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# PARENTAL PERCEPTIONS OF OVERWEIGHT AND OBESE CHILDREN AMONG LOW-INCOME WOMEN, INFANTS, AND CHILDREN PARTICIPANTS

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Education:

Health Education

by

Thomas Hernandez

September 2005

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#### ABSTRACT

During recent years, there has been a considerable increase in the average weight of the population from the United States, particularly that of children. This study investigated parental perceptions of overweight or obese children receiving services from the Women, Infants, and Children (WIC) Program in San Bernardino County, California. This investigation demonstrated a clear difference in perception between what a child actually weighs and parents' perception of their child's weight.

The approach used in this investigation was a qualitative one in which focus groups and oral interviews were used to determine whether parents perceived their overweight children as healthy or at risk of chronic disease. This investigation explored several themes:

(a) participants' overall view of health, (b) specific health of family, (c) effect of body weight on health, (d) child health and current weight, and (e) parental action in response to weight status of their child.

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#### CHAPTER ONE

#### BACKGROUND

Increasing rates of overweight and obesity have recently become the focus of much scientific interest ranging from concerned health groups to public health agencies and health professionals. Over the last few decades, weight status averages among the world's populace have steadily increased to epidemic proportions (WHO, 1998). The growing prevalence of obesity worldwide has caused an increased investigation into the causes of the population's weight gain. In the United States, concern has focused on targeting possible causes of weight gain, especially among children (Hayman & Hughes, 2004; Christoffel & Ariza, 1998; Fowler-Brown & Kahwati, 2004; Golan & Crow, 2004; Flegal & Troiano, 2000).

Overweight and obesity rates are considered risk factors that influence the overall quality of life and health of individuals. Research shows that the worldwide dietary practices, along with the amount and types of physical activity, have changed during the last few decades (WHO, 1998). This has prompted the World Health Organization to target obesity as a major associated cause of morbidity and mortality worldwide. The concern is that

#### Purpose of the Project

It is important to understand why obesity rates have increased during the last several decades. As populations grow in the United States and access to health information and resources become increasingly available, the question still lingers, why are our children becoming overweight and obese? The purpose of this investigation is to determine the common beliefs and opinions of Women, Infants, and Children's (WIC) Program participants in relation to the health status, specifically the weight status, of their children. The following questions were selected for verbal responses: What does the phrase "good health" mean to mothers of overweight or obese children receiving WIC services? How is "good health" important for WIC mothers and their families? How do WIC participants feel about the health of their children and family? Do WIC participants believe a person's weight affects their health? How do WIC participants feel about their child's current weight and health status? Do WIC participants believe that their children are at appropriate weights at this time? Do WIC participants believe that their child's health is affected by their body weight? Do WIC participants believe their children's current weight is cause to worry about the future health of their children?

Is immediate action or inaction needed by WIC mothers to address the current weight status of their children?

Traditionally, most studies tend to focus on physiological, biological or environmental reasons for the increase in weight status among American youths. An ecological approach to understanding the influences of cultural and social differences is important in developing a comprehensive picture of why obesity occurs among certain groups of the populace. Ecological models posit that behaviors are influenced by a multitude of factors including culture, society, and the environment and how they interact with intrapersonal variables (Sallis & Owen 1997). This investigation seeks to add to the current general knowledge about parental perceptions of overweight and obese children of low-income parents participating in the WIC Program. This study seeks to understand the precursors to obesity and how parental perception, as well as culture and socioeconomic status, contribute to the perpetuation of the familial conceptions related to obesity.

#### Context of the Problem

Parents play an important role in the lifestyle of their children including their level of physical activity

and eating patterns. Parental decisions and beliefs of what is considered to be acceptable and non-acceptable health behavior and of body image are important to the development and growth of children under their care (Maffeis et al., 2000). If a child is perceived by the parent to be of healthy body weight, while conclusive evidence leans to the contrary, factors deeming this perception must be examined and investigated. Parental perception is crucial to a child's psychological well-being and can have positive as well as negative outcomes in structuring a child's knowledge, attitude and beliefs (Contento, Basch & Zybert, 2003). It is crucial to assess whether there is a correlation in how parental perceptions of a child's health status can be affected based upon parental beliefs rather than actual health and physical data obtained.

#### Assumptions

This investigation assumes that parental beliefs and actual child health indicators are important when dealing with behavioral change. Attitude and behavior are two factors that play important roles in the overall health of an individual (Montaño, Kasprzyk & Taplin, 1997). It is presumed that once attitudes and behaviors become set and

fixed within an individual, the process to negate negative health patterns becomes increasingly difficult to accomplish without in depth practice and focus of the individual involved and those seeking to modify attitudinal or behavioral patterns. Finally, it is assumed that understanding the mindset of parents in relation to how they perceive their child's body shape and appearance will benefit parents and practitioners in determining cultural differences regarding what is and what is not acceptable.

#### Limitations

The main limitation of this investigation is the nominal sample size used to collect the data. Information was collected exclusively from a small sample of women of various ethnic groups participating in the WIC Program. Due to the small size of the sample, the information learned from this investigation cannot be generalized beyond the population sampled.

Other limitations to the investigation are also noted. The focus groups conducted were of small size.

Generally a focus group consists of between 5 to 8 individuals. Due to a low rate of participation in this study, focus groups in the study ranged between 2 to 5

individuals. Additionally, only 4 of the anticipated 8 focus groups were actually conducted successfully, due to minimal attendance. Two of the focus groups had no turnout and two others ended in oral interviews with a single WIC participant, who attended each session. Another limitation to the study is the method used to collect participants' information. This investigation was dependent exclusively on self-reported information from individual and group interviews. As a result, the opinions and perceptions stated by the participants are prone to personal bias, seeking personal acceptance and approval of the researcher or others in the group when responding, and the emotional, physical and mental status of the participant before, during and after the interview session. Lastly, the qualitative investigation is limited by the inexperience of the researcher in relation to insufficient training and abilities in conducting successful focus groups.

#### Definition of Terms

For this investigation, the following definitions will apply.

Attitude - A complex mental state involving the beliefs, feelings, values and dispositions of an individual to act in a certain way.

- <u>Behavior</u> The actions or reactions of an individual in response to external or internal stimuli.
- <u>Belief</u> A degree of conviction of the perceived truth of something based on one's consideration or examination of the evidence.
- Body Mass Index (BMI) A measure of body fat that is the ratio of the weight of the body in kilograms to the square of its height in meters. A body mass index that exceeds a value of 25 is used as an indication for being overweight. A body mass index that exceeds a value of 30 is used as an indication of obesity.
- <u>Culture</u> The customary beliefs, social norms, and traits of a racial, ethnic, religious, or social group.
- Ecological Approach A method in which one examines how an individual affects their environment and how an environment in turn affects the individual living in the environment. In qualitative research this is a useful approach in acquiring interpersonal and intrapersonal information.
- Focus Group A qualitative research technique where an experienced moderator guides approximately 8 to 10 participants through a discussion of a selected topic, allowing them to talk freely and spontaneously. Focus groups are often used to

- identify previously unknown issues or concerns or to explore reactions to potential actions, benefits, or concepts during the planning and development stages of a research study.
- Health The World Health Organization's Constitution (1948) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
- <u>Lifestyle</u> A manner of living that reflects the person's values, beliefs, and attitudes.
- Morbidity The rate of incidence of a disease within a specific group of the population.
- Mortality The specific death rate among a cohort of individuals within a population.
- Obesity The condition of being obese or grossly overweight usually caused by excessive accumulation of fat. Defined as a BMI >30.
- Oral Interview A conversation, such as one conducted by a reporter, in which information or statements are elicited from a participating individual.
- Overweight When a person has more body weight than is considered "normal" or healthy for one's age or build.

- Perception When an individual develops an idea or thought based upon the body's senses that are used to understand his or her surroundings.
- <u>Risk factor</u> A negative health habit or behavior of an individual that increases the risk or susceptibility of the person developing a chronic or life threatening disease.
- <u>Well-being</u> A contented state of being healthy, happy and prosperous.
- WIC Program The Temporary Supplemental Nutrition Program for Women, Infants, and Children. A federally funded nutrition program, that provides supplemental foods for qualifying low-income pregnant, breastfeeding, and post-partum women, and children under 5 years of age.

#### CHAPTER TWO

#### LITERATURE REVIEW

There has been much research conducted on the topic of childhood obesity and its overall affect on child health. The articles included in this review focus on the general incidence of obesity among common groups, approaches conducted to address the issue of childhood obesity and parental perceptions related to weight and how weight status affects child health.

Over the past few decades, there has been an increase in the understanding of what precursors trigger the development of unhealthy eating habits that may in turn lead to becoming overweight or obese. Since 1970, the prevalence of obesity has increased, even as access and availability of new technologies and information has become more readily available to assist in weight maintenance and management (French, Story & Jeffery, 2001). It is still largely unclear what triggers are most effective in lowering obesity rates.

A cross-sectional study was conducted by Nelson,
Chiasson and Ford (2004) within the city of New York to
determine the incidence of obesity among a select group of
the population. The study involved child participants,

ages 2-4, who were receiving WIC benefits. The information was collected from a sample of enrolled families. New York WIC data of 557 children was reviewed for purpose of the study. The children were assessed based on Body Mass Index (BMI) and summary of nutritional history, as well as demographic and questionnaire information. Those who were receiving WIC benefits were generally classified as low socio-economic status based upon WIC qualification guidelines, which comply with the Federal 185% Poverty Guidelines. The results of the study showed that approximately 40% of children receiving WIC benefits had a BMI of 85% or greater, which is considered by WIC guidelines to be overweight. The younger the child, the less likely they were to be considered overweight. For example, in their study three and four year olds had higher BMI averages than did 2 year olds. Children of Hispanic origin were twice as likely to be overweight than other racial/ethnic groups. This was a concern because those children receiving WIC services are at a higher nutritional risk than non-participants. The limitations of the study include not involving a non-WIC control group.

Moreover, a cross-sectional comparison survey was conducted by Flegal and Troiano (2000) to determine the distribution of BMI in regards to the Unites States

population. Survey information from the third National Health and Nutrition Examination Survey (NHANES III) was compared with a previous cross-sectional survey conducted on adults. The analysis of the survey information involved comparing the mean BMI of one section of the population to another in order to determine if there was a difference in BMI. The results of the analyses showed that there has been an increase in the mean BMI and prevalence of obesity among the children and adult population of the United States. The degree of increase among these groups did differ by age and ethnicity. The findings suggest that more research be conducted to determine why there has been an increase in BMI. The environmental and social impact of obesity has not been fully recognized as of yet. Factors causing obesity, such as lifestyle, activity and food intake, rather than obesity itself is deserving of more research and evaluation.

A retrospective cohort study was conducted by Whitaker (2004) using information acquired from the Ohio State's Women, Infants, and Children's Program (WIC). The study sought to find out if there is a relationship between maternal obesity and the development of overweight or obesity in children between the ages of 2 to 4. Information from 8,494 low-income children, enrolled in

the program was used for the study. The study looked at the incidence of maternal obesity and how it affected whether or not the child would be at a higher risk of obesity due to in-utero factors. The study found that a child was more than twice as likely to become overweight or obese between 2 to 4 years of age if the mother was obese during pregnancy. About 1 out of every 4 children who had obese mothers, were themselves obese compared to approximately 1 out of every 10 children who had normal weight mothers. More research in the future was suggested to determine the precise mechanism at work in promoting obesity in children.

A study by Park, Menard & Schoolfield (2001) was conducted to determine if rates of adolescent obesity in the San Antonio, Texas area were different from national statistics. This study involved a cross-sectional study of 7,208 school children attending schools within the San Antonio school district. The majority of those involved in the study were of Mexican descent. Non-Hispanic whites made up 28.3% of the study and the remaining participants of the study were African-American. The study used skin fold measurements along with height and weight measurements to determine the body fatness and BMI of the adolescents taking part in the study. A BMI of >95% was

used to classify children and adolescents as overweight. A BMI of >85% to 95% was used to classify children and adolescents as being at risk for becoming overweight. The results of the examination showed a higher prevalence of overweight and at risk of overweight in Mexican-American boys and girls and in African-American girls than in any other ethnic group.

Golan & Crow (2004) conducted research on a group of over 500 teenage girls. The girls were interviewed and asked questions based on the influence of media and body image. The responses of the participants were coded to determine common patterns. The results concluded that for the most part, teenage girls are unsatisfied with their bodies and hold standards to the images gleamed from magazines depicting ultra-thin models. This combined with other factors such as parental example and access to healthier food alternatives, were found to contribute to childhood obesity.

In the past, methods to treat obesity have had little lasting success at best. Glenny, O'Meara, Melville, Sheldon & Wilson (1997) reviewed previous controlled trials that conducted interventions designed to treat obese children and adults. The investigation reviewed the successes and drawbacks of the previous studies to

determine whether or not there exists certain treatments that are successful. The investigators concluded that there is currently no specific treatment that can be generalized to all populations. Children tend to respond better to family therapy and interventions coupled with lifestyle modifications. Studies tend to focus on treatment of children who are obese, only after the child has developed behaviors and attitudes that promote overeating and sedentary behaviors.

There does not appear to be a clear method for reducing adult obesity that is successful for all demographic groups. There are different approaches that all seem to have some measure of success in positive responses in reducing the incidence of overweight and obesity. The best suggestion is for physicians to provide more personalized intervention that continues throughout the course of health care. Treatment needs to be specific and gauged to the population at need. A study conducted by Pisacano, Lichter, Ritter & Siegel (1978) is an example of an early attempt of intervention when it comes to childhood obesity. The study involved a test group of 80 infants all from private practice physicians. This group was compared to a previous group of 50 children born in 1964. The study was to determine the incidence of

overweight among these age groups. The study showed that there was an increase in the energy intake of these children, which caused an increase in body weight. The study involved modifying the diet of infants throughout the course of infancy, with a specific intake of food design to limit the development of overweight or obesity in later childhood. The diet was restricted in infants and those that participated in the study showed lowered rates of overweight and obesity than those that did not participate. The results of the research showed only immediate reduction in body weight. The study did not take into account the differences in gender or the overall nutritional needs of the infant.

In a commentary based on a previous research study provided by Christoffel & Ariza (1998), a quick outline was suggested to assist professionals in dealing with the growing problem of childhood obesity. The first suggestion was for clinicians to plot and track the BMI of children in their care. The second recommendation was to modify dietary patterns to promote a healthier weight. Next, it was suggested to promote physical activity by routinely advising parents and children of the importance of exercise. Another was to be aware of children who are potentially at risk for developing obesity. Subsequently,

household beliefs, regarding what is considered attractive, affects most children of normal weight. Aside from food choices, media images and societal views affect the pattern of eating of young children, which can lead to irregular eating habits, which set the child up for unhealthy dietary practices throughout the growing period of life.

Westenhoefer (2002) conducted a study to review the dietary habits that start in childhood and continue through adolescence. The study noted that dietary habits develop during early infancy, along with the development of physiological tastes and psychological preference. The more exposure an infant has to a particular food item, the more they will like it. This form of food preference follows the infant through childhood and into adulthood. Children, as well as adults, tend to surround themselves with food that they like. This study denotes a correlation between what we eat and what is available to eat. It was suggested in the investigation that there are other factors that contribute to the choices we make, such as social modeling, family ideals, and peer pressure. Body image was found to be a developing issue. In developing appropriate intervention strategies, parents and the family as a whole were suggested as being crucial in

determining what is nutritionally and physically right for the child.

As a result of an increased prevalence of overweight and obesity worldwide, Campbell & Crawford (2001) conducted a review of dietary behaviors and habits to assist in developing a strategy to counter the effects of this growing condition. With overweight and obese adults on the rise in Australia (more than half of all adults have a BMI of 25 kg/m<sup>2</sup> or greater), an analysis was done to study dietary determinants that affect pre-school aged children eating habits and behaviors. The role of the parent and/or caregiver was found to be highly important. The research showed a correlation between preference for food and the likelihood of availability of the food. According to the review, the more a child has access to healthy foods and healthy role models, the more likely the child will develop healthier eating habits. Of course, the studies also show that the reverse will occur in the absence of the availability of healthy foods and role models.

Maffeis, et al. (2000) carried out a study to assess the relationship between food intake, parent's body weight and child's weight in a group of 735 children. Increased energy intake and reduced energy output among all age

groups seems to be the cause of the rise of overweight and obesity. The study analyzed meals eaten by the children involved in the study either alone or in a family-eating environment. Measurements of food intake and activities were recorded and analyzed using quantitative and qualitative methods. The results showed about 30% of the children involved were overweight or obese. There was also a clear relationship between overweight and obese children and overweight and obese adults in the household. If a child was overweight, there was a higher possibility that either one or both of the parents were also overweight or obese. Genetics was determined to be a contributing factor to the incidence of weight gain, but parental lifestyle and food choices within the household were considered to be a major contributing factor.

Maynard, Galuska, Blanck & Serdula (2003) conducted a study which looked at maternal perceptions of the weight of their children compared to actual anthropometric information gathered from the children. The study sought to determine how mothers perceive the weight status of their children and how it compares to actual weights of the children. Data was acquired from interview and survey information from 5,500, two to eleven year old boys and girls from the Third National Health and Nutrition

Examination Survey (NHANES). Anthropometric information of the children involved in the study was also taken to compare maternal perceptions of weight status to the child's true weight status. Children with a BMI greater than or equal to the 95th percentile were classified as overweight. Children with a BMI between the 85th to 95th percentiles were classified as at risk for overweight. The results of the survey reported that almost one third of all mothers perceived their overweight child as being about the right weight for their age. Moreover, the mothers who did view their children as being overweight, tended to view their daughters as being overweight twice as likely as their sons. These findings show that maternal misclassification of weight status can often affect the nutritional status and development of their children. Also, there was a noted distinction between gender images in relation to weight and obesity.

Contento, Basch & Zybert (2003) conducted a descriptive correlational study among 187 low SES Latina women and their children in the city of New York. Body mass index (BMI), food frequency and preference as well as image perceptions were all reviewed to assist in ascertaining beliefs among this community. The results of the study showed that these women had a strict perception

of what is considered thin and in good health. On a scale between 1 and 7, 1 being thinnest and 7 being obese, an average of 2.5 among the participating women was considered to be of a relatively thin and preferential body size. Most saw themselves as being overweight even if their weight was within normal limits. However, most participating women viewed their children as thin or of normal size, even in the case of the child being overweight or obese.

An investigation completed by Jain, et al. (2001) sought to discover perceptions mothers had in relation to how children become overweight, noticing or determining if a child is overweight, and barriers to the prevention and management of childhood obesity. The study looked at obesity in low-income preschool children. While this group is commonly thought of as being at risk for underweight and malnutrition, they actually are having high rates of childhood obesity. This qualitative research involved a total of 18 mothers in 3 focus groups of 6. The mothers were active participants of the Women, Infants, and Children (WIC) Program of Cincinnati, Ohio. Aside from the interview, anthropometric data was used to determine the child's BMI and whether or not the child was overweight. The results of the focus groups showed that

mothers did not consider a child to be overweight based on growth charts, but on lack of physical performance and teasing from other children.

Research conducted by Crawford, et al. (2004) in California using Women, Infants, and Children (WIC) Latina participants from different population settings sought to discover mothers' beliefs about weight and feeding issues when it comes to weight perceptions of their children. The qualitative study involved pursuing a series of focus groups in various locations around the state. A total of 43 Latino mothers participated in 8 focus group sessions each conducted by a trained focus group facilitator. The narrative information was analyzed and four areas of concern were interpreted: beliefs about weight, causes of overweight and obesity, values and concerns and strategies for improvement. It was found that of the Latina mothers that participated in the study, many are highly concerned about their children's health, but few perceived their children as being overweight, even if the child had a high BMI.

#### Summary

Obesity among children is becoming an increased area of concern. With obesity on the rise especially among

children, measures must be taken to address why and how children are becoming increasingly overweight. It has been noted that mothers are an integral factor in a child's early nutritional development. They are responsible for food preparation, food choices and scheduling appropriate mealtimes. When factors affect how a mother perceives her child, problems affecting nutrition may arise. These findings show that maternal misclassification of weight status can often affect the nutritional status and development of their children.

#### CHAPTER THREE

#### METHODOLOGY

This investigation was a follow-up study based on previous research findings of how parental perceptions impact the health of overweight and obese children. The proposed research project was to understand parental perceptions of overweight and obese children based upon the responses of a series of focus groups of WIC participants each belonging to dissimilar ethnic backgrounds. The investigation was to support the growing evidence for continued research into how cultural and social factors affect weight status. The primary qualitative method that was used to conduct this research was a series of focus groups based upon an ethnographic and descriptive design. The design was based on a qualitative ethnographic interview technique in which a moderator guided between 6-12 individuals through a discussion of a specific topic, which lasted approximately one hour. A series of focus groups was chosen versus individual interviews based on the dynamic nature of group interviewing, which allowed for a wide range of responses, building of dialogue and probes among group individuals.

#### Human Subject Protection

Previous to the implementation of the focus group interviews, permission was requested and received from the Nutrition Program Manager of the WIC Program to conduct a maximum of 8 focus groups within the County of San Bernardino's WIC Program. Due to confidentiality issues, the research conducted was based on availability of participants and WIC appointment scheduling. Research was confined to the San Bernardino County Department of Public Health WIC Program and access to data was limited to authorized WIC personnel, who assisted in determining eligible participation in the focus groups. Prior to any communication with WIC participants, permission and approval was obtained from the California State University San Bernardino Institutional Review Board and the Graduate Coordinator Advisor. The outline and questions asked in the focus group were based upon standards set by the University's Institutional Review Board in relation to human subjects' rights and participation.

#### Sample

The research was based on primary research conducted by utilizing direct focus group facilitation. The focus groups were selected purposefully from WIC participants

enrolled in the San Bernardino County WIC Program Agency to provide a convenience sample for the investigation. Data provided by the WIC Program was used to confirm eligibility for participation in the series of focus groups. The criteria used for selection in this investigation included families of similar ethnic backgrounds actively participating and receiving WIC services, having at least one child enrolled in the WIC program, who had been identified by WIC personnel as being overweight or at risk of becoming overweight, and previously scheduled by WIC personnel for specific focus group classes that coincided with their regular WIC appointments. Participation was based on active families who have been deemed eligible by the WIC Program to receive services for a period of 6 months from the time of participation in this investigation. Three main ethnicities, Black, Hispanic, and White were chosen to participate based on the top three ethnicities receiving services according to WIC statistical data.

Instrumentation and Data Collection

A moderator's guide with 10 questions was developed to encourage participation and responses from those participating in the focus group and interview process

(see Appendix B). The WIC Program provided the participants that matched the necessary requirements for involvement in the focus groups. To qualify for the investigation, individuals were pre-selected active participants of the WIC Program, having children who are overweight or at risk of becoming overweight and scheduled for a regular WIC appointment. The interview questions were based on general views regarding good health, health of family members, weight in relation to health, their child's health, their child's weight, how their child's weight affects their current and future health status, and whether immediate action was needed to address the issue of their child's weight.

The content validity of the interview questions was strengthened by review of the current literature, review by interested WIC personnel and the MA Ed (Health Education Option) Graduate Faculty.

#### Procedure

A total of 5 focus group and 5 interview sessions were administered in the course of two weeks during the last week of April and the first week of May 2005 to gather the primary data to be analyzed for the study.

Participants for the study were contacted directly by WIC

Program personnel due to HIPPA policies set for patient confidentiality and were scheduled to participate during their regular WIC appointment. Participant selection was based on individual availability and willingness to participate. A special class code was given to those selected to participate to designate them as focus group participants. The code SR81 distinguished qualifying participants from non-qualifying participants so that WIC staff would direct the appropriate participants to the focus group.

Seven of the 18 available WIC offices were used to represent the diversity and uniqueness of WIC populations. Offices were pre-selected based upon clinic's willingness to participate and availability of open WIC appointment scheduling.

At each focus group scheduled, the researcher met with those who actually chose to attend their scheduled appointment. In the event of low participation turnout, the researcher chose to conduct individual interviews with the consent of the participant. An explanation of the purpose of the focus groups or interviews was stated to those in attendance and oral informed consent was given as well as consent forms allowing permission for audiotape usage by the researcher. The moderator's guide was

followed to inform participants of their rights and each interview question was followed in its written succession. The researcher asked each question and responses were recorded and written. Each question was discussed until no further participant input was given.

The focus group and interview sessions ranged from between 30 to 60 minutes. Additional notes were taken on participants' mannerisms and eagerness to participate.

Upon completion of the focus groups or interviews, participants were thanked and provided with information to contact the moderator's Graduate Advisor if more information regarding the study or results were to be requested.

### Data Analysis

The transcripts and notes were analyzed utilizing EZ
Text and AnSWR Software available free through the Center
for Disease Control and Prevention Wonder Website, which
was used to code and analyze the text. The information
reported from the research comes primarily from data coded
from the transcripts and notes, and later joined for
synthesis of research and to provide patterns of
information. An inductive analysis of the data assisted in
determining similar patterns among the participants

interviewed. Answers were compared and joined into similar categories. Comparing individual interviews with focus group responses assisted in developing themes. Themes were developed based upon interview-to-interview responses, group-to-group responses, and different ethnic-to-ethnic responses. The responses given were used to help identify key issues and themes within the qualitative information acquired.

#### Summary

An ethnographic qualitative design was used to assist in obtaining detailed information regarding parental perceptions in relation to their child's health and weight status. Twenty-one WIC participants completed the study based upon availability and willingness to participate in the scheduled focus groups and interviews. All those interviewed responded to identical questions asked by the researcher. The information obtained by the researcher was analyzed to identify and compare similar patterns and themes from the qualitative data.

#### CHAPTER FOUR

#### RESULTS AND DISCUSSION

# Presentation of Findings

Of the 40 clients scheduled for focus groups, a total of 28 participants of the Women, Infants and Children Program were interviewed via focus groups or one-to-one oral interviews. All those interviewed were female and had at least one child on the WIC program classified as overweight or at risk of overweight according to BMI standards set by the Centers for Disease Control and Prevention. Twelve of the participants were Hispanic, nine were African-American, and seven were classified as White. All those who participated were active WIC clients.

# Discussion of the Findings

#### Overall View of Health

Regardless of ethnic background, all participants seemed to agree that the good health of their family was important. Each viewed health as a necessary component to quality of life and lifestyle. "Good health means being happy, safe, well-nourished and taken care of"; "Good health is very important for me because it is necessary. I have to be healthy overall to keep my family healthy"; "Very important, because I want to be in good health to be

around for my children"; "It's taking care of yourself and everyone. I think health is very important and we should stay focused on what we eat"; "Good health is important to me and my family. It involves eating healthy, exercising at least 30 to 60 minutes per day and drinking plenty of water"; "It's important to have good health in order to have the quality of life you desire."

During the interview process, those participants in focus groups who did not comment directly did support or agree non-verbally with the others interviewed. Of the 28 interviewed, less than half responded with a complete comment of their own. They expressed their agreement by nodding of the head or comments such as "Oh, I agree" or "Yes very important."

# Specific Health of Family

There were differences in the specific health status when it came to members of the household. Four of the twelve Hispanics reported having a member of the household or family whom they considered not to be in good health. "My son is not in good health, because he has asthma. He gets sick often"; "My mom has diabetes, but she takes care of herself"; "Yes, myself, due to my illness (diabetes) I must watch what I eat and be a good example for my kids and husband"; "I have some members in my family that

should improve their health or else they'll probably die soon."

Four out of the nine African-Americans interviewed reported having a member of the household or family whom they considered not to be in good health. "I know I'm overweight and I can't take good care of my family if I become sick"; "I know my son has medical issues, that I worry about"; "Well, all my life I have been overweight and I don't want my children to end up like me"; "My mother has high blood pressure and is overweight, so I really have to take good care of myself and my kids."

Two of the seven participants interviewed that were classified as White reported having a member of the household or family whom they considered not to be in good health. "I know I'm severely overweight. Just look. I know if I don't take care of myself, who will take care of my family"; "My husband's family has high cholesterol, so I know that he and my kids are at risk of having a heart problem or stroke. That's why I try to include lots of fruits and vegetables in their diet."

During the interview process, those who were concerned about their self-weight in the context of health, viewed obesity as a benign condition that may or may not lead to an illness. Most agreed that steps should

be taken to safeguard their health, but only viewed it as a negative if they developed symptoms related to illness. "I know I'm overweight and I can't take good care of my family if I become sick."

# Affect of Weight on Health

Despite differences in cultural and ethnic backgrounds, all participants agreed that an individual's weight has an affect on their overall health status. "I feel a person's weight contributes to all kinds of disease"; "If you are very fat, you won't be able to do anything. You get tired easy and aren't able to do other things that many of us take for granted"; "Yes. Being overweight or underweight will have an affect on anyone's health"; "When you are overweight you have a greater chance of having a heart attack, diabetes, a stroke or other conditions related to being too overweight"; "I worry more about my child being underweight. I was told once that she was underweight and I couldn't figure out why"; "I remember times when I went to sleep hungry when I was young and I don't want that for my children"; "I think that being underweight is worse than being overweight"; "If my child is not at a healthy weight, he won't be able to grow well and that will affect his health in the long run."

Throughout the interview process, those that did not verbally respond in the focus groups displayed physical signs of agreement with the others. Regardless of verbal or non-verbal responses, all participants of focus groups nodded their heads in response. Response agreements included were, "Yes"; "Definitely"; "I agree" or "That's right."

# Child Health and Weight Status

Of the 28 participants of different ethnic backgrounds interviewed, only three commented about their child's health status. "My son is not in good health, because he has asthma. He gets sick often"; "I know my son has medical issues, that I worry about"; "I worry more about my child being underweight. I was told once that she was underweight and I couldn't figure out why."

Most other participants interviewed felt their children were currently in good health and at a good weight for their age. "My daughter's doctor said her weight was fine and that she was healthy"; "My son is fine right now. Nothing's wrong"; "My child is at the right weight for her age. She's very active and plays a lot. She only drinks juice, milk or water. I never give her punch or soda"; "I know my son is healthy. Look at him. He's growing so fast"; "I'm fine with it. She eats healthy.

She's constantly snacking on pieces of fruit or vegetables. I make sure of it"; "My child's health is good and his weight is also good."

During the interview, those that did not verbally respond in the focus groups agreed on the good health and adequate weight status of their children. Common short responses were, "Good"; "Excellent"; "Fine. Fine. Fine"; "Fine with it." Only one Hispanic participant during one focus group session did not respond verbally or non-verbally to this topic.

### Parental Action in Response to Weight Status

Of all ethnic groups interviewed, only one WIC participant perceived her child's weight as a possible health issue. "I worry more about my child being underweight. I was told once that she was underweight and I couldn't figure out why." The participant and child were residents of the high desert community and were self classified as White.

All other participants interviewed did not perceive their children's current weight to be a health issue and each felt no action was needed to address their health issues at this time. "As long as he's at the right weight for his age he'll be healthy, and he is"; "He's fine right now. As long as I take care of him, he'll be fine"; "I

feed him well, lots of healthy food, so I think he'll be fine" "I think only if you're too thin your body will function different than it's meant to"; "Why should I worry, she's fine." One participant perceived the issue as an immediate concern and was taking steps to prevent her child from becoming underweight in the future. Another participant was concerned about their child's future in relation to asthma, but not because of weight. "I only worry about her asthma getting worse. Every summer it gets worse and worse.

During the interviews conducted, non-verbal responses were similar to previous responses of support, head nodding and one participant padding the other on the back. Short verbal responses were, "Not at this time"; "Not right now"; "No"; "She's perfect."

# Summary

The various responses of 28 interviewed participants of the WIC Program were presented. All those interviewed were mothers of children receiving WIC services that were classified as being overweight or at risk of becoming overweight. Participants were interviewed via focus groups or one-on-one oral interviews.

Participants commented on the overall health of their family and child or children, and the weight status of their child or children. Common themes identified in the interviews included an overall positive view of good health in relation to family and children, concern about family health, the negative affect of weight in relation to a person's good health, current perception of child's good health and weight, and the need for action or inaction to address health in regards to weight.

#### CHAPTER FIVE

#### CONCLUSIONS AND RECOMMENDATIONS

The purpose of this investigation was to understand if parental perception of a child's weight status influences the health of the child. The study was conducted using a sample of 28 participants of the San Bernardino County Women, Infants, and Children Program. The following is a synthesis of the qualitative data that was collected, interpreted and presented.

#### Conclusions

The overall view of health by those WIC participants interviewed was that good health is considered important for the whole family. Most participants in this study noted a deep concern for the continued good health of their children and reflected on ways to continually improve the health status of their children and family. Most agreed on the importance of good nutrition and physical exercise when it comes to leading a healthy lifestyle.

When it came to the specific health of family members within or outside the household, some participants interviewed noted members of the family who possessed risk factors or contributing factors to the development of

illness and disease. Each saw the health of their family members as crucial to the overall well-being of the whole family unit. Most realized that having a family member with health issues might increase their chance or the chance of their children of developing health issues in the future. Most participants made the connection that negative health habits may lead to poor health in the future if actions were not taken in the present to address or remedy the health threatening habits.

Most participants were aware of possible risk factors that can lead to health problems in the future. The results of this study found weight to be no exception. Weight was noted as an important factor to the overall health of participants, especially their children. The problems associated with high weight were easily identifiable by WIC participants. There seemed to be a clear understanding that high weight gain might negatively affect the health of an individual. Those interviewed clearly stated this was not an option desired for their children and each was deeply concerned about their children's health in relation to current weight status and weight gain.

In regards to child weight status, all but one participant seemed concerned about the current weight of

her child. However, despite her child being identified as overweight by WIC Program standards, the parent felt more concerned about preventing her child from regressing to a previous state of being underweight. The remaining participants viewed their child's weight as acceptable for their age. All regarded their child's weight as healthy despite each child being classified as overweight and felt no action was needed immediately or in the future to address their weight status.

This study supports the findings of the research conducted by Crawford, et al. (2004) where it was found that despite the fact that children had a high body mass index as classified by the California Women, Infants and Children Program, parents still perceived their children to be of a healthy weight. The research conducted by Crawford and associates was exclusively with Latino parents. Also, a descriptive correlational study conducted by Contento, Basch & Zybert (2003) found that Latina women living in New York, viewed their children as thin or of normal size, even in the case of the child being overweight or obese. Parallel to the previous studies, the results of the qualitative research conducted in this investigation point to similar beliefs by those belonging

to Hispanic, African-American and White WIC participants within the San Bernardino County community.

#### Recommendations

Although the findings of this research are only applicable to the small sample conducted, results were similar to previous research conducted on other low-income mothers with overweight children. Regardless of the medical or nutritional diagnosis of a child's weight as being above normal healthy limits, most mothers perceived their child to be at an appropriate weight for their stature and age. What mothers perceived as healthy seemed to be associated with visual evaluation and the absence of a symptomatic illness among their children.

A connection must be made for parents to understand visually what is an acceptable weight. All participants in this investigation had children classified as overweight or at risk of becoming overweight. Possible future studies might involve showing parents or mothers pictures of children at various BMI levels and having them describe those children, which they believe appear healthy.

Clearly a gap exists between parental perception and medical reality. The discrepancy requires further research on appropriate interventions when dealing with, educating,

and counseling overweight or obese children and their parents.

The old adage of not describing a book based solely on its cover is truly applicable to people as well. Many times, perceived healthy individuals may be harboring risks or illness, which have not presented themselves as symptoms described by the patient or signs identified by the practitioner. Visual evaluation should not be considered an identifier of health, but rather the results or reflection of an individual's vital signs and diagnosis.

Qualitative findings are important in understanding a specific community researched, but are also important as precursors to quantitative studies. It is recommended that further evaluation and measurable surveys and research be conducted to determine whether parental perception misclassification of weight status among children is localized to specific communities or is found in all other communities across the board.

#### Summary

This study was completed to determine how a parent, receiving WIC services in San Bernardino County, perceives the weight status of a child classified as overweight or

at risk of becoming overweight. It was found that the parents interviewed are highly concerned with the health of their children and family, but do not perceive their child to be at an immediate health risk. In addition, most felt that their children's weight to be normal in spite of any physical findings that suggested otherwise.

Despite the applicability of this investigation to only the community sampled, it parallels other findings that are applicable to certain other communities.

Regardless of the diagnosed weight of a child, parental perception is based on what parents believe for themselves to be acceptable or non-acceptable, and social norms based upon cultural acceptance. There clearly exists a misperception in the community researched on what is considered healthy versus what the actual health status is.

Additional research with larger sample sizes and diverse communities is needed to add to the growing qualitative research. It is suggested that supportive and measurable quantitative research be conducted so that the findings may be generalizable to a larger population.

# APPENDIX A

LETTER OF APPROVAL TO CONDUCT RESEARCH
WITH THE SAN BERNARDINO COUNTY WOMEN,
INFANTS, AND CHILDREN PROGRAM

# DEPARTMENT OF PUBLIC HEALTH



COUNTY OF SAN BERNARDING

JAMES A. FELTEN, MPA Public Health Director ERIC K. FRYKMAN, MD, MPH, MBA Health Officer

Nutrition Program 351 North Mt. View Avenue, First Floor Room 104 ........ San Bernardino, CA 92415-0010 (909) 387-6320 ....... Fax (909) 387-6899

April 15, 2005

To Whom It May Concern,

This letter is to acknowledge permission given to Mr. Thomas Hernandez to conduct a maximum of 8 focus groups in conjunction with the requirements needed for a master's thesis in education.

Thomas is an employee with the Women, Infants and Children program and will conduct his qualitative research in accordance with county, state and federal confidentiality policies and any rules established by his university's institutional review board.

By signing this letter of authorization, I am granting permission to Thomas Hernandez to conduct his research within the San Bernardino County Women, Infants and Children Program.

Sincerely,

Betsy Cline, MPH, RD Program Manager WIC/Nutrition Program San Bernardino County Department of Public Health

MARK UFFER County Administrative Officer 

# APPENDIX B AUDIOTAPE CONSENT FORM

# AUDIO USE INFORMED CONSENT FORM FOR NON-MEDICAL HUMAN SUBJECTS

As part of this research project, I will be making audiotape recording during your participation in the experiment. Please indicate what uses of this audiotape you are willing to consent to by initialing below. You are free to initial any number of spaces from zero to all of the spaces, and your response will in no way affect your credit for participating. We will only use the audiotape in ways that you agree to. In any use of this audiotape, your name will *not* be identified. If you do not initial any of the spaces below, audiotape will be destroyed.

# 

• The research team for use in the research project can study the audiotape.  Please initial:
• The audiotape can be shown/played to subjects in other experiments.
Please initial:
• The audiotape can be used for scientific publications.
Please initial:
• The audiotape can be shown/played at meetings of scientists.
Please initial:
• The audiotape can be shown/played in classrooms to students.
Please initial:
• The audiotape can be shown/played in public presentations to nonscientific groups.
Please initial:
• The audiotape can be used on television and radio.
Please initial:
I have read the above description and give my consent for the use of the audiotape as indicated above.
The extra copy of this consent form is for your records.
SIGNATURE DATE

# APPENDIX C MODERATOR'S GUIDE AND QUESTIONS

# Parental Perceptions of Overweight and Obese Children Among Low-Income Women, Infants, and Children Program Participants

# Focus Group Moderator's Guide

#### A. Introduction

Good Afternoon, my name is Thomas Hernandez and I am a graduate student at California State University San Bernardino. I will be moderating this focus group today. So I will like to welcome you all to our focus group session.

I want to let all of you know that your comments are strictly confidential and will be used for research purposes only. Nothing you say will be attributed to your name. If at any time you do not want to answer a question or feel uncomfortable with the setting, you are free to refrain from answering or are free to leave the session completely. This focus group is entirely voluntary and if you don't wish to participate you may leave at any time. Your participation in the WIC Program will not be affected in any way if you do or don't participate in this focus group.

Let me give you a little background about what a focus group is. In a focus group, there are no answers that are considered right or wrong. We are interested in your opinions only. I would like to hear equally from everyone participating in this focus group. The purpose of this focus group is to understand how parents' view of their child's appearance affects their child's health status.

We have some general rules for the conducting of this focus group:

- 1. I want to hear all of your comments and opinions.
- 2. Please be respectful of the opinions of others.
- 3. If you disagree with someone, please feel free to voice your opinion.
- 4. Please feel free to ask any questions.
- 5. I look forward to hearing all your different views.

Within the next hour we have a lot of information that we are going to cover. We may skip around from topic to topic, but feel free to ask me a question or state a comment at any time.

Before I start the discussion I will be distributing a consent form to all of you granting me permission to tape this session. I am going to be recording this focus group session so that I will be able to review all the comments that you all come up with. I will be transcribing the taped session at a later time to develop a report based on our discussion. As before, participation is entirely voluntary, if you do not wish to be taped, you may leave at any time. This focus group follows standards set by the

California State University Institutional Review Board in relation to human subjects' rights and participation.

The California State University San Bernardino Department of Health Science and

Human Ecology is sponsoring this study. If you have any questions or require more information please direct them to Dr. Kim Clark, Graduate Coordinator of the Master's in Education Health Education Option at (909) 880-5323. Thank you.	
1.	What does the phrase good health mean to you?
2.	How is good health important for you and your family?
3.	Do you feel anyone in your family is not in good health? Why or why not?
4.	Do you believe a person's weight affects their health?
5.	How do you feel about your child's health?
6.	How do you feel about your child's weight?
7.	Do you feel your child is at a good weight at this time?
8.	Do you believe your child's weight will affect your child's health? Why or why not?
9.	Does your child's weight make you worry about your child's future?

10. Do you feel you need to take action or no action to address your child's current weight status at this time?

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