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Walden University

College of Health Sciences

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Crystal Terry

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Walden University
2016

Abstract

Parental Perceptions of Childhood Overweight and Obesity in Four-Year-Olds in Northeastern North Carolina

by

Crystal Keyes Terry

MA, Old Dominion University, 1998

BS, Elizabeth City State University, 1997

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

Walden University

June 2016

Abstract

Childhood obesity has increased due to factors such as more television time, less outside play, parents' lack of education about nutritious meals, and eating more fast food versus home cooked meals. Research has been performed on many school-aged children; however, there is a gap in research as it pertains to preschool children. Preschool age learning is when children are most receptive to habit-forming activities. The purpose of this transcendental phenomenological study was to assess the parental perceptions of 11 preschool parents in rural Northeastern North Carolina of 4-year-old children who have been told by a health care professional that their children are overweight or obese. This qualitative study used the health belief model as its theoretical foundation. Responses were manually transcribed and uploaded into NVivo 10 software. The researcher performed horizonalization of the data to determine the themes and subthemes used for data analysis. Participants revealed that they recognized childhood obesity and overweight as an issue in their child and were knowledgeable on how to combat their child's diagnosis. As a result of this research, parents revealed that working and a lack of affordable resources played viable roles in why childhood obesity and overweight exists in their children. Parents shared that they felt safe in their neighborhoods, but acknowledged that affordability of healthy foods and other family members' impact on their child's eating habits play a role in their child's weight concerns. This study will lead to positive social change by providing local public health workers with an increased understanding of the experiences of parents of overweight and obese preschool-aged children, which may assist in stronger program development for the targeted population.

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Dedication

The work of this dissertation is dedicated to my children, Chaz My'Ron Terry and Chrislyn Myriah Terry. Thank you for sacrificing hours of mommy time in order for us to ultimately share more treasured time together.

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I first want to acknowledge God as the one who has ordered my steps and guided me in this endeavor and made everything possible. Thank you Lord. Next, I am grateful for my husband, Myron Terry, for his support throughout this academic journey. I want to thank my mom, Doretha Keyes, for stepping in to offer assistance with any motherly duties, for me or my children, to help deter any distractions. I thank both of my children for their support, but especially my night owl, Chrislyn, who made sure I stayed awake when finishing late night assignments. I am extremely appreciative to my Walden family of friends who I could depend on to give me the extra push that was needed to get through my courses; specifically, Katetia Hargrove, Tiney Ray, and Christina Omole. Thanks to my committee members for their time and efforts. Even though it is their job, they made sure that I produced the best product of my capabilities. My chairperson, Dr. Jennifer S. Perkins, was very instrumental in the completion of this process as she showed herself as a great motivator and friend.

Table of Contents

List of Tables v

Chapter 1: Introduction 1

Introduction 1

Problem Statement 2

Purpose of Study 3

Research Questions 4

Theoretical Framework 4

Nature of Study 5

Operational Definitions 6

Assumptions 7

Limitations 7

Scope 8

Significance of Study 8

Summary 9

Chapter 2: Literature Review 11

Introduction 11

Research Strategy 11

Theory and Framework 12

Early Intervention 13

Parental Perceptions 17

Obesity and Overweight in Rural Settings 20

Socioeconomic Factors 24
Family Dynamics 25
Summary 27
Chapter 3: Research Method 28
Introduction 28
Study Design and Approach 28
Research Design and Rationale 28
The Role of the Researcher 30
Methodology 31
Instrumentation 33
Issues of Trustworthiness 34
Summary 35
Chapter 4: Results 36
Introduction 36
Study Setting 36
Participant Demographics 37
Data Collection 37
Data Analysis 38
Evidence of Trustworthiness 41
Results 41
Community: Resources 42
Community: Safe Neighborhoods 44

Parent Attitude about Their Child's Diagnosis: Affect on Chronic Illness 45
Parent Attitude about Their Child's Diagnosis: Agree with Diagnosis 46
Parent Attitude about Their Child's Diagnosis: Disagree with Diagnosis 46
Parent's Perception of Their Child Becoming Obese/Overweight 47
Parent's Perception of Their Child Becoming Obese or Overweight:
Child's Food Habits 47
Parent's Perception of their Child Becoming Obese or Overweight:
Exercise 50
Parent Perception of Their Child Becoming Obese or Overweight:
When the Child Eats 53
Prevention: How Efforts Can Be Improved 55
Summary 56
Chapter 5: Discussion, Conclusions, and Recommendations 58
Introduction 58
Interpretation of the Findings 58
Limitations of the Study 60
Recommendations 61
Implications 61
Conclusion 62
References 64
Appendix A: Flyer 72
Appendix B: Questionnaire: Parent Interview 73

Appendix C: Informed Consent 74

Appendix D: Permission to Post Flyer Letter 76

List of Tables

Table 1. Themes/Subthemes 40

Chapter 1: Introduction

Introduction

Childhood obesity and overweight's increase throughout the nation seems to have no definite boundaries of causation. The National Institute of Health (NIH; 2013) reported that rates of childhood obesity have more than doubled among children ages 2–5, tripled among youth ages 6–11, and more than tripled among 12–19 year old adolescents in the last 30 years. The increase has become a national concern and the government initiative, Healthy People 2020, has included childhood obesity and children being overweight in its objectives to help decrease the proportion of children with unhealthy weight gain at the community level (U. S. Department of Health and Human Services, 2011). An objective of Healthy People 2020 includes focusing on increasing the physical activity of children and decreasing sedentary behavioral habits such as watching too much television (U. S. Department of Health and Human Services, 2011). Childhood obesity impacts various areas of children's and parent's lives. If this disease is not controlled, it can lead to early death and unnecessary injuries.

Educating the community on the effects of obesity and being overweight can create an atmosphere in which people begin to make conscious decisions about their well-being. However, to best educate the community, public health workers must be able to understand their experiences in order to cater education towards their needs. In Chapter 1, I provide background information about the childhood obesity and overweight epidemic. I provide insight on how overweight and obesity in children is determined and

identified the purpose of this study. I then present the research questions being studied and the format in which answers to those questions were determined.

Problem Statement

The rates of childhood obesity are increasing in the United States. The Center for Disease Control and Prevention (CDC) (2011) stated that 17% of all children and adolescents in the United States are affected by obesity or being overweight. This number triples the rate of the previous generation (CDC, 2011). As a result, children are presenting diseases that were once nearly nonexistent within this population. The negative effects of childhood obesity range from high blood pressure, high cholesterol, Type 2 diabetes, asthma, joint problems, and social and psychological problems taking place during childhood years (CDC, 2011).

One population of interest that suffers from the disease of obesity and overweight is preschool children of low-income families. The CDC (2011) stated “1 of 7 low-income, preschool-aged children is obese” (para. 2). Racial and ethnic disparities play a role in this disease. Hispanic boys ages 2 to 19-years-old were more likely to be obese than non-Hispanic Caucasian boys in the same age group (CDC, 2011). Non-Hispanic African American girls were more likely to be obese than non-Hispanic Caucasian girls (CDC, 2011). According to the Leadership for Healthy Communities (2010), Hispanic boys are more likely to be obese than Caucasian or African American boys during the ages of 2 to 19. The Leadership for Healthy Communities also reported that the prevalence of childhood obesity and overweight in Hispanic boys is 29.9 %, 33 % in African American boys, and 29.5 % in Caucasian boys. There is limited research of other

populations of preschool children, particularly preschool children that are not from low-income families.

For the purpose of this study, I focused on the beliefs and knowledge patterns concerning childhood obesity of parents or guardians of children aged 4 years old. The focus was in Northeastern North Carolina; however, neither income nor ethnicity was a focus of the study. Children's weight is impacted by the parental view on childhood obesity or overweight (Akhtar-Danesh, Dehghan, Morrison, & Fonseka, 2011; Bellows et al., 2010; Watkins, Clark, Foster, Welch, & Kasa-Vubu, 2007). While research is prevalent in childhood obesity occurring in school-aged children, there is a gap in literature as it relates to childhood overweight and obesity in preschool aged children, particularly age 4. There are multiple variables that are present when dealing with children aged 4, including familial status, school status, environmental factors, or the impact of their parents on their ability to eat certain foods or have access to play. Increased research is needed to help identify strategies to control and combat childhood overweight and obesity. Researchers have focused on school-aged children and their measured exercise in school, along with their cafeteria's meal preparation. Many preschool-aged children are not in an accessible environment to be measured as such because they may not be in a school.

Purpose of the Study

The purpose of this study was to identify perceptions of parents or guardians as it relates to childhood obesity and overweight. Understanding parental perception of childhood obesity among parents of obese children may provide information on

additional factors that may contribute to the epidemic. By parents providing insight on socioeconomic concerns, such as living environment, household population, income, and local safety concerns, more effective programs can be developed to address the needs of the target population. Recognizing the belief pattern and perception of parents with obese or overweight children will assist in developing programs to decrease childhood obesity prevalence. The findings of this study may also assist with program development and implementation in other areas by finding differences in childhood obesity rates when compared with those same characteristic children who live in cities.

Research Questions

The following research questions were used to guide the study:

1. What are parents' perceptions of their child's current obese or overweight state?
2. What type of resources are parents willing to access in support of controlling childhood obesity/overweight?
3. According to parents, what unique issues exist in rural Northeastern North Carolina related to the childhood obesity epidemic?
4. What are the parents' perceptions on how to improve childhood obesity efforts?

The research questions' answers will be used to provide data specific to Northeastern North Carolina's childhood obesity population.

Theoretical Framework

The health belief model (HBM) was used as the theoretical base for this study. According to the HBM, it is important to expose a person to knowledge so the individual can make a decision about his or her health practices (Hales, 2012). Developed by Rosenstock, the components of the HBM include "perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy" (as cited in Schiavo, 2007, p. 38). These components relate to many of the issues of childhood obesity. Understanding how parents think of or perceive childhood obesity will allow for educational intervention and insight to use to develop effective programs. HBM provides a foundation for understanding how perceptions impact behaviors. The research questions developed for this study were aligned with the HBM standards related to the parent's control of childhood obesity and overweight, the severity of the epidemic in their personal surroundings, and their perceptions of barriers as it relates to preventing and/or eliminating childhood obesity and overweight as it relates to their child's food choices. A personal interview of the parents supplied the necessary data to determine their stance on their child's overweight or obesity issue. The answers provided were analyzed to establish universal themes that the parents are experiencing.

Nature of the Study

This study was qualitative in nature with a phenomenological approach. It allowed parents or guardians to share their experiences of parenting obese or overweight children. These experiences were shared via interviewing the volunteer participants. The use of qualitative data provided me with a variety of parental perspectives to gain an in-depth understanding of a specific phenomenon. Phenomenology is the study of an

experience that more than one individual has had that is similar in nature (Heidegger, 1927; Creswell, 2007). Chapter 3 provides additional details about the study's design and methodology.

Operational Definitions

Following are a compilation of terms and definitions that are used throughout this study in an effort to gain a better understanding of the research. Childhood obesity and childhood overweight for the purposes of this study may be used interchangeably.

Childhood overweight: Body Mass Index (BMI)-for-age between the 85th and 95th percentile (Ogden & Flegal, 2010, p.1).

Childhood obesity: BMI-for-age at or above the 95th percentile (Ogden & Flegal, 2010, p.1).

Early intervention: Programs developed for preschool-aged children to help with decreasing childhood obesity (Carnell, S., Edwards, C., Croker, H., Boniface, D., & Wardle, J., 2005).

Health care professional: Any individual who works in a health setting and authorized in program management or is a doctor or LPN or RN nurse.

Northeastern North Carolina: Pasquotank, Camden, Currituck, Gates, Perquimans, and Chowan counties.

Parents: The person legally responsible, biological or not, for the everyday care of the child being represented (Conger, R., Conger, K, & Martin, M., 2010).

Preschool child: Any child who is 4 years old.

Socioeconomic status: A living condition that depends on a combination of variables, including occupation, education, income, wealth, and place of residence (Dubois et al., 2007; Singh, Kogan, & Van Dyck, 2008, p.100).

Assumptions

Parents were interviewed to gain data concerning the study. I assumed that parents were truthful in their statements and opinions. I assumed that the parents or guardians of the children accurately self-reported that their child has been diagnosed by a health care provider as being overweight or obese within a year of their birthdate. I assumed that the health provider's diagnosis is in keeping with the CDC's (2011) guidelines. The assumption of the parent being told by a health care provider that their child is overweight or obese was necessary as a foundation to the purpose of this research being conducted.

Limitations

Limitations of the study included not having access to the child's medical records and allowing the parents to self-report if their child has been diagnosed by a health care professional that they were overweight or obese. Also, participants were selected on voluntary bases, so the study was limited to individuals who chose to be part of the data collection process. A qualitative study denotes that external validity can be compromised due to small sample size (Creswell, 2007). The limitation of exposure and personal experiences can affect findings because they may vary from person to person and not reflect an entire population. However, the findings are expected to be important enough to be applied to real situations that a program intervention can be based upon. Interviews

were conducted in English; therefore, only English-speaking parents or guardians were able to participate in the study. This may limit the applicability of these findings to overweight and obese children in non-English speaking households.

Scope

Parents of 4-year-old preschool children were the focus of this study. The obese or overweight children were 48–59 months of age at the time of the parent's interview. Parents of the targeted population had to reside in Northeastern North Carolina at the time of the study in order to participate. The BMI standards for overweight and obese observed by the CDC (2011) were used as a guideline in this study.

Significance of Study

North Carolina Cooperative Extension (n.d.) stated that health care costs due to obesity in North Carolina are over 2 billion dollars, although the amount is not attributed directly to childhood obesity – but obesity in general. The Community Health Assessment is a tool mandated in North Carolina that takes a census of various health components within each county (Albemarle Regional Health Services (ARHS), 2010). The Community Health Assessment revealed that 15.2% of the children aged 2–4 were overweight and 17.1% were obese, a figure that exceeds the state average of 15.4% (ARHS, 2010). The number jumps in children aged 5 to 11 to 20.4% of the children being overweight and 26.7% being obese, again exceeding the state average of 25.7% for obese children (ARHS, 2010). It is important to understand early intervention and its potential in impacting the decline of childhood overweight/obesity rates. Determining the

mindset of parents in a location where childhood overweight/obesity is an issue and where resources are limited can help formulate successful future initiatives.

Summary

Childhood obesity and childhood overweight is often referred to as an epidemic as its increase has occurred quickly in the past 30 years. Children may have an increase in weight due to parents working longer hours, fewer opportunities for outside play at home and at school, as well as the prevalence of fast food restaurants (Lutfiyya, Lipsky, Wisdom-Behounek, & Inpanbutr-Martinkus, 2007). In this study, I used in-depth interviews to gain the perspective of parents or guardians as it relates to their 4-year-old child’s overweight or obese status. The health belief model guided this study as the theoretical framework. The background information about childhood obesity and overweight in this chapter is enhanced by Chapter 2’s literature review.

In Chapter 2, I explore various aspects of childhood obesity such as early intervention, the role of the parents, and the child’s environment. I review research findings on using preschool aged children in a study. Other aspects reviewed include using the parent’s perspective for data collection in other childhood studies as they relate to childhood obesity and overweight as well as a review of what some parent’s cite as a concern for their child or children.

In Chapter 3, I explain the research methodology of this study. The explanation includes an explanation of how participants were obtained and the types of questions that were asked. NVivo 10 was the data analysis tool that assisted in developing themes amongst the data collected in the interviews. In Chapter 4, the results of the interviews

and data analysis are reported. And in Chapter 5, I present an interpretation of the results and recommendations. This discussion provides a breakdown of my findings and how they involve social change.

Chapter 2: Literature Review

Introduction

Childhood obesity is an epidemic that has largely impacted the United States of America, as well as other countries (U. S. Department of Health and Human Services, 2011; Singh, Kogan, & Van Dyck, 2008). This study focused on rural Northeastern North Carolina parents' perceptions of childhood overweight or obesity in 4 year olds. The following literature review covers early intervention of parental influence, parental perceptions, rural settings' impact on childhood obesity and/or overweight, and socioeconomic factors. In an effort to support the decline of childhood obesity and overweight's prevalence, it is imperative to acknowledge key factors that directly impact the disorder (Ben-Sefer, Ben-Natan, & Ehrenfeld, 2009).

Research Strategy

The articles included in this literature review were from Academic Premier, CINAHL Plus with Full Text, Health Sciences SAGE Full Text collection, and EBSCO. The search term, *childhood obesity,* yielded in excess of 2,700 articles. These articles were streamlined by adding the following search terms: *preschool, rural, 4 year olds,* and *parental perceptions*. As articles accumulated and were read, their references were reviewed to determine authors that had completed additional research on the topic. References that were obtained by that method were found by using Google Scholar. Google Scholar was instrumental is assisting with citations and locating more references. Information about childhood obesity and overweight statistics was gathered from the CDC, Healthy People initiatives, and the local health department (ARHS, 2010; CDC,

2011; U. S. Department of Health and Human Services, 2011). All articles reviewed that directly addressed childhood obesity research were dated from the year 2000 or newer.

Theory and Framework

The HBM was developed in the 1950s by Hochbaum, Rosenstock, and other psychologists to explain why health programs were not successful in gaining adequate participation (Glanz, Rimer, & Viswanath, 2008). This model would be expanded in years to come by other researchers to include a behavioral component (Glanz et al., 2008). The HBM's goal is to predict the behavior of individuals based upon perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Glanz et al., 2008).

Interviews are the most common method for data collection in qualitative research involving health components (Gill, Stewart, Treasure, & Chadwick, 2008). A structured interview uses predetermined questions for all the participants (Gill et al., 2008). Interviews for the purposes of this research allowed for exploration of the participants' actual experiences and beliefs.

The means of gaining the information via interview provided the foundation for the HBM's standard of perception. Interviewing the parents and guardians provided their individual perceptions of their child's susceptibility to childhood obesity and their perceived severity of the condition. Although, the participant's children involved in the study are already determined to be obese or overweight, it was the goal of the study to determine if the parents actually agree with the child's diagnosis. Additionally, it was the goal to gain the parents' perception of the condition's severity. I used the HBM's

standards to also determine if the parent perceived any barriers to their child's obesity. The answers to these questions can assist in finding out the parent's perceptions to benefits of making behavioral changes and what steps to take to take in future program development.

Early Intervention

This study sought to gain insight into the perceptions of parents of obese or overweight 4-year-old children. The literature review helped to establish the importance of targeting preschool children. Early intervention in childhood obesity and overweight is an opportunity to instill principles in young impressionable minds that they can perhaps take into adulthood. Devising a plan amongst various age groups has proven to be beneficial (Gillis et al., 2009; Giralt et al., 2011; Vitale, 2010); however, there lies some discrepancy on the economic benefits of program implementation targeting all 0–6 year olds, versus targeting only those 0–6 year olds that are obese and overweight. Ma and Frick (2011) supported the idea of implementing programs specific to the target population in order to reap economic benefits. The expense of obesity programs can impact their longevity, and thus the ability to fulfill the program's full potential. According to Dolinsky et al. (2012), programs that are personal and include aspects of a community's environment can prove to be more cost effective. These programs are also beneficial to the family in the long run by establishing healthy habits among family members (Dolinsky et al., 2012).

Parents and guardians serve as the caretakers for their children. Often parents are the first teachers for their children, and children tend to follow their practices. By taking a

glimpse inside the thoughts and experiences of the parent, one may be able to predict some of the children's tendencies. Ostbye et al. (2011, 2012) agreed that parent's eating habits and knowledge influenced whether or not a child was overweight or obese. Parents often are the ones that inject values and habits upon their children. Children tend to follow the behavior that parents model (Ostbye et al., 2011, 2012). Involving parents in a childhood obesity intervention will help educate them on the benefits of making healthy choices, and the parents are then able to pass these lessons on to their children (Ostbye et al., 2011, 2012).

A study was conducted by Australian female doctors aimed at preventing childhood obesity by evaluating early intervention starting in infancy (Daniels, Mallan, Nicholson, Battistutta, & Magarey, 2013). This study agreed that about one in five 2-year-olds are overweight, with potential adverse outcomes and that early feeding practices lay the foundation for food preferences and eating behavior and may contribute to future obesity risk (Daniels, Mallan, Nicholson, Battistutta, & Magarey, 2013). The study suggested that early feeding benefits were enabled through group education about feedings via randomized, controlled trials and through the use of validated questionnaires (Daniels, Mallan, Nicholson, Battistutta, & Magarey, 2013). This study's findings assist in validating the benefits of early intervention.

If healthy behavior patterns are established in early childhood, there are proven lifelong benefits and a decrease in the development of serious diseases later in life (Daniels, Mallan, Nicholson, Battistutta, & Magarey, 2013). Smart Start and The Partnership for Children (2013) agreed with this statement and are responsible for making

every effort in improving outcomes for children with increasing access to healthcare and working with providers, health departments, families, and communities to improve the healthcare systems that serve children. In 2010, Smart Start partnered with the Blue Cross and Blue Shield of North Carolina Foundation in implementing an innovative initiative called Shape NC, which focuses on children ages 0–5 in tackling childhood obesity (Smart Start and The North Carolina Partnership for Children, 2013). Shape NC embodies three different structures: beginning early, research, and mobilizing the community (Smart Start and The North Carolina Partnership for Children, 2013). The beginning early structure focuses on children ages 0–5 instead of targeting school-age children (Smart Start and The North Carolina Partnership for Children, 2013). Shape NC uses multiple researched-based models to gain a detailed method in childhood prevention in combination with evidence-based models which increase nutrition and physical activity with an outdoor learning environment (Smart Start and The North Carolina Partnership for Children, 2013). Shape NC agreed that working with the community, to include parents, to gain insight to their experiences and develop strategies from information obtained can help in reducing childhood obesity (Smart Start and The North Carolina Partnership for Children, 2013).

The program High 5 for Kids is another initiative that capitalized on the parent's ability to change in order to influence change in their children (Haire-Joshu et al., 2008). High 5 for Kids' three main components were: "a tailored newsletter, a series of home visits, and materials for the parent and child, including storybooks" (Haire-Joshu et al., 2008, p. 78). These three components were all tailored to the needs of the family. The

term, tailored, meant that upon the participants' completion of a personal assessment, their newsletter, home visits, and storybooks all revolved around their unique needs as a family (Haire-Joshu et al., 2008). This program's goal was to use a familiar entity, the home, to implement education specific to the need in order to promote change (Haire-Joshu et al., 2008). Use of the home environment encouraged parents to model healthy eating habits which also encouraged their preschool children to eat healthier (Haire-Joshu, et al., 2008). High 5 for Kids indicated that early intervention in the home is an applicable approach to combating childhood obesity (Haire-Joshu et al., 2008).

Interviewing parents or guardians in an environment of their choosing creates a comfortable setting that can allow important information to be shared. Personalized attention in any setting can render improvement in the childhood obesity battle; it appears the key is one-on-one methodology (Dolinsky, Armstrong, Walter, & Kemper, 2012). This method is more medically founded, but still incorporates educating family members on setting healthy goals for long-term lifestyle changes from various entities in one location (Dolinsky et al., 2012). Dolinsky et al. (2012) inferred that this method yielded greater results in severe obesity reduction.

Early intervention can provide an understanding of future tendencies in behavior. Studies suggest that children of preschool age that are exposed to positive interactive play behavior were linked with having an active engagement in learning activities in the classroom (Coolahan, Fantuzzo, Mendez, & McDermott, 2000). These interactions lay the foundation for determining how children can retain information received to influence their choices. While the study did not put emphasis on the children's social component,

the study did reiterate the importance of using familiar environments and people to change behavior patterns, much like the program, High 5 for Kids. (Coolahan, Fantuzzo, Mendez, & McDermott, 2000; (Dolinsky, Armstrong, Walter, & Kemper, 2012).

Parental Perceptions

Parents' beliefs can influence a child's habits, specifically their eating habits. The HBM's premise is that an individual's "beliefs are more powerful than knowledge and attitudes" (Hales, 2012, p. 17). In 2010, the North Carolina Children's Hospital conducted a study confirming that "parents of overweight or obese children do not recognize their child's weight problem" (University of North Carolina (UNC) School of Medicine, 2010, para. 2). Pediatricians in North Carolina are on a quest to reduce childhood obesity and implement intervention programs that are effectively changing the perspective of parent's in their child being overweight or obese along with changed behaviors in reducing risks (UNC School of Medicine, 2010). Dr. Perrin, a pediatrician in Chapel Hill, North Carolina, indicated that by including initial parental perceptions in her study, and intervening accordingly, parent's perspectives were positively influenced and the children's behavior was changed (UNC School of Medicine, 2010).

Understanding the specifics of one's beliefs and environment is influential in designing a program to implement change. Watkins et al.'s (2007) study placed value on the parent's perception of childhood overweight and obesity and recognized their perception to be a key element in a child's successful participation and completion of any obesity type program. This study focused on several elements in assessing an intervention program for childhood obesity and overweight, such as the relationship in the parent's

weight and their child's weight and the parents' description of their child's weight (little overweight, overweight, very overweight, or obese) in comparison with the child's actual BMI (Watkins et al., 2007). The study found that childhood obesity in younger children, preschool and elementary level, is often not acknowledged but rather is seen as a sign of being healthy (Watkins et al., 2007). This study also deemed that mothers, versus parents in general, play a greater role in determining if a child will be overweight or obese. Data collected from a questionnaire coupled with observations, suggest that the maternal BMI affects the child's BMI because the mother may be the individual who is responsible for the nutritional needs of the child (Watkins et al., 2007). This study indicates how a parent's beliefs play a role in their child's health status.

Many childhood obesity interventions target schools and the children's environments versus surveying the parent's attitudes on childhood obesity (Akhtar-Danesh, Dehghan, Morrison, & Fonseka, 2011). An intervention that takes into consideration how a parent feels about childhood obesity is important when developing strategies to combat childhood obesity and overweight (Akhtar-Danesh et al., 2011). Akhtar-Danesh et al.'s (2011) study focused on the parental perceptions of childhood obesity causation, the impact of childhood obesity on the child's health, as well as the barriers to successfully preventing childhood obesity. The study concluded that while the parents that participated in the study were knowledgeable about proper nutrition and exercise, it was still important to educate the community and supplement exercise with alternative activities such as dance (Akhtar-Danesh, et al., 2011). These findings indicate what can be done in the community to successfully combat childhood obesity.

Understanding the experiences of the parents and children are important in childhood obesity endeavors. Interviewing parents provides a deeper insight into what programmatic characteristics parents view as successful as well as those characteristics that are a deterrent (Stewart et al., 2008). Talking with parents of obese children that receive treatment reveals feelings toward the program manager or the educator. Stewart et al.'s (2008) research implemented behavioral change techniques such as: goal setting, contracting, rewards for reaching goals, self-monitoring, environmental/stimulus control, problem solving, and preventing relapse. These techniques, when presented in a person-centered manner, fostered effective behavioral changes (Stewart et al., 2008). Considering parents' opinions in program implementation can avail positive results that includes them modeling behavior that cultivates behavioral changes (Bellows et al., 2010).

However, the study by Bellows et al., design is of a social marketing framework, which generally will evaluate the program to be sure that it is on track with its goals and objectives (Bellows et al., 2010). Bellows et al.'s (2010) program integrated separate techniques for the child and then for the parent to determine if those techniques motivated families to partake in more physical activities. This study used a mixed methods approach to conclude that parent education materials are successful in resulting in more physical activity in the home. The study was unclear in reporting the success of the nutrition component as it related directly to the children. However, it did acknowledge that further research is needed to determine the study's effectiveness of the parent component (Bellows et al., 2010).

There are multiple variables involved when attempting to understand what causes childhood obesity. A study in Japan accounted for the parental perceptions of childhood overweight and childhood obesity by administering surveys to the parents of children, ages 9 and 10 (Shiraswa et al., 2012). While this study acknowledged that parents primarily control the lifestyle of children, it also suggested that a parent's perception of childhood obesity impacts a child's overweight status (Shiraswa et al., 2012). A similar study was conducted in the United Kingdom in 3-5 year olds that sought to determine the level of parent's awareness of their child's weight status (Carnell et al., 2005). Carnell et al. (2005) survey revealed that "only 1.9% of parents with overweight children and 17.1% of those with obese children described their child as overweight; and no parent described their child as very overweight" (p. 354). These findings indicate the possibility that parents may need more education on identifying childhood obesity and overweight as a concern. These studies confirm the importance of understanding the viewpoint of parents as it relates to childhood obesity and overweight. These studies incorporated quantitative methods, versus the qualitative methods that will be used for the proposed research. Qualitative will add an additional component of allowing parents to provide information rather than agreeing or disagreeing to what is already presented before them.

Obesity and Overweight in Rural Settings

Disparities or areas of inequality may include geographic information. Singh, Kogan, and Van Dyck (2008) were able to determine in their study that geographic location did impact the prevalence of childhood obesity and overweight. The Rural Assistance Center (RAC; 2014) state that rural communities experience higher rates of

obesity and overweight than urban communities. The South central regions of the United States, specifically North Carolina, along with other states such as: West Virginia, Kentucky, Texas, and Tennessee, had the highest prevalence of childhood obesity in children aged 10-17 when compared to the Mountain Region of the United State's Utah region, which possess the lowest prevalence for childhood obesity (Singh et al., 2008). Children living in rural regions are more likely to be obese than those that live in urban areas (Davis et al., 2010; Lutfiyya et al., 2007) also determined this to be true.

Often in rural settings, a lack of resources is evident (Campbell & Edwards, 2012). Specialists, such as dietitians and nutritionists are also limited in rural areas; which adds to the lack of resources in rural communities (Filbert, Chesser, Hawley, & St. Romain, 2009; Lutfiyya et al., 2007). Those living in rural areas may also have a harder time accessing any available resources (Campbell & Edwards, 2012; Lutfiyya, et al., 2007). Studies also determined that in rural areas the following environmental dynamics existed: obese children that lived in rural areas were more likely to be white, live in poverty conditions, lack health insurance, lack preventive health care with a healthcare provider in the last year, more likely to be a girl, use computers in excess of at least three hours a day, excessively watch television, and has been told by a health professional to have asthma, attention deficit disorder or attention deficit hyperactive disorder (ADD or ADHD), anxiety issues, depression, bone or muscle issues, or diabetes (Lutfiyya et al., 2007). Other pinpointed areas of concern included the exaggerated costs of fruits and vegetables and access to get the food (Lutfiyya et al., 2007; Singh, 2010).

The built communities in rural areas tend to be a crutch in the health viability of adults and children, alike. Miranda et al. (2012) agreed that our built communities may add to the childhood obesity epidemic. The built environment includes buildings, parks, roads, and lighting that are used to enhance communities (Miranda et al., 2012). However, the added convenience may have stimulated people, adults and children, to not be as active as they once were. In rural areas, some communities have no sidewalks, no access to play equipment, nor any access to recreation centers (Grafova, 2008; Singh et al., 2010). Some neighborhoods are unsafe due to excess litter, poor housing quality, and vandalism (Miranda et al., 2012; Singh et al., 2010). Singh et al. (2010) discovered that those less than desirable conditions promoted more inactivity, more television watching, and more computer use. Specifically, it was noted that "children in unsafe neighborhoods had 61 % higher odds of being obese and 43% higher odds of being overweight than children living in safe neighborhoods" (Singh et al. 2010, p. 509). Targeted programs that consider the citizens of the community, as well as the stakeholders, may be more successful in implementing change because the citizens are more likely to invest back into their own neighborhoods (Filbert et al., 2009). Filbert et al.'s (2009) research reinforced the importance of including the entire community in program development; this is particularly crucial in rural settings where resources are limited. The same concept used in the school setting could be applied to the community setting. Surveying individual communities is important in program development. For example, children living in rural Louisiana are reported to exceed the national prevalence of childhood obesity rates (Williamson et al., 2009). Studies support that children in rural areas are at a

higher risk for obesity, however, not enough evidence exists to support why; though contributing factors, such as the built environments provide a strong case for reasoning (Gallagher et al., 2011). Based on gathered data, obese children were less physically active than children residing in urban neighborhoods (Gallagher et al., 2011).

Rural environments can be viewed as unsafe by its residents and cause parents to not allow their children to go outside as much; thus children will fail to get the proper amount of physical activity. Also, aforementioned, was the role of the mother on the child's weight status. Bacha et al.'s (2010) study considers the mother's perception of a neighborhood's safety level. The study supported that if the mother felt that the neighborhood was unsafe, the girls displayed a higher BMI z-score; versus the boys, which stayed the same (Bacha et al., 2010). The article attributed some of the safety issues to the parents' awareness of their child's ability to function in the neighborhood or sometimes it was simply based on the child's gender (Bacha et al., 2010). These thoughts of the parents are imperative in understanding the type of obesity program to implement in a community.

Burdette and Whitaker (2005) sought a link in preschool children's obesity patterns and the amount of outdoor playtime, television watching time, and the mother's perception of a safe neighborhood. Although this study is not in a rural setting; it does present a comparison for rural settings as well as evaluating a neighborhood's safety factor from a parental viewpoint. The mother's perceptions of an unsafe neighborhood was linked to the amount of television watched, but, had no impact on the children' risk for obesity or the amount of outdoor playtime (Burdette & Whitaker, 2005). Though this

study tends to go against the other studies' findings, it is important to note what was actually being measured in the study. The authors left room for negotiation in its findings such as the fact that they did not measure dietary consumption and the amount of street traffic. The amount of street traffic in the neighborhoods could be a safety concern and would affect the amount of outside play (Burdette & Whitaker, 2005).

Socioeconomic Factors

Conger, Conger, and Martin (2010) stated that socioeconomic status is linked to "satisfaction and stability in romantic unions, the quality of parent-child relationships, and a range of developmental outcomes for adults and children" (p. 685). Their study used the interactionist model of SES and family life. The research used for this study utilized the findings in Conger, Conger, and Martin to set the precedence for socioeconomic factors to be examined.

Families with lower incomes are likely to experience difficulties in purchasing healthier foods and that can result in unhealthy food choices which may lead to unhealthy bodies. Studies support that children that live in neighborhoods with single-parent households, females lacking education, low income households, highest proportion of non-white residents, and fewest owned homes are more commonly found to have obese children (Seattle Children's et al., 2010). Research attributes numerous reasons for childhood obesity rates increasing throughout recent years. Most point to lowered levels of physical activity, increase consumption and access to fast foods, and unstable family dynamics, such as separation or divorce in parents. (Kunkel, 2010).

Research concluded that children that lived in a household solely with the mother and children without siblings were at higher risk for obesity than those children that lived with two parents and those that had siblings (Chen & Escarce, 2010). Notable statistics resulted from a study that showed when "compared to children with family incomes exceeding 400% of the poverty threshold, those below the poverty threshold had 69% higher odds of being obese" (Singh et al., 2008, p. 95). Other statistics that were produced involved the amount of television watched, those children that did not exercise, and demographic comparisons of affluent white children and poor Hispanic, white and black children. Children who viewed television three or more hours a day had a 59% more chance of being obese when compared with other children that watched television for an hour or less a day (Singh et al., 2008). Singh et al. streamlined their research to pinpoint socioeconomic and behavioral factors, along with their residential state to determine that Hispanic children had a 27% chance of being obese when compared to non-Hispanic white children and black children had a 60% chance of being obese when also compared to non-Hispanic white children. Identified socioeconomic factors included income inequality, poverty rate, and violent crime rate (Singh et al., 2008).

Family Dynamics

A social factor as simple as spending adequate family time is important to the well-being of an individual. According to Gable, Chang, and Krull (2007), kindergarten and first grade children that had fewer family meals and experienced increased incidences of watching television were more likely to be overweight by the spring season of the third grade. Also, children who continued the trend of watching more television and eating

fewer family meals in grades kindergarten through third, proved to be more likely persistently overweight by the spring of third grade (Gable et al., 2007). This study isolated children in terms of how much television and family time they received as well as it provided relevance to the importance of incorporating parents into targeted early interventions as it relates to childhood obesity.

There are various social factors that children encounter that may influence their eating habits. Dubois et al. (2007) researched social factors such as: "the mother's age, immigrant status, educational level, smoking status during pregnancy, family type, annual household income, income sufficiency, day care attendance, and food insufficiency" (p. 9). The social factors were aligned with the children's reported factor of being a picky-eater, an over-eater, or no reported eating disorders or issues. The following social factors were present in children aged, 2.5, 3.5, and 4.5 years of age when they were classified as an overeater: "single-parent family status, lower family income, income insufficiency, and having two parents that were overweight or obese" (Dubois et al., 2007, p. 9). When the two factors of food insufficient families and food-sufficient families were compared, the numbers doubled in all age groups in the proportion of children that were grouped as overeaters (Dubois et al., 2007). Children, aged 2.5 that were born to young mothers, along with children aged 2.5 and 3.5 years old to immigrant mothers, as well as children aged 2.5 years old to less educated mothers were determined to more likely be overeaters at those ages when paralleled with children from "older, more educated and non-immigrant mothers" (Dubois et al., 2007, p. 9). This study provides insight in the area of eating behaviors in preschool children, their weight, and their environment. The

information gained allows additional research and energy to be placed in developing programs that target parents of children overweight or at risk of being overweight or obese.

Summary

Chapter 2 focused on reviewing literature that dealt with early intervention, parental perspectives, rural settings, and socioeconomic factors as they relate to childhood obesity and overweight. The literature review supports the belief that parents can influence the weight status of their child. The literature contained many quantitative studies as it related directly to parental perceptions; however, often the literature excluded preschool aged children and rather focused on school-aged children. This study used a qualitative study method that offered specific points of view from parents of 4-year-olds. In the next chapter, I provide an outline for gathering data that helped to determine the mindset of parents and guardians concerning childhood obesity and overweight, as well as potential environmental influences in Northeastern North Carolina.

Chapter 3: Research Method

Introduction

The purpose of this study was to identify perceptions of parents or guardians as it relates to their child's status as obese and/or overweight. Understanding parental perception of childhood obesity among parents of obese children may provide information on additional factors that may contribute to the epidemic. By parents providing insight on socioeconomic concerns, such as living environment, household population, income, and local safety concerns, more effective programs can be developed to address the needs of the target population. Recognizing the belief pattern and perception of parents with obese or overweight children will assist in developing programs to decrease childhood obesity prevalence. The findings of this study may also assist with program development and implementation in other areas by finding differences in childhood obesity rates when compared with those same characteristic children who live in cities.

Study Design and Approach

The previous chapter displayed research that highlighted some of the factors associated with childhood obesity/overweight. This chapter will document the qualitative methodology chosen to determine parents' perceptions of childhood obesity in 4-year-old children in a rural location. In this chapter, I will highlight how a sample was achieved, the instrumentation used in the study, data collection, and data analysis.

Research Design and Rationale

I used qualitative methodology for this study with a phenomenological approach. Parents of obese or overweight children participated in face-to-face or telephone-based interviews that were analyzed to determine how they perceived their child's weight. The interview questions helped to determine if parents viewed childhood obesity or overweight as a problem, as well as identified their experiences as the parent of an overweight or obese child.

Interviews are a type of participatory research that allows individuals to play an active role in program assessment, planning, and implementation (Findholt, Michael, & Davis, 2010). The information gained from the interviews in this study fills the gap concerning obese or overweight 4-year-olds in Northeastern North Carolina and may be used directly in program development. Using this type of approach gives the researcher insight from the viewpoint of the affected community which allows for more effective program development. Parents of obese and overweight children participated in this study. The line of questions, specific to childhood obesity, offered a look from a parent's perspective about their personal experiences with childhood obesity and overweight. The interview questions revealed, "What have you experienced in terms of the phenomenon? and What contexts or situations have typically influenced or affected your experiences of the phenomenon?" (Creswell, 2007, p. 81). The interview questions were designed to address the following research questions for the study:

1. What are parents' perceptions of their child's current obese or overweight state?

2. What type of resources are parents willing to access in support of controlling childhood obesity/overweight?
3. According to parents, what unique issues exist in rural Northeastern North Carolina related to the childhood obesity epidemic?
4. What are the parents' perceptions on how to improve childhood obesity efforts?

Qualitative research is the study of things in a natural setting (Creswell, 2009). Phenomenology is the study of a phenomenon or an experience that more than one individual has had that is similar in nature (Heidegger, 1927; Creswell, 2007). Using one's natural setting, along with allowing the individual the opportunity to express their personal point of view often can provide valuable information that promotes discussion in the community, influences policymakers, and involve citizens in health promotion efforts (Findholt et al., 2010). The data received deals with the collaborative theme of several individuals' account of something that has occurred in their lives (Creswell, 2007).

The Role of the Researcher

I had the role of observer, as I gained information from the participant and did not stay in their living environment. Due to the rural setting, it was possible that the participants and I knew one another. A confidentiality statement was signed by each participant explaining the intent of the information received and how it was handled. Neither the participants' names nor the names of their children were used when discussing the data obtained. Complete anonymity was maintained when the data was shared by only referring to the participants by their placement in the interview process,

such as Interview #1 or Interview #2, for example. No identifying factors, such as their address, were used in data sharing. Having any type of relationship with the participant did not affect the study, as the same set of questions was administered to all. The answers to the questions were recorded and transcribed exactly according to what was said. The participant was encouraged and prompted to use words for answers instead of body language.

Methodology

The purpose of sampling is to represent what the name suggests, a sample of a population or glimpse into a particular aspect about a group of people or things (Frankfort-Nachmias & Nachmias, 2008). Frankfort-Nachmias and Nachmias (2008) stated that it is nearly impossible to obtain information from every individual or unit of study, so it is more practical to study a representation of a population. A convenience sampling strategy is used best when money and time may be a factor (Creswell, 2007), and this study used a convenience sampling for those same reasons.

Partnering with the local health department, Albemarle Smart Start Partnership, North Carolina Cooperative Extension, and the NC Head Start program that focus on 0—5-year-old children's welfare, assisted with obtaining participants for the study. These organizations were contacted as a source to gain parent participants via doctor or counselor recommendations. Upon obtaining permission to post flyers, they were placed in doctor's pediatric offices, Albemarle Smart Start Partnership, the NC Cooperative Extension office, and Head Start and Pre-Kindergarten classes asking for volunteers (see Appendix A). Participants were considered that were referred from doctors, program

managers, and other health professionals. If no responses were received from the flyer, participants were recruited by my in-person attendance at Parent Teacher Organization (PTO)/Parent Teacher Association (PTA) meetings in the schools and soliciting assistant from childcare and preschool teachers upon approval from the Institutional Review Board (IRB). A sample of 11 participants was used to gain data for this research. The sample for this study was sought from Northeastern North Carolina's Pasquotank, Camden, Currituck, Gates, Perquimans, and Chowan Counties. Pasquotank County is the home of the multicounty district health department, which is the central station for Northeastern North Carolina (ARHS, 2010). Pasquotank County is also the most highly populated county in Northeastern North Carolina (ARHS, 2010). Surrounding counties' health services are mostly filtered through Pasquotank County, allowing the sample to still represent Northeastern North Carolina. Though flyers were placed in all counties, only parents that resided in Pasquotank responded and participated in the study. Only parents that were 18 years old and older were selected to participate. General data about the status of the children's BMI was self-reported by the parents. This information provided a baseline to acquiring a convenience sample (Frankfort-Nachmias & Nachmias, 2008). If a potential parent or guardian failed to acknowledge that they have been told by a health care professional that their child is overweight or obese, they were not allowed to participate in the study.

Patton (2002) stated that qualitative studies' sample sizes are based on what the researcher is seeking to learn as a result of the intervention. The sample size was selected to provide the best results in the allotted time frame with the available resources. This

study used the parent's viewpoint to examine what their beliefs were as it related to their child being obese or overweight. The findings supported reasons that included culture variances, gender, and socioeconomic factors to explain the presence of childhood obesity in a rural area.

Since childhood obesity is an international issue, the results could help researchers tackle childhood obesity and overweight concerns in other rural communities around the world that have a similar population. However, for the purpose of this research, the population of focus was from rural Northeastern North Carolina. This area has some unique characteristics as it pertains to the landmass, resources, access to care, and culture. Of the 590, 4-year-olds living in Pasquotank County in Northeastern North Carolina, 17.1% are obese, which is higher than the state average (ARHS, 2010). There is a jump in the 5 to11 year olds, where out of 369 children, 26.7% are obese, still higher than the state average (ARHS, 2010). It is important for the study to provide insight on the rise of childhood obesity by focusing on what the parents perceive to be or not to be an issue.

Instrumentation

Discovering the questions to ask to get the proper results is a means of performing backwards research (Siegel & Lotenberg, 2007). Based on the research questions, I developed a set of interview questions that provided the best outcomes to support my research goals. The interview questions were reviewed by a panel of childhood obesity experts that have experience working with the youth in Northeastern North Carolina (see Appendix B). The childhood obesity experts included health educators who currently

work or have worked in Pasquotank County and have specifically worked with the target population of 4-year-olds and their families. All of the review experts have served as stakeholders for the community assessment administered by Albemarle Regional Health Services.

The parent participants, upon signing a consent form for them to participate in the program, agreed to report true and honest statements when being interviewed. Participants were asked to donate an hour of their time to answer interview questions in an interview with me. These interviews were recorded via an iPhone 6 and then uploaded on my computer in a private and password protected file. The interviews were then entered into a computer program, NVivo 10, to better identify reoccurring themes. All data collected were the primary data. The data collected in this study were very subjective, but important in determining habits that form in households.

I was responsible for transcribing the interview and placing it in NVivo. Themes were determined via NVivo 10 to get reoccurring codes from the interview answers to help determine the outcome. The themes that were devised from the gathered data better formulated specific ideas from holistic concepts about the perceptions of parents with obese and overweight children. NVivo 10 was essential in data organization and provided accessible information quickly. Stakeholders and participants were provided a PDF copy of the dissertation results' summary, if so desired, once the dissertation process was complete and approved.

Issues of Trustworthiness

Volunteers signed an informed consent form once they agreed to participate in the interview process (Appendix C). The participants were not asked to disclose any identifying characteristics, such as name or address, for the purposes of this study. If a name was needed during the presentation of the data, a pseudonym was used. The risks, as they related to the interview, were minimal. The participants and I decided on the location of each interview. The location of the interview recordings and transcripts were kept private and password protected on a flash drive, known only by me and the designated Walden University committee. As an incentive for participation, each participant was offered an award of $5 as a thank you gift.

Summary

Chapter 3 reviewed the strategy of data collection for the study. The qualitative study used interview questions for the parents of obese or overweight 4-year-old children to determine what the parent's perception was of their child's weight issue. In the chapter, I also described the sample size and setting used to gain the data. After the data was obtained, NVivo 10 was used for a data analysis. Lastly, in the chapter, I discussed the ethical concerns of data collection and participation in the study.

Chapter 4: Results

Introduction

In Chapter 4, I reveal the results and data analysis of the study. The data were analyzed using NVivo 10 software. My research data were obtained by using a qualitative, phenomenological approach. A self-developed survey of open-ended questions was given to 11 parents of 4-year-olds to determine the parent's perspective on their child's overweight or obese diagnosis and the circumstances that related to the diagnosis.

The interview questions were conducted face-to-face and via telephone. The one-on-one methodology proved beneficial in gaining the trust of the participants to share personal information about their child (Dolinsky, Armstrong, Walter, & Kemper, 2012). Each participant received and signed an informed consent form prior to the interview taking place. The interviews were recorded after receiving permission from the parent participants. I transcribed each interview and uploaded them to NVivo 10 software to be analyzed. Based on the information received from the interviews, I developed four nodes: (a) community, (b) parent attitude about child's diagnosis, (c) perception of becoming obese or overweight, and (d) prevention. Some nodes had child nodes that were developed to capture all the information needed to assist in answering the research questions.

Study Setting

The interviews were conducted in a location most comfortable for the parent (Findhold et al., 2010). I travelled to the homes of some interviewees, as some requested

to be interviewed over the telephone. I conducted all of the interviews and served as the only transcriber of them. A $5 cash token of appreciation was offered to each interviewee for their time and effort in this process.

Participant Demographics

This study consisted of 11 African American female participants. All participants spoke English as their first language and lived in Pasquotank County, NC. Ten participants stated that they were told by a health care provider that their child was overweight, and one reported that they were told that their child was obese. One parent reported that their child was diagnosed with high blood pressure, three parents reported that their children has asthma, one reported that the child has eczema, and three reported that their child has no diagnosis. Ten parents reported that they do not attend school and one reported to being a student. All participants reported that that did not have a child that attends Elizabeth City State University (ECSU).

Data Collection

Once I received approval from Walden IRB (Appendix C), I began the process of data collection. I posted the approved flyers in child care facilities, the health department, and the Cooperative Extension office. I got one phone call back from my posting of flyers efforts. After that interview was performed, that parent recommended other parents to give me a call. The remaining 10 interviews were conducted as a result of other parent recommendations. Each interviewee was contacted to determine their qualifications for the interview. They were read and given a copy of the consent form prior to the interview. Participants were asked to allow at least an hour for the interview. The parents

signed the consent form and answered the questions that were previously developed by me. Once the interview was completed the participant was offered the $5 cash appreciation gift.

Data Analysis

Transcendental phenomenology was the preferred method of data analysis for this study based upon Moerer-Urdahl and Creswell's research (2004). Their research was an expansion of previous work by Moustakas (1994), who focused on qualitative research and the ability to cross reference experience and behavior as in working together in a subject (Moerer-Urdahl & Creswell, 2004). My study dealing with childhood obesity and overweight outlined the applicability of transcendental phenomenology in various types of qualitative study. This form of data analysis deals with the human experience and guides how to organize and analyze phenomenological data (Moerer-Urdahl & Creswell, 2004). One of the first key steps in this process is for the researcher to set aside any prejudgments, also known as epoché (Moerer-Urdahl & Creswell, 2004). When analyzing the data for this study, I had to erase any previous thoughts from my mind in an effort to remain neutral during the interview and analytical process.

The second step in the transcendental phenomenology process is reviewing the data gained from the interviews (Moerer-Urdahl & Creswell, 2004). This review was accomplished by first manually transcribing the interviews and then uploading them into NVivo 10 software. NVivo 10 is a vehicle that assists in organizing the data (Moerer-Urdahl & Creswell, 2004). Each interview was then read again to identify similar statements. Moerer-Urdahl and Creswell (2004) also identified this process as

horizonalization, where statements are grouped together so that the researcher and others can easily view the various perspectives of the participants. I studied the data to determine what common ideas were stated by each participant and assigned each idea to the appropriate node. Nodes are the terminology used in NVivo 10 software; however, for the duration of this research, I will refer to nodes as themes. Themes were developed using inductive reasoning. Inductive reasoning allows the data's overall themes to come directly from the data content without making assumptions of the data (Moerer-Urdahl & Creswell, 2004). The interview transcripts were used to identify patterns in the data which were placed in child nodes in the NVivo software. Child nodes are the terminology used in NVivo software that is equivalent to the term, subtheme. For the remainder of this research I will use the term, subtheme, instead of child nodes. The research questions were reviewed along with the questions that were asked of the participants. Responses to the questions were grouped together to determine recurring themes of the answers. This process, also referred to as open coding, breaks down the data, compares it, and puts the data in its appropriate category as determined by the researcher based on the participant responses (Moerer-Urdahl & Creswell, 2004).

This process was instrumental in naming themes. Based on the data gained from the interviews and what was being sought from the research, four themes emerged: community, parent attitude about diagnosis, perception of becoming obese or overweight, and prevention. Content analysis was implemented to further determine the subthemes. The recurring words in the answers aided in placing responses to the correct theme categories. Under the theme entitled, community, two subthemes were developed:

resources and safe neighborhoods. The theme, parent attitude about diagnosis, was broken down into three subtheme categories: effect on chronic illness, agree that child is overweight or obese, and disagree that child is overweight or obese. The theme, perception of becoming obese or overweight, was broken down into three subthemes: child's food habits, exercise, and when the child eats. The final theme, prevention, included data that focused on how efforts can be improved.

NVivo 10 software did not analyze the data, but was essential in organizing the data so that I could easily recognize themes and subthemes. Data received only focused on the perceptions of the parents of the 4-year-old children as self-reported. Their statements were compared for similarities in the data analysis process, which resulted in constructing the overall themes of the research as guided by the research questions. All answers received provided the insight needed to possibly continue the research and assist in programming efforts to foster potential behavior changes.

Table 1

Themes/Subthemes

Themes	Sub-themes
Community	Resources Safe neighborhoods
Parent Attitude about child diagnosis	Affect on chronic illness Agree that child is overweight or obese Disagree that child is overweight or obese
Perception of becoming obese or overweight	Child's food habits Exercise When child eats
Prevention	How can efforts be improved

Evidence of Trustworthiness

During the interview process, I allowed each participant to answer questions without implications from me that could potentially influence their thoughts and answers. Member checks during the interview process helped to make sure that the recorded data was what the participant intended to say. This was accomplished by restating the interviewee answer to ensure correct understanding. All participants agreed that the recorded responses were their perceptions.

Results

The themes and subthemes identified via NVivo 10 were based on the participants' response and its relevancy to the research questions. Four research questions served as the basis for this research:

1. What are parent's perceptions of their child's current obese or overweight state?
2. What type of resources are parent's willing to access in support of controlling childhood obesity/overweight?
3. What unique issues exist in rural Northeastern North Carolina, according to parents, related to the childhood obesity epidemic?
4. What are the parent's perceptions on how to improve childhood obesity efforts?

The first theme that I explored dealt with the community. The first subtheme of this section was resources, which sought to determine what the participants have available to them within their community. The second subtheme was safe neighborhoods.

The purpose of this subtheme was for the participants to share from their point of view if their neighborhood is safe and if it is a factor in the amount of exercise or activity their child is involved in. Participants were asked if they were provided any resources upon their child's diagnosis. They were asked follow-up questions such as: "Did you use the resources?" "Were they helpful?" and "What would you do differently?"

Community: Resources

In Interview #1, the participant stated that they were not given any community resources from the doctor; however, she happened to be familiar with EFNEP (Expanded Food and Nutrition Program):

> Um, the suggestion that was given was to provide more fruits and vegetables and fiber in her diet. Um no resources were given, Um I was given a chart to break down the food groups and the portion sizes that she should be getting. So yes. (What about resources in the community?) Resources in the community…. Um, I wasn't directly given anything from her doctor but, I've come into contact with the lady from the EFNEP program – the food and nutrition lady… and um I meet with her monthly, and we do like a food planning menu type thing. (Do you find that helpful) yes I do. (What would you do differently if anything?) The thing that I would do differently, ummmm, junk food is a major item in our daily… in our daily living…I would eliminate that and eat more fruits and vegetables.

When other participants were asked about their child's involvement in community resources, they responded in these ways. Interview #3 stated "They said that the YMCA is a good place for the child to have – to do different things in there." Interview #4

stated, "No, there is nothing really for the kids to do at a time that works for me." Interview #5 "If I could get him involved in the local rec (recreation) center or it sounds like the exercise part or some additional outside activities, that type of thing." Interview #6 added that:

> "Um, resources, um basically they looked over her diet, her nutritional plan and recommended amount of activity; what her weight should be for her age and then just gave me, as far as… the nutritional guide is what really was helping a lot. Cutting out a lot of junk foods, and having more vegetables and fruits and a lot of exercising."

Another participant in interview #7 felt that "Ummm, no.; Elizabeth City as a whole… it's really nothing here for her, like being social..." Interview #8 said:

> "Yes I do… intramural sports in my local area, the YMCA, the school offers opportunities that he can participate in like the run to raise money. So it is just a manner of getting the information and putting your child in those activities. If I could, I would definitely go more organic as far as the foods we introduced, um growing our own foods, using the health food store, the farmer's market… our grocery options more so than the traditional grocery options."

Interview #11 was positive about her living environment's resources:

> "Yes, she assigned a team of doctors to monitor her blood pressure and weight as well as her kidneys. They put her on a kids weight watchers program. I found the program helpful a little. Since she been heavy since birth, I would have personally

been a little more proactive when she was younger instead of thinking she would grow out of it."

Community: Safe Neighborhoods

Participants were asked to express in what manner they felt their neighborhood environment impacted their child getting enough physical activity. Interview #1 stated, "She can go outside and play with the proper supervision, so my neighborhood is pretty safe." Interview #4 said, "I don't feel the area has anything to do with it." Interview #6 was in agreement with Interview #4, "First for our area – I don't think that is a factor because there are things for kids to do. However, it is about finding time to get involved and, you know, - expenses." I asked Interview #6 if she felt that specifically, around your house, do you feel like that area is a contributing factor and if she felt safe in her neighborhood?" Interview #6 further stated:

> "Um, I feel safe right now… as far as traffic, we are right off a busy street, there is a school across the street. So I feel that if I were in another neighborhood, where she could just go outside and run around then it would be a lot different without, you know, the traffic."

When Interview #7 was asked about how she felt about her neighborhood she said, "neighborhood is pretty decent". Interview #10 also had positive feelings for her neighborhood and stated:

> "As far as my neighborhood, I feel it is safe enough for my son to go outside and play. He has toys he can play with outside as long as we get home in time and it's not too dark."

Interview #11 declared that:

> "My neighborhood… She has lots of yard to run and play, but she doesn't like to go outside too much. It is safe where we live, but with her being 4, she still has to be closely monitored when she is outside so sometimes making time for us all to go outside is kinda difficult."

Parent Attitude About Their Child's Diagnosis: Effect on Chronic Illness

The second theme is parent attitude about their child's diagnosis. This theme has three subthemes that developed as follows: Affect on chronic illness, agree with diagnosis, and disagree with diagnosis. The answers below reflect the participants' responses to if they felt the diagnosis impacted their child's chronic illness. Interview #1 said "No, her's is more like exercise induced". Interview #3 stated, "I feel it's true, because I have HBP myself and when I come down and lose weight, my blood pressure comes down. So I am feeling that probably the same thing with her." Interview #5 affirmed by stating, "I would say yes, as far as activity, being able to move and breathe correctly, I would say yes." Interview #8 said, "I don't think that it is related" in reference to the child's weight being a factor in their chronic illness. Interview #11shared her feelings concerning childhood obesity and overweight and its impact on chronic illness:

> "She has been overweight since birth and doctors are considering medication to help her blood pressure.; In my culture we tend to celebrate everything with a meal. Just about in everything we do, we eat, not sure if that is based on the area where we live, but we do eat a lot at family gatherings."

Parent Attitude About Child's Diagnosis: Agree with Diagnosis

The next two sections show whether or not the participants agree or disagree with the diagnosis that their child has received. This question was asked primarily to simply see if the parent agreed with what they had been told by a health care professional about their child's weight status. Interview #2 and Interview #3 both agreed with the health care professional. Interview #5 added, "Yes; probably some of mama's bad habits. Eating late and um… that's probably some of the biggest things, not getting rest and eating late; eating a lot of fast foods." Interview #6 said, "Yes; Just comparing her to the children in her school, she is a little bit oversize for her height and for her age." Interview #7 feelings were, "Sort of, cause she is kinda big for her age." Interview #8 stated, "Yes, I agree… He was heavier than my other children that I compare him to." Interview #10 agreed with the health professional too. Interview #11 agreed by making the statement, "Yes; Only because of her number readings and medical. She ranks in the upper percentile of height and weight when compared to other children her age."

Parent Attitude About Child's Diagnosis: Disagree with Diagnosis

Interview #4 stated the following concerning her child when asked if she agreed with the health care professional's statement :

> "I feel as if she is not overweight. I feed her healthy things, she gets exercise, she gets the adequate amount of rest that she is suppose to receive; So the second doctor told me, she was like no she is not overweight, she said she is taller for her height, she said, but her weight and height will balance out after a while; I honestly don't know, she went for a physical and…at that time I think she was

like, at that time in the 95 percentile, or something like that. With her being 4 years old, she is supposed to be within a certain range or weight and I guess she was over that and that's what he said, but I don't look at her – I don't see overweight. She doesn't eat anything like an overweight or obese child would eat. I think she is perfectly fine."

Parent's Perception of Their Child Becoming Obese or Overweight

Interview #1 confessed that she did not believe the child care professional. She said:

"I don't agree because I don't see overweight when I see her, I see healthy. But if you look into logistics as far as the chart with height and weight, then I understand it. But just visibly – I don't – just looking at her, I don't agree."

Interview #8 said the following concerning their child's weight, "He is a good eater and did not start getting active with outdoor sports until more recently." Interview #11 stated, "truthfully its genetics and how we eat".

Parent's Perception of Their Child Becoming Obese or Overweight: Child's Food Habits

Interview #1shared her child's food habits by saying:

"It could be a factor in junk food or candy – things like that, you know – so that comes at my hands, because I do serve her.; she loves the vegetables, she loves the fruits, but she do love her cake and snacks; I'm right off of the major highway, that offers all of the fast food opportunities. And It's crazy because of the fast food is more convenient and cheaper than to purchase than the healthier meals

and snack ideas. So I am more inclined to go for the $1 menu at McDonald's as opposed to that healthy side salad or something like that."

Interview #2 added:

"I don't think it's where we live, for us, I think it is heredity and how we grew up eating, um how our parents cooked, um how they prepared stuff, um I wanna say that in my neighborhood contributed to that part of it. I think people's schedules – the way they work also has a lot to do with it... I can tell she has gained weight by the size of her clothing and I know some of her habits aren't the best. And we need to change how we all eat.; The main thing came from my mama. She cooks at her house and she likes to watch her eat and lets her eat what she wants.; but said she drinks too much. Tea, juice, um and a lot of that has a lot of sugar in it, so we just have to cut those things out.; She loves green beans, cabbage, um, what else does she like, corn, lol… oodles of noodles, she loves hotdogs, um, what we trying to do is cut out the beef and we been doing turkey, ground turkey, um turkey sausages, um I stopped buying a lot of bread, and we don't eat a lot of bread with meals and stuff anymore – hardly any bread at all, um cause she was really into the honey bun and donut thing and stuff like that… she loves that – can't eat any of that anymore."

Interview #3 shared:

"Eating too much and not enough activity; She could um… do more activities as well as I could fix foods that's more healthy because at this time the foods that

she is eating is not as healthy as she should be eating either so that contributes to it.; Fried foods, greasy foods, a lot of stuff you know".

Interview #4 said the following about her child:

"She is really picky. She eats um.. she loves fruits; she loves bananas – she is a banana fanatic. Um she loves like barbecue chicken, corn, broccoli. We don't eat a lot of fried foods or we don't have a lot of sweets in my household. I mean we do have a couple but not a lot."

Interview #5 stated:

"We are pretty much on the go all the time so, that's another reason why we eat out a lot – you know – can run by and pick up chicken nuggets and stuff; Generally breakfast is like bacon and eggs. He loves milk and he does love fried chicken. Chicken nuggets, not so much of a fish eater. Doesn't really care for baked or broiled foods. He does like vegetables, only broccoli but he'll eat chicken any day, all day. M&Ms, ummm that's pretty much it, I do have to break him from sodas. I think mainly the fried foods, the fried chicken, chicken nuggets, that type of thing."

Interview #6 said, "She is a picky eater, so she likes fish sticks, she loves fruits... still trying to work on her vegetables, I try to introduce a new vegetable each week."

When Interview #7 was asked about her child's eating habits, she stated, "Her eating habits and genetics; she eats everything". I followed up by asking Interview #7 to give

me about 5 things that her child likes to eat. She replied that her child likes to eat any type of chicken. She also said, “She likes macaroni and cheese, she likes pizza”.

Interview #8 answered as follows:

> “He loves grapes and bananas, grill cheese, cereal and milk, and of course – unfortunately, chicken nuggets and fries. If he eats out, he will get the chicken nuggets and fries and occasionally eat yogurt with his meal. In a sit down restaurant, he will eat spaghetti and a salad.”

Interview #10 additionally added:

> “I have a hard time telling my son no and I don’t like him to cry or beg. We eat out a lot and he doesn’t have the best eating habits and he is a picky eater.; A lot of fast foods like hamburgers and French fries mostly. He loves desserts too.; Yes, there are a lot of fast food restaurants and that makes it easy to eat the wrong foods, because most people are on a budget, and it is cheap and quick.”

During the final interview, Interview #11stated this about her child, “She eats a lot of fast foods and starchy foods like potatoes, mac and cheese... fried chicken, fried pork chops, grilled food… mostly anything”.

Parent’s Perception of Their Child Becoming Obese or Overweight: Exercise

Interview #1 was asked if she felt that her child gets enough exercise. She answered, “I do feel that she get enough exercise. I think that just with this – with her young age, it will pan out, you know. I feel like it will pan out.”

Interview #2 replied:

"And a lot of times, if you say let's go exercise, she doesn't want to go. So, a lot of times I say let's go walk or let's go ride the bike. So, if you can find ways to make it more fun to her she will; but if you the word exercise – she doesn't like that word exercise; we don't have anything here, like for her to go exercise at.; I thought about a tumbling class… But a lot of that stuff doesn't work with our schedule.; she did say that jumping on the trampoline was not exercise, even though I think she was being active, she said that wasn't because she was not exerting force – the trampoline is doing it. But I see when she jump, she is sweating, you know… she busy to me, but that is what the doctor had said…"

Interview #3 added in response to the question of if she thought her child got enough exercise by saying:

"Yes, when she is not doing anything, that means that her metabolism is really slow, the slower her metabolism is, the harder it is to lose weight and she eats way more than she should so, that leads to gaining more weight by eating more.; She eats and lays down."

Interview #4 said, "My child does get exercise, but I think if a child is not getting enough exercise I think it will impact them after a while; especially if they are not eating as they should." Interview #5 stated her view for her child's weight as:

"Lack of exercise. My main reason is because of having an older sibling and not being able to have them out and about, outside playing. We are kinda taking the child along with the older sibling to do her activities. So I don't have as much time to be home with my child where he is actively

> running and doing stuff after school. We are pretty much on the go all the time so, that's another reason why we eat out a lot."

Interview #6 provided reasons for her child's weight by saying:

> "Um, less activity outside, more activity inside in regards to technology, being a little more advanced… she likes to play the game system or cell phone; Yes, um as far as her weight gain and lack of exercise; if they are eating more and not getting the right amount of exercise at home or at school, they are not burning off as many calories, or their metabolism is not kicking in as quick."

Interview #7 simply stated that she didn't feel that her child get enough exercise.

Interview #8 said in response to exercise affecting her child's weight:

> "Yes I do…I noticed a difference as soon as we were able to sign him up for certain activities, I noticed that his weight started to shed. Before we could sign him up for those types of activities, he was holding on to weight, and as he got more active, I could obviously see a difference in his clothes and his weight pretty quickly."

Interview #10 offered a reason for her child's inactivity:

> "Lack of exercise because he doesn't do a lot of physical activities. I am in school and I don't get home until late most days, so it is difficult to make time to go outside right now.; Yes, but because of my schedule I can't always get him to the activities."

Interview #11 stated the following concerning her child:

> “Yes, she does exercise, but probably not enough. We kinda live a hectic lifestyle and I can’t always go outside with her to play. Sometimes I go walking and I get her to ride her bike with me.; Yes, like I previously said, we are all trying to work out as a family to get healthy together so she won’t feel singled out. She is so young, she can’t play on the rec team yet and the YMCA is a little pricey.”

Parent’s Perception of Their Child Becoming Obese or Overweight: When the Child Eats

In response to asking about when their child eats, Interview #1 stated:

> “She probably gets about 5 (meals). Breakfast, lunch, and dinner, and then those little mediocre meals in between. Might not be a meal; I would say more or less like a heavy snack. Breakfast usually at 8:30am, lunch about 12:30pm and dinner usually about6:30pm. The other ones come in between.”

Interview #2 said:

> “She rarely eats breakfast at school, she eats it at home if I cook, um and that is probably about 9 if we are home, and at school they eat about 7:30. Um lunch she eats about 12 or 1:00. Um dinner, because I work like an hour out of town, dinner is kind of sketchy, um if my mom cooks cause she is there, she probably eats about 6 or 7. If she has to wait for me to cook, it’s probably around 8:30.”

Interview #3 confirmed that her child ate “…mostly lunch and dinner around 12 and 6.” Interview #4 said, “She gets 3 full meals, and then like 2 snacks, think… um she eats at like 8:30 when she goes to school, and on weekends we eat around 9 or 9:30am. Noon is lunchtime and dinner around 6.”

Interview #5 answered the following concerning when her child ate during the day:

> "Breakfast in the morning and that's like between 6 and 6:30. And he's in preschool so he does get snack at school and then lunch for them is usually around 12. Then I know they get an afternoon snack, then he gets an additional snack when he comes home. Um, and then dinner which is usually after my daughter's activities, usually between 8 or 9."

Interview #6 said:

> "At daycare, she eats about 8. For lunch, they try to feed them by 11:30, she has a snack there at 2pm. I normally pick her up about 5, we come home and she eats another afternoon snack, and normally she is eating dinner by 7:30."

Interview #7 said that her child eats, "Breakfast around 8:00, lunch around 12:30, and then dinner around 7 or 8pm. (When is the snack given?) She has that around 2 something." Interview #8 said, "He eats 3 meals a day, breakfast, lunch and dinner and there is a snack between that lunch and dinner hour. Breakfast around 7:45, lunch right a noon, and dinner is closer to 6:00. His snack is around 2pm." Interview #10 answered that her child, "He eats about 3 meals a day with some snacks in between meals. He eats most meals at school, breakfast around 8, lunch around 11:30, then a snack around 3. He eats dinner at home between 7 and 8." Interview #11 stated:

> "She eats about 3-4 meals a day. Breakfast and lunch is at school around 7:45 and 11:30. She has a snack around 2. I pick her up about 5:15 and she will have a snack when we get home about 5:30. We eat around 8 or 8:30, sometimes later than that... around 9."

Prevention: How Efforts Can Be Improved

Interview #1 stated, "The thing that I would do differently, ummmm, junk food is a major item in our daily… in our daily living. I would eliminate that and eat more fruits and vegetables." Interview #3 shared their thoughts on how efforts can be improved by stating:

> "They said that the YMCA is a good place for the child to have – to do different things in there and wanted me to follow a nutritional sheet. (ok, so they gave you a piece of paper with nutritional information on it) Yes, they gave me a piece of paper. (Did you use those suggestions or resources) I haven't yet – no. (ok, any particular reason why not) The YMCA I cannot afford and I can be, but I just can't afford it right now.; No I don't think the environment has anything to do with it because I mean its just directly the household and she can do more activities outside. We have things that don't require much, just have to go outside more."

Interview #4 said, "Yes, she can prevent being overweight or obese by just… I mean with my help of course since she is only 4, but by me watching what I give her to eat, make sure she gets her exercise, cut out a lot of excess sugars and stuff like that… so you can prevent it."

Interview #5 added:

> "Well it may be me trying to change some of our scheduling and how we do things now. I think we could have opportunity but when I do have time off, I'm tired and I can't send my child outside by themselves. So it's me just trying to get

> my schedule under control; the type of foods I do cook, how I prepare the meal, um the proportions of the meal, and definitely reinforcing more exercise than the child is actually getting now."

Interview #6 shared:

> "Yes she has opportunities, usually with daycare being a lot cooler outside ; there are certain requirements as far as when they could take the child outside with temperatures. So hopefully when it starts to warm up she will be outside a little bit more, you know, running around, being a little bit more active."

Interview #7 felt she could improve efforts to her child's weight concerns by saying, "Yes, Attention to her eating habits and cutting back on a lot of stuff." Interview #10 said:

> "I was told to limit his portions and restrict his times when he eats. Like, don't allow him to eat an hour before bedtime or something like that. I did use the resources, but it was hard sometimes because of my schedule. I did find the suggestions helpful in theory, but realistically it was hard. I can't say I would do anything different, because I feel the suggestions are helpful.

Summary

In Chapter 4, I displayed the analyzed raw data of lived experiences as described by the transcendental phenomenological approach that were collected from the 11 interviewees for this research project. The interview data first shares the demographics of each participant and was then further broken down into four overall themes. Those themes contain subthemes to help analyze the data in a way that addressed the research

questions developed. Excerpts were taken from the interviews and coded to the appropriate theme or subtheme based on the four research questions below.

1. What are parent's perceptions of their child's current obese or overweight state?
2. What type of resources are parent's willing to access in support of controlling childhood obesity/overweight?
3. What unique issues exist in rural Northeastern North Carolina, according to parents, related to the childhood obesity epidemic?
4. What are the parent's perceptions on how to improve childhood obesity efforts?

The participants' responses reflected that most agreed that their child had a weight concern. Some parents accepted responsibility for the child's eating habits; however, there was an overall theme that parents lacked the time to expose their child to outdoor play due to their schedules. Lack of finances to participate in some local activities, as well as lack of activities for 4-year-olds was a concern for many parents. In the final chapter, Chapter 5, I discuss my conclusions which include the final theme, social change implications, and recommendations based on this study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this chapter, I present an interpretation of the results shared in Chapter 4. This phenomenological study's purpose was to identify perceptions of parents or guardians as it relates to their child's obesity and overweight in rural Northeastern North Carolina. The data obtained allowed parents to self-evaluate their involvement in their child's health. Parents had the opportunity to acknowledge if their child's weight was a concern and to determine how they could assist in controlling any issues that were presented. The perceptions of the parents when shared with the appropriate community leaders can provoke social change in the local communities.

The majority of the participants agreed that their child had a weight concern. Parents identified lack of time to expose their child to outdoor play due to schedule conflicts. Some parents pinpointed lack of finances as a reason for their child's inability to participate in some local activities.

Interpretation of the Findings

Given that childhood obesity and overweight has increased drastically over the last 30 years (U. S. Department of Health and Human Services, 2011); it is imperative to understand the perceptions of parents as it relates to children's eating and exercise habits. The desire is for parents to acknowledge their role in modifying their child's diagnosis in a favorable way, and ultimately, for the community to provide an outlet that allows parents of this age group to have access to means that will assist with combating childhood obesity and overweight.

Eleven interviews were conducted with parents/guardians to answer the four research questions. The transcripts were manually transcribed and uploaded into NVivo 10 software. They were then coded and analyzed with the software's assistance. The themes and subthemes were identified and discussed in Chapter 4. When conducting interviews, I adhered to Walden's privacy policy to in order to protect the participants. The recorded interviews were placed in a password protected file after they were transcribed. The results based on the research questions are as follows:

Research Question 1 was: What are parent's perceptions of their child's current obese or overweight state? Ten of the 11 parents agreed with their child's diagnosis. Some parents did share that they felt that their child was just big for their age based on genetics, while others expressed that they understood that a concern existed. Most parents whose children had a chronic illness did not link the illness to the diagnosis. One parent felt that the doctor's prejudice dictated his decision to label her child as overweight. She sought the counsel of another doctor that stated that her child was perhaps taller than other children her age due to genetics.

Research Question 2 was: What type of resources are parent's willing to access in support of controlling childhood obesity/overweight? Parents seemed willing to try different approaches to assist their child lose weight. The overall issue seemed to be that parents did not possess the time needed to spend with their child due to their working hours or other obligations. Parents expressed that buying healthier foods is an option, but eating healthy is also more expensive. Due to busy schedules, many parents said that the

fast food restaurants were cheaper and even convenient to use to feed their children at times.

Research Question 3 was: According to parents, what unique issues exist in rural Northeastern North Carolina related to the childhood obesity epidemic? The parent's perceptions of their environment did not reflect any issues related to their neighborhood. All felt as if their environment was safe for their children to play outside. Most parents participated in the community overall, but either it was too expensive or they lacked the time to take the children to the specific community events because of their work schedule.

Research Question 4 was: What are the parent's perceptions on how to improve childhood obesity efforts? The parents agree that if they provide healthier snacks and meals for their children that their children will be a healthier size and perhaps lose the excess weight that they have. While many parents think that their children do get exercise, most agree that they don't exercise enough.

Limitations of the Study

Parents that volunteered for this study self-reported if their child had been diagnosed as overweight or obese by a health care professional. The convenience sample was obtained on a voluntary basis, so only individuals who chose to be a part of the data collection process were available for the study. This limitation prevented all of the solicited counties to be represented in the study as well as limited the amount of total participants. The limitation of exposure and personal experiences may have affected findings because Northeastern North Carolina has many rural areas that can impact the

reflection of an entire population. However, the findings are important enough to be applied to real situations that a program intervention can be based upon.

Recommendations

A longitudinal study that explored more cultures, such as the Hispanic or Caucasian, would provide insight to how these cultures view childhood obesity and overweight. A study that included other cultures would represent a larger, multicultural community. A comparable study in a similar rural region would provide additional insight to the perceptions of parents living in similar environments.

Conducting interviews and making sure there is proper representation from each county is recommended to have a more well-rounded study for North Carolina's unique, rural landmass. A comparative study of 4-year-old children in a rural area versus an urban community would provide results that either support or deny the researched claims of Sing, Kogan, and Van Dyck (2008) and the RAC (2014). Singh, Kogan, and Van Dyck (2008) determined in their study that geographic location did impact the prevalence of childhood obesity and overweigh; while the RAC (2014) stated that rural communities experience higher rates of obesity and overweight than urban communities.

Implications on Social Change

This phenomenological study revealed that there are needs in our community as it relates to young children, particularly, preschool aged children. The problem of overweight and obesity exists in preschoolers in rural North Carolina, but most parents acknowledge that while some activities exist, there is a gap for this age group in correlation with most parents' work schedules. Due to childcare regulations, children in

childcare are able to go outside. However, there may be a need to still have structured activities to ensure children are moving to get exercise. Parents also expressed a need for assistance with making healthy food choices economical. Parents having access to fresh and affordable fruits and vegetables coupled with hands-on education classes would benefit the community.

Programming efforts can make the difference in providing families with the opportunity to have access to fresh foods that are economically beneficial. These same programming efforts can provide opportunities for children to have access to more reasonably priced, physical activities during convenient hours. A combination of the proposed programming efforts will impact society by making families healthier, thereby decreasing a household's medical expenses.

Conclusion

The purpose of this phenomenological study was to examine the parental perceptions of childhood obesity and overweight in 4-year-olds in Northeastern North Carolina. While research exists to support school aged children, there is not much to support the issues of childhood obesity and overweight in preschool-aged children. However, because of the epidemic of childhood obesity and overweight, efforts have trickled down that have perhaps affected preschoolers, and so the trend is starting to decline. Participants volunteered to answer questions that provided raw data to address the study's research questions. Participants revealed that they do recognize childhood obesity and overweight as an issue in their child and were knowledgeable on how to combat their child's diagnosis. The issue of parents working and lack of reasonable

resources played a viable role in why childhood obesity and overweight exists. Parents shared that they felt safe in their neighborhoods, but acknowledged that extenuating circumstances such as the affordability of healthy foods and sometimes other family members' impact on their child's eating habits play a role in their child's weight concerns.

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Appendix A: Flyer

Research Study Participants Needed!

A research study is being completed for our community to help understand the views of parents with overweight children. If you have been told by a health professional that your four year old child is overweight or obese, you are invited to participate in an interview to share your thoughts about their weight. This is your chance to help our community develop programs that are specific to your child's needs.

If you want to participate in the study you must be the legal parent or guardian and your child must be 4 years old!

During the interview process, please expect the following types of questions:

- *What type of food does your child eat?*
- *How much exercise/ movement activity does your child get?*
- *Discuss what you perceive or think is the cause for your child's weight gain.*
- *Discuss your opinion about your child's weight.*

The interview will take place in a public location of your choosing. Please allow at least an hour to complete the interview. A $5 thank you gift will be provided at the end of the interview.

If you want to participate, please contact Crystal Terry at XXXXXXXXX or XXXXXXXXXX

Thank you for your time!!

Appendix B: Questionnaire

Parent Interview

Demographics:

1. Please state your name.
2. What is your race/ethnicity?
3. Have you ever been told by a doctor or health care provider that your child is overweight or obese? If yes, which one?
4. Has your child been diagnosed with any chronic illnesses? (Asthma, diabetes, for example)
5. Are you a student? Do you have a child that attends ECSU? If so, what is their name?

Interview:

1. Do you agree with your child's diagnosis?
    a. Why or Why not?
2. If your child has a chronic illness, do you feel that your child's weight impacts the illness?
    a. If yes, How so?
3. How do you feel your child became overweight or obese?
4. Do you feel that exercise or the lack of exercise impacts weight gain in your child?
    a. Please give reasons, being as specific as possible
5. Do you feel that your child has opportunities to prevent being overweight or obese?
    a. Why or Why not – please provide specific examples
6. When told that your child was overweight, were any suggestions given to help them or were you linked to any resources? If so, please name them.
    a. Did you use the suggestions or resources? Why or why not?
    b. Did you find them helpful?
    c. What would you do differently, if anything?
7. What types of food does your child eat?
8. How many meals a day does your child eat and at what time?
9. Do you think the area where you live is a contributing factor to childhood obesity? Why or why not?

Appendix C: Informed Consent for Participants in Research Involving Human Subjects

Title of Project ____

Investigator ____

I. Purpose of this Research/Project

The purpose of this study is to identify those predisposed social factors or implications in parents as it relates to childhood obesity and overweight. Understanding the belief pattern and perception of parents with obese or overweight children will assist in developing stronger programs to decrease childhood obesity prevalence.

II. Procedures

The interview will take place at the participant's chosen location. If the volunteer agrees to participate, they will be expected to participate in an audio recorded interview that will be transcribed. The interview will take about an hour. No names will be used in the transcription process.

III. Risks

There is a minimal risk as it relates to the participants of this study. The location of the interview recording and transcripts will be known solely by the researcher and the designated Walden University committee. A copy of this informed consent form will be provided to the participant.

IV. Benefits

It is hopeful that the information gained from the study, will be used in program development for children and their families in the area of childhood obesity and overweight.
Any additional information about childhood obesity or overweight can be obtained from Albemarle Regional Health Services (252-335-3400) or Albemarle Smart Start Partnership's Child Care Health Consultant (252-562-0156).

V. Extent of Confidentiality

Any information collected from the parental interviews and used will not include any identifying information. Names and other identifying characteristics will not be included in the interview transcripts. If a name should be used it will be a pseudonym. Any information given during the interview that point to intentional

child neglect, abuse or harm, the events will be reported to the appropriate child protective services due to professional and personal obligations.

VI. Inclusion Criteria

Participants will volunteer to participate in the research. Participants will not be asked personal questions about their living status, mental capacities, nor their emotional capacities. Any information that is involuntarily offered will not impact the study nor will it be revealed in any data analysis. Participants are selected solely on the criteria of having an overweight or obese 4 year old child residing in Northeastern North Carolina and whether or not they can successfully answer the qualifying questions.

VII. Compensation

There will be a $5 thank you gift given at the completion of the interview.

VIII. Freedom to Withdraw

The participant is not bound to the research study and is free to withdraw from the study whenever he/ she desires to. Participation is strictly voluntary.

IX. Approval of Research

This research study is approved, as required, by Walden University's dissertation guidelines. If you have any questions about this research, you can contact Crystal K. Terry [crystal.terry@waldenu.edu], researcher, and/or jennifer.perkins@waldenu.edu], research chairperson.

Walden University's approval number for this study is 12-09-14-0195818 and it expires on December 8, 2015.

If you have any questions about your rights as a participant, you can contact the Walden representative at irb@waldenu.edu.

IRB Approval Date: 12/9/14

____________________________ ____________________________

Researcher Participant

Appendix D: Permission to Post Flyer Letter

To Whom It May Concern:

My name is Crystal Terry and I am a candidate for the PhD program in Public Health – Community Health Education at Walden University. To satisfy my educational requirements, I am completing my dissertation, entitled, "Parental Perceptions of Childhood Obesity and Overweight in 4-Year-Olds in Northeastern North Carolina". I will be performing interviews of parents and guardians of 4-year-old children. I would like for you to assist me in my efforts of gaining participants by displaying my recruitment flyer in your office and recommending qualified potential participants to my study. Your support will help to gain insight to the belief patterns of parents of overweight or obese children and ultimately assist in stronger program development.

Thank you in advance for responding with your approval or disapproval of displaying my flyer at your business location. If you have further questions, please contact me at XXXXXXXX.

Sincerely,

Crystal K. Terry

Crystal K. Terry