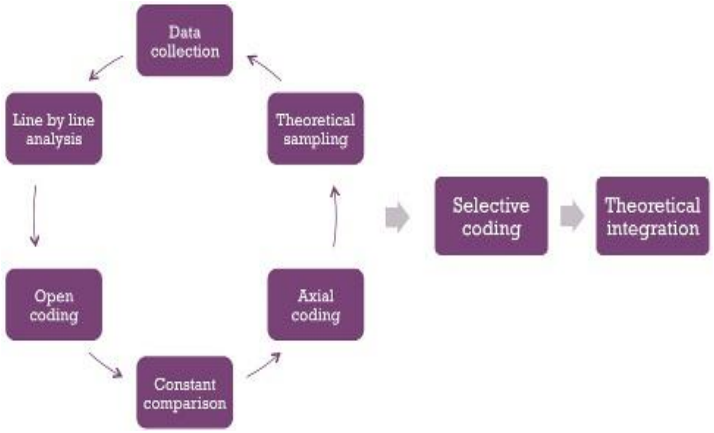

Figure 1. Medacier (2016) model for classical grounded theory method adapted from http://scielo.edu.uy/img/revistas/cleiej/v15n1/1a02f1.jpg

Issues surrounding weight are sensitive topics that elicit a complex set of attitudes and beliefs based on individual experiences and cultural practices. Therefore, the qualitative paradigm, undergirded by Glaserian grounded theory methodology, involving semi-structured interviews and a focus group, proves the most appropriate method for this study because it allowed the researcher to obtain perspectives and in-depth exploration of the knowledge, perceptions, and attitudes of obese Haitian-Americans

toward bariatric surgery and helped generate a theoretical framework that might be transferable to the management of obesity in that population. This type of qualitative groundwork is an important precursor to larger-scale studies and the design and implementation of interventions appropriate to obese Haitian-Americans.

Sample and Setting

Participants of a grounded theory investigation must be selected based on their experience with the social process being investigated. The sample size is determined by the data generated and their analysis. Sample selection seeks to collect rich, thick data, purposive and theoretical samplings are used to recruit participants. Charmaz (2012) theorizes that open, purposive sampling is the starting point of grounded theory and is based on predetermined inclusion and exclusion criteria for participation. The goal of this initial sampling is to maximize variations in experience and descriptions by using participants from contrasting milieu and background, thereby, achieving a heterogeneous sample of informants (Morse, 2012).

Theoretical sampling (Glaser & Strauss, 1967) began once concepts and theoretical categories were starting to form and continued throughout the iterative data collection and analysis. A characteristic of grounded theory is its sampling approach, known as theoretical sampling, which is directed at supporting theory development. Rather than being fixed in advance, sampling was adjusted in response to the emerging theory; additional data was be collected, for example, to allow a particular concept to be investigated in more detail. The principle is to confirm the research and theories, both sides of the issue must be sampled to gain a true picture of the phenomenon and to ensure credibility of the data. Hence, data cannot be unidimensional but must approach an issue

from all perspectives, thereby, providing a multidimensional view of the phenomenon and resultant theory. Data must be all inclusive to arrive at the created theories. This process gives more meaning to the theory. Without this theoretical sampling a condition of "lacuna" or hole in the research could exist (Campbell, 2011). Data gathered from this process of "hole filling" must also follow the aforementioned process of re-checking against the theory for theory validity. An explanation of the idea of theoretical sampling is that it refines, elaborates, and exhausts conceptual categories. Gibbs (2010) describes this theoretical sampling as the process when the researcher determines who should be interviewed and where the data should come from (Gibbs, 2010). Therefore, as the theory develops for the researcher, a conscious process of considering the data and determining other facets of the theory are explored. Gibbs explains that theoretical sampling is, like the theory, driven by the data to make its determinations. Purposive sampling is where you start, whereas theoretical sampling "directs you where to go" (Charmaz, 2012, p. 100). Theoretical sampling concludes when no new properties emerge from the data that are relevant to the theoretical categories (saturation).

In considering sample size, Creswell (2013, p. 157) recommends 20 to 30 individuals in order to develop a well-saturated theory, whereas, Charmaz (2012) explains that saturation occurs when gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of theoretical categories. This goal focuses more on the amount of quality, descriptive data than the number of people to recruit. This study occurred in two phases, Phase I reached saturation after twelve individual interviews with obese Haitian-Americans and Phase II comprised a focus group of five Haitian-Americans who had bariatric surgery to serve as expert to confirm the categories, core

category and model. Phase I consisted of a 60-minutes interview per participant, including 10 minutes to complete a demographic questionnaire and 50 minutes to conduct the interview. Most of the interviews occurred at participants' home, except for four that were held at a mutually agreed quiet room. The aim in choosing the setting, ideally, was to congregate participants in a mutually agreed upon and nonthreatening location with an atmosphere that would encourage interactive and dynamic dialogue and the sharing of views, ideas, experiences, and feelings. After each interview, the audio recording was transcribed by the researcher and a copy was emailed or personally delivered to each participant, within two weeks, for review, correction and feedback if necessary. This process allowed for data verification and for member check and trustworthiness. The interviews continued until theoretical saturation was reached, which occurred after the ninth interview, when gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of theoretical categories. However, three more participants were interviewed to confirm saturation.

Phase II of the data collection process was devoted to theoretical sampling. This phase took place in a quiet room that was mutually agreed upon by all five participants. The group consisted of five Haitian-Americans who had bariatric surgery at least 6 months prior to the interview. The interview lasted one and half hours, 15 minutes of which was allocated to complete the demographic questionnaire and the remaining 75 minutes was devoted to the interview. The purpose of this focus group interview was for verification of the categories and the model revealed from the phase I interviews and to completely saturate and confirm the core categories, leading to the substantive theory that emerged.

Access and Recruitment of the Sample

Upon receipt of approval from Barry University's Institutional Review Board (IRB) (see Appendix A), the researcher sought permission (see Appendix B) from owners and managers to post flyers (see Appendix C) in businesses and community centers where Haitian-American adults congregate (such as churches, beauty salons, barber shops, social organizations, social service offices, medical offices and clinics). The flyer included the study's information and the researcher's contact for interested participants to contact the researcher directly via telephone and e-mail. After a brief interview over the phone with each caller, those who met criteria for the purposive sample were invited to participate in the study and an appointment was made for the place and time of the interview. The recruitment of samples for this study was completed in two phases: Phase I was the purposive sample of twelve self-identified obese Haitian-American adults who met the inclusion criteria and at the completion of data analysis and saturation, phase II for the theoretical sampling was carried out and included five Haitian-Americans who had bariatric surgery at least six months prior to the interview. The researcher also used snowball sampling in both phases, whereby, interview participants were asked to refer others who met inclusion criteria.

Inclusion Criteria

Inclusion criteria for the first phase or individual interview of the study include as follows:

Each participant must

1. Be born in Haiti and living in the United States

2. Be 18 years of age or older
3. Be able to speak English or Creole
4. Self-describe as obese
5. Be willing to complete a one-hour face-to-face, or Internet/Skype interview with the researcher at a place and time that is convenient
6. Be willing to discuss one's knowledge, perceptions, and attitudes about obesity and weight loss surgery.
7. Be willing to have the interview audio tape recorded and transcribed
8. Be willing to review and return the transcriptions
9. Must know how to use the video conferencing method and access to a computer, email account, and telephone, if using Skype.

Inclusion criteria for Phase II focus group interview:

Each participant must

1. Be born in Haiti and living in the United States
2. Be 18 years of age or older
3. Be able to read and speak English and Creole
4. Self-describe as obese and have undergone weight loss surgery at least six months prior to interview
5. Agree to participate in a face to face, or via Skype group interview, lasting approximately 90 minutes at a place and time that is convenient for the group
6. Be willing to discuss their knowledge, perceptions, and attitudes about obesity and weight loss surgery with the researcher and the group
7. Be willing to have the interview audio tape recorded and transcribed

8. Know how to use the video conferencing method and have access to a computer, email account, and telephone, if using Skype.

Exclusion Criteria

Exclusion criteria for individual interview, phase I include:

1. Non-Haitian-American
2. Younger than 18 years old
3. Unwillingness to participate in interview
4. Unwillingness to be audiotaped
5. Individuals who participated in focus group interviews

Exclusion criteria for focus group interview, phase II include:

1. Non-Haitian-American
2. Younger than 18 years old
3. Does not speak and write English
4. Does not understand Creole
5. Has not had weight loss surgery
6. Unwilling to participate in group interview
7. Unwilling to be audiotaped
8. Individuals who participated in individual interviews

Ethical Considerations/Protection of Human Subjects

Ethical considerations are an essential component in conducting an effective research study. This is particularly relevant in qualitative research, which involves direct and constant contact between the researcher and the participants. Protecting the rights and welfare of those who volunteer to participate in research is a fundamental tenet of

ethical research. The principles underlying the Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research (Belmont Report) (National Commission 1979) have served for over 30 years as a leading source of guidance regarding the ethical standards that should govern research with human participants in the United States. The Belmont Report emphasized that research must respect the autonomy of participants, must be fair in both conception and implementation, and must maximize potential benefits while minimizing possible harms. However, further oversight was needed to keep up with the fast growing research industry; therefore, The National Bioethics Advisory Commission (NBAC) was established by Executive Order 12975, and signed by President William Clinton on October 3, 1995. This commission proposes 30 recommendations for changing the oversight system at the national and local levels to ensure that all research participants receive the appropriate protections. The adoption of these recommendations, which are directed at all who are involved in the research enterprise, not only leads to better protection for the participants of research, but also serves to promote ethically sound research while reducing unnecessary bureaucratic burdens (National Bioethics Advisory Commission, 2001).

The proposed research was presented at the Institutional Review Board (IRB) of Barry University and was not started until approval was received (see Appendix A). Upon approval from the Barry IRB, the researcher ascertained that the rights and confidentiality of the participants in this study were protected during each step of the process. At the onset of each interview, after proper introduction and ice-breaker, proper written, voluntary informed consent document was received from each participant, including consent to the use of digital audio recordings. The informed consent form

provided clear information regarding participant status, aim of the study, type of data, nature of the participants, risks and benefits, compensation, voluntary status, right to withdraw at any time, and contact information for the researcher. The consent form is kept separate from the interview data and demographic questionnaire. Confidentiality was further assured through the use of self-identifying pseudonym, restriction of access to information on the principal investigator's password-protected personal computer, and research findings being reported using participant pseudonyms. Recorded data will be kept until the study is transcribed and printed, then, it will be destroyed by the researcher. All participants' information-transcriptions, voluntary informed consent forms and demographic data sheets obtained during the research process will be held securely in locked boxes and on a password-protected personal computer in researcher's home office indefinitely.

The participants were informed that this study offers no direct benefit to them, and there is no known risk associated with participating. However, at any point during the interview, the participant may ask to suspend the interview, refuse to answer any question(s) or ask to refrain from recording portions of the interview. There will be no penalty resulting from not continuing the interview. A $10 Visa gift card was given to each participant as a token of appreciation. During publication of the results, the findings will be disseminated in an aggregate form through poster and podium presentation, as well as through newspaper and journal articles, but no identifiable traits that can reveal participants' identity will be used in order to protect their confidentiality. Lastly, participants were informed of their right to receive the results of this inquiry and are provided complete instructions on how to access this information by this researcher.

Data Collection Procedure

Grounded theory can involve multiple data collection methods including in-depth interviews and observation, as well as document analysis, offering the possibility of triangulation of sources and aiming to gather rich data that get beneath the surface of social and subjective life (Charmaz 2014). Grounded theory is primarily associated with qualitative data, although Glaser and Strauss (1967) also referred to the use of quantitative data in their original text. In grounded theory, data collection and data analysis occur simultaneously (Glaser, 1967). The researcher must have the ability "to step back and critically analyze situations, to recognize and avoid bias, to obtain valid and reliable data, and to think abstractly" (Strauss and Corbin, 1990). The researcher, who is Haitian-American and fluent in English and Creole (written and verbal), personally interviewed all of the participants and performed the verbatim transcriptions and translations. The transcripts were back-translated by a Haitian-American who is fluent in English and Creole and further verified by the dissertation committee chairperson who is also fluent in English and Creole.

Following approval from Barry University's IRB, data collection commenced. Flyers were posted in various Haitian-Americans community sites that have agreed to allow posting and/or distribution. The purposive sampling started with Haitian-Americans who contacted the researcher and expressed interest in participating in the study. Those who met the inclusion criteria received a full disclosure of the study and were asked to sign the voluntary informed consent, on a first come first serve basis. They were given option for face to face or Skype interview; all chose face to face interview. An appointment for the face to face interview with the researcher was set up at a mutually

agreed upon safe and convenient place and time for both the participant and the researcher. During the interview for data collection, the audio recording device was placed on a table or desk near the participant to ensure clear recording of the interview.

In phase I, each individual interview lasted approximately 60 minutes, which included 10 minutes to complete the demographic questionnaire and 50 minutes for the interview. Five interviews were conducted in English, two in English and Creole and five in Creole. At the start of each interview, the researcher welcomed and thanked the participant, explained the purpose of the study, clarified any questions about the study, reviewed the interview procedure, sought permission for interview recording, and obtained the voluntary, informed consent. The signed consent form with the participant's name is kept separately from the demographic questionnaire and data transcriptions, in lock boxes in researcher's home office and password-protected personal computer indefinitely. A $10 Visa gift card was given to the participant as a token of appreciation. The participant was instructed to choose a pseudonym to ensure anonymity. The pseudonym is used on the demographic questionnaire and all other data forms. The participant was reminded that he or she can refuse to answer any question without any fear of penalty and may decline to participate at any point, and the interview process would be graciously terminated, and he or she may still keep the token of appreciation. The participant was informed that any information provided during the interview will be kept confidential to the extent permitted by law.

During phase I, a semi-structured, individual interview format, using open-ended questions (see Appendix F) was utilized to generate data from the participant's social context of obesity and bariatric surgery. The interviews were audio recorded. An

interview guide was used to stimulate discussion, however, after each interview and data analysis, new questions were formulated to better understand and elaborate on evolving categories. At the end of every interview, the researcher thanked the participant and offered him or her opportunity to ask questions, make additional comments, and/or express concerns. The researcher transcribed verbatim the data from the individual interview, added field notes and memos to ensure rigor in the study. Each transcription was labelled with participant's chosen pseudonym, then sent to participant via email or personally delivered for confirmation of the accuracy of the transcribed data and member check.

Data collection and analysis continued simultaneously throughout Phase I, until saturation was reached and a basic social process started to emerge after the ninth interview. For confirmation of data and categories, three more interviews were conducted (Glaser, 1978). The sampling became more selective with each interview "along the lines of the focus on the central issue of the emerging theory" (Glaser, 1978, p. 46). Using the logic of grounded theory, before subsequent interviews, prior transcript was coded and analyzed as it was completed. Transcript was read, recoded, and reanalyzed using constant comparison. The results were compared with the first coding, hoping that repeated coding yielded the same results and established consistency of the data (Glaser & Strauss, 1967). Coded data were checked for agreement (Miles & Huberman, 1994). Common themes were identified and recorded in the respondent's own words in theoretical memos. Emerging codes and categories were clarified with subsequent phase I participant and later the focus group. Using the constant comparative technique (Glaser & Strauss, 1967), codes were clustered into categories, categories into concepts and

concepts into theory. Participants in subsequent interviews further confirmed the emerging categories and provided additional data where necessary. The intended outcome of this process is a theoretical framework that will show the linkage of the categories and concepts. Interviews continued until all categories were saturated and no new data were emerging. This process led to theoretical saturation of the core categories and emergence of the theoretical sampling.

At this point, the phase II interview with the focus group took place. Two weeks prior to the meeting, each participant was given a copy of the categories and emerging core category and conceptual model to review and prepare for the interview. The interview was conducted in English, face-to-face with all five participants in a quiet room that was mutually agreed upon. The focus group consisted of five Haitian-American adults (two male and three female) who had bariatric surgery at least six months prior; it lasted approximately 90 minutes, including 15 minutes to complete the demographic questionnaire and the 75 minutes for the discussion. Prior to starting the interview the researcher welcomed and thanked the participants, explained the purpose of the study, clarified questions about the study, reviewed the interview procedure, requested permission to audio record the interview, and obtained voluntary, informed consent from each participant. A $10 Visa gift card was given to each participant as a token of appreciation. Two participants (**Duval and Ann**) refused the gift card, because “it was an honor for them to contribute to the study”. The participants were also reminded that they can refuse to answer any question without any fear of penalty and they could decline to participate at any point, and they will still keep the token of appreciation. The focus group participants were informed that due to the nature of group process confidentiality

cannot be guaranteed although every effort will be made to ensure confidentiality to the extent permitted by law. Each participant was asked to select a pseudonym of his or her choice to ensure anonymity and for easy identification by the researcher and to refer to themselves by the selected pseudonym each time they are speaking.

The semi-structured focus group interview started by using open-ended questions (see Appendix F), with additional questions intending to allow the group participants to describe meaning and essence and produce a rich description confirming the emerging theory from the individual interviews. Upon conclusion of the meeting, the researcher thanked the participants and reminded them that every effort will be made to ensure confidentiality. The researcher transcribed verbatim the data from the focus group interview. The data transcriptions was labeled "focus group" and kept with the questionnaires, separately from the informed consents, in locked boxes in researcher's home and password-protected personal computer.

The purpose of the focus group interview was to confirm emerging theory and clarity of the diagram that helps clarify the scope and direction of the theory (Charmaz, 2014). The focus group was asked to review the emerging theory for confirmation or to refute the researcher's interpretation. Trustworthiness was demonstrated when the members agree with the interpretation of the findings and the depicted conceptual model. Interview journals and field notes were kept throughout the entire process to describe the social interactions, and the context in which they occurred and were added to the interview after transcription. When the researcher and participants were convinced that a theory has been generated and is a reasonably accurate statement of the knowledge, perceptions, and attitudes of obese Haitian-American adults toward bariatric surgery and

the data are credible and confirmatory, the results were recorded and the research ended. Glaser and Strauss (1967) admonished that researchers should continue data collection until the point of data saturation.

Interview Questions

The process of interviewing during a qualitative study allows the researcher the opportunity to gain the perspectives of other individuals (Glesne & Peshkin, 1992). These authors relay how "the opportunity to learn about what you cannot see and to explore alternative explanations of what you do see is the special strength of interviewing in qualitative inquiry" (1992, p. 65). The researcher used the grounded theory approach to learn about the Haitian culture and obese Haitian-Americans by speaking with informants or members of the culture or group. Glaser (1967) emphasizes beginning the study with a general wonderment (an empty mind) or with neutral questions. Accordingly, vast amounts of data can be collected through the process of interviewing.

The individual semi-structured interviews began with a grand tour question followed by additional probing and open-ended questions to clarify or expound on specific perceptions and experiences and to obtain data about unstated processes or meanings (Glaser & Strauss, 1967). A list of guiding questions for the individual and focus group interviews is provided in Appendix F. The grand tour question for phase I interview was: What are your thoughts and opinions about obesity, surgery for obesity, and how it relates to your health? The interest is in gathering data about knowledge, perceptions, and attitudes of obese Haitian-American adults toward bariatric surgery in order to identify, develop, and relate concepts that prove theoretical relevance to generate a theory. In phase II, the researcher focused the group discussion on the specific themes

of research interest that developed from the individual data collection (Kvale & Brinkman, 2009). In addition to asking the focus group to expound on their experiences on obesity and bariatric surgery as a Haitian-American, the researcher used probing questions to develop or confirm the conceptual and theoretical categories generated from the individual interview data.

Back-translation from English to Haitian-Creole and then back to English was used for the consent form, demographic questionnaire and interview guide. This process is a recommended approach for instrument translation to ensure equivalent meaning (Hilton & Skrutkowski, 2002). It was completed between the primary investigator and another Creole native speaker and verified by the committee chairperson who is also fluent in English and Creole.

Demographic Data

Upon signing the informed consent, each participant was asked to complete a researcher-developed demographic questionnaire (see Appendix E), using their pseudonym on the form. Ten minutes was allotted to complete the questionnaire in phase I interviews and 15 minutes in the phase II interview, these times were included in the total interview times. The questionnaires were different for the two phases, but requested basic identifying information from participants that describe the study population. Participants for this study represented a variety of ages, educational background, settings, and income level. The reporting of this information is done in aggregate form and through the use of the pseudonyms. The questionnaires and the collected data are stored securely in a locked file in the researcher's home office and on researcher's password-protected personal computer.

Data Analysis

Data analysis in grounded theory was originally introduced by Glaser and Strauss in 1967 as a method of constant comparative analysis; they proposed that constant comparative analysis consists of "explicit coding and analytic procedures" (p. 102) and suggested the following four procedures of data analysis: (a) comparing incidents applicable to each category, (b) integrating categories and their properties, (c) delimiting the theory, and (d) writing the theory (p. 105). This involves the researcher moving in and out of the data collection and analysis process. This back and forth movement between data collection and analysis is also called iteration, grounded theory research involves multiple iterations. The process begins with the researcher asking a series of questions designed to lead to the development and generation of the core category or basic social process regarding some aspect of social life, in this case, the critical factors that influence obese Haitian-Americans toward bariatric surgery. These generative questions led in identifying the purposive sample or the initial sample of people to observe and talk to (e.g. obese Haitian-Americans or personal experience with obesity).

This iteration process allowed the researcher to begin to develop codes and categories that eventually led to the basic social process regarding the main question of this inquiry. Based on the initial analysis, the researcher decided how next to sample (e.g., speak to Haitian-Americans who are obese and/or who had bariatric surgery), this is the theoretical sampling. This process of continually collecting and analyzing data and engaging in theoretical sampling are critical features of the constant comparative analysis that Glaser described. The cycles of data collection and analysis continued until no new insights or new dimensions to categories were identified. This is the point of theoretical

saturation. Glaser (1978, 1992) suggested two stages of coding: substantive coding (consisting of open coding and selective coding) and theoretical coding.

Open Coding

Open coding is where the researcher begins to segment or divide the data into similar groupings and forms preliminary categories of information about the phenomenon being examined. According to Glaser (1992), open coding is the initial stage of constant comparative analysis. Depending on the type of data, codes can be generated through line-by-line analysis, closely examining phrases or words, sentence by sentence or paragraph by paragraph analysis, and breaking down of the raw data. The researcher is conceptualizing the data by comparing incident to incident. The concepts emerge when there is underlying uniformity or pattern within a set of descriptive incidents. Glaser maintained that whereas concepts are the basic unit of data analysis in grounded theory methodology, conceptualizing the data is the first step in grounded theory analysis. He further reiterated that conceptualizing or breaking down the data does not mean taking apart a single observation; rather, it means comparing incident to incident when there are no concepts and then incidents to concepts when the concepts emerge. Table 3 depicts an example of the open coding of paragraph by paragraph analysis from the current study.

Table 3

Open Coding

Participants	Narrative	Open Coding
Elizabeth	So obesity is viewed, like you know, here in the U.S., the more slander you are the healthier you are, the better you look. In our culture the	Cultural norms/Acceptance

(Table 3 continues)

Table 3 continued

Participants	Narrative	Open Coding
	bigger you are, the more beautiful you are, the more attractive you are. So, definitely a lot of Haitian women will go build more toward the obesity side versus the thinner side because it attracts more men in general and they feel more like… So that's the reason why obesity is something that is a positive view in my culture than other culture.	
Red	I think obesity is accepted in the Haitian culture, even they push it, cause, if you are too skinny it's a problem, because, the thicker you are the better off you are in their eyes. Better off in terms of financial status and everything. So I guess their understanding is that if you are thick and you are plum that means you have the means of feeding yourself and your family like it basically shows riches, I guess.	
Field notes	The body language of the participants emanated a sense of pride, as they were conveying this information	

Selective Coding

In selective coding, the researcher organizes and integrates the categories and themes in a way that articulates a coherent understanding or theory of the phenomenon of study. As codes and concepts emerge, the researcher begins to selectively code the codes and concepts that have emerged from the raw data. This process involved constant comparative analysis of more incidents to incidents and incidents to concepts, while looking for patterns. Patterns of many similar incidents are given a conceptual name as a category, and patterns of the categories that are not similar are given names as properties of categories. The researcher also interchangeably compares other incidents to other concepts and vice versa. Saturation is reached when there is a constant recurring pattern among the interchangeable indices. During this process, the researcher constantly asked two formal questions: (a) what is the chief concern or problem of the people in the

substantive area and what accounts for most of the variation in processing the problem? b) What category or what property of what category does this incident indicate? (Glaser, 1992).

Theoretical Coding

Theoretical coding is the process of theorizing the relationships among substantial codes (see Figure 2), it is the final step toward coding for the emergence of a core category. According to Glaser (1978), theoretical codes help to give an integrative scope, broader picture, and new perspective to the emerging theory. Theoretical coding for this study began at the end of the substantive coding when the data had been categorized. In order to properly code the codes and saturate the categories, more data were collected and the constant comparative analysis continued by comparing more incidents to the categories and the categories and their properties to each other. As this process continued and the linkages emerged, more of the categories were reduced, and some categories became part of another category. The categories were continuously analyzed, compared, and contrasted as more data were collected to densify, saturate, and ascertain that no new categories were formed.

In theoretical sensitivity, Glaser (1978) wrote that "memos are the theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding" (p. 82). Memoing is a constant process that began simultaneously with the start of the first data coding. Theoretical memos of the researcher's reflections, thoughts, conflicts, and interpretation of data were continuously written during the entire coding process to track theoretical development. Table 4 depicts an example of the theoretical coding from the current study.

Table 4

Theoretical Coding

Category	Example
Determining (*Education and Socioeconomic*)	AB commented: I like to educate them if they are overweight; they got to know the risks and benefits of the surgery. You have to tell them about it. But we got to talk about it, try to educate people about the lifestyle, about diet, and about the surgery. Djoubi stated: For some people it's not their fault, the little money that they have is not enough, especially if they have many children. So instead of eating salad, it's more economical to cook rice. They keep the same custom from Haiti in cooking lots of rice and turkey wings. So yes, all of these things contribute to the obesity in the Haitian population. Their economic situation force them, like the proverb say:" sa ou pa vle pile ak pye, ou manyen ak men" (What you don't want to step on with your feet, you touch with your hand), when you don't have enough money to buy what is good, you take whatever is the cheapest
Memoing (5/17/2017)	The participants often refer to "they" (the other Haitians Americans), when speaking about the factors and barriers to obesity and constantly compared Haitians living in Haiti with the ones in the U.S.

In summary, the grounded theory data analysis is a systematic process of sifting and arranging all information obtained from interview transcripts, field notes and other material collected to increase understanding of the data and to enable the presentation of

what have been discovered (Bogdan and Biklen, 2007). Miles and Huberman (1994) asserted that the areas of reducing the data into manageable units and coding information are integral parts of the analysis process. Activities, happenings, or events in the raw data are treated as indicators of some phenomenon, which are then given a conceptual label, called a code. As analysis continued, the researcher looked for other instances in the data that seemed to be examples of the same phenomenon and coded them accordingly. The coded concepts form the building blocks of the emerging basic social process and during the analysis process, became progressively more numerous and played a central role in the qualitative analysis.

Additionally, two threats that commonly occur in qualitative studies are the bias of the researcher and reactivity which is the effect the researcher has on the setting or the study (Bickman & Rog, 2008). One attempt to help minimize the effects of the researcher bias on the study is reflexivity. In being reflexive the researcher incorporated continuous awareness of reflecting, examining and exploring relationship through all stages of the research process (Conrad et al., 1993). Writing theoretical memos is another strategy used to record thoughts on the nature of the phenomena, relationships between categories, codes, and existing theoretical models. Furthermore, the researcher remained vigilant by remembering Charmaz' edit (2006) that constant comparison can aid precision in the development of concepts and also guard against researcher bias by continually challenging concepts with fresh data, by producing large quantities of theoretical memos, linkage suggestions, and finally, a model that helps to describe and explain the data. The end product of all this analysis is the production of a fundamental core category that is completely saturated and lends itself to further evolution.

Research Rigor and Trustworthiness

Although it is difficult to prove absolute exactness of qualitative research, triangulation (Kolb & Hanley-Maxwell, 2003), and the processes of credibility, dependability, confirmability, and transferability within the research (Guba & Lincoln, 1981) have been identified as strategies that improve trustworthiness. Attention to these four components of trustworthiness produces the rigor, integrity and competence of the research. Further, goodness of the qualitative research calls for critical attention to situatedness, trustworthiness, and authenticity during the research process (Tobin & Begley, 2004). Therefore, establishing trustworthiness is a major factor in accurately reflecting the integrity of this research project (Glesne & Peshkin, 1992) and the ensuing paragraphs will definite how rigor and trustworthiness were established in this research.

Credibility

Beck (1993) viewed credibility in how vivid and faithful the description is to the experience lived. When this occurs, the insight is self-validating and others will see the text as a statement of the experience itself (Husserl, 1970). Lincoln and Guba (1985) described the goal of credibility as demonstrating that the inquiry was conducted in a manner to ensure the topic was accurately identified and described. To that end, the use of in-depth descriptions of the participants' complex experiences and interactions were embedded in the data and the final text. The use of a decision trail which documents rationales, outcomes, and evaluation of all actions and the prolonged, persistent engagement with the data, further facilitated the credibility of the research. In grounded

theory, the credibility of the theory, or verification, is derived from its grounding in the data and can be improved by basing the research on multiple comparison groups.

The researcher implemented several of the techniques outlined above to establish the credibility of this study. It began with the use of twelve individual interviews comprised of a purposive sampling of Haitian-Americans to saturate the categories. After transcription of the initial interviews, the transcribed data were given to the participants within 2 weeks for member checking to ensure that the transcripts and initial coding of the data represented the participants' expressed views. During this time, no new questions were asked; however, the participants were given the opportunity to expand on the information given previously. This process assisted the researcher in getting richer and fuller data, as well as clarification and verification that the transcribed data accurately represented participants' views. This researcher also spent extended time in the field—conducting multiple interviews, keeping field notes, and observing participants to further maximize and enhance the richness of the data. Additionally, a focus group was used as theoretical sampling to review the summary of the research findings and to verify the fit of the emergent basic social process to their understanding of knowledge, perceptions, and attitudes of Haitian-Americans toward bariatric surgery. Finally, this novice researcher also relied on the dissertation committee for feedback on the emerging concepts and data interpretation.

Confirmability

Confirmability refers to maintaining neutrality and ensuring that the study findings are a result of informants' experiences and ideas rather than the preferences of the researcher (Shenton, 2004). Because the researcher is well versed in the Haitian

culture and is also obese, the researcher clearly bracketed predispositions and maintained a reflexive journal throughout the iteration process. To minimize the effects of researcher bias, triangulation of data was maintained through the individual interviews, the focus group interview, and random encounters with participants in the settings, keeping memos, and glancing at the literature.

Dependability

Dependability of the study is paramount because other researchers may want to repeat studies of interest, therefore, dependability is achieved when a research study within a similar context, with the same methods, and similar participants is repeated and the findings are similar (Shenton, 2004). For this reason in this research, the intended processes of the study are reported in detail to allow duplication of the study within the same context and with the same participants and setting to produce similar results. A reflective appraisal of the project is provided to demonstrate that the effectiveness of the process has been evaluated.

Transferability

Transferability refers to possibility of applying the study findings to a wider population and this can be accomplished by providing detailed steps of the research inquiry, allowing the readers to draw their own conclusion of applicability to their own situation (Shenton, 2004). The use of purposive sampling improves transferability and is described in detail. Additionally, a rich, thick description of the inquiry, including a thorough overview of the data within the context and a discussion of the sample, settings, and research process are provided to allow the reader to judge transferability. Proceeding with this strategy allows comparison of the proposed study with other samples.

Chapter Summary

This chapter presented grounded theory methodology as the research design that facilitated the exploration of the inquiry. Access and recruitment were presented as the methods to select the purposive and theoretical samplings of Haitian-American adults willing to share their knowledge, perceptions, and attitudes toward bariatric surgery. The setting of the study was also discussed. An in-depth discussion of the data collection procedures to meet the study's aim was deliberated. Ethical considerations that could affect the study were considered. A detailed description of the procedure for data collection and analysis informed by the grounded theory tradition was presented, using the constant comparative analysis. Finally, this chapter addressed how rigor and trustworthiness was achieved in this study by using memoing, member check, reflexivity and maintaining an audit trail. Chapter four will expose the results of the inquiry.

CHAPTER FOUR

FINDINGS OF THE INQUIRY

The purpose of this qualitative, Glaserian (classic) grounded theory study was to generate a substantive theory on the critical factors that influence knowledge, perceptions and attitudes of obese Haitian-American adults toward bariatric surgery. A substantive theory will assist in building solid platforms for the care and management of Haitian-American adults who are faced with the challenging and life-threatening condition of obesity. It can also increase the current body of nursing knowledge and care for this population. The previous chapter provided an in-depth look at the methods used in this study and discussed the proposed research design, research strategies and rigor. Chapter Four will describe the study sample, review the results of the data collection, including codes, and finally draw a connection to reveal the discovered basic social process.

Overview

This study embraced the classical (Glaserian) grounded theory method outlined by Glaser (1992) which believed that the qualitative method of inquiry is necessary when there is a need to uncover the nature of people's actions, experiences, and perspectives about which very little is known. Furthermore, Glaser does not advocate full description but maintains that through a constant comparative analysis of the data, the use of field notes, the conceptual abstraction using code and memos, and the theoretical sampling, a substantive theory will emerge from the data. Twelve participants were interviewed individually during Phase I of the data collection process. Initial line-by-line coding

splintered the interview data to reveal implicit processes, actions, and meanings of the participants' experiences with obesity and bariatric surgery. The entire coding and analysis process was surrounded by a zigzag process of constant comparative analysis, where the researcher constantly compared codes to incidents, incidents to codes, codes to codes, incidents to incidents, and incidents to categories while constantly inquiring what is this a study of and/or what property of what category does this incident/code represent (Glaser, 1978).

During the open coding process, individual interview data were broken down through line-by-line, sentence-by-sentence, and paragraph-by-paragraph analysis and conceptualized. Words and phrases were analyzed and constantly compared. The researcher conceptualized the data by constantly comparing incidents to incidents. These conceptualized data pieces were used to generate codes. These codes were constantly compared and examined for similarities and differences. These codes further streamlined subsequent data collection and interview questions. Constant comparative methods were initiated with the first interview transcript comparing statements and line-by-line coding within the same interview and then between and among all subsequent interviews. This process of constantly comparing similarities and differences in the data provided insight into what kinds of data were needed from subsequent interviews. As more raw data were gathered, each data were coded and constantly compared to previous concepts, incidents, and codes for similarities and differences. As this was going on, in order to maintain theoretical sensitivity during the constant comparative analysis, the researcher was continuously asking the question of what category or property of a category does this indicate? What is this a study of? Finally, what are these data telling?

The researcher chose to pursue major conceptual categories grounded in the data. As comparative analysis progressed, certain major conceptual categories easily subsumed lesser categories, accounted for more data, and offered an understanding of the relationships between and among processes. The researcher remained sensitive throughout the analytic process by memoing personal assumptions and analytic speculations. Memos were generated immediately after the interviews to capture the researcher's immediate reaction and analytic thoughts and were later included in the interview transcript. They were also attached directly to thought-provoking initial and focused codes. As constant comparative analysis continued, many similar pattern concepts emerged, and this researcher began to selectively code the codes. Selective coding was done by a constant comparative analysis of more incidents to incidents and incidents to concepts. Finally, nine codes emerged from the data analysis: *identifying with a larger body size, identifying with Haitian dietary habits, identifying with Haitian exercise habits, education, socioeconomic status, fear of surgery, view of bariatric surgery as extreme and last resort, revealing, and advocating.* Conceptualization of these codes led to abstraction, and as abstraction continued and codes were completely saturated, some codes became interchangeable. These similar concepts were further grouped together and given conceptual names as categories. These categories were abstractions of what was happening in the data and what the data were saying. These codes that shared specific attributes and properties were clustered together and gave rise to three categories: *identifying (identifying with a larger body size, identifying with Haitian dietary habits, identifying with Haitian exercise habits); determining (education, socioeconomic status, fear of surgery);* and *understanding (view of bariatric surgery as*

extreme and last resort, revealing, and advocating). Finally, the emerged categories coalesced into the core category that illuminated the basic social process of *acquiring knowledge.*

Prior to data collection, IRB approval was obtained from Barry University (see Appendix A). Participants for Phase I were recruited via three methods: (a) posting flyers in common places where Haitian-Americans congregate (appendix C); (b) through personal invitation by the researcher; and (c) snowball sampling. Sampling was initially purposeful and consisted of adult Haitian-Americans who met the inclusion criteria. As the interviews progressed, the sampling became more selective and theoretical. Each meeting was held at a place most convenient for the participant and conducive to the interview process. Each interview was audio recorded and subsequently transcribed by the researcher; field notes and memos were kept and added to the transcriptions after member checking. The transcription was emailed or hand-delivered by the researcher to each participant within 2 weeks of the interview, for member checking and to ensure that the transcripts and initial coding of the data represented the participant's expressed views. During this time, no new questions were asked; however, the participants were given the opportunity to expand on the information they gave previously. This process assisted the researcher in getting richer and fuller data, as well as clarifying and verifying that the transcribed data accurately represented the participant's views, which added to the process' integrity and credibility.

At the start of the face-to-face, semi-structured interview, participants were provided with an explanation of the research and intent of the individual interview. Participants were informed that confidentiality will be maintained to the extent of the

law, and further instructed to select a pseudonym, to be used for publication and dissemination purposes. Next, each participant signed an informed consent and received a $10 Visa gift card as a token of appreciation for their time and participation. They were informed that they were free to leave the meeting at any time. The participants completed a researcher-developed demographic questionnaire (see Appendix E) using their chosen pseudonym. Then, the interview commenced, using open-ended questions (see Appendix F) to encourage participants to expand and open up about their knowledge, perceptions, and attitudes toward bariatric surgery. The interview questions were further refined after each interview analysis to focus on the emergent conceptual categories. This process continued until the researcher felt that saturation was reached by the ninth interview, when no new data were being elucidated. The researcher conducted three more interviews to confirm data. Phase I data were analyzed, coded, conceptualized into categories until a core category that illuminated the basic social process and a conceptual model emerged.

Then, Phase II of the study with the focus group commenced. Recruitment of the focus group participants shifted from purposeful to theoretical sampling in order to elaborate, refine, and confirm the conceptual categories, core category and conceptual model that emerged from the Phase I interviews. Five participants, who met criteria, were selected, based on their history of having bariatric surgery more than 6 months prior to the interview and being Haitian-Americans, to form the focus group. The ensuing sections will provide a summary and narrative description of the individual (n = 12) and each focus group participant (n = 5).

Sample Description

A total sample of 17 participants (N = 17) from South Florida were interviewed for this study. They were divided into two phases, Phase I comprised a purposive sample of twelve (n = 12) Haitian-American adults who self-identified as obese. These participants were nine females (75%) and three males (25%). Individual interviews provided the data from which the codes, the conceptual categories, the core category and the conceptual model emerged. A researcher-developed demographic questionnaire was completed by each participant. This Phase I questionnaire collected the following data: country of origin, number of years living in the United States, age, gender, marital status, level of education, household income, weight, and whether participant and others think he or she is obese. This demographic data assisted the researcher in ascertaining the similarities and differences in the overall characteristics of the research participants. This information also helped to grasp the true and full meaning of the participants' experience and knowledge, as well as, to get as close as possible to the participants. In so doing, the researcher gained a better knowledge of the participants' situated contexts. Furthermore, this information was a way of enhancing the credibility of this study.

Phase II of the study comprised the focus group of five (n = 5) Haitian-American adults who underwent bariatric surgery six months or more prior to the interview. This focus group was made up of three females (75%) and two males (25%); each participant completed a researcher-developed demographic questionnaire which collected the following data: years living in the United States, the age, gender, marital status, income level, education level reached, height, weight, BMI, and type of surgery received.

Phase I: Individual Interview Participants

This section describes the characteristics of the 12 participants who participated in Phase I, as reported in the demographic questionnaire. Prior to requesting each participant fill out the demographic questionnaire, the researcher explained the details of the study and elicited a signed consent. Table 5 below lists, in aggregate form, the overall demographic information of the 12 participants. The Phase I group includes nine female (75%) and three male participants (25%). The researcher ascertained that all of the participants met inclusion criteria. They were all born and raised in Haiti, except for one participant who was not born in Haiti, but was brought back to Haiti in early infancy and raised there by her Haitian parents until her late twenties. They all verbally self-identified as being obese or in the process of losing weight to achieve a healthier weight. Five of the interviews were conducted in English and seven were conducted in Creole and later translated in English by the researcher who is fluent in both English and Creole and the translation was back translated by a third party who is also fluent in English and Creole.

Table 5

Demographic Characteristics of Participants in Phase I (N =12)

Characteristics	Range	N	%
Country of birth			
Haiti		11	91.67%
Other		1	8.33%
Years living in the US			
	0-10	1	8.33%
	11-20	3	25%
	21-30	5	41.66%
	31-40	3	25%

(Table 5 continues)

(Table 5 continued)

Characteristics	Range	N	%
Age	Under 18	0	0
	18-25	0	0
	26-40	2	16.66%
	41-55	6	50%
	>55	4	33.33%
Gender			
	Male	3	25%
	Female	9	75%
	Transgender	0	0
Marital status	Single	1	8.33%
	Married	5	41.66%
	Separated	2	16.66%
	Divorced	1	8.33%
	Widow	3	25%
Education			
	Less than primary	0	0
	Primary only	1	8.33%
	Some High school	2	16.66%
	Complete High school	1	8.33%
	Some college courses	4	33.33%
	Bachelor's degree or higher	4	33.33%
Income			
	Under $25,000	2	16.66%
	$25,000-$30,000	1	8.33%
	$31,000-$40,000	0	0
	$41,000-50,000	1	8.33%
	Above $50,000	8	66.66%
Current weigh			
	151-200	5	41.66%
	201-250	5	41.66%
	252-300	2	16.66
Obesity Rating			
Self		10	83.33%
Others		12	100%

The following paragraphs will report on the demographic characteristics of each participant that were extrapolated from the demographic questionnaires.

AB. AB is an over 55-year-old male widow who was born in Haiti and living in the United States (U.S.) for 33 years. He holds a master's degree and his household income ranges between $41,000- $50,000. His current weight is 199 pounds and stated he is in the process of losing weight to get healthier. **AB**'s interview was conducted in English. When asked if Haitian-Americans see obesity differently than other ethnicity, he replied:

> Yeah, in Haiti when you are big, it's a sign that you are rich. If you are obese, people think that you are a money guy, in Haiti that's the way they see it. But here when you are obese it's not something that is good.

Red. **Red** is in the age range of 26-40 years old. She is a married female who was born in Haiti, holds a master's degree, and has a household income greater than $50,000. She has been living in the U.S. for 32 years. Her current weight is 221pounds, and SHE considers herself obese. Her interview was conducted in English. When she was asked about her definition of obesity, she replied:

> I think obesity is accepted in the Haitian culture, even they push it, cause, if you are too skinny, it's a problem, because, the thicker you are the better off you are in their eyes. Better off in terms of financial status and everything. So I guess their understanding is that if you are thick and you are plum that means you have the means of feeding yourself and your family. Like, it basically shows riches, I guess.

Elizabeth. Elizabeth is a divorced female in the age range of 41-55 years old who was born outside of Haiti but grew up there from infancy until the age of twenty five, she later moved to the U.S. where she has been living for the past 28 years. She

holds a master's degree and her household income is more than $50,000. She currently weighs 243 pounds and considers herself obese. Her interview was conducted in English. When asked if she thinks Haitian-Americans see obesity differently than other cultures, she replied:

> Yes, definitely. In our culture the bigger you are the more beautiful you are, the more attractive you are, so definitely a lot of Haitian women will go build more toward the obesity side versus the thinner side because it attracts more men. They have a say, when you are slender or thin: you don't have enough meat on your body you need to put some meat in there.

Flash. **Flash** is a 41-55 year-old married male, born in Haiti, and has been living in the U.S. for 30 years, he holds a doctorate degree, and his household income is above $50, 000. His interview was conducted in English. He currently weighs 195 pounds, and when asked if he considers himself obese, he replied:

> Hum, I think my frame, ever since I was younger, I have very large frame, I am able to do all sorts of activities, athletic activities, hum, I believe that some of the standards that medicine or science use to calculate whether a person is overweight is based upon an Anglo population mostly and it doesn't take into consideration, Africans, especial males of African origin population who are by in large, wide frame big and tall and big-boned. …

Dodo. **Dodo** is a separated female who was born in Haiti; she has been living in the U.S. for 27 years. She is older than 55 years and completed middle school. She reported a household income of more than $50,000 yearly. She currently weighs 185 pounds and is dieting to lose weight. Her interview was held in Creole and later

translated by the researcher. When asked if the Haitian culture encourages obesity, she replied: "Me, I don't know about that, but yes it looks good when you are young, but once you start getting in age being overweight is not good for your health."

Noune. **Noune** is a female widow, born in Haiti and living in the U.S. for 11 years. Her age range is 41 to 55 years. She holds an associate degree and describes her household income of under $25,000. She weighs 196 pounds and considers herself obese. Her interview was conducted in English and Creole. When asked if she believes there is a high rate of obesity in the Haitian-American adults? She replied: "Yes, it's a problem because of the way we eat and how we eat causes us a big problem. Yes, I think there are many obese Haitians."

Johnny. Johnny is a 26-40 year-old, married male, born in Haiti and living in the U.S. for 15 years. He completed some college courses, and his household income is over $50,000. He weighs 281 pounds and considers himself obese. His interview was conducted in English. On the subject of obesity and its impact on health, he replied:

> Well, I would think so. But I wouldn't say entirely, because… I consider myself obese, of course, but yet I am healthy, my blood pressure is good, no diabetes, no cholesterol, no nothing. So, I think it can be both. So I guess the best thing really is to keep an active life, like exercise and stuff like this.

Djoubi. Djoubi was born in Haiti and has been living in the U.S. for 13 years. She is an older than 55 years old separated female. She completed high school and reports a household income of more than $50,000. She weighs 228 pounds and considers herself obese. Her interview was conducted in Creole and later translated by the researcher. When asked whether the Haitian culture encourages obesity, she replied:

"Yes, Haitian people like weight because they associate it with doing well, women also think they are more appealing to men, more men will court them."

Carline. Carline is a married female between the ages of 41 and 55. She was born in Haiti and has been living in the U.S. for 14 years. She completed some college courses and reports a household income of less than $25,000. She weighs 210 pounds and considers herself obese. Her interview was conducted in Creole and later translated by the researcher. When asked if she thought there is a large obese Haitian-American population, she answered: "We find a lot of obese Haitian people. For them, being big gives the appearance that things are going well for them. …"

Marg. Marg is a single, never-married female, who was born in Haiti and living in the U.S. for 29 years. She is between the ages of 41-55 years old. She holds an associate degree, and her household income is above $50,000. She weighs 280 pounds and considers herself healthy-obese. Her interview was conducted in Creole and later translated by the researcher. When asked on the subject of exercise among Haitian-Americans, she answered: "Haitians don't really exercise because in Haiti, they walked everywhere, the people who live in the rural areas, are not usually overweight, because they walk everywhere but those who live in the cities don't walk."

Nesi. **Nesi** is a female widow who is older than 55 years. She was born in Haiti and has been living in the U.S. for 36 years. She did not complete high school and her household income is above $50,000. Her interview was conducted in Creole and later translated by the researcher. She weighs 193 pounds and considers herself getting into a healthy weight through diet. When she was asked what she knows about weight loss surgery, she replied:

> Yes, I've heard of it. I heard there is a surgery for people to lose weight, but I don't know much about it. I would rather these people diet and exercise first. Eat more vegetables and salad, exercise, you can lose weight naturally that way and will not need to have surgery.

Preacher. Preacher is a married female, who was born in Haiti and has been living in the U.S. for 3 years. She is between the ages of 41 and 55 years old. She did not finish high school, and her household income is between $25,000 and $30,000. She weighs 215 pounds and considers herself obese. Her interview was conducted in Creole and later translated by the researcher. She was asked if she has heard of the weight loss surgery and answered:

> Well, I don't know its name, but I have heard of it and know someone who did it. Her stomach was this big, she was very fat with very big belly, she did the surgery, I don't know how they did it, if they removed piece of her stomach or what. For me I would not do it because I believe more in doing it the natural way.

Results

Using the iterative process of content analysis of the data gathered from the Phase I interviews, the researcher generated a coding scheme using *in vivo* and *gerund*. By applying the final coding schemes to all transcripts, common codes concerning obesity in general and bariatric surgery in particular were identified. The researcher achieved thematic saturation, or redundancy of codes, such that no new information was presented by the ninth individual interview. Three additional interviews were conducted to confirm that fresh data did not spark any new theoretical insights, nor reveal any new properties in the three conceptual categories. Data were coded and analyzed comparatively,

interpretively, and continuously. Sorting, diagramming, and integrating the researcher's analytic memos (written throughout the research process) enhanced the theoretical development. Finally, through theoretical sorting, memoing, diagramming, and the use of field notes, the conceptual codes were integrated and their relationships were established. This eventually led to the development of nine initial codes: *identifying with a larger body size, identifying with Haitian dietary habits, identifying with Haitian exercise habits, education, socioeconomic status, fear of surgery, view of bariatric surgery as extreme and last resort, revealing, and advocating.* Three conceptual categories were derived inductively from these codes: *identifying (identifying with a larger body size, identifying with Haitian dietary habits, identifying with Haitian exercise habits); determining (education, socioeconomic status, fear of surgery); and understanding (view of bariatric surgery as extreme and last resort, revealing, and advocating).* These categories were further selectively coded in terms of their properties and theoretically coded in relationship to each other to form the emerging core category or basic social process of *acquiring knowledge,* which explains what was happening in the data. The clustered codes, emergent categories, basic social process and conceptual model will be discussed in the next sections.

Conceptual Categories

The three categories of *identifying, determining, and understanding* were elicited from the coded data that helped explained the critical factors that influence the utilization of bariatric surgery among Haitian-American adults. The integration of these categories established the emergent basic social process of *acquiring knowledge*, which assists in answering the research questions of this inquiry regarding the knowledge, perceptions,

and attitudes of obese Haitian-American adults toward bariatric surgery. The following paragraphs offer a description of the emerged clustered codes, conceptual categories, basic social process, and conceptual model.

Identifying

Identity is a person's sense of who he or she is based on his or her group membership(s). It is a real, true and vital part of the person. Tajfel (1979) proposed that the groups (e.g., social class, family, football team, etc.) whom people belonged to were an important source of pride and self-esteem. Groups give a sense of identity: a sense of belonging to the social world (Tajfel & Turner, 1979). Haitian-Americans identifying with their cultural norms are the first category that emerged from the coded data. It addresses the important and prominent role the Haitian culture plays in the concept of obesity and utilization of bariatric surgery among Haitian-Americans. All of the participants acknowledged that the Haitian culture influences their perspective on weight, starting from infancy into adulthood. Three codes were clustered to form this main category: *identifying with a larger body size, identifying with Haitian dietary habits,* and *identifying with Haitian exercise habits*.

Identifying with a larger body size. The participants unanimously conveyed the category of *identifying with a larger body size* by agreeing that obesity is highly encouraged in the Haitian culture and even regarded as an object of beauty, sexual attractiveness, and financial stability. The participants clarified that identifying with this cultural norm helps Haitians to fit in. When pondering the effects of the Haitian culture on weight, participant **Red** noted: "I think obesity is accepted in the Haitian culture, even

they push it, cause, if you are too skinny it's a problem, because, the thicker you are the better off you are in their eyes."

Djoubi commented: "Haitian people like weight because they associate it with doing well, women also think they are more appealing to men, more men will court them, men like big women, women with big bottom".

Elizabeth observed:

> In our culture the bigger you are the more beautiful you are, okay. So obesity is viewed… here in the U.S., the more slander you are the healthier you are, the better you look. In our culture the bigger you are the more beautiful you are, the more attractive you are. So that's the reason why obesity is something that is viewed positively in my culture than other culture.

Flash, a male participant opined:

> If you interview most Haitian-American males, the word obese will not even come in their vocabulary, because from their point of view, from their cultural point of view, being skinny is not even... It's dismissible; it's something a Haitian male does not even want to think about. They want to be strong; they want to be big. And I believe that in the culture having a little belly is a sign of being well-fed, being opulent and whatever else. In the Haitian culture, if a woman is too skinny, it's not regarded as a sign of being healthy.

AB added: "Financially, people think you are better off. So I guess their understanding is that if you are thick and you are plump that means you have the means of feeding yourself and your family, like it basically shows riches."

Some of the participants further related identifying with a larger body size to body frame. In their opinions, Black people tend to have a larger body frame than other ethnicities; therefore, obesity in Haitians can be a natural occurrence, depending on how one acquires the weight. They argued that these people should not be viewed as obese and this obesity need not be changed or regarded as a risk factor for diseases. To that thought, **Preacher** noted:

> There are people that are big-boned, something that is hereditary, it's a natural weight that means the whole family is big, mother and father, you will see these people are bigger. If a person was born naturally big, even though you need to keep an eye on your weight so it doesn't get exaggerated, but to me this person should not think about having surgery to lose weight.

Flash commented:

> Ever since I was younger, I have very large frame, and I am able to do all sorts of activities, athletic activities. Hum, I believe that some of the standards that medicine or science use to calculate whether a person is overweight is based upon an Anglo population mostly and it doesn't take into consideration, Africans, especially males of African origin population who are by in large, wide frame, big and tall, and big-boned. …

AB added: "I was born chubby, myself, but I try, now, you know, I am more aware of the risk factor, and I want to live longer, so I am taking steps to correct everything.

Identifying with the Haitian dietary habits. Identifying with the Haitian dietary habits appears to play a vital role in the participants' view of obesity. Most of the participants agreed that the way Haitians cook and their love of their cuisine are

contributing factors to being obese. Although they agree that the cuisine itself is not obesogenic, as evidenced by the normal to underweight of Haitians living in Haiti, they agreed that the preponderance of carbohydrates and liberality of cooking oil that make up the diet can contribute to obesity in Haitians-Americans living in the United States (U.S.). This propensity is blamed on poor food choices, leading stressful lives, lack of exercise and the additives found in the foods here in the U.S. Therefore, the participants concluded that Haitian-Americans need to adapt healthier cooking and eating habits.

Dodo commented: "What makes Haitian-Americans bigger is eating a lot bread and rice. If you don't eat bread and rice you won't be obese. Personally, I used to love bread, but because I want to lose weight I stopped eating it."

Flash commented:

> I think the cuisine is in need of adjustment. In Haiti, people are able to burn more calories because of the way the urban areas are constructed, are structured, people walk a lot and people are more active.

Nesi added:

> Yes, too much oil, too much rice, too much white flour, like spaghetti, rice, beef, they can make you gain weight. Not too many people eat a lot of vegetables and salad. The majority of Haitians eat a lot of oil, they believe in that. They fry their foods. …

Marg commented:

> Here in the U.S., I don't know if it's the products that they put in the foods because in Haiti, especially in the rural areas, you don't really see obese people. It seems it's when you leave Haiti to come here, the way Haitians eat; they don't

> eat salad to help them. Although, they did not eat salad in Haiti, they were not obese. Haitians eat rice morning, noon and night. Too much oil in the foods also makes them sick. They eat a lot of oil and a lot of salt. When Haitians come to the U.S. they become obese it's because of the types of foods here, because the foods in Haiti were organic, fresh from the farms.

Elizabeth discussed her love of Haitian foods as a culprit to her obesity: "So I am obese. And as a healthcare provider, I already know that I am obese and the fact that I love my Haitian fat foods, I love fried food, I love my chicken, my griot (Fried pork), my rice, especially my cake so all those things contribute to my obesity. So yes, I am obese.

Identifying with Haitian exercise habits. Identifying with the Haitian exercise habits also contributed to the category of *identifying* with the Haitian cultural norms. The participants mentioned that exercising for weight control and to maintain health is not really a part of their Haitian culture, and they realize that for people living in the U.S., exercise is essential to maintain normal weight and health. However, they still find it hard to incorporate this routine in their life. The participants related that Haitians in Haiti, especially in the rural areas, walk a lot but out of necessity and that there are little other exercises that are part of the daily life. They conveyed that Haitians in the U.S., because they own cars or have readily available transportation, and are busy with their daily lives, do not voluntarily partake in exercise. The participants believe that culturally, they think of exercise as a necessity not a way of life and health, but there is a paradigm shift, where Haitian-Americans are trying to incorporate more exercise.

Flash commended:

> You see a lot of Haitian-Americans nowadays at the gym, walking at the park, on the bicycles trying to keep up with the rest of the populations; I think right now, it's shifting more toward traditional medicine than cultural traditions.

AB mentioned: "It's not in the culture, if you go to some of the neighborhoods, you see people walking every morning, if you pass by the Haitian neighborhood, nobody. They are not doing that."

Noune elaborated:

> Back in Haiti we were not obligated to exercise, we walked out of necessity but it helped with the health, because you perspired. Whatever distance you are going you walk, even when you don't feel like walking sometimes, you have to, because you don't have money to pay transportation, so you walk, you transpire and you move around, that helped the body.

Determining

In further analyzing and coding the data from the participants, three codes were clustered to form the category of *determining*. *Determining* derived from *education*, *socioeconomic status*, and *fear of surgery*. *Determining* relates to the conditions that predispose Haitian-Americans to obesity and shape their understanding and subsequent utilization of bariatric surgery. *Education and socioeconomic status are* two conditions of social determinants of health and according to Healthy People 2020, social determinants of health are conditions in the environments in which people live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks (Healthy People 2020, 2010).

Healthy People 2020 further advances that the prevalence of obesity is greater in lower socio-economic groups and attributes that to higher cost of healthy diets, safety concerns that prevent walking and other outdoor activities and greater social acceptance of excess body weight. The voices of the participants related these conditions to be contributing factors that influence the knowledge, perceptions and attitudes of obese Haitian-American adults toward bariatric surgery. Healthy People 2020 declares that it is well known that low education and socioeconomic status affect access to healthcare, therefore, impacts health outcomes. Furthermore, NIH has linked poverty and lower levels of education to obesity (NIH, 2006). The following paragraphs will unfold how *education, socioeconomic status,* and *fear of surgery* contribute to the category of *determining*.

Education. The World Health Organization (WHO, 2016) defines health education as any combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge or influencing their attitudes. Although Haitians attach a great value to education, access to education however, can be very limited in Haiti. UNICEF (2013) estimated the total adult literacy rate 2008-2012 for Haiti at 48.7%. This low literacy rate encompasses all levels of formal education and creates knowledge deficit and stagnation across the board. Most of the participants cited low education level as a major contributor to obesity in the general Haitian-American population and a barrier to bariatric surgery. The participants' views align with Healthy People 2020, which declares that more education is a predictor of better health (Healthy People 2020, 2010). The participants repeatedly commented that Haitian-Americans need better education to nullify the socio-cultural acceptance of

obesity and to understand obesity as a disease before they can accept bariatric surgery as an effective treatment modality. This lack of education was reflected on as an intrinsic social determinant of health related to access to formal education inflicted by low socioeconomic status. **Elizabeth** noted: "As a healthcare provider I can tell you that they do not relate obesity with any type of chronic health care condition."

AB commented:

> I like to educate them if they are overweight; they got to know the risks and benefits of the surgery. You have to tell them about it. But we got to talk about it, try to educate people about the lifestyle, about diet, and about the surgery.

Marg commented:

> Haitians need a lot of education, Haitians need that because if they have someone educating them and telling them about that often, they would finally say maybe I should try it and see if it really works, they can say let me try.

Flash added:

> If it is explained to anyone, including Haitians that a certain surgery would be beneficial to their health they will go ahead and do it. Of course, they will be meeting that with some kind of resistance, because they have to test it against their traditions, against their theologies and their belief, but in the end, reality will prevail.

Socioeconomic Status. Socioeconomic status can pose a significant obstacle to obesity treatment. As a social determinant of health, it impacts not only the understanding of health, but most importantly, the access and quality of health services. Lack of access, or limited access, to health services greatly impacts an individual's health

status. For example, when individuals do not have health insurance, they are less likely to participate in preventive care and are more likely to delay medical treatment. The participants were in disagreements as to the degree to which socioeconomic status affects access to healthy food, exercise, and having weight loss surgery, but for the most part, still viewed it as a factor.

Preacher stated: "I don't think Haitians will spend their money to lose weight; it's more common for them to spend money to gain weight. Only if the person's mentality and education is higher, maybe the person will accept."

AB commented:

> Sometimes they cannot buy healthy food, others don't know how to cook well, others have too many children, they have a lot of rice, that's why…it's cheaper for them too, they don't eat healthy, some of them, not everybody. If they don't have insurance, it's a problem; they cannot afford to do it (bariatric surgery).

Dodo commented: "Although socioeconomic status should not hamper people from eating healthy and exercising, but it is a great barrier to accessing healthcare and particularly bariatric surgery and all its demands."

Red commented:

> I don't think Haitian-Americans truly spend money to get healthy like maybe going to see a dietitian or getting a personal trainer to help or even consider surgery. I think money is the most important aspect of them not wanting to do the surgery.

Djoubi stated:

> For some people it's not their fault, the little money that they have is not enough, especially if they have many children, it's not enough. So instead of eating salad, it's more economical to cook rice. Their economic situation forces them, like the proverb say: " sa ou pa vle pile ak pye, ou manyen ak men" (What you don't want to step on with your feet, you touch with your hand), when you don't have enough money to buy what is good, you take whatever is the cheapest.

Fear of surgery. Fear of surgery of any kind became part of the category of *determining* because all the participants expressed concerns and fears about surgery and especially bariatric surgery. The participants articulated that for Haitians, surgery is something unnatural and a threat to life and, therefore, not something that is welcomed or tolerated, regardless that it can facilitate weight reduction and improve morbidity and mortality. They expressed fears and concerns about surgical risks, complications, and results. Their fears also stem from "horror stories" described by acquaintances that had undergone any type of surgery and particularly bariatric surgery. For instance, **Marg** described a coworker's experience with bariatric surgery:

> This coworker did it (she had bariatric surgery), and after she did it she had a bad reaction, she became anemic, she was constantly going to the doctor, going to the hospital. Then the doctor gave her a list of medications to take for the rest of her life. Therefore, I said I am not sick; I will never do this kind of surgery. Angela wasn't sick, but she ended up sick after the surgery. Yeah!

Nesi stated, "They are not doing the surgery maybe because they are thinking about the complications that can happen later." **Djoubi** added:

> For me, I am naturally fearful of anesthesia and surgery. I always say I will not correct God. I would rather activate my faith in God than have surgery. For me to consider such surgery, I would need more information regarding the complications and side effects. Recently it was on the news that a lady came from Orlando to have fat removed from her stomach and she ended up dead.

Dodo commented:

> Oh no! I am afraid of surgery. I am very, very afraid of surgery. I realized that everyone who had a surgery end up with a complication afterwards. Yes, everybody, yes it is surgery, as long as it's a surgery, they have a complication afterwards.

Carline mentioned:

> Some people are afraid, afraid of what can happen; they say whenever you cut your body there could be problem or death. But mainly they are afraid of dying and also they don't want side effects that will create problems for them later. They think they used to be healthy and now they went seeking for problem they did not have before, so they rationalize that God made them obese, so they are not going to correct God.

Understanding

John Dewey (1933) summarized the idea of *understanding* most clearly in his book, *How We Think*. Dewey communicated that *understanding* is the result of facts acquiring meaning for the learner: to grasp the meaning of a thing, an event, or a situation is to see it in its relations to other things: to see how it operates or functions, what consequences follow from it, what causes it, what uses it can be put to. In contrast, what

we have called the brute thing, the thing without meaning to us, is something whose relations are not grasped. The relation of means and consequence is the center and heart of all *understanding*. This definition expresses this third category of *understanding* because it explains the thoughts brought forth by the participants in trying to reconcile their knowledge of bariatric surgery to its supposed benefits. Over and over the participants relayed that their *understanding* regarding bariatric surgery is mostly negative hearsays, coupled with their inherent fear of surgeries in general; hence, their view is that this procedure is too extreme and a method of last resort. However, the narratives from the participants are heavily permeated with a desire to learn and know more about bariatric surgery from the voices of healthcare professionals and Haitian-Americans who have undergone bariatric surgery.

Three codes coalesced to form the category of *understanding: surgery is extreme or a method of last resort, revealing, and advocating*. This category of *understanding* offered a paradox where the participants exhibited a lot of reluctance about utilizing bariatric surgery but on the same token reflected an overwhelming desire to learn more about it. This appears to take place when the participants were confronting this disorienting dilemma of considering bariatric surgery as a mean to lose weight and be healthy. This process requires them to grapple with decisions, ideas, values, and beliefs, which to this point have fit their way of thinking or habit of behaviors. Hence, the process the participants utilized to transcend their culture and maintain health was revealed. It was found that participants' knowledge of bariatric surgery was based on stories they heard from relatives, friends, television, or social media. Many of these stories involved patients that suffered complications or death following surgery.

Paradoxically, the participants expressed a desire to learn more about this surgery and its effects from medical professionals. This paradox was shared by the following voices. **Marg** stated: "Someone told me, she has a list of medications she has to take for the rest of her life. I don't see how this surgery helps, if you have to take medications for life." **Elizabeth** mentioned:

> We will have to educate them number one. Education will be the first route to go about it. And the second thing is trying to convince them that by doing ABC this is going to be the outcome, and this is what's going to happen, that's how you are going to benefit from it. But I do believe with proper education, training and follow up, that's one of the major things.

Surgery is extreme or a method of last resort. The code that *surgery is extreme or a method of last resort* was coded in the category of *understanding* because it resonated among all of the participants, even the two who intimated they were ready to have bariatric surgery. For the participants, surgery would only be considered if the situation were life and death or if they were no longer able to take care of themselves. They express the belief that this method of weight loss was too extreme, therefore, not to be used until and unless all other options have been exhausted. **AB** said, "If it's very extreme for a person, so it will affect his overall health, I think they will recommend him to have this, yeah, but I think you will start first with diet, with exercise and that's it." **Marg** stated:

> For Haitians, it would require a lot, a lot of education. If they see that they were about to die, then they would consider it. It's not easy; it would be a last resort.

> I remember a friend of mine that's how she died; she said she would rather die than have the surgery.

Revealing. The participants further attributed their lack of understanding of bariatric surgery to the absence of disclosure from Haitian-Americans who have had the surgery and are not sharing their results and knowledge with the rest of the population. The participants expressed a desire for Haitian-Americans who had bariatric surgery to reveal themselves **"**as cultural role models" in order to help others better understand the surgery, and then they may accept to do it. However, the participants also voiced skepticism about Haitians revealing themselves, because, they rationalized that Haitians, for the most part, are very private, therefore may not readily disclose their surgery.

Red commented:

> This is not something they would openly discuss, but this not something that they frown upon either. Let's take an example, like if someone was to have the surgery, the older generation would probably say: what's going on with her? Look how skinny she's become? Again these people lack the understanding when it comes to health and what's right for you. But when you look at the newer generation, we are like, wow! I am so happy for you, you are looking great, and that's excellent.

Noune commented:

> Some people would talk about it, but many would not, like with my co-worker, everybody could see she lost weight, but she did not disclose everything that she did. But from the way she lost the weight so fast, we knew exercise is not enough to give her that result, she had to add something else to it.

Elizabeth, especially**,** was convinced that they would not reveal it:

> We are a people with a lot of pride, which means that we are not the type of person that will put our business out there, regardless, even if other people can benefit from it. Even though they have gone with the surgery some people will never share it with you, they rather would tell you oh no, I used diet, I used this.

Advocating. *Advocating* depicts the empowerment the study participants yearn as they seek to learn more and understand bariatric surgery as a viable treatment option for obesity. They expressed this advocating should come from Haitian-Americans who have undergone bariatric surgery, to speak out publicly for the purpose of reaching, teaching, and empowering obese Haitian-Americans. The participants also wish to hear from healthcare professionals who would provide the proper education regarding bariatric to obese Haitian-Americans. All 12 participants conveyed that they have been advised by their healthcare providers to lose weight via diet and exercise; however, only one reported that she was offered explanation to consider bariatric surgery.

Noune commented:

> I believe people who already did this surgery could make it a point to educate the rest of the community, a community service, to motivate others to help them. They can participate in different meetings and advertise, show pictures and allow people to ask them questions, so they can help others. So for people in our community to consider this surgery, others must tell them about it.

Johnny noted: "I don't know much about it. The only thing I know about it is some people do it for health issues, because it's really recommended for them. But, some people do it too because they want to look good."

Marg affirmed: “This surgery, I don’t know anything about it, but I know co-workers who did it. Therefore, I said I am not sick; I will never do this kind of surgery.”

In summary, the three categories of *identifying, determining,* and *understanding* emerged upon saturation and are grounded from the data collected and analyzed from the individual interviews. The constant comparison and iteration in analyzing the data made it apparent that the individual participants’ thoughts converged to the same conclusion albeit they came from many different angles. The conceptualization of the data made it possible to extract and recapitulate the narratives the participants were conveying regarding the factors that influence their knowledge, perceptions, and attitudes toward bariatric surgery. Therefore, out of these three categories emerged the basic social process of *acquiring knowledge* and a subsequent conceptual model that explains this process. Two weeks prior to the focus group interview, all of the participants were provided with an explanatory narrative of the clustered codes, the three categories, the basic social process of *acquiring knowledge* and the conceptual model (Figure 3) for their review.

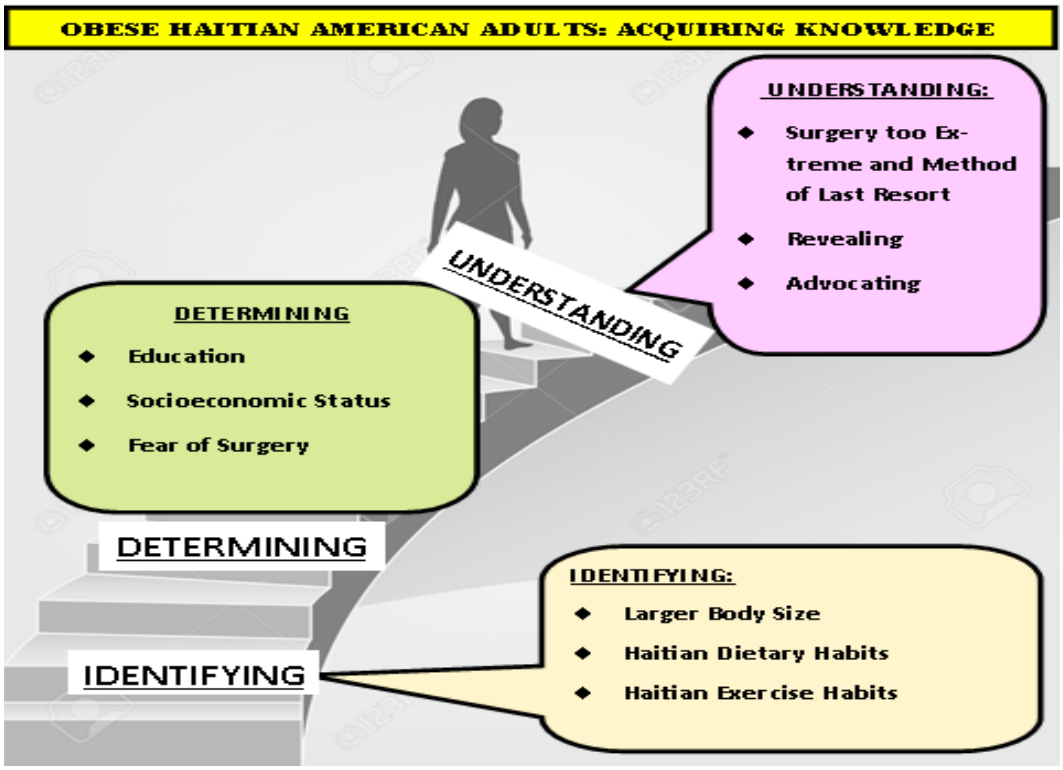

Figure 3. Conceptual Model of Acquiring Knowledge (Medacier, 2017).

Phase II: Focus Group Participants Characteristics

The purpose of the focus group was to confirm the conceptual categories, to elucidate on the merit of the proposed basic social process and the conceptual model that emerged from the data collection and analysis from the Phase I participants. Phase II participants (N = 5) comprised the theoretically sampled focus group interview with five Haitian-Americans who have received bariatric surgery greater than six months prior to the interview. The focus group interview was conducted at the completion of the Phase I individual interviews, upon data saturation of the conceptual categories, emergence of the basic social process, and completion of the conceptual model. The focus group interview was held with all five participants, physically present, in a mutually agreed quiet room. It was conducted in English, with some sprinkles of Creole terminologies that were later

translated by the researcher. The meeting was audio recorded and later transcribed by the researcher.

At the outset of the interview, the participants were thanked for their participation and were offered a $10 Visa gift card as a token of appreciation for their time. Two participants (**Duval** and **Ann**) kindly declined the gift card because they were "honored to contribute to the study." The participants were provided with an explanation of the research and intent of the focus group interview. They were informed they were free to leave the meeting at any time, and also due to the nature of the meeting, confidentiality of participants could not be assured. However, each participant was asked to maintain confidentiality of the group. The participants were further instructed to select a pseudonym to be used for publication and dissemination purposes and to use it while intervening during the interview process. Each participant signed an informed consent then completed a demographic questionnaire using their chosen pseudonyms. Table 4 below depicts, as provided in the demographic questionnaire and communication, the focus group's individual demographic characteristics, and a narrative description will follow.

Table 6

Demographic Characteristics Phase II Participants (N = 5)

Characteristics	**Range**	**N**	**%**
Country of Birth	Haiti	5	100%
Years Living in the U.S.			
	<10	0	0
	11-20	1	20%
	21-30	2	40%

(Table 6 continues)

(Table 6 continued)

Characteristics	Range	N	%
Years living in the U.S. (continued)			
	31-40	0	0
	>40	2	40%
Age			
	18-25	0	0
	26-40	0	0
	41-55	3	60%
	>55	2	40%
Gender			
	Male	2	40%
	Female	3	60%
Marital Status			
	Single	1	20%
	Married	3	60%
	Separated	0	0
	Divorced	1	20%
	Widowed	0	0
Education			
	Primary School	0	0
	High School	0	0
	Some College	2	40%
	Bachelor's or >	3	60%
Household Income			
	<$25,000	0	0
	$25,000-$30,000	1	20%
	$31,000-$40,000	0	0
	$41,000-$50,000	2	40%
	>$51,000	2	40%
Weight			
	151-200 lbs.	4	80%
	201-250 lbs.	1	20%
	251-300 lbs.	0	0
	>300 lbs.	0	0
Height			
		5'9"	
		5'	
		5'3"	
		5'11"	
		5'8"	

(Table 6 continues)

(Table 6 continued)

Characteristics	Range	N	%
BMI			
	Normal 18.5 – 25	0	0
	Overweight 25 - 30	2	40%
	Obese Class I 30 – 35	2	40%
	Obese Class II 35 – 40	1	20%
	Obese Class III > 40	0	0
Surgery Type			
	Roux-en-Y	0	0
	Laparoscopic Adjustable Banding	2	40%
	Sleeve Gastrectomy	3	60%
	Duodenal Switch	0	0
	Other	0	0
How Long Since Surgery			
	6 months-2 years	3	60%
	3-4 years	1	20%
	5-7 years	0	0
	>7 years	1	20%
Years of Obesity			
	Childhood	0	0
	Adolescent	1	20%
	Adult	2	40%
	All my life	2	40%

The participants of Phase II focus group were as follow:

Duval. Duval, born in Haiti, **is** an older than 55 year-old married male. He has been living in the United States of America (US) for 53 years. He completed some college courses and has an annual household income over $50,000. He is 5’9” and weighs 188 pounds (lbs.). By his account, he became obese as an adult after leading a very active and athletic military lifestyle. He had the laparoscopic banding procedure 8 years prior to the interview and is very

happy with the result, in spite of the occasional side effects of vomiting and abdominal discomfort.

Carm. Carm was born in Haiti and has been living in the US for twenty one years. She is a married female between 41-55 years old. She holds a bachelor's degree and has an annual household income of more than $50, 000. She is 5'0 and weighs 185 lbs. She has been obese all her life and had the sleeve gastrectomy procedure one year prior to the interview due to severe chronic health issues. She chose to have this surgery although she encountered opposition from her family.

Iris. Iris was born in Haiti; she has been living in the US for forty one years. She is a >55 years old, married female who holds a master's degree and has an annual household income of over $50,000. She is 5'3" and weighs 188 lbs. She has been obese all her life and had sleeve gastrectomy 7 months prior to the interview and is happy with the result so far.

Thobe. Thobe was born in Haiti and has been living in the US for twenty eight years. He is a 41-55 year old single male. He did some college courses and his household income is $25,000- $30,000. He is 5'11" and weighs 230 lbs. He has been obese since early adolescent and received the sleeve gastrectomy surgery 13 months prior to the interview.

Ann. Ann was born in Haiti and has been living in the US for twenty nine years. She is a 41-55 year-old divorced female. **Ann** holds a bachelor degree and has a household income of $40,009-$50,000. She weighs 180 lbs. and had the laparoscopic adjustable gastric banding procedure 3 years prior to the interview.

Ann reports that her obesity started in adulthood after the death of her mother and is a self-proclaim advocate for bariatric surgery.

Confirmation of the Result by the Focus Group

Two weeks prior to the meeting, each member of the focus group was provided (via email or in person) a copy of the conceptual categories, emerging core category and conceptual model to prepare and have an opportunity to think through the materials. On the agreed day and time of the meeting, the focus group engaged in a 90-minute, spirited conversation with no one person dominating the discussion; the group often directed questions and asked opinions of one another. Although there were some points of contention, mainly regarding the dietary and exercise habits of Haitian-Americans, the focus group agreed that these differences were more personal and out of the norm. Therefore, the focus group concluded that the Phase I participants' understanding was more in line with the Haitian-American culture. They reviewed and provided insightful confirmation of the codes, the three categories, conceptual model and the basic social process of Acquiring Knowledge that emerged from within the data. Each participant was afforded time to address each category. A summary of the focus group's interview is presented below.

Identifying

The focus group confirmed the three codes that made up the category of identifying by agreeing with the assessments of the individual interviewers. The focus group established that the Haitian culture plays a pivotal role in the perceptions and attitudes about obesity and its management, where the culture even encourages obesity. They further believe that these innuendos start in childhood and continue well into

adulthood. Moreover, the group acknowledged the idea that the Haitian diet can have a negative effect on weight and that the Haitian culture does not promote exercising as part of a healthy lifestyle. **Carm** stated:

> Yes, when you are skinny, they tell you, you need to eat some rice. But they are not fat, the majority of the Haitians in Haiti are not fat, it's encouraged but they are not fat. On the country side they eat healthy, they eat less meat and more vegetables. In the big cities they eat imported foods, but for Haitians here, they eat more rice and chicken. But myself, I was a very athletic person from childhood.

Thobe commented: "Yes the diet is full of carb and grease."

Iris added:

> I think identifying with a larger body size is on point, I agree with the findings. Haitian men usually don't see that their women need to lose a lot of weight, "maybe just a few pounds", nothing that would require surgery. I also want to add that portion size is also a problem, my parents taught us not to leave anything on our plates.

Determining

The Institute of Medicine (2003) defined public health as "what we as a society do to collectively assure the conditions in which people can be healthy." That certain conditions commonly referred to as social determinants—including access to affordable healthy food, potable water, safe housing, and supportive social networks—are linked to health outcomes. The unequal distribution of these conditions across various populations is must be addressed as a significant contributor to persistent and pervasive health

disparities. The theoretical group recognized the social determinants of health as contributory factors to the category of *determining* among Haitian-Americans and that they constitute a very important aspect of the obesity factors. Therefore, the focus group confirmed the clustered codes of *education, socioeconomic status and fear of surgery* that formed the category.

Thobe commented on the aspects of education and socioeconomic status, "Yeah! They don't know better. If they don't know, they don't know what to do. With the little money they have they just buy what they can afford." **Carm** opined, "So tell that person who is making a little bit of money to go to Whole Foods to buy groceries, they can't, they don't have money for that."

Iris chimed in:

> I agree in the category of *determining* for both *education* and socio*economic status* as social determinants of health for Haitians, because in the supermarket, what you are able to get is what your money can get you. Food is more organic in Haiti. As far as *education*, reading labels is hard and not widely understood.

Duval commented on the socioeconomic status:

> I understand that most of the Haitian community does not have that opportunity, but my insurance gave my doctor no problem. Without insurance, the surgery will be a lot of money, and if you go without insurance, you have to pay the amount.

Understanding

After much discussion, the focus group confirmed the category of *understanding* which was supported by the codes of: *view of surgery as extreme or a method of last resort, revealing, and advocating.* The focus group explained the category of

understanding as a lack of formal knowledge of bariatric surgery, an inherent fear of all surgeries due mainly to fear of suffering or dying, and therefore, bariatric surgery becomes a method of last resort. The focus group explained that the education level of many Haitian-Americans may precludes them from fully understand and know what bariatric surgery is. The focus group blamed this lack of knowledge on healthcare providers who don't readily provide obese Haitian-American patients with information regarding bariatric surgery. This point was clarified when only **Duval** declared that he was advised by his physician to pursue bariatric surgery, "My doctor educated me about it. He put me in a class once or twice a week to see people who had the surgery." The other participants of the focus group professed that they found out information about bariatric surgery on their own. The focus group also described reluctance and total refusal among their family and friends toward bariatric surgery. They intimated that this reluctance and refusal stem from their lack of understanding of bariatric surgery. Therefore, they explained that they were self-motivated to have their bariatric surgery.

Thobe commented:

> Myself, I wasn't afraid because this is something I wanted to do and I know it's going to work and it will be better for me. So I wasn't afraid. And my family was okay, but you know surgery is surgery, so there were some concerns. But they were there for me, after the surgery, they kept an eye on me.

Carm explained:

> I went to a meeting, I took a family member with me, when they were talking about what can happen, she only sees the complications, and she never sees the good part of it. Then she said no, I will not let you do that, then she went home

> and told everybody about it and everybody was against it. The day for my surgery, I signed up, three times I did not show up.

Iris commended:

> It was very difficult to approach my husband and family about it. I waited until it was close to my surgery to actually tell them they found a hernia that I need to repair and I will do the bariatric surgery at the same time. My husband agreed to the hernia surgery but did not see the reason for me to have bariatric surgery. It really discouraged me at first, but in the end, he took the time to come out to the hospital with me.

Duval stated: "My wife was worried. Although she went through her own surgery, she had a hysterectomy. But any surgery, you have to make a choice."

Thobe stated:

> I agree with that. I agree that people who went through surgery should share what they went through so they can help others to alleviate their fears. Like me, if it wasn't for that guy (participant was referring to an acquaintance he encountered after his bariatric surgery), I would never find out about bariatric surgery.

Carm summarized *revealing and advocating* as follows:

> You know what? A lot of Haitian people have the surgery, but because we are a secretive people, we are so secretive, that is why we haven't heard of it ... I can't eat a lot of rice, and you have to educate yourself. The surgery is not they cut you up and that's it, but it's a lifestyle change. Now you can't do the sugar, we get dumping syndrome, you start sweating, you want to vomit, you can't, and you

> don't know what's happening to your body. You have to learn, if you think it is worth it, go for it.

Duval added, "People need others to come alongside them, to help them make the decision. My doctor helped me with that, when he educated me and put me in the classes to meet other people who had bariatric surgery".

Ann corroborated the category by saying:

> Most likely Haitian will not come out and talk about it. Even the people that I coach, I witness them lying about having surgery. They will not let everybody know how they did it. I agree, if more doctors talk about it on radio TV, pamphlets, every clinic should talk about it, have information available. For me I don't care, even if you are doing interview, program invite me and I will come and talk about it.

The sentiments by the Phase I individuals that most Haitian-Americans would not reveal their surgery status was substantiated by **Iris**:

> I don't go out and tell people my business. I think it's a privacy issue. Even my uncle asked me what kind of diet I did; I said: zip my mouth diet. I did not speak to any Haitian-Americans who had the surgery either. Although I attended the required classes, I did not meet any Haitian-American who had the surgery. No, I would not talk about it.

The robust discussion and feedback provided by the theoretical sample that made up the focus group confirmed the three conceptual categories along with the clustered codes that supported them. The basic social process of *Acquiring Knowledge* that emerged from the categories and the conceptual model that explained the process were

substantiated by the focus group. The focus group agreed the codes supported the main categories accurately noting integration of the main categories and dimensions, which supported the theoretical basic social process. The basic social process of *acquiring knowledge* elucidated on the critical factors that influenced the knowledge, perceptions, and attitudes obese Haitian-American adults toward bariatric surgery. The subsequent sections will discuss the basic social process of *acquiring knowledge* and the theoretical framework used to describe the model will be presented and explored.

R**estatemen**t of **Rese**a**rch Que**stio**ns**

The coding process of constant analysis and iteration of the data developed into three main categories: *identifying, determining, and understanding*. These three categories concluded with the basic social process of *acquiring knowledge* that elucidated the four overarching questions of this study. The core category of *acquiring knowledge* emerged from the integration of the three categories of *identifying, determining, and understanding* that were induced from the data. The data revealed that these categories are all necessary components in answering the main research question: What are the critical factors that influence knowledge, perceptions, and attitudes of obese Haitian-American Adults toward bariatric surgery?

Through the comments of all the participants, the second question: "What processes do obese Haitian-Americans utilize to manage their obesity?" was answered. All the participants agreed that diet and exercise should be the primary methods to lose weight and that's what most Haitians ascribe to, more than diet pills, which they, paradoxically use frequently to gain weight. **Preacher** stated, "Yes exercise can help control weight. I take myself as an example, I walk, I walk, I do abdominal crunches,

exercise is very important in losing weight and it's also good for health. Exercise is very important." **AB** commented, "My diet, I try to eat healthy, I go to the gym."

The third question of perceived barriers to weight loss surgery among Haitian-American adults was answered through the categories of identifying and determining. Culturally, the participants' ascribed meaning of beauty, health, and wealth to being obese. Through the category of determining, they expressed their lack of knowledge about bariatric surgery, their inherent fear of surgery effects and lastly, they consider bariatric surgery an extreme measure or method of last resort. **Preacher** said:

> I don't think Haitians will spend their money to lose weight; it's more common for them to spend money to gain weight. But in general, it's not easy to find Haitians who will spend money to lose weight or have surgery. Some people who live in the U.S. now think differently depending on their educational level, they may choose to do it, but this is not the norm for Haitians.

Elizabeth commented:

> In our culture the bigger you are the more beautiful you are, okay. So obesity is viewed, like you know…, here in the U.S., the more slander you are the healthier you are, the better you look. In our culture the bigger you are the more beautiful you are the more attractive you are, so definitely a lot of Haitian women will go build more toward the obesity side versus the thinner side because it attracts more men in general and they feel more like, how could I say it? In our country they have a say, when you are slender or thin, they always say you don't have enough meat on your body you need to put some meat in there, so that's the reason why obesity is something that is a positive view in my culture than other culture.

The final question dealt with how the health belief of Haitian-American adults affects their knowledge, perceptions, and attitudes toward bariatric surgery. This question impinges on the previous question, where the participants view obesity as healthy, as stated above by **Elizabeth**, "In our country they have a say, when you are slender or thin, they always say you don't have enough meat on your body you need to put some meat in there."

Djoubi stated:

> Yes, in men, when they are big, they have big stomach, they are called "gwo don: Rich man," they say you got money. So these people think it's a compliment, they are so proud of that you can see them holding their belly and caressing it. But some men don't like to be obese either, because there are certain activities they cannot partake in, namely in the bedroom.

The research questions were answered through the rich and thick data that emerged from the individual interviews and confirmed by the focus group.

Evolution of Theory: Acquiring Knowledge

Acquiring knowledge became the basic social process that emerged from the open, axial and selective coding process. The data collection and analytic process revealed three conceptual categories and stemming from the clustered codes that eventually abridged into the core category or basic social process of *acquiring knowledge.* This core category represents the interactive processes that concomitantly determine the knowledge, perceptions and attitudes of obese Haitian-Americans toward bariatric surgery. Through the main categories and core category, the voice of the participants embedded within the data revealed that obese Haitian-Americans are prioritizing their

health over cultural expectations and their own fears, and illustrated a critical step toward understanding.

Human beings' self-motivation can be proactive and engaged or, alternatively, passive and alienated, largely as a function of the social conditions in which they develop and function (Ryan & Deci, 2000). Accordingly, the analysis and constant coding of the data collected from the obese Haitian-Americans during the individual interviews in Phase I and the confirmation of the categories and model by the focus group in Phase II placed focus on the social–contextual conditions that facilitate versus forestall the natural processes of self-motivation and healthy psychological development that is taking place among the obese Haitian-Americans. Specifically, factors from the data have been examined and found to enhance versus undermine intrinsic motivation, self-regulation, and well-being of these individuals regarding the inquiry. The findings have led to the three categories of *identifying, determining, and understanding,* which revealed the core category of *acquiring knowledge.*

The participants cited extrinsic and intrinsic cultural factors as reason for being obese and further enunciated these factors as barriers for not pursuing bariatric surgery. However, their human motivation, development, and individual wellness were noted to mature as data collection progressed. The core category of *acquiring knowledge* was then depicted by means of a spiraled staircase, as a metaphor of the efforts obese Haitian-Americans deploy to progress toward their desired goal to achieve their outcome of acquiring knowledge about bariatric surgery.

The conceptual category of *identifying,* at the lower right corner, initiates the path where cultural identifications serve as the foundation for the critical factors affecting

knowledge, perceptions, and attitudes toward bariatric surgery. The subcategories that formed this category (*identifying with a larger body size, identifying with Haitian dietary habits and identifying with Haitian exercise habits)* are cited within. The next steps up (middle box) involve the second conceptual category of *determining* with its subcategories of *education, socioeconomic status, and fear of surgery.* This category is represented by two factors that are social determinants of health (*education and* socio*economic status)* and one inherent cultural factor *(fear of surgery)*, which can be influenced to produce better determine health outcomes. The third and final category is *understanding; understanding* encompasses the codes of: *surgery is extreme or a method of last resort, revealing, and advocating*. It is placed near the top of the spiraled stairs to depict its importance among obese Haitian-American adults in attaining the desired understanding about bariatric surgery. A desire and thirst for understanding, with the help of Haitian-Americans who underwent bariatric surgery and education from health care professionals, are embedded within the category of *understanding*. The participants are questioning the status quo and testing the cultural norms, which propel them to the point at which this sample population is coming to terms with its health reality, seeking advice and advocacy, to understand bariatric surgery as an effective treatment modality. This moving upward ultimately leads the three conceptual categories to the basic social process of *Acquiring Knowledge.*

Chapter Summary

Chapter Four provided the results of the inquiry emanating from the data obtained and analyzed from the participants during Phase I and confirmed by Phase II participants. Phase I involved 12 individual interviews with participants. Their demographic

information is presented in aggregate format. Individual characteristics provided descriptive information to support the purposive and theoretical sampling of the participants. Phase II involved a focus group interview with five post-bariatric surgery Haitian-Americans. This group confirmed the conceptual categories of cultural identification, social determinants of health, reluctance and transformation that emerged with supporting data from the informed-voice of the participants during the individual interviews. These conceptual categories and contextual conditions formed the foundation of the basic social process of *acquiring knowledge.*

CHAPTER FIVE

SUMMARY ANDDISCUSSION OF FINDINGS

The purpose of this qualitative, Glaserian (classical) grounded theory study was to explore the critical factors that affect knowledge, perceptions, and attitudes of Haitian-American adults toward bariatric surgery. The social process of *acquiring knowledge* and the conceptual model (Figure 5) emerged to describe and answer the research questions:

1) What are the critical factors that influence knowledge, perceptions, and attitudes of obese Haitian-American Adults toward bariatric surgery?

2) What are the processes obese Haitian-Americans utilize to manage their obesity?

3) What are the perceived barriers to weight loss surgery in Haitian-American adults, and

4) How does the health belief of Haitian-American adults affect their knowledge, perceptions, and attitudes toward bariatric surgery?

Three main categories emerged that described the basic social process of *acquiring knowledge*: *Identifying*, that emerged from: i*dentifying with a larger body size, identifying with Haitian dietary habits,* and *identifying with Haitian exercise habits*; *determining*, emerged from: *education* and *socioeconomic status and fear of surgery*; and *understanding*, emerged from: *view of surgery as extreme and a method of last resort, revealing, and advocating*. Chapter Five presents: an exploration of the meaning of the study findings, an interpretive analysis of the findings, the significance of the study to

nursing, the study's strengths and limitations and concludes with recommendations for future scientific inquiry.

Exploration of the Meaning of the Study

From the beginning of this inquiry, many studies were cited that revealed gaps in the literature concerning the use of bariatric surgery among obese minority populations, in particular obese Haitian-Americans. Therefore, this study aimed to gain an in-depth understanding about the factors that influence knowledge, perceptions, and attitudes of Haitian-American adults toward the utilization of bariatric surgery. The classic Glaserian grounded theory method, as outlined by Glaser in 1965, provided the broad lens through which this meaning-making inquiry was examined. Its philosophical underpinnings of pragmatism and symbolic interactionism informed the research. Glaser believed that the qualitative method of inquiry is necessary when there is a need to uncover the nature of people's actions, experiences, and perspectives about which very little is known. This researcher's epistemology closely aligns with the classic Glaserian approach to grounded theory analysis, which does not advocate full description but maintains that through a constant comparative analysis of the data, the use of field notes, conceptual abstraction using code and memos, and theoretical sampling, a substantive theory will emerge from the data.

Pragmatism refers to theoretical perspectives that emphasize the practical giving primacy to usefulness over theoretical knowledge, the need to get out into the field, if the researcher wants to understand what is going on. This aspect was evidenced by the researcher going out into the participants' comfort zone, where they live to experience their reality. Pragmatists posit that understanding is based on consequences (Star, 2012).

James (1977) saw little value in modes of thinking that did not somehow make a difference in daily life. He defined pragmatism as the attitude of looking away from principles, categories and supposed necessities—and looking toward fruits, consequences, utility, and facts (James, 1977, p. 48). **Nesi** commented, "It's good to be thin. It is a very good thing when someone loses weight and I think this surgery will help Haitians a lot, not just Haitians but everyone who is obese, with weights over 200 pounds, that will help them." Glaser and Strauss (1967) recommended that researchers enter the field without preconceived or a priori ideas of the subject area, of what may be discovered, or where it may lead. This leads pragmatist researchers away from an a priori logic or philosophical analysis with pre-set categories to be verified by the study (Creswell, 2013, p. 28). Pragmatism by participants was demonstrated where nearly all of the participants, except for one, started the interview with a negative view of bariatric surgery and ended the interview with at least a willingness to give it a try if life or health depended on it.

Pragmatism supported the current study's intent to inductively develop a substantive theory on the factors that affect knowledge, perceptions, and attitudes among obese Haitian-Americans toward bariatric surgery. This leads to the emergence of the theoretical framework of Acquiring Knowledge, which emerged from the four categories that developed from the collected and analyzed data. The viewpoints of the obese Haitian-American participants' were considered as they discussed their obesity and their knowledge, perceptions, and attitudes toward bariatric surgery. The personal feelings attached to this subject were revealed in the participants' dialogue where they shared their interpretation and understanding of the topic.

Symbolic interactionism is often considered foundational for a study where meanings are being explored (Denzin & Lincoln, 2011). Three assumptions described by Blumer (1980) specific to symbolic interactionism are (a) meaning is attached to an object, event, or phenomenon, based on meanings held; (b) meaning is derived from and arises from human social interactions; and (c) meanings are modified from the interpretive process of the person (Crotty, 1998; Wuest, 2012). The examples subsumed from the data under the category of identifying provided ample evidence to explore the meaning in the symbolic interactionism. **Preacher** offered this example:

> In Haiti, when you are big, people will tell you "oh, I am happy to see you; things are working well for you". That's how it is. If they see a skinny person you will hear them say, hey girl, you are too skinny, you must do something about yourself. So this person will go and drink something call "Ti police", an appetite stimulant pill. In no time, the person will gain a lot of weight. So, that's basically how Haitian think.

Interpretive A**nalysis of the Findings**

Studies have called attention to pervasive disparities in the use of bariatric surgery, especially among minorities and these studies have suggested that the procedure is used inequitably according to race and socioeconomic status (Bowleg et al., 2011, Hammond et al., 2010; Pompper, 2010). However, these studies have been limited by a lack of population-based data to address these issues. Moreover, there is limited evidence in the research literature related to the unique categories of this study. This current study aimed to bridge this gap by studying obese Haitian-Americans, a subgroup that is very much neglected in research and literature. This research focused on exploring

the factors that affect knowledge, perceptions, and the attitudes of obese Haitian-American adults toward bariatric surgery. The major research questions for the study were related to the critical factors that influence knowledge, perceptions and attitudes of Haitian-American adults toward bariatric surgery. In so far, most of the literature regarding health disparities relating to obesity among African-Americans has suggested that lack of financial resources is the main barrier to weight loss surgical intervention. While this proved to be an accurate factor for the current study, the results indicated that cultural factors and social determinants of health take precedence as barriers to the utilization of bariatric surgery in the Haitian-American population. Other factors included inherent fear of surgeries, lack of understanding, and perceptions of bariatric surgery as extreme and a method of last resort.

This study suggests that obese Haitian-Americans go through a process of transformation in order to achieve health and maintain life. A shift started from the position of cultural normalcy of obesity *identifying* that is further aggravated by two social determinants of health, *education* and *economy determining*. The process then progressed to a period of *understanding*, where the participants are questioning the wisdom of obesity while trying to maintain health. In this period, the participants reflected on their perceived barriers to bariatric surgery. This reflection landed them at the steps of *transforming*. This process elucidated the participants' *understanding* of normal weight as a mean to maintaining health, but they still wrestle with the how to manage this obesity, *accepting* the conventional methods and relegating the use bariatric surgery as a method of last resort, albeit, seeking advocacy from like-minded individuals who underwent bariatric surgery.

Acquiring knowledge is the overarching category that represents the central phenomenon present in each of the other categories. As the overarching category, it brings together concepts that explain the critical factors that affect knowledge, perceptions, and attitudes among obese Haitian-Americans toward bariatric surgery. *Acquiring knowledge* includes dimensions of both intrinsic and extrinsic motivation. A person who has the ability or freedom to direct or influence outcomes for themselves has self-determination. The core category of *acquiring knowledge* for this classic grounded theory is an in vivo code (code using participant's actual words) gifted during the 12 semi-structured interviews with obese Haitian-American adults. This basic social process contextualizes the knowledge, perceptions, and attitudes of obese Haitian-Americans toward bariatric surgery. It became evident that as participants acquire more knowledge regarding bariatric surgery, they are more empowered to consider bariatric surgery. One of the most effective approaches to acquiring knowledge is teaching. Education enables an ability to influence and make decisions and to have the power to make and act upon a decision. Hence, *acquiring knowledge* refers to the obese participants' desire to understand bariatric surgery outside of any cultural or social determinants' constraints. The conceptual categories and core category will be discussed, interpreted, and supported with the literature in the ensuing pages.

Identifying

Identifying emerged from the data as a catalyst for the theoretical framework. It represents the participants' beliefs of the origin of their obesity. *Identifying*, in this study, is defined as a person's sense of who they are based on their group membership(s). It is a real, true, and vital part of the person (Tajfel, 1979). This category is anchored by three

subcategories related to identification with cultural norms: *identifying with a larger body size, identifying with Haitian dietary habits,* and *identifying with Haitian exercise habits*. The participants spoke about how their cultural identity affected their views on obesity and surgery and implied how these views accounted for their tepid acceptance of bariatric surgery. The participants' interview data included descriptive examples of how they believed the Haitian culture encourages obesity, as it is viewed as a status of wealth and health. These views are in line with research studies done on other ethnic minorities and in light of the absence of studies on obese Haitian-Americans, data were compared with available studies on other ethnicities, especially Blacks and Hispanics.

Birkmeyer and Gu (2012) used a population-based data from Michigan to explore disparities in the use of bariatric surgery by gender, race, and socioeconomic status. Factor analysis was used to identify six census variables that could be meaningfully combined into a summary socioeconomic status summary score. They constructed a summary measure of socioeconomic status (SES) for Michigan postal ZIP codes using data from the 2000 census and divided the population into quintiles according to SES. Data from the state drivers' license list and 2004–2005 state inpatient and ambulatory surgery databases to examine population-based rates of morbid obesity and bariatric surgery in 10,221 adults according to gender, race, and socioeconomic status. They found an inverse linear relationship between SES and morbid obesity. In the lowest SES quintile, 13% of females and 7% of males have a body mass index >40 compared to 4% of females and males in the highest SES quintile. Overall rates of bariatric surgery were highest for Black females (29.4/10,000), followed by White (21.3/10,000), and other racial minority (8.6/10,000) females. Rates of bariatric surgery were low (<6/10,000) for

males of all racial groups. An inverse linear relationship was observed between SES and rates of bariatric surgery among whites. However, for racial minorities, rates of surgery are lower in the lowest SES quintiles with the highest rates of bariatric surgery in the medium or highest SES quintiles. In contrast with prior studies, they did not find evidence of wide disparities in the use of bariatric surgery. This study's conclusion that that lower rates of bariatric surgery among low SES minorities might reflect cultural differences in preferences regarding obesity and/or surgical treatment in general reflects the category of Haitian-Americans identifying with tear culture's views of obesity. These authors further commented that obesity is socially and economically more stigmatizing for whites than for blacks and that black have a more positive body image and are less likely to overestimate body weight than whites (Birkmeyer & Gu, 2012).

Another aspect in *identifying* worth mentioning is related to the participants' understanding of obesity and health. The participants reported that, while they agreed that they met BMI criteria for obesity, they preferred not to use the term obesity (they used overweight), and they did not see their weight necessarily as a major health issue. This assertion is consistent with Moore, Cooper, and Davis-Smith's (2014) assessment of perceptions of obesity and body image among Blacks. However, this is refuted in Caleyachetty et al.'s (2017) meta-analysis study that addresses the limitations of studies that often refer to a subset of obese individuals without obesity-related metabolic abnormalities as being "metabolically healthy obese." The study used linked electronic health records (1995 to 2015) in The Health Improvement Network (THIN) to assemble a cohort of 3.5 million individuals, 18 years of age or older, and initially free of cardiovascular disease. It created body size phenotypes defined by body mass index

categories (underweight, normal weight, overweight, and obesity) and three metabolic abnormalities (diabetes, hypertension, and hyperlipidemia). The primary endpoints were the first record of 1 of 4 cardiovascular presentations (coronary heart disease [CHD], cerebrovascular disease, heart failure, and peripheral vascular disease). During a mean follow-up of 5.4 years, obese individuals with no metabolic abnormalities had a higher risk of CHD (multivariate-adjusted hazard ratio [HR]: 1.49; 95% confidence interval [CI]: 1.45 to 1.54), cerebrovascular disease (HR: 1.07; 95% CI: 1.04 to 1.11), and heart failure (HR: 1.96; 95% CI: 1.86 to 2.06) compared with normal weight individuals with 0 metabolic abnormalities. Risk of CHD, cerebrovascular disease, and heart failure in normal weight, overweight, and obese individuals increased with increasing number of metabolic abnormalities. This study concluded that metabolically healthy obese individuals had a higher risk of coronary heart disease, cerebrovascular disease, and heart failure than normal weight metabolically healthy individuals. Even individuals who have normal weight can have metabolic abnormalities and similar risks for cardiovascular disease events. In essence, this study further addresses the health risks associated with the Haitian-Americans' view of identifying with a larger body size and challenges their view that they are healthy in spite of their obesity.

The study by Moore, Cooper, and Davis-Smith was a qualitative, phenomenological study seeking to explore the phenomenon of bariatric surgery in African-American men. Fourteen African-American men meeting the body mass index (BMI) criteria for bariatric surgery (having a body mass index of 40 or higher or 35 or higher with a comorbidity) and African-American men that meet the BMI criteria for obesity (BMI of 30 or higher) who may be viewed as at risk and may actually qualify for

surgery due to comorbidities participated in semi-structured interviews. Three major themes emerged from their data: (a) participants' process of understanding bariatric surgery, (b) masculinity and social norms, and (c) finances. The major research question for the study was related to attitudes and perceptions of obese African-American men regarding bariatric surgery and barriers to their utilization of it. The study found, although, most of the literature regarding health disparities relating to obesity among African-Americans has suggested that lack of financial resources is the main barrier to weight loss surgical intervention. While this proved to be accurate, for their study, the results indicate that there may be additional barriers as it relates to culture, which is congruent with the current literature regarding African-American men (Bowleg et al., 2011; Hammond et al., 2010; Pompper, 2010). This study supported the cultural stance of Haitian-Americans which identify with a larger body size.

Determining

The category of *determining* bared relatedness to the category of *identifying* as a contributor to obesity and lack of knowledge of bariatric surgery, and is described by *education, socioeconomic status*, which are two social determinants of health for Haitian-Americans and *fear of surgery,* which in extrinsic trait that is found to be common in Haitian-Americans. In this present study, *determining* is defined as conditions in the environments in which people live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Healthy People 2020, 2010). *Determining* is the second category and represents *education, socioeconomic status, and* fear *of surgery,* the factors that influence obesity and knowledge of bariatric surgery in Haitian-American adults. Prior study of disparities in the use of bariatric

surgery by Martin, Beekley, Kjorstad, and Sebesta (2010), has suggested that the procedure is used inequitably according to race, socioeconomic status, and gender. These authors conducted this study to analyze the socioeconomics of the morbidly obese patient population and the impact on access to bariatric surgery using two nationally representative databases. They found that access to bariatric surgical care among eligible patients might be adversely affected by a variety of socioeconomic factors. The national bariatric eligible population was identified from the 2005–2006 National Health and Nutrition Examination Survey and compared with the adult non-eligible population. The eligible cohort was then compared with patients who had undergone bariatric surgery in the 2006 Nationwide Inpatient Sample, and key socioeconomic disparities were identified and analyzed. A total of 22,151,116 people were identified as eligible for bariatric surgery using the National Institutes of Health criteria. Compared with the non-eligible group, the bariatric eligible group had significantly lower family incomes, lower education levels, less access to healthcare, and a greater proportion of non-White race (all *p* .001).

Bariatric eligibility was associated with significant adverse economic and health-related markers, including days of work lost (5 versus 8 days, *p* _.001). More than one-third (35%) of bariatric eligible patients were either uninsured or underinsured, and 15% had incomes less than the poverty level. A total of 87,749 in-patient bariatric surgical procedures were performed in 2006. Most were performed in White patients (75%) with greater median incomes (80%) and private insurance (82%). Significant disparities associated with a decreased likelihood of undergoing bariatric surgery were noted by race, income, insurance type, and gender. The authors concluded that **s**ocioeconomic

factors play a major role in determining who does and does not undergo bariatric surgery, despite medical eligibility. Significant disparities according to race, income, education level, and insurance type continue to exist and should prompt focused public health efforts aimed at equalizing and expanding access. This study further ascertained that social determinants of health, education and socioeconomic status, found in Haitian-Americans indeed, may preclude them from utilizing bariatric surgery.

Furthermore, the Health Disparities and Inequalities Report by the Centers for Disease Control and Prevention (CDC), in the United States, recognized that educational attainment and income are the indicators that are most commonly used to measure the effect of socioeconomic position on health. It indicates that substantial educational and income disparities exist across many measures of health (CDC, 2013). In this quantitative report, the CDC conducted a cross-sectional monthly household survey of a representative sample of the civilian, non-institutionalized U.S. household population that was conducted jointly by the U.S. Census Bureau and the Bureau of Labor Statistics. This report analyzed 2009 and 2011 data from the Current Population Survey (CPS) to monitor progress toward eliminating health disparities in the prevalence of non-completion of high school and poverty. Self-reported data were collected on various characteristics, including demographic, socioeconomic, and geographic characteristics and place of birth. Group disparities in age-standardized prevalence of non-completion of high school and poverty were assessed according to sex, race/ethnicity, age, educational attainment, poverty status, disability status, place of birth, world region (country) of birth, U.S. census region of residence, and metropolitan area of residence.

Race/ethnicity categories included non-Hispanic white, non-Hispanic black, American Indian/Alaska Native, Asian/Pacific Islander, Hispanic, and multiple races. Age groups included 25–44, 45–64, 65–79, and ≥80 years. Educational attainment categories included less than high school, high school graduate or equivalent, some college, and college graduate. Poverty status was derived from the income-to-poverty ratio IPR, which is based on family income relative to federally established poverty thresholds that are revised annually to reflect changes in the cost of living as measured by the Consumer Price Index. The *z* statistic and a two-tailed test at $p < 0.05$ with Bonferroni correction for multiple comparisons were used to test for the statistical significance of the observed absolute and relative differences and for changes over time. CDC used statistical software to account for the complex sample design of the CPS and to produce point estimates, standard errors, and 95% confidence intervals. Estimates were age standardized by the direct method to the year 2000 age distribution of the U.S. population (*20*). Estimates with relative standard error ≥30% were not reported. The findings in this report indicated that persons with low levels of education and income generally experience increased rates of mortality, morbidity, and risk-taking behaviors and decreased access to and quality of health care. This report confirmed that the lowest levels of education and income are most common and persistent among subgroups that systematically exhibit the poorest health. These conclusions are congruent with the category of determining in Haitian-Americans.

In 2012, Dan et al. presented a retrospective study of 218 patients who underwent bariatric surgery during the 8-year study period. This study aimed to establish that bariatric surgery could be safely and efficiently undertaken in a low-volume center

outside the “designated centers” with comparable patient outcomes even in a third-world setting. Twenty-two patients were lost to follow-up. The final analysis consisted of 196 patients; 172 Roux-en-Y gastric bypasses, 15 sleeve gastrectomies, and nine gastric banding. Data regarding patients who underwent bariatric surgery in a single surgical unit (which offers the bariatric surgery service in the whole island of Trinidad & Tobago) were prospectively recorded for a period of 8 years (July 2003 through June 2011) and analyzed retrospectively. Demographic data recorded included age, gender, weight, height, and body mass index (BMI). Clinical data recorded included preoperative biochemical parameters, comorbid illnesses, drug and medication history, type of surgical procedure undertaken, surgical duration, postoperative complications, repeat procedures, hospital stay, requirement of High Dependency Unit/Intensive Care Unit admission, postoperative biochemical parameters, postoperative medication requirements, weight loss in the postoperative period, and any other serious adverse outcome including mortality if any.

Actual weight lost in the postoperative period ranged from 23.2 to 127.7 kg (mean 41.2 kg). Bariatric surgery is usually considered successful if more than 50% of the excess weight is lost postoperatively and maintained at that level. Of the 172 patients who underwent gastric bypass, 134 maintained an excess weight loss of greater than 50% (mean 74%) at a mean follow-up time of 3.4 years. Nineteen patients lost less than 50% of the excess weight (mean 39%). Four patients became pregnant (against advice and contraception) within 6 months after surgery and hence never lost significant weight. Fifteen patients lost up to 82% excess weight but regained weight after 1 year. This was secondary to poor patient compliance with diet, exercise, and follow-up. Diabetes

resolved in 52 of 61 (85%) patients. Hypertension resolved in 70 of the 87 (80%) patients. Sleep apnea improved in 128 of 138 (93%) patients. Two patients with active venous ulcers had them healed in 4 months and the varicosity related edema improved after bariatric surgery.

Significant improvement in the comorbidities was noted even for those patients whose weight loss was not adequate. Average length of stay for all patients ranged from 20 hours to 10 days (mean 1.9 days) with 92% patients discharged within 48 hours after surgery. Length of procedure ranged from 46 minutes to 210 minutes (mean 75 minutes). There was no mortality in this series. The major findings of the study is that laparoscopic bariatric surgery can be performed in a low-volume center in a third world setting with low complication rates (218 bariatric cases over 8 years) and a low-volume surgeon (27 cases per year) and not fitting the criteria for a center of excellence. The study has also demonstrated that bariatric surgery can be performed safely with acceptable morbidity and mortality. This study demonstrated that bariatric surgery is safe and effective in this low-volume center in a third world setting. Furthermore, patients should not be deprived access to this most important treatment exclusively based on number of procedures but rather on outcome. This study addresses the fear of surgery among Haitian-Americans and provides information for proper education related to safety and efficacy of bariatric surgery.

The above studies substantiate how education socioeconomic status and fear of surgery further aggravates disparities in health and affect morbidity and mortality in affected populations. The studies also offer evidence to help combat these factors.

Understanding

One interesting aspect that emerged in the study was the fact that eleven out of the twelve participants mentioned that they did not have discussions with their primary health providers regarding bariatric surgery. The data provided on this stance led to the third category of *understanding*, which emerged from a combination of three codes: *surgery as extreme or a method of last resort, revealing, and advocating*. *Understanding* is denoted in this study as the result of facts acquiring meaning for the learner. To grasp the meaning of a thing, an event, or a situation is to see it in its relations to other things: to see how it operates or functions, what consequences follow from it, what causes it, what uses it can be put to. In contrast, what we have called the brute thing, the thing without meaning to us, is something whose relations are not grasped. The relation of means and consequence is the center and heart of all *understanding* (Deci & Ryan, 2008).

Paradoxically, the participants disclosed their lack of knowledge of bariatric surgery and their search to understanding that could alleviate their general fears and concerns about surgery and appease their views of bariatric surgery as too extreme or a method of last resort. They seek to find this understanding through Haitian-Americans who have undergone bariatric surgery to reveal and advocate on behalf of the community also through health care providers to provide better education to obese patients regarding the option of bariatric surgery

In 2013, Polanski sought to examine and compare the cultural beliefs and attitudes Hispanic and Haitian community members regarding childhood obesity and to investigate cultural factors contributing to this chronic condition in each culture so that effective, culturally appropriate, community-based programs of care can be developed.

The author anticipated that cultural attitudes, or the feelings a cultural group has toward some issue or fact, will influence the way that group may use or adapt to interventions or interact with community resources. The author used a qualitative descriptive design informed by ethnographic methods for data collection. Nine semi-structured ethnographic interviewing techniques were used. Data were collected until data saturation occurred for each cultural group. A sample of nine Haitian and 10 Hispanic parents participated in this study. Parents ranged in age from 23 to 49. The Haitian participants had lived in the U.S. from 5 to 42 years, with an average time of 17.5 years; one participant was born in the U.S. Among the Hispanic participants, five were born in the U.S., and those born outside the U.S. had been here from 7 to 30 years, with an average of 17.6 years.

Analysis and interpretation for this study involved identifying cultural themes that emerged from the data. A unique theme that emerged from the data was the need for a community (social) response to help families deal with issues of childhood obesity. Although many of the descriptions were on target with what is already in the published literature, new ideas around advocacy were noted. When describing what could be done to prevent children from becoming overweight or reduce the number of overweight children, rarely did participants focus on individual responses to reduce/prevent this chronic condition. The depth of meaning that emerged from the interviews illuminated the perceived need for a community and social response to help Haitian-Americans overcome their weight. It was important to parents that schools be actively involved in helping to keep children healthy. Parents said they thought schools should provide

nutrition education to all students, and some said this instruction could influence the choices made at home.

Although this study aimed to examine he cultural beliefs and attitudes of members of two cultures (Hispanic and Haitian community members) regarding childhood obesity and to explore cultural factors contributing to this chronic condition, the views and experiences reflected in the data were that of the adult parents, who were the participants. The new ideas around advocacy by the community that were noted in that study mirrored those of this current study, whereas obese Haitian-Americans yearn for revealing and advocating from other Haitian-Americans who underwent bariatric surgery, in order for them to understand and maybe accept bariatric surgery.

Understanding also exposes the absence of data on the utilization and outcome of bariatric surgery among minorities, specifically Haitian-Americans. In 2015, Serrano et al. piloted a study to close the gap in the paucity of data on the outcomes of bariatric surgery on Hispanic patients. They performed a retrospective review of obese patients treated at their institute between 2008 and 2014 and identified self-reported Hispanic patients who underwent a laparoscopic gastric bypass (LGBP), sleeve gastrectomy (LSG), or gastric band (LGB) procedure. The primary end point was excess weight loss (EWL) at 6, 12, 24, and 36 months. Secondary end points included improvement of obesity-related metabolic parameters at 1 year. They performed a repeated measures analysis of variance to calculate statistical significance throughout the study time period. They identified 2,002 Hispanic patients who underwent bariatric surgery (1,235 LGBP, 600 LSG, and 167 LGB) at their institute from 2008 to 2014. Follow-ups at 6, 12, 24, and 36 months were 62.2%, 54.5%, 36.2%, and 19.8%, respectively. Mean preoperative

BMIs were 47.0 _ 7.2 kg/m2, 46.1 _7.8 kg/m2, and 44.9 _ 6.0 kg/m2 for the LGBP, LSG, and LGB cohorts, respectively. Excess weight loss was significantly more pronounced in the LGBP and the LSG groups than in the LGB group; this difference was accentuated over time ($p < 0.0001$). Obesity-related metabolic parameters and the need for comorbidity medical therapy decreased in all three surgical groups. They concluded, among others, that bariatric surgery is highly successful in Hispanic obese patients. In the largest series to date, LGBP and LSG seem to yield more effective EWL and reduction of cardiometabolic parameters than LGB among Hispanics; however, outcomes are still markedly reduced when compared with those in non-Hispanic populations. This study by Serrano et al. closed the gap in the paucity of data on the outcomes of bariatric surgery among Hispanics and recommended such studies on other minorities. This conclusion highlights the absence of such study in Haitian-Americans, which further accentuates the lack of role model for obese Haitian-Americans.

Another study conducted by Sharman et al. (2016) on Australian patients highlighted the importance of revealing and advocating by recipients of bariatric surgery. The study sought to examine Australian patients' motivations for seeking bariatric surgery because the reasons for seeking bariatric surgery are incompletely understood. Therefore, this information is needed to inform health-service planning and therapeutic decisions. Ten focus groups were audio-recorded, transcribed verbatim, and analyzed thematically. Thirty-two women and 17 men (mean age 55 years; range 23–72) who had received or were waitlisted for publicly- or privately funded bariatric surgery engaged in the study.

Novel findings highlighted the importance of other bariatric surgery recipients, health professionals' recommendations (e.g., bariatric surgeons, medical specialists, and general practitioners), the media (e.g., televisions shows on bariatric surgery), and having private health insurance. The authors also confirmed previous findings that people seek surgery for physiological and psychological health, and because of previous failed weight loss attempts and significant others (e.g., wanting to live longer for children). The authors concluded that many individual, societal and environmental factors influence people to seek bariatric surgery. Exposure to recipients of bariatric surgery and recommendations made by health professionals appear to be common factors prompting a surgical pathway not previously reported. A great effort should be made by health-care providers to inform obese Haitian-Americans about the evolution of bariatric procedures, the potential benefits they offer, and the existence of certified bariatric centers. This will allow doctors to provide optimum health care to patients who could benefit from bariatric surgery.

Finally, Das and Faxvaag (2014) looked at what influences patient participation in an online forum for weight loss surgery in a qualitative case study. The purposes of this study were to explore how individuals undergoing bariatric surgery used the moderated discussion forum and to better understand what influenced their participation in the forum. The study was designed as an explorative case study. A secure online discussion forum was developed and offered to bariatric surgery patients. The forum was moderated and allowed contact with peers and health care professionals. The authors conducted participant observation of the discussion forum over a time period of approximately 6

months. For further insight, they carried out in-depth semi-structured interviews with seven patients who had access to the forum.

They analyzed the material inductively, using content and thematic analysis. The patients used the forum as an arena in which to interact with peers and providers, as well as to provide and achieve informational and social support. The analysis suggests that there are three major themes that influenced participation in the online discussion forum: (a) the participant's motivation to seek information, advice, and guidance, (b) the need for social support and networking among peers, and (c) concerns regarding self-disclosure. The findings of this study implied that a moderated discussion forum for bariatric surgery patients has potential for use in a therapeutic context. The discussion forum fulfilled the informational and support needs of the bariatric surgery patients and was particularly useful for those who excluded themselves from the traditional program and experienced barriers to expressing their own needs. The authors found that many patients who are considering or who undergo bariatric surgery seek information and social support in online discussion forums, but the vast amount of available information raises concerns about the impact of such information. These authors' findings support this current study's premises that Haitian-Americans desire revealing and advocating from Haitian-American recipients of bariatric surgery and open discussions of bariatric surgery from healthcare providers.

In summary, three major interpretive conclusions emanated from this study findings. The first is the fact that the study was conducted on one specific minority subgroup, obese Haitian-Americans. The second is the path to understanding taken by

the obese Haitian-Americans, and the third is the emerged basic social process of acquiring knowledge.

Acquiring Knowledge

The basic social process that derived from the collected data contributed by the obese Haitian-Americans is positioned within the core category of *acquiring knowledge*. This social process connects the three categories of *identifying*, *determining*, and *understanding*, which are interconnected, highly linked, and dependent on one another. Acquiring knowledge is important to this study's participants because it makes for disappearance of doubt, and when doubt disappears, they can understand the properties of bariatric surgery. Central to the present work is the discovery that the factors that influence knowledge, perceptions, and attitudes of obese Haitian-American adults toward bariatric surgery can be conceptualized within the developmental framework of knowledge acquisition. The inquiry showed a moving process toward acquiring more knowledge. The participants are seeking knowledge from the trusted voices of Haitian-Americans who have undergone bariatric surgery and healthcare professionals in order to better understand the ramifications of obesity and benefits of bariatric surgery. The categories followed a movement from *identifying* (with Haitian cultural norms) to *determining* (social determinants of health) to *understanding* that leads to *acquiring knowledge.*

In order to acquire this new knowledge, the participants exhibited a need to be able to make sense of the new information on bariatric surgery. They acknowledged specific skills that can help them achieve this goal. These skills or learning strategies are technical methods that help them process (e.g., *identifying and determining)* and

ultimately retain (*understanding*) the information. The participants identified two learning strategies that can help them move forward with acquiring knowledge, first, they seek to have role models (*revealing and advocating*). Haitian-American role models may make the participants to feel positive that they will be able to utilize bariatric surgery if they so choose. Second, they desire the benefits of healthcare providers' interventions and instructions that help make information about bariatric surgery more accessible to obese patients. These combined approaches appear to reinforce the study's concepts and foster the confidence participants yearn to succeed toward their goal of *acquiring knowledge*.

The participants cited extrinsic and intrinsic cultural factors as reasons for being obese and as barriers for not pursuing bariatric surgery. Although they did not show readiness to accept bariatric surgery, they displayed a motivation toward *understanding* (Deci & Ryan, 2008). The categories *identifying* and *determining* represent the social conditions that diminished the participants' motivation, competence and relatedness. Yet, the category of *understanding* enhances their human motivation and ushered in the basic process of *acquiring knowledge.*

Significance of the Study

Obesity has risen to epidemic levels in the U.S. and caused devastating and costly health problems while reducing life expectancy. Bariatric surgery has been proven efficacious in the management of obesity but is under-utilized by African-Americans. Haitian-Americans, being a disadvantaged subgroup of African-Americans also suffer disproportionately from factors that contribute to obesity, such as cultural, societal, and the sequelaes of obesity like diabetes type II and cardiovascular diseases. However, this

at-risk population has not been studied regarding its use of bariatric surgery as an efficacious treatment modality for obesity and its co-morbidities. Therefore, the significance of this study is many folds.

The emergent basic social process of *acquiring knowledge* is the first step toward testing a theory that may answer the research questions of this inquiry. This framework can aid in informing preventive care and enhancing culturally relevant healthcare efforts specific to obese Haitian-American adults. Moreover, it may be a catalyst for the development of culturally based community-support services and programs where healthcare providers could seek to establish roles within nontraditional settings to assist Haitian-American patients manage their obesity and acquire knowledge about bariatric surgery. As population diversity expands, it is also necessary to provide ethnic minority groups effective quality prevention, interventions, and programs that reduce health care disparities and inequalities. Attending to and improving the health of this growing segment of the U.S. population is important because, it has been proven that the health of immigrants impacts national health outcomes (Ozra-Frank & Venkat Narayan, 2010). Finally, healthcare providers should be conscious of their patients' complex lives and support them in identifying, adopting, and maintaining health-restoring behaviors that works for them (Buchholz, Huffman, & McKenna, 2012). The findings from the present study can provide clinicians insights on how to treat and counsel obese Haitian-American patients regarding obesity-related co-morbidities and bariatric surgery. In turn, this will facilitate the goal of obese Haitian-Americans adults to attain the basic social process of *acquiring knowledge.*

Through the use of the grounded theory method, the study answered the question of the critical factors that affect the knowledge, perceptions, and attitudes of Haitian-American adults toward bariatric surgery. Grounded theory illuminated a theoretical framework on a topic that little was known about. It also allowed an in vivo coding, where the voices of the participants informed the inquiry. Its three conceptual categories of *identifying, determining,* and *understanding* emerged into the theoretical framework of *acquiring knowledge*, which may prove beneficial in furthering the education of obese Haitian-Americans vis-a-vis bariatric surgery. Furthermore, this study bridges the gap that currently exists in research and literature and adds a new narrative that depicts a deeper understanding by nurses and healthcare professionals regarding the health knowledge, perceptions, and attitudes of obese Haitian-Americans toward bariatric surgery and obesity in general.

Implications for Nursing Education

The history of nursing demonstrates an incredible resolve to ensure quality and safety for patients. Evidence of quality and safety competencies is present in nursing publications, standards of practice and accreditation guidelines. Education is regarded as the conduit to needed improve quality in the health care system by providing the necessary link to creating the transformation. Nursing students must be prepared with a different set of knowledge, skills and attitudes if the quality and safety of health care is to improve. Insights gained from this study will inform nurse educators of the knowledge, perceptions, and attitudes of obese Haitian-Americans adults toward bariatric surgery, so that they are able to incorporate in their teaching specific strategies for obesity care specific for this population. Improved knowledge and awareness regarding the scope of

the problem of obesity and the factors affecting under-utilization of bariatric surgery in Haitian-Americans might guide the development of related educational and practice competencies for nurses entering the profession.

This theoretical framework of *acquiring knowledge* could assist in building solid teaching strategies for patient interventions, education, and advocacy for obese Haitian-American adults in a culturally sensitive manner. Finally, this study will also shine a light on the lack of available research literature on Haitian-Americans, may be a catalyst to generate more studies, and bring awareness of cultural differences among larger groups comprises of many subgroups. The voices of all the participants cried out from the data for more education from healthcare providers, as stated by Marg: "Yes, Haitians need a lot of education. Haitians need that because if they have someone educating them and telling them about that often, they would finally say maybe I should try it."

Implications for Nursing Practice

The result of the study offers many useful implications to nursing practice. This study will help nurses to recognize the need for cultural sensitivity and inclusion of culturally informed interventions into their nursing practice. This research is an important reminder that there is as much diversity within a particular cultural group as there is across groups, although cultural groups may share similar values. With this thought in mind, the practical theoretical framework *acquiring knowledge,* informed from the voices of obese Haitian-Americans may assist nurses in planning optimal culturally competent care for this population. Novel knowledge sourced from the voices of service recipients (i.e., Haitian-Americans) may help nurses practice more meaningfully and more effectively, with cultural humility, to produce improved health outcomes for

patients and greater nurses' job satisfaction. Finally, when educating obese Haitian-Americans about bariatric surgery, practitioners should be cognizant to the fact that beside the cultural factors, social determinants of health, such as education and socioeconomic status, can prove to be important factors that can pose important barrier. Likewise, practitioners must specifically acknowledge and address these limitations.

Implications for Nursing Research

As nursing research seeks to increase the breadth of knowledge in the field, nurse researchers must understand that paucity in research for any population equates to inequality and disparity of treatment of this population (Polit & Beck, 2012). This narrative is especially relevant to nurses as they are patients' advocates. The generation of this theoretical framework of *acquiring knowledge* engenders new knowledge on obese Haitian-Americans and will encourage advancing and testing this theory, thereby adding more researches to the profession and closing the gap in the literature and in so doing advancing the health of this population through evidence-based practice. This study may also provide the impetus necessary to support a greater understanding of the effects of social determinants of health, health marginalization of groups and the exclusion of individual and population. The participants in this study had many misconceptions and unanswered questions regarding bariatric surgery and therefore afford an array of potential future researches. In the words of **Johnny**:

> I don't know. I don't believe that the surgery is the answer. I feel like this is the easier way to get to it. So basically I feel like this is too easy, it may not be healthy to do it.

Implications for Nursing Health/Public Policy

Wallace, Young-Xu, Hartley, and Weeks (2010) concluded that obesity is associated with serious health and social consequences, high medical costs and is increasing in the U.S., particularly among socioeconomically disadvantaged populations. Bariatric surgery has been established as the most effective long-term treatment for morbid obesity and obesity-related comorbidities. Despite its success, there is a paucity of data on the utilization of bariatric surgery among minority patients (Serrano et al., 2016). As obesity is the major epidemic of our generation, the public and private healthcare sectors are clamoring to find the perfect recipe for its long-term management and nurses have their roles in this search. As a response to the Institute of Medicine's call to action among nurses(IOM, 2011), this obesogenic epidemic and use of bariatric surgery by minority can be an arena where the nursing profession can effectively engage in advocating for better education, accessibility, availability, and better insurance coverage for the socioeconomically disadvantaged populations. Accessibility and availability of bariatric surgery for Haitian-Americans can be an emerging healthcare policy that impact national health. From the voice of **Carline**: "Everybody who would like to do the surgery says it costs too much money, that's why a lot of Haitians, although they want to do it, they know they need money to do it." Hence, the implications of this study for nursing health/public policy may inform nurses to advocate for appropriate patient care programs, affordable insurance, culturally appropriate policy on health education. It could also influence legislation about nutrition and weight control for obese Haitian-American adults.

As nurses become better knowledgeable about Haitian-Americans' knowledge, perceptions, and attitudes toward bariatric surgery, they will be better informed in advocating on behalf of this at-risk population for more favorable healthcare. Having health care policies and interventions that are culturally sensitive and adaptable to the needs and concerns of underserved population may help nurses better frame the issues of health inequalities to effect positive social and economic policy changes on the local, national, and global health care scene. Lastly, strategies may have to be tailored to specifically address the socioeconomic situation of Haitian-Americans to reduce morbidity and mortality.

Strengths and Limitations of the Study

The strength of this study lies in the fact that it endeavored to close the gaps in the scarcity of research conducted on Haitian-Americans. This study makes a significant contribution toward understanding the critical factors and barriers among Haitian-Americans toward bariatric surgery because it was conducted using data from the voices of a marginalized subgroup. Finally, it is uniquely poised to provide an impetus for better education on bariatric surgery for obese Haitian-Americans.

Limitations to the study are in line with any qualitative approach research study, where the purpose of qualitative research, grounded theory method specifically, is not to determine cause-and-effect relationships, but to explore a particular phenomenon in depth (Creswell, 2013). As such, consumers of this study are reminded that the sample was limited to a small sample of obese Haitian-American adults from South Florida and their conceptualization of obesity and their knowledge, perceptions, and attitudes toward bariatric surgery within this context. Therefore, this study may not be transferable to

others; other studies may not reflect similar findings. Since all data were self-reported, they are subject to recall and one must also take into consideration the potential confounding factor of the social desirability bias effect, where participants may tend to exaggerate or misrepresent knowledge or perception in order to cast themselves as having a stronger experience with the phenomenon than was actually warranted.

Furthermore, researcher bias is a common limitation of qualitative inquiry (Charmaz, 2012). This researcher recognizes that her own experiences may affect the final narrative. Through constant comparison of the data and memoing, the researcher was able to articulate assumptions about the data, which in turn is compared and contrasted to emerging data. As a result, researcher bias was either confirmed or rejected by the data, and in effect, minimized. A final limitation of the study is the researcher's inexperience with grounded theory methodology. The expertise of the dissertation chairperson and committee members was integral in maintaining the rigor and integrity of the study.

Recommendations for Future Study

Many comments and questions posed by the participants opened the door to countless recommendations for future studies, quantitative, qualitative and even mixed studies. This statement below, echoed by many of the participants, can prompt a quantitative study on the definition of obesity among Haitian-Americans (HA). **Red** stated: I don't know too many… I haven't seen too many HA that are like so obese that they can't walk, like their tummies are like down to their knees." Another future study recommendation could be a follow-up longitudinal study on HA who have had bariatric surgery, because many of the Phase I participants said they did not know any Haitian-

Americans who had bariatric surgery. Another future study can explore attitudes and perceptions of primary healthcare providers regarding bariatric surgery as a treatment for obesity, especially for minorities. Further study could also be undertaken about the effects of cultural norms in relation with diet and nutrition and its effect on weight control. Lastly, another study could look at the effect of acculturation on the diet and exercise patterns of Haitian-Americans

Conclusions

The results of the present study, although not unexpected, have yielded several important and concerning findings, with wide-ranging implications. Cultural and socioeconomic factors continue to exert significant influence on who does and does not undergo bariatric surgery. The resultant disparities affect scores of Haitians Americans with morbid obesity and obesity-related medical diseases. The costs associated with failure to adequately address this issue will be staggering in terms of excess mortality, uncontrolled morbidity, lower quality of life, and stress on an already overburdened healthcare system. Healthcare providers servicing Haitian-Americans must begin to take a more active role in advocating on the debilitating disease of obesity and championing bariatric surgery as an effective agent for public health policy change.

The results of this study confirm earlier studies that have concluded that there are wide disparities in the use of bariatric surgery by gender, race, and socioeconomic status (Martin, Beekley, Kjorstad, & Sebesta, 2010). However, although there are cultural barriers, such as perception of obesity as an indication of wealth, dietary and exercise habits, lack of health education, and fear of surgery etc., this research has shown that lack of proper education from health care providers and absence of revealing and advocating

from Haitian-Americans who underwent bariatric surgery are the primary factors among Haitian-Americans from utilizing bariatric surgery. Therefore, through the elimination of these factors, obese Haitian-American adults may succeed in their goal to acquire more knowledge of bariatric surgery as a viable mean to control excess weight and prevent obesity-related morbidity and mortality.

This current study highlighted the critical factors that influence knowledge, perceptions, and attitudes of obese Haitian-American adults toward bariatric surgery in a purposive sample of participants from South Florida. It emphasized the importance of identifying barriers that could interfere with bariatric surgery. Identifying and addressing these factors are essential in meeting the need of obese Haitian-American adults in the journey of *acquiring knowledge* regarding bariatric surgery and make bariatric surgery available to these patients and likely will save lives and resources. Failure to identify and address these factors may undermine the patient's effort to acquire knowledge and further perpetuate obesity and its co-morbidities.

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APPENDIX A

Institutional Review Board Approval

Barry University
Division of Academic Affairs

Institutional Review Board
11300 NE 2nd Avenue, Miami, FL 33161
P: 305.899.3020 or 1.800.756.6000, ext. 3020
F: 305.899.3026
www.barry.edu

Research with Human Subjects
Protocol Review

Date:	January 27, 2017
Protocol Number:	170116
Title:	The Critical Factors that Influence Knowledge Perceptions, and Attitudes of Obese Haitian American Adults toward Bariatric Surgery
Meeting Date:	January 18, 2017
Name:	Ms. Odiane Medacier
Faculty Sponsor:	Dr. Jessie Colin

Dear Ms. Medacier:

On behalf of the Barry University Institutional Review Board (IRB), I have verified that the specific changes requested by the convened IRB on January 18, 2017 have been made.

It is the IRB's judgment that the rights and welfare of the individuals who may be asked to participate in this study will be respected; that the proposed research, including the process of obtaining informed consent, will be conducted in a manner consistent with requirements and that the potential benefits to participants and to others warrant the risks participants may choose to incur. You may therefore proceed with data collection.

As principal investigator of this protocol, it is your responsibility to make sure that this study is conducted as approved by the IRB. Any modifications to the protocol or consent form, initiated by you or by the sponsor, will require prior approval, which you may request by completing a protocol modification form.

It is a condition of this approval that you report promptly to the IRB any serious, unanticipated adverse events experienced by participants in the course of this research, whether or not they are directly related to the study protocol. These adverse events include, but may not be limited to, any experience that is fatal or immediately life-threatening, is permanently disabling, requires (or prolongs) inpatient hospitalization, or is a congenital anomaly cancer or overdose.

APPENDIX A

Institutional Review Board Approval

The approval granted expires January 31, 2018. Should you wish to maintain this protocol in an active status beyond that date, you will need to provide the IRB with an IRB Application for Continuing Review (Progress Report) summarizing study results to date. The IRB will request a progress report from you approximately three months before the anniversary date of your current approval.

If you have questions about these procedures, or need any additional assistance from the IRB, please call the IRB point of contact, Mrs. Barbara Cook at or send an e-mail to dfeldman@barry.edu. Finally, please review your professional liability insurance to make sure your coverage includes the activities in this study.

Sincerely,

David M. Feldman, PhD
Chair, Institutional Review Board
Barry University
Department of Psychology
11300 NE 2nd Avenue
Miami Shores, FL 33161

Cc: Dr. Jessie Colin

APPENDIX B

Barry University
Informed Consent Form
Individual Interview
For use with Skype

Approved by Barry University IRB:
Date: 2/1/2017
Signature:

Institutional Review Board
Protocol Form
November, 2016

APPENDIX B

Barry University
Informed Consent Form
Individual Interview
For use with Skype

Your participation in a research project is requested. The title of the study is: Critical factors that influence knowledge, perceptions, and attitudes of Obese Haitian American adults toward bariatric surgery. The research is being conducted by Odiane Medacier, a doctoral student in the College of Nursing and Health Sciences at Barry University, and is seeking information that will be useful in acquiring knowledge of the management of obesity and the utilization of weight loss surgery among Haitian American adults. The purpose of this research is to explore the knowledge, perceptions, and attitudes of Haitian American adults toward weight loss surgery. To achieve this aim, one digitally recorded, semi-structured interview will be conducted via Skype®, using open ended questions related to the topic. It will last approximately one hour, including 10 minutes to complete a demographic questionnaire. The researcher will transcribe the digital recording of this first interview and send it to you via email, fax or mail for you to review it for accuracy and then we will have a follow up interview in-person, or via telephone, or Skype, or email to go over the transcription. The purpose of this second interview is for clarification and verification of information collected during the first interview. This second meeting is expected to last approximately 30 minutes; the total time is approximately 90 minutes. We anticipate the number of participants to be a maximum of twenty individuals.

If you decide to participate in this research, you must meet the following criteria:

1. Be born in Haiti and living in the United States
2. Be 18 years of age or older
3. Speak English **or** Creole
4. Self-identify as obese
5. Be willing to complete a one-hour face-to-face, or telephone, or Internet/Skype interview with the researcher at a place and time that is convenient for you
6. Be willing to discuss your knowledge, perceptions, and attitudes about obesity and weight loss surgery.
7. Be willing to have the interview audio tape recorded and transcribed
8. Be willing to have another 30 minutes meeting to review and return the transcriptions
9. If using Skype, you must know how to use the video conferencing method Skype® with access to a computer, email, or fax and telephone.

A $10 Visa gift card will be sent to you via mail by the researcher on the day of the interview as a token of appreciation for participating in the study. Thank you for agreeing to be part of the study. You may keep this gift even if you withdraw from the study.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects. You may also choose not to answer any or all questions.

There is no known risk as a result of your participation in this study. Although there are no direct benefits to you, your participation in the study may help our understanding of the meaning of your experience with obesity management and the ways that your culture influences that

APPENDIX B

Barry University
Informed Consent Form
Individual Interview
For use with Skype

experience.

As a research participant, information you provide will be held in confidence to the extent permitted by law. As this project involves the use of Skype®: to prevent others from eavesdropping on communications and to prevent impersonation or loss of personal information, Skype® issues everyone a "digital certificate" which is an electronic credential that can be used to establish the identity of a Skype® user, wherever that user may be located. Further, Skype® uses well-known standards-based encryption algorithms to protect Skype® users' communications from falling into the hands of hackers and criminals. In so doing, Skype® helps ensure user's privacy as well as the integrity of the data being sent from one user to another. If you have further concerns regarding Skype® privacy, please consult the Skype® privacy policy. Confidentiality cannot be guaranteed in the Skype® interview communication. After the interview, the researcher will delete the conversation history. Once this is done, the conversation cannot be recovered. To ensure confidentiality, the researcher will establish a separate Skype® account for this research project only. After each communication, the researcher will delete the conversation history. Once this is done, the conversation cannot be recovered. The conversation will be transcribed by the researcher. Following verification of transcription, the digital recording will be destroyed.

As stated previously, to the fullest extent of the law, the information you provide as a research participant will be kept confidential; consent forms will be separated from data and locked in an alternate file in the researchers office, no names or other identifiers will be collected on any of forms used, except for this consent. Any published results of the research will not use your name, or any characteristics that can reveal your identity. Data will be kept in a locked file in the researcher's office and on a personal, password-protected computer that is accessible only by the researcher. Audiotapes will be destroyed after transcription. Your signed consent form will be kept separate from the data. All data will be kept for 5 years after the study as required by law and then indefinitely.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, [redacted], or my supervisor, Dr. Colin, at (305) 899 3830, jcolin@barry.edu, or Barry Institutional Review Board point of contact, Barbara Cook, at (305)899-3020, bcook@barry.edu.

If you are satisfied with the information provided and are willing to participate in this research, please signify your consent by signing this consent form.

Voluntary Consent

I acknowledge that I have been informed of the nature and purposes of this experiment by Odiane Medacier and that I have read and understand the information presented above, and that I have received a copy of this form for my records. I give my voluntary consent to participate in this experiment.

_____ _____
Signature of Participant Date

_____ _____
Signature of Researcher Date

Appendix B (Creole)

Barry University
Fòm konsantman Informé Endividyèl
Ak Pou sistèm Skype

Approved by Barry University IRB
Date: 2/1/2017
Signature:

Institutional Review Board
Protocol Form
November, 2016

Barry University
Fòm konsantman Informé Endividyèl
Ak Pou sistèm Skype

Mwen bézwen patisipasyon ou nan yon étid. Tit étid la sé: Faktè kritik ki enfliyanse konesans, pèsepsyon, ak atitid granmoun ayisyen Ameriken ki gwo sou zafe operasyon pou pedi pwa. Sé Odiane Médacier kap fè étid sa a, yon elèv doktora nan Kolèj Enfimyè ak Syans Sante nan Barry University, kap chèche enfòmasyon ki pral itil nan profesyon enfimyè. Bi étid sa a sé pou chèche konnen konésans, perception, ak atitid granmoun Ayisyen-Ameriken ki gwo genyen sou zafè opérasyon pou pèdi pwa. Pou réyisi rivé nan bi étid la, mwen bézwen entèvyoué é obsevé pliziè mounn. Mwen antisipé kantité patisipan yo pou yon maksimòm de ven mounn. Premye entèvyou a pral fèt an person, oswa atravè Skype®, li kap diré inèdtan apéprè, di minit ladan se pou renpli yon kesyonè demografik. Dézyèm entèvyou a ap yon swivi ki pap diré plis ké 30 minit, an person, oswa atravè Skype®, oswa téléfòn, oubyen pa imel. Dezyèm entèvyou sa a se pou klarifikasyon ak verifikasyon enfòmasyon ou té bay nan premye entèvyou a. épi tou fok ou dako pou mwen tépé é transmet a lékri entèvyou a. Entèvyou yo ap diré en total 90 minit. Nou antisipe kantite patisipan yo ap yon maksimòm de ven moun.

Si ou désidé patisipé nan étid sa a, ou dwe satisfè kritè sa yo:

1. Fèt an Ayiti é rété nan Etazini
2. Gen laj 18 lané ou plis
3. Pale Kreol oubyen englè
4. Fok ou panse ke ou gwo (gra)
5. Dako pou patisipé nan yon premié entèvyou fas a fas, osinon pa Skype, ki pap diré plis ké inedetan, nan yon plas ak yon lè kap pi bon pou rou.
6. Dako pou diskité nan entevwou a sou sa ou konnen, pansé, ak atitid ou sou gwosè ak opérasyon pou pèdi pwa ak chèchè a
7. Dako pou mwen tépé é transmèt a lékri entèvyou a
8. Dako pou patisipé nan yon dézyèm swivi, ki pap diré plis ké 30 minit pou konfime infomasyon ou te bay nan premye entevyou a.
9. Si w ap itilize metòd Skype konferans sou videyo, ou dwe konnen ki jan yo sèvi ak Skype® e gen aksè a yon òdinatè, imel ou fax ak telefòn.

Si ou désidé patisipé nan étid sa a, wap resevwa yon kat kado Visa $10 kòm rémesiman pou patisipayon nan étid la. Ou kap kinbé kado a men si ou ta désidé pa patisipé nan étid la anko.

Konsantman pou patisipé nan étid la li volontè. Ou gen dwa réfizé patisipé oswa ou ka chwazi pa kontinyé nan nenpòt lè pandan étid la, épi tou ou gen dwa pa réponn kek késyon, pa pwal gen okenn éfè kontrè sou wou. Pa genyen okenn risk ki enpliké nan étid sa. Malgré ké étid la pa genyen okenn bénéfis dirèk pou wou, patisipasyon ou ka édé konpwéyansyon dé konésans, peseptyon, ak atitid granmoun Ayisyen-Ameriken genyen sou zafè jesyon gwosè ak opérasyon pou pèdi pwa, épi ki infliyens kilti nou ka gennyen sou sijè sa.

Appendix B (Creole)

Barry University
Fòm konsantman Informé Endividyèl
Ak Pou sistèm Skype

Kòm yon patisipan nan étid la, nou promet pou kenbé enfòmasyon ké ou bay yo nan tout konfidans nan mézi ki pèmèt dapre lalwa étid. Kòm étid la enpliké itilizasyon Skype, pou anpéché lòt moun kouté konvèsasyon an ak pou prevni pou pa pèdi idantite ak enfòmasyon pesonel mounn, Skype asiyen chak mounn yon "sètifika digital " ki se yon adrès elektwonik pou asire idantite chak mounn kap itilize Skype, nenpot kote mounn nan ye. Epi tou, Skype pran lot prekosyon pou pwoteje kominikasyon moun yo anba men kriminèl yo. Skype fè tout sa, pou ede kenbe enfòmasyon yo prive e asire entegrite enfòmasyon mounn ap pataje yo. Si ou gen lòt enkietid konsènan enfòmasyon prive w, konsilte règleman Skype sou enfòmasyon prive. Pou asire konfidansyalite, chèchè a ap etabli yon kont Skype senpleman pou rechèch sa. Apre chak entevyou, chèchè ap odyo tepe kominikasyon an sou yon lot aparèy separe, e pa kenbe okenn idantifikasyon. Chèchè a pral transmet odyo enregistrement motamo epi efase enregistremen an le ou finn verifye li. Yon fwa li efase li pa kapab trouve anko.

Jan sa di deja, nan limit ke lwa mande, enfòmasyon ou bay kòm yon patisipan rechèch la, nap kenbe li konfidansyèl; nou pap itilize okenn non oswa lòt Idantifyan sou fòm mwen ranmase yo, eksepte sou konsantman sa a. Le map répòté é pibliyé rézilta étid la mwen pap sèvi ak non wou, ni oken karaktéristik ki kapab révélé idantité w. Chèchè ap kenbe done yo nan yon dosye ki fèmen akle nan biwo'm ak sou yon òdinatè pèsonèl ki pwotéjé ak modpas e ki aksésib sèlman a chèchè. Map détwi tép yo apwé mwen fin transmèt konvèsasyon yo a lékri. Fòm konsantman sa ou siyen an ap rété séparé de tout lot enfomasyon yo. Map konseve tout done yo ak enfòmasyon yo endefiniman.

Si ou gen késyon, oubyen enkyétid sou étid la oubyen patisipasyon w nan étid la, ou ka kontakté m, Odiane Médacier [redacted] email: [redacted] oubyen pwofésè'm Dr. Jessie Colin, nan (305) 899 3830, jcolin@barry.edu, oubyen komité révi enstitisyonèl nan Barry Inivèsité a ki sé, Barbara Cook, nan (305) 899-3020, bcook@barry.edu. Si ou satisfè ak enfòmasyon mwen bay'w yo é ou pwèt pou patisipé nan étid sa a, tanpri siyifyé konsantman ou avèk siyati ou sou fòm konsantman sa a.

Konsantman volontè

Mwen admèt ké mwen té enfòme dé nati ak tout lidé étid sa a pa Odiane Médacier é ké mwen li é konprann enfòmasyon ki té pwézanté a, é ké mwen té résévwa yon kopi fòm sa a pou dosye'm. Mwen bay konsantman volontè mwen pou patisipé nan étid sa a.

_____ _____
Siyati patisipan dat

_____ _____
Siyati Chèchè dat

Appendix B

Barry University
Informed Consent Form
Focus Group
For use with Skype

Approved by Barry University IRB
Date: 2/1/17
Signature:

Institutional Review Board
Protocol Form
November, 2016

Barry University
Informed Consent Form
Focus Group
For use with Skype

Your participation in a research project is requested. The title of the study is: The critical factors that influence knowledge, perceptions, and attitudes of obese Haitian American Adults toward bariatric surgery. The research is being conducted by Odiane Medacier, a student in the College of Nursing and Health Sciences at Barry University, who is seeking information that will be useful in acquiring knowledge of the management of obesity and the utilization of weight loss surgery among Haitian American adults. The aim of the research is to generate a substantive theory about the knowledge, perceptions, and attitudes of obese Haitian American adults toward weight loss surgery. A $10 Visa gift card will be given at the beginning of the interview as a token of appreciation for participating in the study. You may keep this gift even if you withdraw from the study. To achieve the aim of the study, the following procedures will be used: a digitally recorded group interview of approximately 7 people, at a mutually agreed time and location by all participants and researcher will be conducted. The focus group interview will be conducted face-to-face or via Skype using open ended questions related to the topic of knowledge, perceptions, and attitudes of obese Haitian American adults toward bariatric surgery. In addition, focus group participants will review categories and emerging theory that generated from prior individual interviews. This interview will last approximately 90 minutes, with 15 minutes allocated to complete a demographic questionnaire. The number of participants is anticipated to be a maximum of seven Haitian American adults who had bariatric surgery at least 6 months prior to the interview. The purpose of the group interview is to confirm findings, concepts, and the initial draft generated from the individual interviews.

If you decide to participate in this research, you must meet the following criteria:

1. Were born in Haiti and living in the United States
2. Be 18 years of age or older
3. Be able to read and speak English and Creole
4. Had weight loss surgery at least 6 months prior to the interview
5. Agree to participate in a face to face, or via Skype group interview, lasting approximately 90 minutes at a place and time that is convenient for the group
6. Be willing to discuss your knowledge, perceptions, and attitudes about obesity and weight loss surgery with the researcher and the group
7. Be willing to have the interview audio tape recorded and transcribed
8. You must know how to use the video conferencing method and have access to a computer, email or fax and telephone.

Appendix B

Barry University
Informed Consent Form
Focus Group
For use with Skype

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out or not answer certain questions at any time during the study, there will be no adverse effects on you.

There is no known risk to you as a participant in this research. Although there are no direct benefits to you, your participation in the study may help us acquire knowledge of the management of obesity and the utilization of weight loss surgery among Haitian-American adults.

As a research participant, information you provide will be held in confidence to the extent permitted by law. As this project involves the use of Skype, to prevent others from eavesdropping on communications and to prevent impersonation or loss of personal information, Skype issues everyone a "digital certificate" which is an electronic credential that can be used to establish the identity of a Skype user, wherever that user may be located. Further, Skype uses well-known standards-based encryption algorithms to protect Skype users' communications from falling into the hands of hackers and criminals. In so doing, Skype helps ensure user's privacy as well as the integrity of the data being sent from one user to another. If you have further concerns regarding Skype privacy, please consult the Skype privacy policy. The researcher will establish a separate Skype account for this research project only. The Skype focus group participants have the option of being visible to the researcher and other participants, but all participants will be audible to one another, therefore, confidentiality cannot be guaranteed. The conversation will be digitally recorded and at the conclusion of the interview, the researcher will delete the conversation history. The recordings will be later transcribed by the researcher, and the digital recordings will be destroyed after transcription is verified. Once this is done, the conversation cannot be recovered.

Although the researcher guarantees to keep all information obtained from the group confidential, due to the nature of groups, confidentiality by group members cannot be guaranteed. All focus group members are asked to respect the privacy of other group members. Any published results of the research will be in aggregate form and pseudonyms will be used. Transcripts of recordings will be kept in a locked file in the researcher's office and on personal, password-protected computer that is accessible only by the researcher. Your signed consent form will be kept separate from the other data. All data will be kept indefinitely.

Appendix B

Barry University
Informed Consent Form
Focus Group
For use with Skype

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Odiane Medacier, at [redacted], my supervisor, Dr. Colin, at (305) 899 3830, email: jcolin@barry.edu or the Institutional Review Board point of contact, Barbara Cook, at (305)899-3020, email: bcook@barry.edu. If you are satisfied with the information provided and are willing to participate in this research, please signify your consent by signing this consent form.

Voluntary Consent

I acknowledge that I have been informed of the nature and purposes of this experiment by _____ and that I have read and understand the information presented above, and that I have received a copy of this form for my records. I give my voluntary consent to participate in this experiment.

_____ _____
Signature of Participant Date

_____ _____
Researcher Date

APPENDIX C

Letter of Request for Access

Odiane Medacier, MSN, FNP-C

[redacted]

Monday, February 06, 2017

[redacted]
JMG Surgical Coordinator
[redacted]

My name is Odiane Medacier; I am a doctoral student at Barry University Schools of Nursing and Health Sciences. I am conducting a study titled "The Critical Factors that Influence Knowledge, Perception, and Attitudes of Obese Haitian-American Adults toward Bariatric Surgery." This study is for my dissertation in partial fulfillment of a PhD in nursing requirements. The purpose of this study is to explore the critical factors that influence knowledge, perception, and attitudes of obese Haitian-American adults toward bariatric surgery. It is expected that the results from this study will generate a theory which may facilitate understanding and knowledge of the use of bariatric surgery among Haitian-Americans.

I am writing today to ask for your permission and assistance in gaining access to Haitian-American adults who frequent your establishment and who want to share their experiences about obesity and weight loss surgery. The first group of participants will be asked to participate in individual audiotaped interviews that will last about one hour. This will be followed by a 30 minutes session one to two weeks after the initial interview. This second session is to review and verify the transcribed data. The total time will be approximately 90 minutes. The second group of participants will require at least 7 Haitian-Americans who had bariatric surgery at least 6 months prior to the interview, to be interviewed together interview for approximately one and a half hours.

Attached are copies of the flyer. This study will be approved by the Institutional Review Board (IRB) of Barry University in Miami, Florida before data collection will begin. The anticipated date for IRB review is January 2017 and the study is expected to begin February 2017. I will comply with all the requirements of your establishment.

Thank you for your consideration of access and assistance to recruit volunteers for this study.

Please contact me at [redacted] for any questions or concerns. You may also contact my faculty sponsor, Dr. Jessie M. Colin, jcolin@barry.edu or (305) 899-3830. The IRB contact is Barbara Cook who can be reached at bcook@barry.edu or (305) 899-3020. I look forward to your response at your earliest convenience.

Yours Respectfully,

Odiane Medacier, MSN, FNP-C

APPENDIX D

Recruitment Flyer

Haitian-American VOLUNTEERS are needed!!!

To participate in a research study to explore your knowledge, perceptions, and attitudes about obesity and weight loss surgery

Two groups of participants are needed:

1) For group one, a maximum of 20 volunteers are needed to participate in individual interviews. 2) For group two, 7 volunteers are needed for a group interview

Qualifications to participate in group one THE INDIVIDUAL INTERVIEWS	Qualifications to participate in group two THE GROUP INTERVIEW
1. Born in Haiti and living in the United States 2. Be 18 years of age or older 3. Speaks English or Creole 4. Self-identified as obese 5. Willing to have a one-hour face-to-face, or Internet/Skype interview with the researcher at a place and time that is convenient for you 6. Willing to discuss your knowledge, perceptions, and attitudes about obesity and weight loss surgery. 7. willing to have the interview audio tape recorded and transcribed 8. Willing to have another 30 minutes meeting to review and return the transcriptions 9. If using Skype, participant must know how to use the video conferencing method Skype® with access to a computer, email or fax and telephone.	1. Born in Haiti and living in the United States 2. Be 18 years of age or older 3. Able to read and speak English and Creole 4. Had weight loss surgery at least 6 months 5. Agree to participate in a face to face, or via Skype group interview, lasting approximately 90 minutes at a place and time that is convenient for the group 6. Be willing to discuss your knowledge, perceptions, and attitudes about obesity and weight loss surgery with the researcher and the group 7. Be willing to have the interview audio tape recorded and transcribed 8. If using Skype, participant must know how to use the video conferencing method Skype® with access to a computer, email or fax and telephone.

You will receive a $10 gift card in appreciation of your participation in the study

If you would like to participate in the study please contact:

Researcher: Odiane Medacier, MSN, FNP-C (Doctoral student at Barry University School of Nursing and Health Sciences)

Email: [redacted] Cellular phone: [redacted]

Barry University Faculty Sponsor: Dr. Jessie Colin: jcolin@barry.edu (305) 899- 3830

Barry University IRB: Barbara Cook: bcook@barry.edu (305) 899- 3020

APPENDIX D (Creole)

Rekritman

NOU BEZWEN VOLONTÈ AYISYEN AMERIKEN!!!

Pou patisipé nan yon étid kap chèché konen konésans, pecépsyon, ak atitid granmounAyisyen Ameriken anvè gwosè ak operasyon pou pèdi pwa.

Nou bézwen 2 gwoup moun.

1) Yon gwoup pou fè entèvyou in a in ak chèchè a
2) Yon lot gwoup pou chita ensam pou fe entèvyou a.

POU PATISIPE NAN ENTÈVYOU in a in an, En Creole ou engle, fok ou (Phase I)	**POU PATISIPE NAN ENTÈVYOU EN GWOUP la, engle selman, fok ou (Phase II)**
1. Fèt an Ayiti é rété nan Etazini **2. Gen laj 18 lané ou plis** **3. Pale Kreol oubyen englè** **4. Fok ou gwo (gra)** **5. Dako pou patisipé nan yon premié entèvyou fas a fas, osinon pa Skype, kap diré inedetan, nan yon plas ak yon lè kap pi bon pou rou.** **6. Dako pou diskité ak chèchè nan yon entevwou sou sa ou konnen, pansé, ak atitid ou sou gwosè ak opérasyon pou pèdi pwa nan** **7. Dako pou mwen tépé é transmèt a lékri entèvyou a** **8. Dako pou patisipé nan yon dézyèm swivi, ki ha diré 30 minit pou konfime infomasyon ou te bay nan premye entevyou a.** **9. Si w ap itilize metòd Skype konferans sou videyo, ou dwe konnen ki jan yo sèvi ak Skype® e gen aksè a yon òdinatè ak email e telefòn.**	1. Fèt an Ayiti é rété nan Etazini 2. Gen laj 18 lané ou plis 3. Pale, li e konpranm englè e kreol 4. Si ou té fè opérasyon pou pèdi pwa sa gen plis ke 6 mwa 5. Dako pou patisipé nan yon entèvyou en gwoup, fas pou fas, osinon pa Skype, entèvyou a pap diré plis ké 90 minit, nan yon lokal ak yon lè kap pi bon pou tout gwoup la. 6. Dako pou diskite ak chèchè é ak gwoup la sou sa ou konnen, pansé, ak atitid ou sou gwosè ak opérasyon pou pèdi pwa, 7. Dako pou chèchè a anrejistre é transmèt a lékri entèvyou a 8. Si w ap itilize metòd Skype konferans sou videyo, ou dwe konnen ki jan yo sèvi ak Skype® e gen aksè a yon òdinatè, email ak telefòn.

Wap resevwa yon kat kado Visa $10 konm apresiatyon pou patisipasyon nan etid la

Si w vlé patisipé nan étid sa, tanpri kontakté:

Cheche a: Odiane Médacier, MSN, ARNP, FNP-C (Etidyan doktora nan Barry University, School of nursing and Health Sciences)

[redacted]

Fakilté Barry Inivèsité: Dr. Jessie Colin jcolin@barry.edu (305) 899-3830

Barry Inivèsité IRB: Barbara Cook bcook@barry.edu (305) 899-3020

(Back translated by Reverend Dr. Adenet Medacier, JD, Esquire)

APPENDIX E

Phase I Demographic Questionnaire

Do not write your name on this paper, use your pseudonym

Please highlight or circle the answer that best applies to you. Highlight or Circle only one answer for each question. Example: What is your favorite color?

a. *Pink* *b. White* *Black*

1. In what country were you born? _____
2. How long have you been living in the United States? _____
3. What is your age range?
   a. Under 18
   b. 18-25
   c. 26-40
   d. 41-55
   e. >55
4. What sex are you?
   a. Male
   b. Female
   c. Transgender
5. What is your marital status?
   a. Single, never married
   b. Married
   c. Separated
   d. Divorced
   e. Widow
6. What is your highest level of education?
   a. Less than primary
   b. Primary only
   c. Complete High school
   d. Some college courses
   e. Bachelor's degree or higher
7. What is your yearly household income?
   a. Under $25,000
   b. $25,000-$30,000
   c. $31,000-$40,000
   d. $41,000-50,000

Appendix E

Phase I Demographic Questionnaire

e. Above $50,000

8. How much do you weigh? _____

9. Do you consider yourself obese
   a. Yes
   b. No

10. Do you think other people consider you obese?
    a. Yes
    b. No

11. If yes to #10, who?
    a. Family
    b. Friend
    c. Doctor
    d. Colleagues
    e. Other (specify)_____

APPENDIX E (CREOLE)

Kestyone Demografik, phase I

Pa ekri non ou sou papye sa a, mete non jouet ou

Souple cercle repons ki meyè pou ou. Cercle sèlman yon repons pou chak kesyon.
Egzanp: ki koulè ou pi renmen?

a. Woz b. blanch ©. nwa

1. nan ki péyi ou fèt? _____

2. Pandan konbyen tan ou rété nan Etazini? _____

3. ki ranjé laj ou?
   a. Mwens ke 18 lane
   b. 18-25
   c. 26-40
   d. 41-55
   e. Plis ke 55 lane
4. ki sex ou yé?
   a. Mal
   b. Fémèl
   c. Mal/ fémèl

5. Ki sitiyasyon matrimonyal ou?
   a. Pa janm maryée
   b. Maryé
   c. Séparé
   d. Divorcé
   e. Veve (mari ou madanm mouri)

6. ki klas ou rivé lékol?
   a. Mwens ke pwimè
   b. Pwimè sèlman
   c. Fini tout klas segondè
   d. kèk kou kolèj
   e. Gen bachelie ou pi wo degre

7. konbyen lagent ki antré nan kay la pa lané?
   a. Mwens ké $25,000
   b. $25,000 a $ 30,000
   c. $31,000 a $40,000
   d. $41,000 a $50,000
   e. Plis pasé $50,000

APPENDIX E (CREOLE)

Kestyone Demografik, phase I

8. Konbyen ou pezé? _____

9. Eske ou panse ou gwo (gra)
    a. Oui
    b. Non

10. Eske lot mounn panse ou gwo (gra) ?
    a. Oui
    b. Non

11. Si oui pou nimero 10, ki mounn?
    a. Fanmyi
    b. Zanmi
    c. Dokte
    d. Asocie
    e. Lot mounn (ki mounn)_____

APPENDIX E

Phase II Demographic Questionnaire

Do not write your name on this paper, use the pseudonym

Please highlight or circle the answer that best applies to you. Highlight or Circle only one answer for each question.

Example: What is your favorite color?

a. *Pink* *b. White* *Black*

1. In what country were you born? _____
2. How long have you been living in the United States? _____
3. What is your age range?
   a. Under 18
   b. 18-25
   c. 26-40
   d. 41-55
   e. >55
4. What sex are you?
   a. Male
   b. Female
   c. Transgender
5. What is your marital status?
   a. Single, never married
   b. Married
   c. Separated
   d. Divorced
   e. Widow
6. What is your highest level of education?
   a. Primary school only
   b. Complete High School
   c. Some College course
   d. Bachelor's degree or higher
7. What is your annual household income?
   a. Less than $25,000
   b. $25,000- $30,000
   c. $31,000- $ 40,000
   d. $40,000-$50,000
   e. More than $50,000

APPENDIX E

Phase II Demographic Questionnaire

8. How much do you weigh? _____

9. How tall are you? _____

10. What is your BMI? _____

11. What type of surgery did you have?
    a. Roux-en-Y gastric bypass.
    b. Laparoscopic adjustable gastric banding.
    c. Sleeve gastrectomy.
    d. Duodenal switch with biliopancreatic diversion.
    e. Other (specify) _____

12. How long since you had surgery?
    a. 6 months
    b. 1-3 years
    c. 3-5 years
    d. More than 5 years

13. How long did you consider yourself obese
    a. All my life
    b. Childhood
    c. Adolescent
    d. Adult

APPENDIX F

Interview Guide for Phase I Interview

Opening question (Grand Tour)

What are your thoughts and opinions about obesity and how it relates to health?

Transitional questions

1. Do you consider yourself overweight or obese?
2. Have you tried to lose weight before? If yes, what are some of the programs you have used?
3. Do you have any chronic health disease that is often associated with obesity, such as high blood pressure, diabetes, high cholesterol, sleep apnea, Acid reflux, etc.?
4. What comes to your mind when you think about obesity?
5. What would be some changes if someone loses weight?
6. Do you think it difficult for Haitian-Americans to lose weight?
7. What do you think about weight loss surgery?

Key questions

1. What is your idea of normal weight?
2. How hard do you think Haitian-Americans need to work at losing weight? (please elaborate)
3. Have you heard about weight loss surgery? If so, what comes to mind when you think of it?
4. Do you think being Haitian-American has any influence on what you think about weight and weight loss surgery?

Concluding question

What is the one burning comment or information that you want to add that was not covered during our conversation?

APPENDIX F (Kreole)

Gid pou Entèvyou Endividyèl

Kestyon Ouvèti (Grand Tour)

Ki sa ou panse oswa ki opinyon w sou zafè gwose ak kouman li concerne sante?

Kestyon Tranzisyonèl

1. Eske ou konsidere tèt ou twò gwo oswa obèz?
2. Eske w janm eseye pèdi pwa? Si wi, ki kèk nan pwogram ou te itilize?
3. Eske ou gen oken maladi sante kwonik ki souvan asosye ak obezite, tankou : maladi tansyon, dyabèt (Sik), kolestewòl, wonfle, Asid, elatriye?
4. Ki sa ki vini nan lespri ou lè ou panse osijè de obèz?
5. Ki kèk chanjmen ou panse ta gen si yon mounn pèdi pwa?
6. Eske ou panse li difisil pou Ayisien Ameriken pèdi pwa?
7. Kisa ou panse de operasyon pou pedi pwa ?

Kestyon kle

1. Ki kantite pwa ou panse ki nomal?
2. Eske ou panse Ayisyen Amerikens bezwen pèdi pwa? (Elabore tanpri)
3. Eske ou te tande pale de operasyon pou pèdi pwa? Si wi, ki sa ki vini nan lespri Lè w panse a operasyon sa?
4. Eske ou panse le fe key on mounn ayisyen-Ameriken infliyence jan li panse osijè de operasyon pou pèdi pwa?

Kesyon pou femen

Eske ou vle ajoute oken lot enfòmasyon?

APPENDIX F

Interview Guide for Phase II Interview

Initial Open-ended Questions:

1. What is your experience with obesity?

2. What is your experience with weight loss surgery?

3. What do you know about Haitian-American and Surgery in general?

4. What are your thoughts on the personal traits or values that might help (or hinder) a Haitian-American from having bariatric surgery.

Intermediate Questions:

1. What are your thoughts regarding the categories that emerged during the individual interviews?

Ending Questions:

1. Describe what you think Haitian-Americans know about weight loss surgery

2. Do you think the categories represent your views of weight loss surgery?

3. Is there anything else you would like to add?

VITA

October 27, 1966	Born – Cap-Haitian, Haiti
1988	AS, Miami Dade Community College Miami, FL
1988-2000	Staff, Nurse, Jackson Memorial Hospital, Miami, FL
1990	BSN, Florida International University Miami, FL
1994-1998	MSN/ARNP, Barry University, Miami Shores,
2000 – 2002	Adjunct Professor, Miami Dade College Accelerated Option Program, Miami, FL
2000 - Present	Clinical Nurse Practitioner, Jackson Memorial Hospital, Miami, FL
2010- Present	Volunteer Visiting Professor, Haiti Nursing Schools
2017 - Present	Adjunct Professor, MSN-ARNP Program, Florida National University, Miami, FL

PUBLICATIONS

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