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Obesity's Impact among Asian Americans in Southern California

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Walden University
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Abstract

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MS, Saint Francis University, 2017

BS, Chapman University, 2014

Dissertation Submitted in Partial Fulfillment

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Abstract

Obesity continues to be an important public health issue in the United States, especially among minority populations. However, one minority group experiences the lowest obesity rate: Asian Americans. As a result, there is not much research available involving the impact of obesity and weight gain among this population. The purpose of this basic qualitative exploratory study was to improve the understanding of obesity's impact on the Asian American population, specifically in Southern California, whose goals were to lose weight and become more informed about obesity's impact on health. The study consisted of three main research questions. Twenty-five participants were interviewed using an original interview guide formulated using the health belief model (HBM) as the theoretical framework. Interview transcripts were coded conducting a thematic content analysis to identify common themes to answer the research questions. Six themes emerged: physical and mental health disadvantages, lack of consistency and motivation, the taboo nature of being overweight or obese within Asian culture, Asian Americans are not a model minority, Western vs. Asian culture, and outdated BMI. Though the themes from the shared experiences cannot be generalized as Asian Americans from other parts of the U.S. may have different experiences, it demonstrates more inclusion is needed when addressing obesity prevention. Furthermore, the results from this study provide opportunities to affect positive social change, such as increased social awareness of the health struggles Asian Americans experience, increased cultural competence among healthcare professionals when treating Asian American patients, and lastly, increased inclusivity and representation of Asian Americans in health discussions.

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Dedication

This dissertation is dedicated to the field of public health education and promotion as well as the Asian American community. My work is dedicated to public health educators who are formally trained as such and are committed to improving the overall health and well-being of the populations they serve, especially the Asian American population.

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Chapter 1: Introduction

Introduction

Obesity has been an ongoing public health issue all over the world, affecting millions of adults. In the United States alone, 40% of American adults suffer from obesity (Centers for Disease Control and Prevention [CDC], n.d.a). This health condition is determined based on a person's body mass index (BMI). A BMI that is greater than or equal to 30 kg/m^2 is considered the obese threshold (CDC, n.d.b). Many factors have contributed to this rise in both preventable and nonpreventable obesity rates. Behaviors such as an unhealthy diet, physical inactivity, medication use, and sleep quality are contributing factors to obesity, but can be prevented by adopting healthy behaviors (National Institute of Diabetes and Digestive and Kidney Diseases [NIDDK], 2017). Yet, some nonpreventable factors include genetics and family history and the environment (NIDDK, 2017). In addition, obesity has been associated with a plethora of chronic conditions, which include but are not limited to type 2 diabetes, heart disease, and hypertension (NIDDK, 2017).

Another major nonpreventable contributing factor to obesity is race. Although obesity affects people of all races and ethnicities, the prevalence of obesity is much higher in minority populations in the U.S. Statistics demonstrate the top groups with the highest obesity rates are African Americans at 76% and Hispanic Americans at 80% (Peterson et al., 2019). Asian Americans are shown to be the group with the lowest rates at 40% (U.S. Department of Health and Human Services Office of Minority Health, 2020b). Yet, there are issues in how data for Asian Americans are collected and

combined together. When disaggregated, obesity rates differ across all Asian subgroups (Yi et al., 2015). Furthermore, while Asian Americans have the lowest risk for obesity, this population is more prone to obesity-related health conditions such as type 2 diabetes, even though their BMI does not make them obese (Misra et al., 2018; Kapoor et al., 2019). Thus, it is important to also include Asian Americans in discussions involving obesity prevention.

In Chapter 1, I present a synopsis of this basic qualitative exploratory study. Additionally, I address evidence regarding obesity as it relates to Asian Americans, identify the current gap in literature, and justify the need for this research. Chapter 1 also includes the study's background information, purpose and problem statement, research questions and subquestions, theoretical framework, nature of the study, and terms and definitions. Lastly, I discuss the study's scope and delimitations, assumptions, and significance.

Background

The public health issue of obesity is prominent, especially in the U.S. While obesity does affect people of all races and ethnicities, minority populations are the most vulnerable. Statistics show Asian Americans as the population with the lowest obesity rates; however, this is misleading because data are aggregated and do not consider Asian subgroups (Wang et al., 2017). When the data are separated, statistics show Filipino and Korean Americans to have the highest obesity rates among Asian subgroups (Malagang et al., 2017). Additionally, according to the World Health Organization (WHO), because Asians are typically smaller in frame and tend to have higher body fat percentages,

standard measurements of determining obesity are inappropriate (Yi et al., 2015). Yet, since standard BMI measurements are used on people of all races to determine obesity, information for Asian Americans may not represent who is really obese among this population.

Aside from potential inaccuracy issues with obesity data among Asian Americans, this population is more at risk in developing obesity-related health conditions, even with a low BMI (Mui et al., 2018). These conditions include type 2 diabetes, hypertension, and heart disease, and is most likely due to their tendency of having higher body fat percentages at a low BMI (Kapoor et al., 2019). This shows calculating BMI to determine obesity among Asian Americans does not suffice in terms of helping this population with their overall health and weight status as the obesity epidemic affects this group in a much more complex way.

Asian Americans experience societal norms and expectations regarding weight as well. These expectations shape perception and contribute to lack of knowledge people have regarding extreme weight gain among this population. The model minority myth fosters the assumption that Asians do not experience health disparities due to high socioeconomic status and education level (Yi et al., 2016). As a result, many health studies involving obesity tend to exclude this population. Immigration and acculturation also contribute to obesity. Acculturation is the action during which immigrants immerse themselves into the culture of the country they moved to (Gong et al., 2019). The longer Asians stay in the U.S. and adopt the Western lifestyle, the more likely they are to be overweight or obese (Gorman et al., 2016). This is especially true for second and third

generation Asian Americans as Western culture is what they know compared to first generation Asian Americans, who are still connected to the culture of their native countries (Oakkar et al., 2015). Moreover, due to the model minority myth and generational status with Asians, society has contributed to acts of prejudice against this population. Asian Americans are questioned about their national identity if they are slender in figure but are assumed to be more American if they are heavier (Handron et al., 2017). Thus, Asians may opt to look heavier to avoid any act of racial prejudice.

This basic qualitative exploratory study on obesity and Asian Americans is important to demonstrate how obesity affects this population. Obesity's impact may not be as obvious compared to other racial groups, but Asians are just as likely to be suffering from obesity and obesity-related health conditions compared to any other population. Therefore, this study will be beneficial in terms of gaining a better understanding of the experiences of Asian Americans as they relate to the obesity epidemic.

Problem Statement

42% of Asian Americans are either overweight or obese (U.S. Department of Health and Human Services Office of Minority Health, 2020b). In Orange County, California, there is a 19.5% obesity prevalence rate (California Department of Public Health [CDPH], 2016), of which 7% of Asian Americans are currently overweight or obese (Orange County's Healthier Together, 2019). In comparison to other counties, Orange County ranks third for the lowest obesity prevalence rate (CDPH, 2016). However, there are eight out of 34 cities where adult obesity rates are above 25%

(Orange County's Healthier Together, 2019). While statistics demonstrate Asian Americans only account for 10% of those who are overweight or obese in Orange County and 40% in the state, data were not disaggregated to show which Asian subgroups may be more at risk for obesity. Subgroups who are at more risk include Filipino Americans with a 78% obesity prevalent rate and Korean Americans at 60%, while Chinese and Vietnamese Americans have the lowest prevalence rates at 52% and 38%, respectively (Maglalang et al., 2017). Furthermore, Asians are at a much higher risk compared to other minorities to develop obesity-related health conditions, such as type 2 diabetes, at lower BMIs (Misra et al., 2018). Nevertheless, because the state's obesity rate for Asian Americans is not as high as African Americans at 76% (U.S. Department of Health and Human Services Office of Minority Health, 2020a) or Hispanic Americans at 80% (U.S. Department of Health and Human Services Office of Minority Health, 2020c), it has contributed to a limited amount of research being conducted on the impact obesity has on this specific population.

Aside from health risks associated with being obese, there are also societal factors to consider for Asian Americans. Handron et al. (2017) investigated the relationship between weight stereotypes and national identity for Asian Americans and said even though weight gain is stigmatized in the United States, Asian Americans who look heavier are perceived as more American. Thus, despite health risks associated with weight gain, there are societal benefits. Another role society plays involves the influence of Western culture. As Asians migrate to the U.S., the duration of their stay correlates with their health decline because of acculturation (Afable et al., 2016). Acculturation is

when immigrants go through the process of adopting their host country's lifestyles and behaviors. Because of acculturation, Asian immigrants' culture of origin is disappearing (Gong et al., 2019). Additionally, second and third generation Asian Americans may be more prone to becoming obese as they are more immersed in Western culture compared to their foreign-born relatives (Yi et al., 2015). This means there are factors contributing to how the obesity epidemic is affecting Asians.

Previous studies that have investigated the effectiveness of obesity intervention programs have focused on the importance of social support, communication, the impact on mental health, and physician-patient dynamic (see Arroyo et al., 2020; Woodruff et al., 2018). However, there lacked solid representation of Asian American participants in these studies. Moreover, these obesity intervention programs do not focus on cultural competence to better address the needs of certain populations. For example, there is a lack of understanding of food culture as it pertains to multiethnic Asian populations as well as Asians' attitudes regarding food (Lim & van Dam, 2020). Thus, existing obesity intervention programs may not be sufficient to address experiences and needs of Asian American patients who are overweight and obese whose goals are to lose weight and become more informed regarding obesity's impact on health. This research will fill this gap by addressing personal experiences of Asian Americans who are overweight or obese. This information could contribute to helping obesity intervention programs improve how the needs of Asian American patients who are overweight and obese are addressed.

Purpose of the Study

The purpose of this study was to improve understanding of obesity's impact on the Asian American population in Southern California whose goals were to lose weight and become more informed regarding obesity's impact on health through application of the health belief model (HBM). The HBM is a theoretical framework that involves using personal perceptions to better understand a phenomenon. This framework was used to shape the research questions. Using a basic exploratory qualitative approach, I addressed the gap found in the literature. Due to COVID-19, a combination of recorded telephone interviews and video conferencing interviews was conducted to develop an understanding of Asian Americans' experiences and factors that influence their perceptions of obesity and weight gain.

Research Questions

The study involved three main research questions, with each question having two subquestions:

RQ1: What impact does being overweight or obese have on Asian Americans in Southern California?

SQ1: What are the advantages to being overweight or obese for Asian Americans?

SQ2: What are the disadvantages to being overweight or obese for Asian Americans?

RQ2: What are the experiences of Asian Americans who are overweight or obese in Southern California?

SQ3: What are the perceived benefits of losing weight among Asian Americans?

SQ4: What are the perceived barriers to losing weight among Asian Americans?

RQ3: For Asian Americans who are overweight or obese in Southern California, what factors influence their perceptions of obesity and weight gain?

SQ5: How do Asian Americans who are overweight or obese describe their susceptibility to obesity and obesity-related health conditions?

SQ6: What influences Asian Americans who are overweight or obese to adopt healthier behaviors?

Theoretical Framework for the Study

The HBM was applied as the theoretical framework for this qualitative study. The HBM is a behavior model that suggests people's belief in a personal threat of an illness or disease and their perceptions of the effectiveness of recommended health behaviors will determine whether they adopt that specified health behavior or not (Boston University School of Public Health, 2019). There are six major constructs that support the HBM: perceived severity, perceived susceptibility, perceived barriers, perceived benefits, cue to action, and self-efficacy (Champion & Skinner, 2008). These constructs help explain how and why people form their perceptions involving a particular topic. Since this study emphasized the experiences of Asian Americans and how those experiences formed their perceptions of obesity and weight gain, the study's research questions were formulated to explain why and how their perspectives on obesity and weight gain were impacting their health and weight status.

Nature of the Study

I used a basic exploratory qualitative approach. It is used by researchers who are interested in people's interpretations of their experiences and what meaning is manifested from those experiences (Worthington, n.d.). The study involved interviews with a group Asian Americans living in Orange County, CA who were overweight or obese and whose goals were to lose weight and become more informed regarding obesity's impact on health.

Definitions

Acculturation: The act in which individuals adopt the host country's cultural lifestyle and behaviors after leaving their home country (Gong et al., 2019).

Body Mass Index (BMI): Measurement used to determine normal weight, overweight, and obesity for individuals. It is calculated using a person's height and weight (CDC, n.d.b).

Cultural Competence: Incorporation of knowledge regarding various groups and people into standard practices in a clinical setting to provide high quality of care to a diverse group of patients (CDC, 2020).

Generational Status: Birthplace of an individual or an individuals' parents. First generation typically means people who are foreign-born while second and third means having at least one foreign-born or two native-born parents (U.S. Census Bureau, 2019).

Health Belief Model (HBM): A behavior model developed in the early 1950s that suggests people's belief in a personal threat involving an illness or disease and

perceptions of the effectiveness of proposed health behaviors determines whether that behavior is adopted (Boston University School of Public Health, 2019).

Immigration: The process in which individuals become either permanent residents or citizens of another country after leaving their home country (Parry, 2019).

Model Minority: In the context of East and South Asians, the model minority stereotype involves assumptions that Asian Americans are educated, law-abiding, hardworking, and have high incomes, low crime rates, and close family ties (Yi et al., 2016). Moreover, it implies that this group is not an underprivileged racial and ethnic minority (Yi et al., 2016).

Normal Weight Obesity: Someone who has a BMI of about 25 kg/m^2 yet has a high body fat percentage (Kapoor et al., 2019).

Obesity: Excessive weight gain and accumulation that can have adverse effects on overall health, such as development of diabetes. The standard measurement for someone who is obese is a BMI of greater than or equal to $30kg/m^2$ (WHO, 2021).

Overweight: Abnormal fat accumulation and weight gain that negatively impacts overall health. The standard measurement for someone who is overweight is a BMI of greater than or equal to 25 kg/m^2 (WHO, 2021).

Race: What humans are often categorized into based on physical traits regarding as common among people of shared ancestry (Merriam-Webster.com, n.d.)

Assumptions

The study had several assumptions. Participants used their BMI calculation to determine being overweight or obese. Participants chosen to be interviewed provided

truthful responses and were not constrained by the sensitive nature of questions. The HBM was an appropriate theoretical framework to apply to my study as it involved focusing on people's personal experiences as well as perceptions involving obesity and weight gain.

Scope and Delimitations

I focused on the experiences of Asian Americans between the ages of 18 and 50, as they related to obesity and weight gain to gain a better understanding on obesity's impact on this population in Southern California. Therefore, this study involved collecting in-depth information from participants using a qualitative format as a way to produce meaningful results. Since I was only interested in gathering personal experiences and perspectives from participants, the timeframe to interview all eligible participants was between 2 and 3 months.

Eligible participants resided in Southern California. Additionally, because this study involved Asian Americans, the sample was a heterogeneous group of overweight and obese Asian Americans adults who fit the study's inclusion criteria, which was they had to self-report as overweight or obese, be of Asian descent (immigrant or native born), lived in Southern California, were between the ages of 18-50, and had tried to lose weight in the last 6 months.

Limitations

Potential limitations involved difficulties recruiting enough Asian American participants via social media platforms, such as Instagram and Facebook, that would produce meaningful data. To mitigate this issue, participants were offered an incentive to

encourage them to take part in the study in the form of a gift card for either Target, Amazon, or Walmart. Another barrier was poor signal or Internet connections when conducting interviews. Participants must have had wi-fi or be willing to use cellular phone data. This was not a major problem. 91% of American adults access the Internet through smartphones, broadband, or a combination of both (Perrin, 2021). However, those with less formal education may not have Internet access (Perrin, 2021). Response bias was another limitation, which was addressed by ensuring interview questions were phrased in a way that would create well-balanced responses from participants. Lastly, ensuring mitigation of researcher bias regarding the problem in question was another challenge. This was done by allowing participants to respond to questions in their own words without outside influences and explaining to them there were no right or wrong answers to open-ended interview questions.

Significance

This research involved filling a gap in understanding by concentrating on experiences of Asian Americans who were overweight and obese. This project is unique because it involved addressing limited amounts of research regarding a group who is impacted by obesity. Lack of research is not only due to preconceived notions that Asian Americans are generally healthy, but also because they have one of the lowest rates of obesity in the country (Yi et al., 2015). This study included substantial insights regarding this demographic and their perspectives involving obesity. It could contribute to assisting health educators and other health professionals in terms of providing obesity prevention care to Asian American patients whose goal is to lose weight, thus addressing cultural

competence. Therefore, it is a way to ensure health professionals are being respectful and understanding of their patients' perspectives, beliefs, and cultures when providing the highest quality of care. This study could contribute to positive social change by helping Asian Americans become more aware and educated about how obesity adversely affects their population. It could influence Asian Americans to make better personal choices as well as encourage today's society to be more inclusive when addressing obesity prevention. With obesity continually increasing among all racial and ethnic groups, it is important to understand its impact on every population and improve disease prevention.

Summary

In this chapter, I provided background regarding the obesity epidemic affecting the United States. It is a prominent public health concern and issue, specifically among minority populations such as African and Hispanic Americans. However, one racial minority group that has been neglected in the public health discussion of obesity is Asian Americans. This chapter also included relevant data on how overweight and obesity is also a concern among this group as well as possible factors explaining why there is insufficient research contributing to obesity prevention among Asian Americans. Moreover, I discussed the purpose and nature of the study, and how the HBM was appropriate to apply. Finally, study assumptions, scope and delimitations, and limitations were also addressed in this chapter. Chapter 2 includes the theoretical framework of the study and literature review as well as information explaining why this study was important.

Chapter 2: Literature Review

Introduction

Obesity is a prominent public health issue in the United States, with 42% of American adults living with obesity (CDC, n.d.a). Moreover, this health problem has been heavily associated with comorbidities, such as diabetes, hypertension, and heart disease (NIDDK, 2017). There are many contributing risk factors to the continuous rise in obesity, which involve health behaviors, environmental settings, genetics and family history, and lack of education (NIDDK, 2017). Race also plays a substantial role. Obesity heavily affects minority populations. African Americans and Hispanic Americans are the groups experiencing highest rates of adult obesity (Peterson et al., 2019), while Asian Americans experience the lowest rates (U.S. Department of Health and Human Services Office of Minority Health, 2020). Yet, because of data aggregation among Asian Americans and current obesity standards, obesity statistics for Asian Americans may be misleading.

In the United States, Asian Americans have an obesity rate of 42%, whereas African Americans experience a rate of 76% and Hispanic Americans 80% (U.S. Department of Health and Human Services Office of Minority Health, 2020). However, these statistics may not be entirely accurate. Obesity is defined as a person having a BMI of greater than or equal to 30 kg/m^2 (CDC, n.d.b). This is a standard cutoff point used for everyone, regardless of race, to determine whether someone is obese. However, using this standard for Asian Americans may not be accurate or appropriate (Mui et al., 2018). Nonetheless, this has led to a limited amount of research being done to explain the

relationship between obesity and Asian Americans. The following literature review will include information explaining why standard BMI cutoff points may be inaccurate for determining obesity among Asian Americans, why obesity is neglected among this specific population, and lack of education involving Asian Americans and obesity.

In this chapter, I describe the literature search strategy, and then evaluate studies and scholarly work that includes background information regarding the obesity epidemic as it relates to Asian Americans. I also address studies on obesity prevention care to identify strategies that are useful for addressing Asian American patients who are overweight or obese. Then, I discuss the HBM and rationale for choosing it. This chapter concludes with a summary.

Literature Search Strategy

I focused on U.S.-based studies related to obesity risk factors, obesity-related health conditions, and obesity and weight gain, specifically involving the Asian American population. I also considered global studies that would help in terms of describing the relationship between obesity and Asian cultures. To support use of the HBM in this study, I ensured these studies were related to obesity prevention as well. While conducting my literature search, I narrowed publication dates between 2015 and 2021. If articles were published prior to 2015, they were only included if they were relevant and informed the research.

Library databases that were used to gather articles for review were ScienceDirect, SAGE Journals, PubMed from the National Center for Biotechnology Information (NCBI), CINAHL & MEDLINE Combined Search, ProQuest Health & Medical

Collection, and Google Scholar. These databases were either accessed directly or through the Walden Library. To review statistical data and other obesity and obesity-related factsheets, I used Internet searches from various credible sources, such as the CDC, U.S. Department of Health and Human Services, California Department of Public Health, and Orange County Health Care Agency.

Keywords used to select relevant literature were *acculturation, adult obesity, Asians, Asian American obesity, Asian stereotype, Asian subgroups, body fat percentage, body mass index, health behavior, health belief model, health education, immigration, model minority, normal weight obesity, obesity, obesity prevention, U.S. obesity, weight gain, weight intervention, weight loss, weight management,* and *south Asians*.

Article selections were based on their significance. Both qualitative and quantitative studies were included in the literature review to inform research and provide statistical data that justifies a qualitative study such as this. All selected articles were published in peer-reviewed journals and were online and written in English.

Theoretical Foundation

The HBM was one of the first health behavior models, created in the 1950s by U.S. public health service social psychologists primarily to improve the effectiveness of health education programs (Boston University School of Public Health, 2019). Because beliefs are individual characteristics shaping and determining people's behavior, creating persuasive techniques to help shape those beliefs could lead to behavior changes (Abraham & Sheeran, 2015). Lo et al. (2015) said identifying key factors of health

behavior through the lens of a theoretical foundation, such as the HBM, is effective to address strategies to improve the quality of health services.

The HBM suggests the combination of people's belief in a personal threat involving an illness or disease and their perceptions of the effectiveness of a recommended health behavior determine whether they adopt that health behavior or not (Boston University School of Public Health, 2019). There are six major constructs of the HBM: perceived susceptibility, perceived severity, perceived barriers, perceived benefits, cues to action, and self-efficacy.

The HBM emphasizes individual perceptions. By applying the HBM, it can be determined what general knowledge Asian Americans have about obesity, how aware they are about how obesity impacts them, and predictors that encourage them to adopt healthy habits to lose weight. Overall, the HBM was used to inform the research, shape the study's research questions, and develop a solid understanding of internal and external factors that explain the relationship between obesity and the Asian American population.

HBM Constructs

Perceived Susceptibility

Perceived susceptibility is an HBM construct referring to beliefs that focus on the risk of developing an illness or condition (Simpson, 2015). This involves how knowledgeable people are about a specific illness and if they believe they are at risk. It accounts for people's feelings and thoughts of how vulnerable they are to an illness (Boston University School of Public Health, 2019). In context, this would be what general knowledge Asian Americans have regarding obesity and applying that knowledge

to their own personal health to determine risk. For example, though not an Asian American sample size, Martinez et al. (2016) demonstrated that when participants discussed susceptibility to obesity, they noted they could not identify their risk because they lacked nutrition education and assumed that only having a slow metabolism would increase the risk for extreme weight gain. This demonstrates how knowledge is an important part in perceived susceptibility. However, while it is beneficial to observe what people know, this construct does not consider external factors, such as economic factors, that increase people's risk for an illness (Boston University School of Public Health, 2019).

Perceived Severity

Perceived severity involves the beliefs concerning the possible severity of an illness or condition (Simpson, 2015). More specifically, this construct focuses on people's quality of life since measuring severity encompasses the discussion and understanding of the potential effects of doing or not doing a certain health behavior (Lo et al., 2015). In the context of obesity, conversations dealing with severity would include how losing weight would enhance overall quality of life and improve health status. For instance, Martinez et al. (2016) determined participants established severity based on the symptoms they were feeling for being overweight or obese as well as the financial stress they experienced because of doctor visits and medications. Yet, like perceived susceptibility, external factors are not considered that possibly affect people's health situations (Boston University School of Public Health, 2019).

Perceived Barriers

Perceived barriers are the obstacles or challenges identified to behavior change (Simpson, 2015). These barriers can either be internal or external challenges people experience that prevent them from making healthier choices. Common challenges typically involve a demanding work schedule, time commitments, healthy food being expensive, and lack of support from others (Martinez et al., 2016). Moreover, this construct involves people weighing out the effectiveness of the proposed health behavior against these identified challenges (Boston University School of Public Health, 2019). If these challenges outweigh the effectiveness of the health behavior, behavior change is unlikely to occur.

Perceived Benefits

Perceived benefits refer to the advantages of behavior change in reducing the risk of having an illness or disease (Simpson, 2015). For behavior change to occur, people's perceived benefits should outweigh the identified barriers and obstacles to performing the health behavior. Considering perceived susceptibility, or people's personal risk to an illness, while determining the benefits of a proposed health behavior may more than likely result in the health behavior being adopted due to the overall benefit on health status (Boston University School of Public Health, 2019).

Cues to Action

Cues to action are the catalysts that push people to start accepting the recommended health behavior to improve their overall health (Boston University School of Public Health, 2019). They can be internal or external cues, depending on the situation

and the person. In the context of obesity, an example of an external cue would be obese patients wanting to finally lose weight because their doctor promised them that if they lost weight, they could get off a certain medication (Martinez et al., 2016). The limitation, on the other hand, is the assumption that cues to action are prevalent and necessary to encourage people to act (Boston University School of Public Health, 2019). Again, there are still outside factors that will either help or hinder people's likelihood of adopting a health promoting behavior.

Self-Efficacy

Self-efficacy is the final HBM construct and refers to the level of confidence people have in successfully executing the behavior change (Boston University School of Public Health, 2019). This concept is new to the overall HBM model as it was later added in the mid-1980s. In fact, the construct of self-efficacy is not unique to the HBM. Because self-efficacy relates to whether people perform the desired health behavior or not, it is a construct applied to various behavior theories to explain successful adoption and maintenance of behavior change (Boston University School of Public Health, 2019). While knowledge may be a substantial part of motivating people to adopt healthier habits, knowledge alone is not enough. Lo et al. (2015) demonstrated that the inclusion of self-efficacy increased the likelihood of adopting and maintaining health promoting behaviors. Likewise, Martinez et al. (2016) shared that when participants learned strategies for eating and cooking healthy in the family home, the more their confidence increased, which in turn, allowed them to maintain their healthy lifestyle and even influence other family members to do the same.

Literature Review

Obesity Epidemic and Asian Americans

While obesity rates are continuously increasing across all American populations, Asian Americans currently rank the lowest. According to the U.S. Department of Health and Human Services Office of Minority Health (2020), Asian Americans experience an obesity rate of 42% while African and Hispanic Americans experience 76% and 80%. Nevertheless, this statistic does not consider Asian American subgroups. Yi et al. (2015) said obesity data collection for Asian Americans are often grouped together, despite the subgroups' differing characteristics. For example, Asian Americans can differ in the level of education they have received, their income level, the country they originated from, and how long they have lived in the U.S.. Furthermore, Mui et al. (2017) explained the data aggregation of these subgroups masks any heterogeneity regarding the prevalence and risk of all types of health conditions, which include obesity. These characteristic differences are crucial since they show how much risk one group has over the other. But without considering these differences, Wang et al. (2017) discovered the obesity prevalence rate of Asians to be 9.8%. Yet, when data was disaggregated, Filipino and Korean Americans were the two subgroups with the highest obesity prevalence rate of 76% and 60%, respectively (Malagang et al., 2017). In addition to the aggregated data among Asian Americans, the current data on obesity may be misleading and inaccurate based on how body mass index (BMI) is calculated for this population as well.

Typically, the standard measurement for someone who is obese is a BMI of greater than or equal to 30kg/m^2 (CDC, n.d.b). However, the WHO noted that when

measuring obesity for those who are Asian, the cutoff points should be modified (Yi et al., 2015). The reasons for this modification are because Asians are smaller in body frame and tend to have higher percentages of body fat, especially in the abdominal area, for the same BMI compared to whites and other racial groups (Yi et al., 2015). Thus, the WHO proposed the BMI cutoff points for Asians who are obese should be 27.5kg/m^2 (Mui et al., 2018). Although this was the WHO's recommendation, it was not widely adopted and implemented within the medical world. Yi et al. (2015) explained it was because there was not enough evidence-based research to back up the claim. Yet, Misra et al. (2018) demonstrated Asians were developing obesity-related health conditions, such as type 2 diabetes, at much lower BMIs compared to other racial and ethnic groups. Therefore, not only is there potential data inaccuracy of how many Asian Americans are currently obese, using the standard BMI cutoff points rather than WHO cutoff points may explain why many Asians are suffering from obesity-related health conditions, even at low BMIs.

Despite the WHO's recommendation for Asian Americans, the standard BMI measurements are still used to determine obesity across all races and ethnicities. Thus, by using this standard measurement, many Asian Americans experience weight-related health problems at much lower BMIs than other racial and ethnic groups (Mui et al., 2018). Some of these conditions include type 2 diabetes, hypertension, and metabolic syndrome. Kapoor et al. (2019) explained this phenomenon by what is known as normal weight obesity (NWO), which is a BMI of greater than or equal to 25 kg/m^2 but with an increased body fat percentage. Because Asians may have higher body fat percentages with normal BMIs, it heightens their health risk for metabolic syndrome as research

suggests Asians with NWO can experience other health complications, such as insulin resistance and dyslipidemia (Kapoor et al., 2019). Furthermore, Misra et al. (2018) supported this phenomenon by illustrating that Asians tend to have a higher prevalence for abdominal obesity even with low BMIs unlike other groups, which is another risk factor for the development of obesity-related health conditions. It would suggest that obesity for Asians involves more than just calculating BMI. A combination of high body fat percentage, increased abdominal fat, and NWO make obesity and obesity-related health conditions much more complex for Asian Americans. Despite the complexity, the risk of obesity among Asians needs to be analyzed from an immigration perspective as well.

Association Between Obesity Risk and Immigration

Before their migration to the U.S., majority of Asian immigrants had optimal health status. Gong et al. (2019) said the healthy immigrant effect was the idea that immigrants generally had lower risk of developing health conditions, such as obesity, compared to long-term residents of the country they moved to. Afable et al. (2016) suggested the healthy immigrant effect involved a protective culture that encourages healthy behaviors and reinforces positive health norms. Gorman et al. (2016) said it plays a little role because migrants are living between worlds of U.S. integration and preserving their sending-country's culture. Essentially, immigrants are not trying to protect themselves from the U.S. culture, but more so trying to find a balance to where they came from and where they are now. The longer Asians stay in the U.S., the more likely their

health status deteriorates, also known as unhealthy assimilation (Afable et al., 2016; Gorman et al., 2016).

The influence of Western culture and lifestyle is a major contributor to the slow decline of health status among Asian immigrants, particularly in obesity. Because of acculturation, or the adoption of the host country's cultural lifestyle and behaviors, and the length of their stay, Asian immigrants slowly adopt habits that increase their risk of being obese (Gong et al., 2019). Contributing factors for this include acculturation-related changes in stress, the decline of their protective culture of origin such as a healthy diet, regular exercise, and strong collective and family ties, and lastly, the adoption of the host country's unhealthy behaviors and more emphasis on individualism (Gorman et al., 2016). Fundamentally, the Westernization that takes place as Asians get acclimated into living in the U.S. affects and changes their behaviors, which in turn affect their health status, particularly in weight gain.

To further elaborate on acculturation and Western influence, Yi et al. (2015) expanded on how generational status and other elements linked to the immigration experience, such as access to healthcare, dietary changes, or language barriers, can also impact Asians' health status as they continue to live in the host country. Generational status refers to the birthplace of an individual or an individuals' parents (U.S. Census Bureau, 2019). Thus, first generation would be those who are foreign-born while second and third refer to having at least one foreign-born parent or two U.S.-born parents, respectively (U.S. Census Bureau, 2019). With that said, a longitudinal study focusing on BMI change among Asian American men showed that foreign-born, or first generation,

Asian American men had a healthier BMI compared to Asian American men in the second or third generation categories (Oakkar et al., 2015). Likewise, Gong et al. (2019) also found that while first generation Asians are less likely to be less overweight or obese, due in large part to holding onto their protective culture of origin, prevalence for obesity begins to increase with later generations and those U.S. born. Thus, acclimating to Western life can be detrimental to Asians' health, and can be further explained by breaking down the model minority stereotype.

Model Minority Stereotype and Obesity Implications

Asian Americans are known as the model minority in society. This stereotype originated in the 1960s during the Civil Rights Movement, suggesting that Asian Americans are educated, law-abiding citizens of the U.S. who believe in hard work, strong family connections, and earn high income (Yi et al., 2016). However, while the intention for this stereotype was meant to be positive and showcase Asians overcoming society's structural barriers throughout history, there is research, or lack thereof, showing negative health implications. Yi et al. (2016) explained that the model minority myth fosters the assumption that Asians do not experience any type of health disparity and because of that, are more likely to be neglected in many national health databases and research studies. Furthermore, in the context of obesity, society typically perceives Asian Americans to be healthy and slender in figure, rarely experiencing any health issues (Handron et al. 2017; Kapoor et al., 2019). As a result, many Asians develop own perceptions of themselves, which can have negative implications on their health.

The U.S. has one of the heaviest populations in the world, and it is seen prototypical for Americans to be overweight (Handron et al., 2017). Therefore, it can be deduced that any overweight person can be perceived as American as opposed to another nationality. However, Handron et al. (2017) investigated the relationship between national identity and weight and discovered that more weight makes Asians look "more American" compared to any other racial or ethnic group. Moreover, due to this societal perception, Handron et al. (2017) suggested a benefit to this was Asians experiencing less xenophobic prejudice because they look more Americanized to others. Wu et al. (2020) further supported this claim by explaining that when Asians were confronted about their American identity, they were likely to consume more high-fat, high-caloric traditional American foods in response. In opposition, Lancki et al. (2018) explained that Asians' larger body sizes had more to do with an individual's social network, or the set of people with whom they seek support and talk to about personal matters rather than cultural or national identity. Irrespective, it is possible that there are certain pressures of having to look a certain way for Asian Americans that contribute to the obesity epidemic among this population, and because of this, weight intervention programs targeting Asian patients whose goal is to lose weight and be more informed should incorporate culturally sensitive strategies.

Effective Obesity Prevention and Cultural Competence

Obesity intervention programs, such as weight-loss interventions and nutrition education programs focusing on behavior change, weight loss, and health education have proven to be effective in encouraging people to adopt healthier habits, to lose weight and

keep it off, and to be more informed on obesity and overall health when specific strategies are executed (Teixiera et al., 2015). These strategies include both internal and external factors. Teixiera et al. (2015) identified that tapping into people's self-efficacy and autonomous motivation helped in successfully adopting obesity-related lifestyle changes. More specifically, Arroyo et al. (2020) explained how implementing interpersonal communication strategies, such as acceptance and positive social control, within close relationships helped patients who are overweight or obese find motivation to want to lose weight and maintain it. Conversely, Woodruff et al. (2018) demonstrated patients favored communication with a health professional when discussing weight loss and maintenance rather than communication with their social networks due to the health professional's credibility on the subject. Regardless, both studies examined how intervention programs applying effective communication techniques can encourage motivation, thus producing successful outcomes. On the other hand, the downside is the lack of representation of Asian Americans in such studies that examine the effectiveness of these obesity prevention programs. In fact, Nam (2013) discovered that because Asian Americans typically have a low obesity rate compared to other racial groups, there is an assumption Asians do not suffer from weight-related health problems, leading to a scarcity of obesity research on this population. Therefore, the systematic review was inconclusive due to little to no knowledge around the development and effectiveness of Asian American obesity programs (Nam, 2013).

The underrepresentation of Asians in health studies, especially involving obesity, can be explained from a combination of Asian participants' perspectives as well as the

researchers' perspectives. Many barriers that were participant-related generally related back to culture and/or language, such as not feeling they belong, religious and cultural conflict, and not being fluent in the native language (Quay et al., 2017). This is further supported by Kaholokula et al. (2018) who demonstrated that health interventions not aligned culturally with the target population are less effective than ones that are more culturally responsive. From the researchers' perspectives, barriers included possessing stereotypes regarding the difficulties of working with an Asian population, lack of cultural competency training, and not having translated materials readily available (Quay et al., 2017). Cultural competence is the incorporation of knowledge regarding various groups and people into standard practices and regulations in the clinical setting to provide high quality of care to different patients (CDC, 2020). Therefore, based on the research, many health studies and discussions are failing to incorporate respect regarding the Asian culture, which has led to the underrepresentation.

To address these challenges and improve Asian representation in health studies and discussions, Kaholokula et al. (2018) suggested cultural adaptation of existing programs and/or community-based participatory research. Quay et al. (2017) also emphasized the importance for researchers to demonstrate respect and knowledge regarding the Asian culture, which Maglalang et al. (2017) proved in showing that Asian participant engagement increased when weight intervention programs were more culturally tailored for its target population. Moreover, another approach was the incorporation of faith-based organizations since Asians are much more religiously diverse compared to other American populations (Kwon et al., 2017). Even though there are

subgroups of the Asian race, the population thrives on the community aspect in addressing health topics, such as obesity, and improving health behaviors. Lim & van Dam (2020) also suggested that to be more culturally aware of Asians when executing weight intervention programs, there should be a better understanding on Asians' relationship with food and the concept of food culture. Food is not just something that is consumed; for Asians, there is also tradition and a sense of celebration that is linked to food. With that said, Lim & van Dam (2020) identified an effective strategy to encourage health eating behaviors among Asians was to promote the pleasure aspects of eating.

Summary

This literature review included an explanation of factors contributing to the obesity epidemic among Asian Americans. I explored the potential inaccuracy of obesity rates for Asian Americans due to the use of standard BMI cutoff points as well as how Asians are prone to obesity-related health conditions despite having low BMIs. Immigration and the impact of U.S. acculturation was also discussed to demonstrate changes in Asians' health behaviors and weight. Furthermore, I highlighted possible pressures to look a certain way in order for Asians to solidify their national identity. In addition, I identified how existing weight intervention programs would be more effective if culturally sensitive and responsive strategies were implemented to address needs of Asian Americans who are overweight or obese. Lastly, the literature review also included a breakdown of the HBM, the theoretical framework I used to inform and shape the study's research questions. Chapter 3 includes a discussion of the study design and methodology.

Chapter 3: Research Methodology

Introduction

This qualitative basic exploratory study was designed to better understand obesity's impact on Asian Americans living in Southern California through their personal experiences involving obesity and weight gain. In this chapter, I explain the study's research design and rationale, my role as the researcher, and recruitment of participants. I also provide information regarding instrumentation, data collection and analysis processes, ethical procedures to ensure protection of the participants, and issues of trustworthiness.

Research Design and Rationale

There is a limited amount of research on obesity and weight gain among Asian Americans. This population is at a much higher risk for developing obesity-related health conditions, such as type 2 diabetes (Misra et al., 2018). Therefore, a basic exploratory study design was suitable to explore and understand obesity's impact on Asian Americans via their own words and perspectives. Basic exploratory qualitative research is used by researchers who are interested in people's interpretations of their experiences and what meanings are manifested from those lived experiences (Worthington, n.d.). Using this chosen research design, I attempted to gain an in-depth understanding of Asian American experiences when addressing obesity and weight gain by analyzing and identifying common themes and patterns. These themes involve personal experiences regarding weight status, cultural and societal norms and expectations, and level of obesity knowledge. I was able to gain an understanding of obesity's impact by gathering data

from participants and identifying significant themes in order to determine how Asian Americans handle and address obesity, what obstacles have to be overcome to make healthier choices, and what factors contribute to their perceptions and knowledge about obesity and weight status.

Research Questions and Subquestions

Research questions for this study were formulated using the HBM. More specifically, the constructs of perceived susceptibility, perceived barriers, and cues to action shaped wording of questions. Overall, development of questions was guided by the purpose of the study, which was to better understand obesity's impact on Asian Americans in Southern California.

There were a total of three research questions, each of which include two subquestions:

RQ1: What impact does being overweight or obese have on Asian Americans in Southern California?

SQ1: What are the advantages to being overweight or obese for Asian Americans?

SQ2: What are the disadvantages to being overweight or obese for Asian Americans?

RQ2: What are the experiences of Asian Americans who are overweight or obese in Southern California?

SQ3: What are the perceived benefits of losing weight among Asian Americans?

SQ4: What are the perceived barriers to losing weight among Asian Americans?

RQ3: For Asian Americans who are overweight or obese in Southern California, what factors influence their perceptions of obesity and weight gain?

SQ5: How do Asian Americans who are overweight or obese describe their susceptibility to obesity and obesity-related health conditions?

SQ6: What influences Asian Americans who are overweight or obese to adopt healthier behaviors?

Role of Researcher

For this study, my roles included interviewer, data collector, analyzer, interpreter, and reporter. Since I recruited participants through social media platforms, such as Instagram and Facebook, I held no supervisory role over them, nor did I have any employment affiliations. Participants were people I did not know professionally or personally. This helped to ensure I had no bias toward participants who were taking part in interviews.

As the sole researcher of this study with multiple roles, it was crucial and necessary for me to be as objective as possible throughout the entire process. While researcher bias is inevitable, I was aware of my bias while taking on these roles by understanding types of bias that exist during each stage of the study, from interviewing participants to analyzing data. One example of bias is interviewer bias, which involves how information is asked, recorded, and interpreted due to the researcher's familiarity with the topic of interest (Pannucci & Wilkins, 2010). A way to mitigate this type of bias was to take participants' responses as is and be open to different answers.

As both the interviewer and data collector, I conducted interview with participants and gathered raw data. I asked questions and made sure interviews were recorded in order to refer to them later on during data analysis. As analyzer, I reviewed and read through interview transcripts, writing down any initial thoughts I had about data. I also chose MaxQDA to run raw data to generate codes. As the interpreter, I reviewed codes generated from software and associated them with common themes in order to answer research questions and provide meaningful results. Finally, I also took on the role of reporter, as I was the one who presented study outcomes to university faculty members as well as participants who were interested in final results.

Methodology

Participant Selection Logic

Participants were required to meet the study's inclusion criteria in order to participate in this study. Participants had to self-report as overweight or obese, be of Asian descent (immigrant or native born), live in a city in Southern California, be between the ages of 18 and 50, and tried to lose weight in the last 6 months. They could not participate if they were not within the age bracket, their last weight loss experience was longer than 6 months prior to being interviewed, they were pregnant, or had gone through bariatric or extreme weight loss surgery. Participants were recruited via social media platforms, such as Instagram and Facebook. They had to reach out to me via email to show their interest in participating in the study, after which I asked them to complete a simple questionnaire as a way to screen and determine whether they met the study's inclusion criteria.

In order to obtain a sufficient sample size that would produce meaningful and significant data, I implemented purposeful sampling despite using social media platforms to recruit potential respondents. Purposeful sampling is a popular method used in qualitative research, which involves selecting persons who are experienced or are knowledgeable in the topic of interest (Palinkas et al., 2015). Since the study focused on the Asian American experience in relation to obesity and weight gain, specifically in Southern California, this type of sampling was appropriate as it was a specific population. Lastly, a sufficient sample size was between 25-30 participants. This was because qualitative research tends to have smaller sample sizes to gather an in-depth understanding of the topic of interest compared to a quantitative approach, which focuses more on generalizations (Dworkin, 2012). While there was no fixed number to what a sufficient sample size for this study will be, 25-30 participants were suffice in showcasing saturation within the data. This is the point in the information where patterns are identified and there are no more gaps or new themes that emerge. In other words, the data collection process no longer contributes new or relevant information to the study (Dworkin, 2012).

Instrumentation

The instrument used for this study was a semi-structured interview guide (see Appendix A). The basis for developing an interview guide was from literature sources that described obesity's impact on Asian Americans from a quantitative standpoint, but not having sufficient knowledge from a qualitative approach (Nam, 2013; Mui et al., 2018; Gong et al., 2019; Kapoor et al., 2019). The developed questions for the interview

guide were not based on a previous published instrument. Since this study focused on how to better understand obesity's impact on Asian Americans through their experiences, the semi-structured interview was the most appropriate type of data collection. This is because the overall purpose for this type of interview is to gather information from a specific population who have personal experiences, perceptions, and beliefs related to the topic of interest (DeJonckheere & Vaughn, 2019). Furthermore, this interview method allowed for flexibility when it comes to asking participants questions. Even though there were set questions in place for the interview, the researcher had an opportunity to ask follow-up questions to further explore the participants' experiences (DeJonckheere & Vaughn, 2019). This provided more insight because it gave the participants the opportunity to speak more freely and get them to think more about the topic of interest as it relates to their personal lives.

For the interview guide to demonstrate content validity, or how well the guide is able to answer the study's research questions (Zach, 2021), the interview questions were formulated with the incorporation of the study's theoretical framework, the HBM. Moreover, since this was a qualitative study, which is focusing on the experiences of Asian Americans, an interview guide inquiring about personal experiences regarding the topic of interest as it relates to the target population was an appropriate tool to measure what the study is trying to examine.

Processes for Recruitment, Participation, and Data Collection

Recruitment Process

Recruitment of participants was done using social media platforms, such as Instagram and Facebook, by posting an invitation to participate flyer (see Appendix B). For Facebook, the flyer was posted on a public feed as well as sent to Facebook groups that focus on helping Asian Americans in Southern California with weight loss. For Instagram, the utilization of stories and posts was done to reach out to potential participants. The use of hashtags (such as #AAPI #AsianAmericans #AAPIobesity #obesityresearch #OrangeCounty #SoCal) was incorporated as well for social media users to easily find the flyer on their newsfeeds.

In the invitation to participate flyer, it had a brief explanation of the purpose of the study but if interested parties wanted more details, I also provided my contact information. The flyer also noted that participation is completely voluntary, but that anyone who did volunteer will be given a monetary incentive in the form of a $30 gift card to either Target, Amazon, or Walmart. I anticipated receiving emails from desired participants after they reviewed the flyer and had asked additional questions. After participants agreed to join and participate in the study, I gave them an informed consent form to thoroughly review before replying back to me with “I consent.” I then followed up with emails and/or phone calls to schedule interviews with my participants.

Interview Process and Data Collection

I collected data from a combination of both telephone interviews and video conferencing interviews. I gave the participants the option of either interview format,

depending on their level of comfort with technology and what they had better access to. Moreover, both types of interviews were beneficial in being both time- and cost-effective. Lastly, it helped in attempting to get participants from different cities within Orange County.

Due to various reasons, such as employment, school, and other personal commitments, interviews were scheduled based on the availability of the participants. The interviews were estimated to last between 60-90 minutes in order to consider any follow up questions. The interviews were conducted in a quiet place, free of distractions to hear the participants clearly. If it was a video conference interview, I ensured I was in an area where Wi-Fi was strong and stable. Participants were encouraged to do the same before the interview began. I followed a semi-structured interview guide, which consisted of open-ended questions and follow-up questions, if it was necessary.

All interviews were recorded to ensure accuracy of the data. Each participant was emailed the interview questions, consent form, and a description of the interview process and the duration of the interview roughly one week prior to the scheduled interview (see Appendix A and C). If it was a telephone interview, I used an iPhone app to record it. Once the iPhone recording was finished, I stored it in a password protected USB drive and deleted the recording from the iPhone. If it was through video conference, I used the record feature to save the interview and also stored it in the password protected USB drive and deleted it from the video conference application. To maintain privacy of the participants and the confidentiality and anonymity of their responses, I coded each

interview using a color instead of their actual names. I did not record any identifiable information during the interview.

Data Analysis Plan

When conducting qualitative data analysis, it is important for the researcher to allot a sufficient amount of time into immersing oneself in the data (CDC, 2018). A thematic content analysis was performed to analyze the study's data. This type of analysis involves the identification, organization, and analysis of common themes that emerge from participants' responses (ResearchArticles.com, 2019). Conducting a thematic content analysis allowed the researcher to find common experiences the participants had as it related to the topic of interest. Overall, it was crucial that the researcher understand and review the data gathered to best draw conclusions and explain the study's results to a broad audience.

Saturation is the moment in the data collection when common themes emerge, and no new pertinent information comes to light with respect to the topic of interest. When gaps no longer exist, saturation has been achieved, which could mean possible answers to the study's research questions and the discontinuation of data collecting (Saunders et al., 2018). Albeit there were no fixed regulations to determining an adequate sample size for a qualitative study such as this, the sample size for this study of about 25-30 participants was sufficient enough to determine key patterns and themes that were common among the participants.

Once the interview data had been collected from all participants, I organized them into topics according to the adoption of healthier behaviors, knowledge of obesity and the

obesity epidemic, and personal experiences around weight gain and/or loss. The selection of each topic was based on the research questions as well as subquestions in order to better organize the data from the interviews. Because I conducted a thematic content analysis to analyze the data collected, it was important to first create transcriptions of each recorded interview. If there were any audio errors or issues that occurred, I reached out to the respective participants for further clarification on the transcript. Yet, no copy of the transcript was provided to the participants to ensure validity of the results.

The goal of thematic content analysis is to be able to bring objectivity to the data (ResearchArticles.com, 2019). Once the transcripts were ready to be reviewed and analyzed, I did one read through of all the data to better familiarize myself with the information before I started the coding process and identifying themes. I then did another read through to write down notes and initial thoughts I have about the data. When it was time to begin the coding process, I ran the data through a qualitative data software (QDA) to maximize time and efficiency of the analysis portion as I am only one person, and it would have been time consuming to code the data manually. This software was set to specifically run a thematic content analysis. Running the data through a QDA helped in generating as well as organizing codes that I analyzed and used to identify common themes to answer the study's research questions. Charts were used to help with organizing the data's codes and themes.

Issues of Trustworthiness

Validity and Reliability

In conducting qualitative research, it was important to consider how the study's validity was to be established. By definition, validity refers to the "appropriateness" of the tools being used to gather the information needed for the study (Leung, 2015). This means the research questions developed, the choice of methodology and research design, the sampling and data analysis, and finally, the study's results should not only align with one another, but also be valid to the overall purpose of the study (Leung, 2015). Because this study's research questions focused on exploring the experiences of Asian Americans who are overweight or obese, the decision for conducting semi-structured interviews to gather qualitative data through purposeful sampling and to analyze by performing a thematic content analysis was appropriate in showing validity.

Aside from validity, another important concept is reliability, which is whether a study's processes and results can be replicated (Leung, 2015). However, when it comes to qualitative research, reliability is a challenge since this type of research cannot be easily generalized as it usually focuses on a specific issue within a specific population (Leung, 2015). Thus, to ensure reliability for this study, what was substantial was consistency. Establishing consistency includes constant data comparison and comprehensive data use, which involves being able to prove the study's results by comparing them to data from original sources used and referring to useful quantitative data, if applicable (Leung, 2015). This study performed both methods to ensure reliability.

Ethical Procedures

It was the researcher's responsibility to ensure anyone participating in the study would be protected from any adverse consequences that could result from study participation. Moreover, protection of the data was also another important duty the researcher had to consider ensuring the participants' confidentiality. Below, I explained the steps I took to mitigate the risk of harm to participants during my study.

I notified participants that their participation in this study was completely voluntary, meaning they had the right to withdraw at any time. In addition, I provided important details pertinent to the study, such as the purpose, the study's procedures, and details about privacy, confidentiality, and informed consent (see Appendix D). Doing this ensured that participants understood the nature of the research and how it would impact them, what they would be contributing to health education and promotion, what the risks and benefits were to participate, the entire process of the study, and finally, the protection they would have throughout the process. Moreover, I let the participants know that they could ask questions at any time. If participants desired to review the study's results, they were provided a copy. Proof of the participants' agreement to the study's requirements described were in the form of an email confirmation sent to them. The use of a coding process was the solution to establishing the participants' protection, privacy, and confidentiality throughout the process. There was minimal risk to the participants.

Informed Consent

All respondents were given an informed consent form, and all their information remained sealed and confidential. I obtained the consent form from my participants

before data collection began. In addition, I shared general information about the study and explained the process, especially regarding the interview, so participants had a good idea of what to expect. Lastly, participants were advised and made aware that they could withdraw from the study at any time, with no adverse repercussions and no questions asked.

Risks and Benefits

I did not foresee any great risk or harm to my participants in this study. Aside from everyday general risks that could come up, I did not anticipate any risk of extreme violence, harm, or trauma to my participants. Examples of general risks included feeling guilty for being uneducated on the topic, feeling stigmatized based on the questions asked, and concerned about privacy. I reduced the risk of adverse effects by maintaining confidentiality and anonymity for my participants as well as allowed them the opportunity to withdraw from the study at any time if they felt uncomfortable. The benefit for the respondents for their participation in this study was contributing to obesity research in relation to the Asian American population, thus overall contributing to health education as well as community health and wellness.

Researcher Bias

Although researcher bias was inevitable and impossible to completely remove from the study, I remained fully aware of my biases and worked to mitigate them through the data analysis portion. This was done by understanding the types of biases that existed during each stage of the study, such as interviewer bias, to not sway or influence the

participants' responses to the interview questions. By being aware of these biases, it helped ensure the data collected produced authentic and uninfluenced responses.

Privacy and Confidentiality

The right to privacy and confidentiality is important for many people. With that said, the participants' information was not released without prior consent. The issues of privacy and confidentiality was addressed and resolved by making sure the researcher did not publish any identifiable information of the study's participants.

Security

All the data gathered for this study was kept on my computer as well as a USB drive as backup storage. Both were password protected, and I was the only one with the password to access the data. Upon completion of the study, all data will be stored and kept for 5 years then be destroyed.

Summary

In this chapter, I provided a description of the study's research design and rationale as well as my role as the primary researcher. Additionally, I explained the study's methodology, including inclusion criteria, instrumentation, and participant selection methods. The data analysis plan was also described, followed by how issues of trustworthiness and ethical procedures were ensured. Chapter 4 includes the study's analysis and results.

Chapter 4: Results

Introduction

Obesity is an important public health issue in the U.S., particularly among minority populations. However, while Asian Americans are a minority group that experiences the lowest rates of obesity, generational status and societal norms have led to obesity issues in this population. Thus, the purpose of this qualitative study was to better understand the impact of obesity on Asian Americans through their personal experiences and how they form perceptions involving obesity and weight gain.

There were three research questions that I investigated, each of which had two subquestions:

RQ1: What impact does being overweight or obese have on Asian Americans in Southern California?

SQ1: What are the advantages to being overweight or obese for Asian Americans?

SQ2: What are the disadvantages to being overweight or obese for Asian Americans?

RQ2: What are the experiences of Asian Americans who are overweight or obese in Southern California?

SQ3: What are the perceived benefits of losing weight among Asian Americans?

SQ4: What are the perceived barriers to losing weight among Asian Americans?

RQ3: For Asian Americans who are overweight or obese in Southern California, what factors influence their perceptions of obesity and weight gain?

SQ5: How do Asian Americans who are overweight or obese describe their susceptibility to obesity and obesity-related health conditions?

SQ6: What influences Asian Americans who are overweight or obese to adopt healthier behaviors?

In this chapter, I explain the interview setting, demographics of participants, how data collection was conducted and organized, analysis of data, how trustworthiness was established, and results and outcomes from data.

Setting

Recruitment of participants was mainly conducted using the following social media platforms: Facebook and Instagram. Posting of recruitment flyers was also done at various places, such as coffee and tea shops, churches, grocery stores, and libraries in nearby cities, such as Cerritos, La Palma, Buena Park, Cypress, and Artesia. Social media, specifically Facebook, was sufficient enough to obtain a sample size of at least 25 people for this study. Those who showed interest emailed contact information listed on the flyer, and I ensured they met inclusion criteria to participate and provided the informed consent form as well as additional details about the study. Once informed consent was given by participants via email, both myself and participants scheduled interview dates and times.

Due to the COVID-19 pandemic and wanting to eliminate travel time, audio-recorded one-on -ne interviews were conducted to gather information from participants. These interviews were mainly conducted via phone, with the exception of some participants who wanted to use a video conferencing platform such as Google Meet. If

the interview was done through a video conferencing platform, no video recording feature was used in order for participants to keep their identities confidential. Thus, only their voices were recorded. Lastly, during all interviews, myself and each interviewee ensured they were in quiet areas that were free from distraction in order to ensure high quality recording.

Demographics

Participants met inclusion criteria and self-reported as overweight or obese, were of Asian descent (immigrant or native born), lived in a city in Southern California, were between the ages of 18 and 50, and had tried to lose weight in the last 6 months prior to their interview. They could not participate if they were not within the age bracket, their last weight loss experience happened before the 6-month cutoff, they were pregnant, or had gone through bariatric surgery.

There were 25 participants in total, of which 12 were males and 13 females, averaging 33 years old, with the oldest 46 and the youngest 22. Using the standard BMI measurement scale, 16 participants were considered obese and 9 were overweight. Participants were 24% Filipino, 20% Chinese, 4% Taiwanese, 24% Chinese Asian mix, 24% Vietnamese, and 4% Pakistani. Nine participants lived in Orange County (36%), while the remaining participants resided in either San Diego (8%), Ventura (4%), Riverside (4%), or Los Angeles County (48%).

Table 1

Descriptive Characteristics

COLOR CODE	ASIAN ETHNICITY	AGE	OBESE OR OVERWEIGHT (based on BMI)
Tan	Chinese Cambodian	27	Obese
Blue	Chinese Vietnamese	33	Obese
Green	Chinese Vietnamese	29	Overweight
Black	Chinese	30	Obese
Yellow	Chinese Vietnamese	30	Obese
White	Filipino	35	Overweight
Pink	Taiwanese	27	Overweight
Brown	Filipino	37	Obese
Orange	Vietnamese	23	Overweight
Purple	Chinese Korean	29	Obese
Grey	Filipino	28	Obese
Teal	Vietnamese	46	Obese
Magenta	Filipino	23	Overweight
Indigo	Chinese	32	Obese
Mocha	Vietnamese	32	Obese
Burgundy	Chinese	30	Overweight
Lime	Vietnamese	22	Obese
Maroon	Chinese Vietnamese	27	Obese
Gold	Vietnamese	29	Overweight
Rose	Vietnamese	30	Obese
Navy	Filipino	30	Obese
Lilac	Pakistani	22	Obese
Peach	Chinese	24	Overweight
Ruby	Chinese	42	Obese
Silver	Filipino	26	Overweight

Table 2

Demographics of Participants

Total Participants	**N=25**
Age	
18-25 years	5 (20%)
26-30 years	13 (52%)
31-35 years	4 (16%)
36-40 years	1 (4%)
41+ years	2 (8%)
Gender	
Male	12 (48%)
Female	13 (52%)
BMI Category	
Obese (>30 kg/m^2)	16 (64%)
Overweight (25-29 kg/m^2)	9 (36%)
Ethnicity	
Chinese	5 (20%)
Chinese Mix	6 (24%)
Filipino	6 (24%)
Pakistani	1 (4%)
Taiwanese	1 (4%)
Vietnamese	6 (24%)

Data Collection

The data collection method used to gather primary data was interviews. As mentioned before, due to the COVID-19 pandemic as well as mitigating travel time, interviews were conducted either through telephone or video conferencing, whichever the participant was most comfortable using. If a telephone interview was conducted, it was recorded using the Rev recorder app on the iPhone whereas if it was through video conferencing, Google Meet was used. Interviews lasted for about 45 minutes, on average. However, some lasted as short as 30 minutes or long as 90 minutes, depending on the length of responses as well as any follow-up questions that were asked. Nonetheless, the researcher ensured participants had enough time to express their feelings, thoughts, and experiences to the fullest extent. There was a total of 25 participants who were interviewed for this study, which produced data saturation and was sufficient enough to identify common themes and patterns that helped in answering the research questions.

Data Analysis

Once interviews were finished recording and saved, each audio file was downloaded onto a password protected desktop folder and removed from the application used to record it. Then, the online version of Microsoft Word was used to transcribe each recording and was saved onto a password protected desktop folder as well to be used during the analysis portion of the study. As mentioned before, a thematic content analysis was the analysis method of choice since the purpose of the study is to better understand obesity's impact on Asian Americans. Therefore, identifying themes and common patterns within the data was substantial in answering the study's 3 research questions.

MaxQDA was the qualitative data analysis software that was used to do the thematic content analysis as opposed to manual coding in order to be more time efficient since there is only one principal researcher completing all parts of the study. All the interview transcriptions were imported into MaxQDA. The first step in the analysis part of my study was to read through the raw data and write memos of initial thoughts and feelings toward the participants' responses. Following memos, the coding process was next to organize the raw data into code categories. These categories were necessary for the final step of the data analysis – interpreting those codes to find common themes within the data collected to answer the study's research questions.

A deductive approach in identifying the code categories, which involves approaching the data with some preconceived themes based on theory or existing knowledge (Caulfield, 2019) was how coding was completed. The preconceived themes from this study were extrapolated from the research questions formulated using the HBM. The code categories included *obesity risks, being overweight or obese, willingness to change, obesity knowledge, dieting, culture, mental health, and beauty standards*. Moreover, some of these codes were broken down further to provide distinction. For example, *culture* was divided into *Asian culture* and *Western cultur*e, *obesity knowledge* was divided into *information/facts* and *perception*, and *being overweight or obese* was divided into *disadvantages* and *advantages*. Upon completion of the coding process, these codes were then further analyzed to identify patterns that could help with then identifying themes. These themes will be discussed in the results section.

Although 25 participants were able to provide the researcher with data saturation to produce common themes that answered the research questions, there were a couple of participants (N=2) who answered some questions in a different way than the rest of the participants. As a result, they ended up being outliers to the rest of the responses as it did not hinder the data saturation that emerged to help identify themes.

Evidence of Trustworthiness

Validity and Reliability

Validity refers to the appropriateness of tools being used to gather information required for the study (Leung, 2015). For this research study, the tool that was primarily used was in the format of semi-structured individual interviews through purposeful sampling. This was suitable because the study's research questions focused on exploring the experiences of Asian Americans who are overweight or obese, and the interviews allowed me to narrow in on common themes and patterns that emerged from speaking with my participants. Furthermore, the data analysis method of choice was a thematic content analysis, which was an appropriate tool to use as well for this qualitative study since identifying themes was substantial to answering the study's research questions, thus ensuring validity.

Reliability was another important concept to establish within this study, which is also referred to as consistency when it comes to using a qualitative approach. This is a concept that questions whether a study's processes and results can be replicated (Leung, 2015). Given that, qualitative research typically focuses on a specific problem within a specific population (Leung, 2015), this type of research cannot be easily generalized and

therefore, it is better to use the term consistency instead of reliability. The findings from this qualitative study were compared to original sources that were used in the literature review to ensure consistency among the results.

Results

Upon completion of the thematic content data analysis, six themes were identified that helped to answer the study's three research questions and provide a better understanding of the impact of obesity among the Asian American population, specifically in Southern California.

Theme One: Mental and Physical Health Disadvantages

When it came to the impact of being overweight or obese, there were many more disadvantages than advantages participants identified with their weight experiences. These disadvantages ranged from issues around their physical and physiological health to problems that stemmed from the emotional and mental sides of health as well. For physical and physiological health specifically, the common responses consisted of having low energy, being out of breath easily, certain joints and body parts feeling pressure from their excess weight, such as their knees, and not being able to find flattering clothes to wear. There was also mention about being at a high risk for other health issues, such as diabetes and high blood pressure, that many of them were trying to avoid. Participant Yellow said:

> Personally, I hate being obese. My ankles and lower back hate me and I am doing everything I can to not be diabetic. Nice clothes are hard to find or at least clothes

that are flattering for my body. Cardiovascular activity is also difficult for me; I'm out of breath after a 10-minute mile run.

Participant Gold discussed physical disadvantages as one of the main reasons she started her weight-loss journey:

> One of the reasons why I started to lose weight was not only career wise, but it's also like physically. My knees are giving out like I'd just be walking and my knees would just like buckle and I would fall.

Participant Rose said:

> I just started a newer job which is more physically labor intensive. So definitely the first couple of days, I felt it in my body. I'm not strong so it does take me a little bit more time when I do any work that is like intense hard labor work.

In addition to the physical disadvantages to being overweight or obese, mental health was also discussed among many of the participants. More specifically, these disadvantages in mental health were about body image and dysmorphia, feelings of worthlessness, low self-esteem and confidence, the perception that you are not being respected, especially at work or in a professional setting, and finally, the feeling of having to constantly compare your body to other people's bodies or to what society expects you to look like. For example, Participant Gold, who has progressed a lot in her weight-loss journey, mentioned:

> It's definitely made my confidence very low and even though I've already lost like all this weight, it's very much like body dysmorphia.

Other participants (N= 4) struggling with mental health problems and their weight stated:

Participant Tan stated:

> My partner, she loves me very much, but sometimes I don't feel worthy of that love.

Participant Navy mentioned:

> A lot of it is definitely mental wise. Being a little overweight you tend to be a little more self-conscious and it kind of weighs on you. And I did find that there was a certain time when I was more concentrated on working out and getting more fit and did lose some of the weight, that I did gain a lot of confidence and felt like my mental health was a lot healthier.

Participant Lilac said:

> I think the biggest impact is just seeing myself in the mirror or getting dressed and not being happy with what I see or not being happy with how clothes fit me or how I look.

Finally, Participant Maroon shared:

> When I gained a lot of weight, I think it also contributed to my depression and like my body image issues. I compared myself a lot to not just American women, like white women, but also other Asian women, especially East Asian women to the point that it really affects my mental health and I've always had depression that amplified my eating habits.

When discussing any advantages that these participants experienced, most of it had more to do with aspects of their social life as opposed to physical and mental health. For Asian women (N = 13), for example, a common advantage that was mentioned was not having to worry about receiving unwanted attention from men because of their weight and size. Aside from this response that come from the Asian female participants, there were far more disadvantages that were mentioned that demonstrated the impact of being overweight or obese for this population.

Theme Two: Lack of Consistency and Motivation

As participants were talking about weight-loss methods and routines they tried to lose weight, there were a couple barriers that were common that resulted in them being ultimately unsuccessful with their fitness goals. The combination of lacking the motivation to keep going and staying consistent with their healthy lifestyle and routine led to gaining the weight they had originally lost when they first started, or for some, even gaining more weight. It did not matter what kind of diet was mentioned by the participants because it always came back to motivation and consistency.

When talking about consistency, some of the responses emphasized life changes and/or disruptions that caused them to revert back to old habits. Participant Gold said:

> So when life gets in the way, I just kind of put it on the backburner. It's just you know like not the top of my priority list, but it's always on the back of my mind. And then as soon as I get like a little bit of freedom in my schedule, then I get back into it.

Participant White also said:

> What happened between now and three years ago is that I brought my family here with me, and now that I live with them, I'm working full-time, there's COVID-19, and I'm also studying – I just lost time for myself and for my body.

Participant Peach mentioned as well:

> I do try to regularly work out and stuff and I would say beginning of last year, when I was really consistent with all my habits, I finally did see some weight loss, but after that I just like had a lot of things going on and I wasn't able to upkeep it and instead gained more weight than like I started before I ever even worked out.

Other participants (N=3) were more about how they did not want to adjust their current lifestyle to incorporate healthier habits that could lead to weight loss. For example, Participant Green stated:

> I mean overall, it's more my lifestyle that got in the way. Any weight loss method I tried, I tried to do in a healthy manner but again like it means I have to completely shift my lifestyle and the way I kind of live.

Participant Indigo shared:

> Kind of like a New Year's resolution thing, I said shoot I should just lose weight but like it wasn't something I kind of meant seriously, only halfheartedly so after a couple of weeks of being on keto, it just dies and I go back to the same eating habits.

Additionally, Participant Lime said:

> I feel like I know what it takes to have a healthy lifestyle and have a healthy diet. For me, it's just kind of hard to commit.

Aside from consistency, motivation was another barrier. Participants (N=18) would mention certain diets or workout routines they would try and see some success at the start. However, it is when they hit a plateau in their weight loss that causes problems with maintaining motivation. Participant Blue explained:

> If you try a little harder, it's just like I need to motivate myself to try harder, you know?

Participant Silver also mentioned:

> What made it difficult like in the end was just maintaining that motivation. Maintaining that motivation to like continue doing it just because like after I lost X amount of weight, I kind of got discouraged when I wasn't seeing the same results with the same amount of effort.

While most of the participants stated they wanted to lose weight or know they should lose weight to feel and be healthier (N=21), their experiences demonstrated perceived barriers to weight loss outweighed any benefits they had mentioned.

Theme Three: The Taboo Nature of Being Overweight or Obese within Asian Culture

Asian culture puts a lot of emphasis on physical appearance, and therefore the concept of being overweight or obese as an Asian is perceived as taboo among the Asian community. This is because body size is typically associated with a type of societal status for Asians, and thus, if you are overweight or obese, you are seen as less than for not being thin. Many, if not all, participants expressed how it is not just a societal expectation

but also an expectation for themselves that they need to look a certain way as an Asian. Participant Teal explained:

> I think some cultures kind of celebrate being heavier. Or rather, it's not as looked down upon as it is in Asian culture. Like I think in Asian culture, even more so than American culture, being thin, if not extremely thin, is held in high value. And I think sometimes it swings the other way as well. So just as much as being very thin is held in extremely high value, being heavy is very much looked down upon and you know, I feel like sometimes it's that you're worthless.

Participant Navy also stated:

> Especially in Eastern culture, they tend to look down on those that are a lot bigger than what's the norm.

Other participants (N=3) also emphasized that what is stereotypically seen in media or just within the general community, is that Asians are expected to look thin or at least a certain way, thus putting pressure on themselves to fit in. If their body size is not what is typically observed, some participants expressed feelings of not fitting in or being less attractive.

Participant Orange shared:

> I think with the people I know and just what I see in the media, Asian individuals are just very thin, and I always have that expectation that I should look that way.

Participant Yellow also stated:

> Growing up, most Asians or Asian Americans were expected to be skinny or lean. In my formative years, those body types were deemed the most attractive.

Moreover, Participant Grey said:

> The stereotype of an Asian is typically like on the thinner side and so there's like I guess, pressure by society, like if Asians don't fit that certain body type then they must not be like a true Asian.

Participant Lilac approached it not just from the perspective of an Asian person who is obese, but more specifically as an Asian woman who is obese:

> I think as an Asian female, if you're bigger in body size, you're definitely seen as less desirable, but I feel like it may even impact opportunities, especially when you're with other Asian people because I feel like in most Asian cultures, being bigger is looked down upon.

Due to the fact that being overweight or obese within Asian culture is seen as taboo and looked down upon, it provides some explanation as to why the issue of obesity as it pertains to Asian Americans is not often discussed. Moreover, because of how obesity is addressed within Asian culture, it has resulted in overall society assuming and having this expectation that Asians are stereotypically thin, when that is not necessarily the truth. The next theme provides more context on how despite obesity being perceived as a taboo subject, Asian Americans are not a model minority for health.

Theme Four: Asian Americans are Not a Model Minority

Subtheme: Lack of Asian American Inclusion

The model minority myth that Asian Americans are stereotypically thin and do not experience health disparities, such as obesity and weight gain, has contributed to the pressures and experiences of Asian Americans who are overweight or obese. In addition

to these personal lived experiences, the model minority myth has also contributed on a societal and community level as it pertains to the inclusion of Asian Americans in various health discussions. Due to this myth, society has failed to become aware and informed that Asian Americans are just as prone to many health issues, including obesity and weight gain, as any other population group in the U.S., which in turn has resulted in a lack of knowledge regarding the issue of obesity among Asians.

Participant Lime specifically explained how the issue obesity is starting to become more prevalent among the Asian community, but that more education is needed:

> I think it is becoming a relevant issue because I mean obesity is impacting everyone, and there are a lot more Asians now that are getting big, getting overweight and I feel like if they are not educated on it, they're going to have a toxic mindset around it.

When participants were asked about what knowledge they have about obesity, all of them explained the basic information of how it affects overall health, what diseases you are more at risk for, the contributing factors that have led to obesity increasing, especially in the U.S., to name a few. On the other hand, when asked what they know about obesity as it pertains to their Asian American community, a lot did not have any responses to provide. For example, Participant Burgundy stated:

> Yeah, there isn't too much information I know about obesity among Asian Americans. I don't think Asian obesity has been explored much, but I do think people really care about it. There's just a lot of social stigma about Asian women and the way they should look.

Participant Lime also shared:

> I wish like in general Asian people would kind of be more I guess open to discussing and talking about it.

Participant Indigo gave an assumption or what he perceived to be true when it comes to Asian Americans who are obese:

> We're probably skinnier. We probably weigh less in comparison to the other ethnicities in the U.S.

In contrast, Participant Silver explained his reason for partaking in this specific study:

> I appreciate this research study because it's focused on Asian Americans and obesity. This is something that I feel like I really don't see often and that's why I was so happy to participate.

Obesity is a public health issue and its discussion on how to further prevent it from increasing needs to involve all groups. However, because of the model minority myth that has fostered in our society, many people, including Asians themselves, are not as knowledgeable as they should be regarding obesity's impact on them. Asian Americans are not a model minority, even with health, and the next subtheme will further explain this.

Subtheme: Risk Factors Exist within Asian Culture

While many participants were not as knowledgeable and informed about obesity as it specifically relates to Asian Americans, there were some who discussed the risks

they perceive to be contributing to an increase in obesity among Asians today compared to before. There was mention of the Asian diet. For example, Participant Grey shared:

> Well, with Filipino Americans, just our use of fatty foods and fried stuff like I think diet is a risk factor to becoming obese.

Participant Yellow also said:

> Salt, sugar/carbs, and fats are some of the tastiest parts in good Asian food, which doesn't make it the healthiest.

Participant Lime stated:

> I think with the new generations and with us being in the U.S., we start to eat things like boba every day and that's all diabetes, that's all sugar and all this fried foods and other Asian American foods like that are increasing our obesity risk.

Finally, Participant Blue mentioned:

> Just Asians generally eat a lot of rice, and I think there's a lot of like negative health consequences. Rice breaks down into sugar, so it's not the healthiest thing, but it's also such as staple in our diet.

In addition to the Asian diet, another thing mentioned that participants (N=2) perceived to be contributing to Asians getting heavier had more to do with generational trauma and how parents grew up in their native country.

Participant Indigo shared:

> Back in the day, there wasn't that much food, so when my parents had it, they were expected to eat all of it and leave like nothing to waste. So now, when my dad cooks, he likes to cook a meal with all this food, and if you don't eat it, he

> kind of yells at you. In a sense, he kind of guilt trips you to eat it all so it doesn't go to waste.

Participant Purple also mentioned:

> My grandparents didn't grow up with very much and my parents grew up in large families, so you had to fight to get your food. So that imparted them with a scarcity mindset so that when food wasn't scarce, you would just tend to overeat. My parents and grandparents would also say you have to finish your plate or you have to eat more.

Although current statistics demonstrate Asian Americans are the minority group who experiences the lowest obesity rate, this group is far from a model minority. These participants shared what they perceive to be contributing to more Asians becoming overweight or obese despite not having too much knowledge around the issue as it relates to them and their community. This emphasizes how more discussion and inclusion is needed, especially if the overall goal is to decrease obesity among all groups in the U.S.

Theme Five: Western vs. Asian Culture

Asian Americans who are overweight or obese, who are also actively trying to lose weight and practice a healthier lifestyle face pressures from both Asian culture and Western American culture, especially living in Southern California. Most of the participants (N=22) expressed how both cultures also have their own standards of beauty that they feel pressure to uphold or try to achieve as well. Participant Yellow, for example, emphasized how being Asian who is overweight, he experiences pressures on both sides:

> Asians or Asian Americans were expected to be skinny or lean. Being in Southern California, the stigma goes double because in Western culture, there is also the "Hollywood" look – being lean, athletic, or muscular.

Participant Green discussed the idea of fitting in with society so as to not be the center of some kind of hate crime:

> Being targeted a lot of us will try to look a bit skinnier to not fit like the Asian American standard of being skinny, but more like the American standard of being skinny because we want to fit in and look like we fit in with the everyday American.

A few participants (N=3) emphasized how both cultures can mentally affect us as well as the challenges faced to balance them out. Participant Maroon said:

> There's a split between being Asian enough and being an Asian American growing up in America, and with food and diet, the two cultures can affect how we see ourselves as well as how we consume food.

Participant Orange mentioned:

> I was born here and growing up, it was always confusing switching from like my Asian culture to like my American culture.

Additionally, Participant Lilac stated:

> I think with Asian culture, eating together is a very important part and trying to limit portions can be seen as disrespectful, which I don't think is much of an issue in American culture just because of how normalized dieting is.

Finally, Participant Burgundy touched on how there are expectations for both Asian males and females in terms of how western society views Asians:

> I do feel like Asian males have different societal expectations than Asian females when it comes to weight and appearance. Asian males are pressured to go to the gym a lot to look really buff but for Asian women, we are pressured to look thin.

Culture plays a role in the experiences of Asian Americans who are overweight or obese due to the fact that there are two cultures they struggle with – Asian culture and American Western culture. Both have their own sets of expectations and standards of beauty that have contributed to how Asian Americans perceive obesity and weight gain and how they view themselves if they do not uphold those expectations.

Theme Six: Outdated BMI

The BMI measurement scale is the typical way to identify if someone is obese and has been a standard practice by many health professionals, such as medical doctors and registered dietitians. However, there was a consensus among many of the participants that using BMI to determine obesity is an outdated practice. They perceive BMI to not be indicative of how healthy a person is because it relies solely on height and weight. Therefore, when they discussed how they perceive obesity as it relates to themselves as well as with society, many did not consider BMI as a sufficient way to address weight gain or weight loss. Participant Gold mentioned:

> I think it's outdated and needs to be changed. I think from someone who used to live by it as the Bible and also being a healthcare provider, I think that it's

unrealistic, especially with workout culture being what it is today, like being strong and lifting weights is huge right now.

Two other participants also emphasized on the fact that there are various body types that exist and thus, relying solely on height and weight does not indicate much regarding obesity. Participant Lilac shared:

I think that it's an outdated measure because you have people who are like bodybuilders who have higher weight, but it's not fat, it's muscle. And also different body types need to be taken into consideration.

Participant Peach also stated:

I think it should be updated because it doesn't necessarily reflect things like muscle mass. I think it's outdated just to compare your height and weight because there's a lot more that goes into body composition.

While half (N=13) were quick to dismiss using BMI as a measurement tool for obesity, there were some (N=3) who perceived it to be a good tool to still use to at least provide a baseline for those who struggle with weight gain. While they agreed that it is a scale that is outdated and should be updated to consider the other factors that affect a person's weight status, they accepted BMI for what it is. For example, Participant Mocha mentioned:

It's definitely not scalable to everyone, but it is the method we have.

Participant Ruby also said:

I think having measurement tools even though they aren't accurate is still helpful.

Perceptions of obesity among my participants were not influenced by BMI. In fact, BMI was seen as more of an outdated measure when it came to addressing obesity based on the fact that it only uses height and weight. Though a widely used tool for calculating obesity, there was common opinion that BMI does not determine if a person is at their optimal weight and general overall health. There is more to what determines how healthy someone is.

Summary

In this chapter, I explained the interview process, participant demographics, trustworthiness of the study, data analysis, and results. Thematic content analysis was conducted to identify common themes among participants, which helped answer the research questions. 6 common themes emerged, with one theme having 2 subthemes. In Chapter 5, study findings are interpreted, limitations are discussed, and recommendations along with areas for further research are explained.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Obesity is a prominent public health issue all over the world, especially in the U.S., and it mostly affects minority populations. One minority population that has been overlooked is Asian Americans. This particular group experiences the lowest obesity rates in the U.S. (U.S. Department of Health and Human Services Office of Minority Health, 2020). Thus, the purpose of this basic exploratory qualitative study was to have a better understanding of obesity's impact among Asian Americans, specifically those living in Southern California. Participants were asked open-ended questions that were developed using the HBM to understand experiences of Asian Americans who are overweight or obese. They expressed their frustration with obesity and weight gain due to a variety of both internal and external factors, which provided me with rich sources of data to analyze. Major findings of this study were based on six major themes extracted from the raw data: physical and mental health disadvantages, lack of consistency and motivation, the taboo nature of being overweight or obese within Asian cultures, Asian Americans are not a model minority, Western vs. Asian culture, and outdated BMI. This chapter includes interpretations of data, limitations, implications, and recommendations for future research.

Interpretation of the Findings

The purpose of this study was to gain a better understanding of the impact obesity has on Asian Americans in Southern California. There were 3 main research questions, along with 2 subquestions for each main research question. 25 participants were

interviewed using an interview guide that was formulated by applying the HBM. Upon completion of interviews, data analysis was completed using MaxQDA to organize data into identified code categories that were then used to determine common themes to answer the study's research questions. Six major themes emerged from the data.

Theme One

The theme of mental and physical disadvantages emerged from the data as a result of participants' responses involving how they physically felt about excess weight as well as how it affected their emotional and mental states of being. Furthermore, this emerged as a consequence of other health problems, such as diabetes, hypertension, and heart disease, they know they are at a much higher risk for due to their weight status.

In general, obesity puts people at a much higher risk of developing health issues such as type 2 diabetes, joint pain, heart disease, high cholesterol, and hypertension (NIDDK, 2017). This is true for Asian Americans, even if they are not technically obese based on standard BMI measurements. Additionally, Asian Americans experience weight-related health conditions at much lower BMIs compared to other racial and ethnic groups (Mui et al., 2018) and tend to have higher body fat percentages with normal BMIs (Kapoor et al., 2019). Therefore, participants for this study were at an even higher risk since they met standard BMI measurements for being overweight or obese.

When it comes to mental health, not much is known about the association between obesity and mental health in general, and even more so among Asian American communities. There could be a negative impact on mental health and overall quality of life, especially since participants in this study explained how meeting certain societal and

cultural expectations regarding body shape and size had a negative effect on their mental health, such as feelings of worthlessness.

Theme Two

Most participants expressed how they knew they needed to lose weight or were actively trying to lose weight, but there were barriers preventing them from progressing. These barriers included busy work schedules, life changes, and not wanting to adjust and make sacrifices to their current lifestyle. Despite participants knowing about the benefits of weight loss, such as feeling more confident and being at less risk for other health problems, barriers won in the end. One barrier that was identified was Western culture and lifestyles Asians have adopted. Gorman et al. (2016) said assimilation into Western culture affects and changes certain health behaviors that involve diet, exercise, and overall lifestyle, which in turn negatively affects health status, particularly in terms of weight gain. Although there may be other contributing factors, Western culture can influence people to adopt unhealthy behaviors.

Theme Three

Weight plays a role in societal status and ways of life for Asian cultures. Participants mentioned not being able to live up to physical expectations that Asian culture fosters. Being overweight or obese is often considered a taboo subject within the culture, as if the culture does not want Asian Americans who are overweight or obese to exist or be associated within communities. This could be because many Asian immigrants who came to live in the U.S. generally had a lower risk of developing health conditions, and demonstrated healthy lifestyles and positive health norms (Afable et al., 2016; Gong

et al., 2019). However, as they continued to stay and live in Western American society, this was no longer the case, and they began to experience health problems that were unfamiliar to them due to acculturation (Gorman et al., 2016). This could be a potential reason for why the topic of obesity is considered taboo.

In addition, there is the possibility that the way Asian culture views obesity and weight gain has contributed to the ways general society perceives Asians. Since some experiences shared by participants involved not being able to meet certain cultural expectations or ignoring issues that mention weight, this could have contributed to the model minority myth. Among Asian cultures which foster standards that Asians are typically healthy and slender, this may have also led to model minority misconceptions. Yet, as this study demonstrates, Asians are not always perfect model citizens when it comes to health.

Theme Four

Asian Americans not being a model minority for health was an important theme that emerged from data. Asian Americans are overlooked when it comes to health discussions. In this case, Asian Americans were neglected in discussions involving obesity prevention.

Subtheme: Lack of Asian American Inclusion

One of the main reasons Asian Americans are typically excluded from health discussions is the assumption Asians do not experience any type of health disparity or struggle, also known as the model minority myth (Yi et al., 2016). Furthermore, due to this myth and how Asian Americans typically have a low obesity compared to other

groups, this has led to a scarcity of obesity research on this population (Nam, 2013). Thus, there is not a lot of information or education that is available for people to be better informed. The literature is supported by my findings because of the participants' responses when asked about what they knew regarding obesity among their own community and population. They may know about general obesity knowledge, but in relation to Asian Americans, there was not much divulged. Ultimately, the lack of inclusion has led to people, including Asian Americans themselves, to come up with their own perceptions and/or assumptions when it comes to obesity and weight gain.

Subtheme: Risk Factors within Asian Cultures

Due to the lack of education regarding obesity among Asian Americans, it is not known that there are risk factors that exist within the community, similar to other racial and ethnic groups. This was crucial in supporting the existing literature that discusses the association between obesity and immigration as well as the general health risks that are linked to obesity. From the experiences shared, there was mention of how the Asian diet is not as healthy as it is perceived to be because of the use of fats, the love for fried foods, and recipes that consist of a lot of sugar. Therefore, even though the current statistics illustrate Asian Americans as a whole experience a low obesity rate, evidence does suggest that many Asian Americans experience obesity-related health conditions even if they are not technically obese, such as type 2 diabetes, hypertension, and metabolic syndrome (Mui et al., 2018). This could be due to the diet many Asians consume despite not physically looking unhealthy.

Aside from diet, another risk involves immigration and acculturation. Before Asian immigrants began moving into the U.S., a majority of them had optimal health status. They generally had lower risk of developing health conditions compared to U.S residents and practiced healthy behaviors (Gong et al., 2019). On the other hand, moving to the U.S. meant that Asian immigrants were living "between worlds" of adopting Western American culture and preserving their native country's culture (Gorman et al., 2016) and this in turn, had an effect on their health, particularly in obesity. Participants had shared how it was important that their parents could put food on their table while growing up, so whatever was available was what they ate even if it was not the healthiest option. This makes sense as Yi et al. (2015) suggested that because of Western influence, many habits, such as eating habits, changed as more Asian immigrants continued to live in the U.S. and have families. This in turn, made the risk for obesity higher among future Asian generations as they are more accustomed to Western American lifestyle.

Theme Five

Being Asian American is a balancing act as it comes with finding a way to live both one's respective Asian culture as well as the American Western culture that one is immersed in living in the U.S. This can involve many facets, such as physical appearance, eating habits, physical activity, and general lifestyle. Participants of this study explained how most of Asian culture values a healthy, active lifestyle and considers obesity a taboo topic while the American Western culture values workout culture, fixates heavily on diets and fad diets, and emphasizes physical appearance, especially being

muscular. Due to the differences between two cultures, there are pressures from both sides Asian Americans struggle with when trying to be healthier.

There is limited research that has be conducted on how both cultures can have an impact on Asian Americans who are overweight or obese when reviewing the literature, but what each culture values potentially comes back to the idea of acculturation among Asians. Gorman et al. (2016) explained it as they are living "between worlds" in having to blend both their native culture's ideals and the American Western ideals into one. Yet, Swami pointed out that due to the modernization and Westernization all over the world, body size ideals no longer differ from culture to culture but rather has more to do with socioeconomic status (2015). Thus, this could be an area for further research on how either culture or both plays a role among Asian Americans dealing with obesity.

Theme Six

The way BMI is determined is by taking a person's height and weight and dividing them. By definition, obesity is when a person's BMI is above 30 kg/m^2 (WHO, 2021). However, this measurement has taken on a lot of criticism over the years due to the fact that it only uses two measurements, without considering other factors that could contribute to extreme weight gain and other health complications (Misra et al., 2018; Kapoor et al., 2019). Kapoor et al. (2019) said NWO is a BMI of greater than or equal to 25 kg/m2 but with an increased body fat percentage, and how many Asians with NWO can experience other health complications. This demonstrates how standard BMI is not a reliable indicator for extreme weight gain. The literature is supported by my findings due to the participants being quick to express their disapproval of using BMI for obesity,

pointing out that there is more to consider regarding body composition. For example, there are differences between muscle and fat as well as how weight is distributed differently for each person. All in all, obesity is complex despite a basic calculation that determines if someone is struggling with obesity.

Limitations of the Study

As much as this study provides substantial insight on the impact of obesity among Asian Americans in Southern California, there are limitations worth mentioning that had an influence on the study's results. First, this study included both Asian males and females, and only briefly touched on the issue of obesity through either the Asian male or Asian female perspective but did not have much depth on either. Second, this study does not consider Asian Americans on a wider scale since it focused on Southern California residents. The Asian American experience regarding obesity in other parts of the U.S. may vary compared to those living in Southern California. Therefore, this study cannot be generalized to other parts of the country. Lastly, the average age of participants was around 30 years old, thus only capturing the experiences within the millennial generation despite the inclusion criteria asking for people between 18-50. This was beneficial in getting responses that produced saturation in the data but does not consider the experiences of older Asian Americans who are overweight or obese.

Recommendations

The limitations mentioned for this study provide opportunities for other qualitative research that can further contribute to the obesity discussion in relation to Asian Americans. One potential study can further explore either the Asian male or Asian

female perspective when it comes to obesity's impact since the lived experiences may differ due to gender. Another opportunity is targeting the older generations of Asian Americans and identifying similarities and differences in their responses to those of the millennial generation. More research on mental health and obesity in relation to Asian Americans is another area that can be further studied and discussed as there are many underlying factors that link the two health issues as identified among the participants' responses. Lastly, another research opportunity could focus on how obesity is considered a taboo topic within Asian culture.

Implications

The themes that emerged from this study to help answer the research questions illustrates that the obesity prevention discussion needs to be more inclusive of Asian Americans, especially if the ideal goal is to decrease obesity among the general public. This study has shown that Asians are just as impacted by health struggles, such as obesity and weight gain, even though aggregated data may say otherwise. This is why it is important to note that Asians are not a monolithic group and encompass more than one Asian ethnicity, and one ethnicity may be more at risk than another. In addition, this study also emphasized how Asians are torn between two types of culture – the Asian culture and the Western American culture – and how both cultures have their own standards of beauty and the hardships to meet those expectations presented within them. By understanding the many factors that impact Asian Americans struggling with obesity and weight gain, it can affect positive social change into the community by being more aware of the fact that Asian Americans are not a model minority, especially when it

comes to health, and can help health education programs become more inclusive in how they cater to their patients. For example, there is an opportunity for existing health education programs to offer programs in an Asian language, such as Chinese or Tagalog, in addition to the English and Spanish programs that are typically already offered.

It is also important for healthcare professionals to foster cultural competence in how they care and treat their patients. Cultural competence is the incorporation of knowledge regarding various groups and people into standard practices and regulations in the clinical setting to provide high quality of care to different patients (CDC, 2020). When it comes to Asian Americans struggling with weight gain, the findings from my study can help healthcare professionals be more empathetic and understanding of how obesity and weight gain is more complex for this group. For example, if dietitians are working with Asian American patients on how to improve their diet, they need to understand that Asians value food as a culture and to figure out how to incorporate cultural foods into a diet plan. Another example of cultural competence could also be having more Asian American representation in the health education profession to better address the challenges and barriers Asian Americans face as it relates to obesity and weight gain. Overall, it is about ensuring that Asian Americans feel included and heard when it comes to addressing obesity prevention.

Conclusion

This basic qualitative exploratory study has investigated the personal experiences of Asian Americans who are overweight or obese as a way to better understand the impact obesity has on this specific population. The reason for this is due to the fact that

there is an insufficient amount of obesity research, from a qualitative approach, that includes Asian Americans as part of the sample. The study involved interviewing 25 Asian Americans who were overweight or obese, living in Southern California, in order to find common themes and patterns that could explain how obesity impacts this specific population. Six themes emerged from the data collected: physical and mental health disadvantages, lack of consistency and motivation, the taboo nature of being overweight or obese within Asian culture, Asian Americans are not a model minority, Western vs. Asian culture, and outdated BMI.

While there are some areas that could be topics for further research, it is clear that the issue of obesity is also an issue among the Asian American population. Although a small population in a specific area was the sample for this study, their experiences should be valued as it demonstrates that Asian Americans are not a model minority for health. Asian Americans do have risks that put their health in jeopardy, including obesity and weight gain. Therefore, the obesity prevention discussion should and needs to be more inclusive. Albeit the Asian American obesity rate is not as high compared to other U.S. minority groups, obesity continues to be a major concern across all populations, and it is important to address the issue with everyone in mind.

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Appendix A: Interview Guide

1) How old are you (in years)?
2) What is your Asian ethnicity?
3) Did you migrate to the U.S. or were you born in the U.S.?

RQ1: What impact does being overweight or obese have on Asian Americans in Southern California?

4) What is your current height and weight?
    a. How do you feel about your weight?
    b. How do you feel about your weight in relation to others?
    c. Do you think you should gain/lose weight or remain the same?
5) If I were to tell you that Asians may opt to look heavier to experience less racial prejudice, would you agree with this statement? Why or why not? Would you consider this an advantage or disadvantage to being overweight or obese?
    a. Do you believe body size has a societal impact on Asians in America?

These relate to the study's subquestions because it demonstrates how being overweight or obese affects Asian Americans as a population as well as individually. It uncovers the advantages and disadvantages from a personal standpoint as well as a societal perspective being an Asian American, who is overweight or obese.

RQ2: What are the experiences of Asian Americans who are overweight or obese in Southern California?

6) How do you perceive obesity to be impacting your life?
    a. Tell me about a day when your weight was an issue or challenge for you.
    b. Are there any advantages that you experience being at your current weight/size?
    c. Are there any disadvantages that you experience being at your current weight/size?
7) Can you please give me an example of a weight loss method you tried but were unsuccessful in your goals? What did this experience mean to you?
    a. Where did you get information about eating and dieting from?
    b. How about a weight loss method that was successful? What did this experience mean to you? What made the weight come back?

These questions relate to the subquestions because it focuses more on the constructs of the Health Belief Model in terms of perception. Additionally, these interview questions involve more personal experiences around weight gain and loss.

RQ3: For Asian Americans who are overweight or obese in Southern California, what factors influence their perceptions of obesity and weight gain?

8) What advice have you received regarding weight loss? Who gave you that advice?
    a. How did you perceive that?
    b. Would receiving advice influence your decision to adopting healthier habits and lose weight? Why or why not?
    c. Does culture influence you to adopt healthier habits and lose weight?
9) What general knowledge do you have about obesity?
    a. What would you like to know more about regarding obesity?
    b. What do you know about obesity as it relates to the Asian population in the U.S.?
    c. Do you believe obesity to be a relevant and important issue among the Asian population in the U.S. compared to other racial/ethnic groups?
    d. How would you describe the risks Asians have to becoming obese? How about to developing health conditions related to obesity?

These interview questions involve more about what knowledge Asian Americans have or do not have regarding the obesity epidemic, specifically among their own population.

Appendix B: Invitation to Participate Flyer

Volunteers Needed for Research Study on Obesity among Asian Americans in Southern California

You May Qualify If You

- Are of Asian descent (immigrant or U.S. born)
- Live in a city in Southern California
- Are between the ages 18-50
- Have tried to lose weight in the last 6 months
- Self-report as overweight or obese

Potential Benefits

Participating in this study will contribute to obesity research and prevention for the Asian American population

Participation Involves

- An audio-recorded interview (lasting approximately 60-90 minutes)

Participants will receive compensation in the form of a $30 gift card to one of the following: Target, Amazon, or Walmart

FOR MORE INFORMATION OR TO SHOW INTEREST IN PARTICIPATING

Please contact Alyssa Carlos at (562) 673-2935 or email at alyssamae.carlos@waldenu.edu

Appendix C: Study Details

UNDERSTANDING OBESITY'S IMPACT AMONG ASIAN AMERICANS IN SOUTHERN CALIFORNIA

My name is Alyssa Carlos, Walden PhD student, doing my dissertation on obesity's impact on the Asian American population, specifically in the southern region of California. This is a qualitative study, involving the gathering of information from Southern California Asian American residents. More specifically, residents who are of Asian descent, either an immigrant or U.S.-born, between the ages of 18-50, self-report as overweight and/or obese, and finally, have tried to lose weight in the last 6 months. The data gathered from this study is to contribute to community health and wellness by having a better understanding of obesity's impact on this racial and ethnic population.

INTERVIEW PROCESS AND PRIVACY PROTECTION:

The interview process will last approximately 60-90 minutes. Questions will be open-ended, with the possibility of follow-up questions to give you, as the participant, the opportunity to speak freely about your experience. While the interview will be recorded, your identity and other identifiable information will remain sealed and confidential to protect your privacy. As participation is completely voluntary, you will have the opportunity to withdraw at any time, no questions asked, if you feel like you cannot continue. Before beginning the interview, you will first be given an informed consent form, of which you will have replied "I Consent." Your participation is greatly appreciated and will contribute to obesity research for Asian Americans.