

8-4-2006

Glaucoma And Quality Of Life And The Role Of The Nurse Practitioner

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**THE ROLE OF THE NURSE PRACTITIONER
IN HEALTH PROMOTION AND
CHILDHOOD OBESITY**

being

A Thesis Presented to the Graduate Faculty
of Mississippi University for Women in
Partial Fulfillment of the Requirements for
The Degree of Master of Science in Nursing

by

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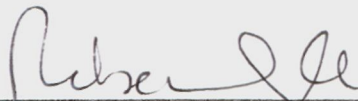
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DEDICATION

I wish to dedicate my research to my family. To my husband Bubba, thank you for your love and support. You are more than I could have ever asked for, and I love you very much. Thank you for all you have done to allow me to reach my goals. To my mother, thank you for all that you do for me. From proofreading papers to just listening to me when I needed someone to talk to. You are the reason I am where I am. I love you.

To my friends, Amanda and Megan, you two are the best. Megan, you and I have come a long way from riding the ball bus to the final days of graduate school. I couldn't have done it without you. Amanda, I am so glad we met each other. You've been a huge support for me. You have both been great friends to me. Thank you.

**THE ROLE OF THE NURSE PRACTITIONER
IN HEALTH PROMOTION AND CHILDHOOD OBESITY**

Jennifer Fitzgerald Stanton, RN, BSN

Mississippi University for Women, 2006

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Abstract

Childhood obesity is on the rise in the United States today. The prevalence of overweight children has more than doubled in the past 20 years, going from 7% in 1980 to 18.8% in 2004 (CDC, 2006). A systematic review of literature using a computer search of CINAHL, MEDLINE, and COCHRANE Library identified gaps in the nursing knowledge regarding the combination of the role of the nurse practitioner in health promotion and childhood obesity. Of these, only three explored the variables of nurse practitioner, health promotion, and childhood obesity. Many explored each individual variable. The study was guided by Nola Pender's Health Promotion Model, (Pender, Murdaugh, & Parsons, 2006). Three questions were generated to guide the study: 1) What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion? 2) What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion and childhood obesity? 3) What is the role of the nurse practitioner in health promotion and childhood obesity? An overview of healthcare literature was completed regarding health promotion and childhood obesity on a total of 10 data and theory-based manuscripts. Recommendations from this integrated literature review include the need for further research investigating the health promotion in childhood obesity for the nurse practitioner.

ACKNOWLEDGEMENTS

I would like to thank Dr. Mary Pat Curtis, program director, for all her help and guidance during this project. I would also like to thank Courtney Coffey for all the technical support. Your support made an unending task seem achievable. Finally, I would like to thank any of my classmates who helped me get through this project. I couldn't have done it without you. You guys never failed to take the time to explain what I needed to know.

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CHAPTER I

Many illnesses and health problems confront children and adolescents in the United States. Few of these problems are so obvious to others, difficult to treat, and have such long-term effects on psychological and physical wellness such as obesity. Current estimates of childhood obesity range from 22% to 33% and of these children 13.7% are between the ages of 6 and 11, which represents the 95th percentile for body mass index (BMI) (Hockenberry, 2003).

During the past decade the number of obese children has doubled and the number of overweight children has increased by 40%. The greatest increases have occurred among children 6 to 11 years of age (Hockenberry, 2003). The prevalence of overweight among children has more than doubled in the past 20 years, going from 7% in 1980 to 18.8% in 2004 (CDC, 2006). The rate among adolescents aged 12 to 19 more than tripled, increasing from 5% to 17.1% (CDC, 2006).

Researchers have identified health-promoting behaviors as key to positively impacting obesity. However, most studies on this subject have focused on adults. Nurse practitioners are huge supporters of health promotion and disease prevention therefore; they can play a key role in helping with the fight against childhood obesity.

Problem Statement

Obesity in childhood has the capacity to generate multiple health problems, which start early in life and continues throughout the life span. Childhood obesity has been related to elevated blood pressure, respiratory disorders, orthopedic conditions, cholelithiasis, and some types of adult onset cancer, along with an increase in type 2

diabetes mellitus (Hockenberry, 2003). A child with obesity is likely to remain obese into adulthood. Because adult obesity is associated with increased mortality and morbidity from a variety of complications disease prevention and health promotion interventions must begin in childhood.

The concepts of disease prevention and health promotion can be traced to the beginnings of the nurse practitioner's role in the 1960's. Thus, nurse practitioners have implemented health promotion into their own practice since that time. There are many aspects to the health promotion role. It is important to understand the complex nature of the health promotion schema. According to the *Health Promotion in Nursing Practice*, the schema consists of individual wellness, family wellness, community wellness, environmental wellness, and societal wellness (Pender, Murdaugh, & Parsons, 2006).

Individuals play a critical role in the determination of their own health status because self-care represents the dominant mode of healthcare in society. Many personal decisions are made daily that shape lifestyle and the social and physical environments. Health promotion at the individual level improves personal decision making and health practices.

Probably the purest form of motivation for health promotion exists in childhood through young adulthood when energy, vitality, and vigor are important to attain. Youth may engage in health behaviors for the pure pleasure of doing so or for the improvement of physical appearance and attractiveness to others. Although the family plays a critical role in the development of health beliefs and attitudes, there is limited research on the

health-promoting role of the family. Almost all individuals identify with a family group in which members influence one another's ideas and actions. Parenting styles and family environments encourage healthy or unhealthy behaviors that may persist throughout the life span.

Researchers have determined a correlation between health promotion and quality of life. Thus, obesity and its health effects on children definitely impact their quality of life. Therefore, for the scope of this project, the following problem will be explored: What is the role of the nurse practitioner in health promotion and childhood obesity?

Statement of Purpose

The purpose of this study is to further explore literature regarding the role of the nurse practitioner in health promotion and childhood obesity.

Significance of the Study

The current level of knowledge regarding the role of the nurse practitioner in preventing childhood obesity is limited. A computer search using CINAHL, MEDLINE, and COCHRANE Library, revealed several articles on health promotion and childhood obesity. Terms utilized in the search include the following:

Table 1

Summary of Literature Searches

Search Terms	Number of Citations	Database
nurse practitioner and health promotion	75	CINAHL

	93	MEDLINE
	51	COCHRANE
health promotion and childhood obesity	30	CINAHL
	69	MEDLINE
	46	COCHRANE
nurse practitioner and promoting health	5	CINAHL
	4	MEDLINE
	95	COCHRANE
nurse practitioner and Pender	2	CINAHL
	3	MEDLINE
	5	COCHRANE
obesity and Pender	7	CINAHL
	7	MEDLINE
	0	COCHRANE

Note. CINAHL = Cumulative Index to Nursing and Allied Health, MEDLINE = Medical Literature Online, COCHRANE = Cochrane Library (Cochrane Database of Systemic Review, Cochrane Database of Abstracts of Reviews of Evidence, and Cochrane Clinical Trials Register).

Clinical significance regarding the role of the nurse practitioner in health promotion to prevent childhood obesity is focused on the need for cost effective, high quality care. Childhood obesity is a growing concern for healthcare providers. Health promotion is an important factor in the prevention and management of obese children. If

more information was available for nurse practitioners to use to help educate and manage obese children and their families, the nurse practitioner would be properly prepared to give the highest quality care to this population of patients.

Theoretical Foundation

Nursing theory improves practice of nurse practitioners by describing, explaining, and predicting certain phenomena, therefore leading to professional independence by guiding practice, education, and research (Toomey & Alligood, 2002). Pender's (2006) Health Promotion Model will guide this study. Pender (2006) believed that the optimal goal of nursing care was optimal health for the individual.

The Health Promotion Model has served as a framework for research aimed at predicting overall health promoting and lifestyle behaviors (Toomey & Alligood, 2002). The model depicts the multidimensional nature of persons interacting with their interpersonal and physical environment. The nurse practitioner plays a role within this environment because they will make changes to and interact with the client's interpersonal environment by therapeutic talk or changing meds due to financial hardships for example. They make changes to and interact with their physical environment by physical examination or invasive procedures. There are several major concepts and definitions that comprise this model.

Personal factors are categorized as biological, psychological, and sociocultural. These factors are predicative of a given behavior and shaped by the nature of the target behavior being considered. This could include the nurse practitioner modifying an obese child's diet and considering the price of certain diet foods when changing the menu.

Perceived benefits of action are the anticipated positive outcomes that will occur from a certain health behavior such as a child losing weight and feeling better because of the weight loss. Perceived barriers to action are the anticipated, imagined, or real blocks and personal costs of undertaking a certain behavior. An example of this could be the child being upset because they know this will decrease the amount of candy or potato chips they are allowed to eat daily.

Perceived self-efficacy is the judgment of personal capability to organize and execute a health-promoting behavior. This is primarily the parents' issue when dealing with an obese child. Activity related effect is defined as the subjective positive or negative feelings that occur before, during, and following the behavior based on the stimulus properties of the behavior itself.

Situational influences are personal perceptions of any given situation or context that can facilitate or impede behavior. Commitment to a plan of action is the concept of intention and identification of a planned strategy that will lead to the implementation of health behavior. This could occur when the nurse practitioner counsels the family and child on the plan to either prevent further weight gain or begin a weight loss program. The immediate competing demands and preferences are alternative behaviors over which individuals have low control or alternatively high control.

Unlike avoidance oriented models that rely upon fear or threat to health as motivation for health behavior, the Health Promotion Model has a competence or approach oriented focus. The HPM has been supported through testing and researched by Pender and others as a framework for explaining health promotion. This theory is best

suiting for this study because of these reasons and the characteristics defined in the Health Promotion Model (Toomey & Alligood, 2002).

Definition of Terms

For the purposes of this study, the following terms are defined:

Health Promotion

Theoretical. Health is a condition in which all functions of the mind and body are normally active (Tabers, 2005).

Operational. Health is multidimensional phenomena comprised of physical, mental, social, and spiritual components.

Childhood Obesity

Theoretical. Obesity is the unhealthy distribution of body fat (Tabers, 2005).

Operational. Obesity is an excess in body weight for height and is determined by measuring the body mass index and classifying the state if the child plots in the 95th or greater on the growth chart (CDC, 2006).

Nurse Practitioner

Theoretical. A nurse practitioner is a licensed registered nurse who has had advance preparation for practice that includes 9 to 24 months of supervised clinical experience in the diagnosis and treatment of an illness (Tabers, 2005).

Operational. For the purpose of this study the operational definition of nurse practitioner will be the same as the theoretical.

Research Questions

For the purposes of this study, the following research questions were generated:

1. What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion?
2. What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion and childhood obesity?
3. What is the role of the nurse practitioner in health promotion and childhood obesity?

Delimitations

Literature was delimited, for the purpose of this integrative literature review, to the following:

1. Literature written in English language.
2. Literature available through CINAHL, MEDLINE, and COCHRANE Library databases.
3. Literature that pertains to promoting health in a child with obesity.
4. Literature that pertains to nurse practitioners role in the facilitation of health promotion.

Limitations

For the purpose of this study a particular limitation identified is that the information obtained cannot be generalized beyond the scope of the research reviewed. The generalization of the findings is further impacted by the lack of nursing research, from the perspective of nurse practitioners, as related to the role of the nurse practitioner in health promotion and childhood obesity.

CHAPTER II

Review of Literature

This investigation is an integrative literature review, which summarizes research on a topic of interest by placing the research problem in context and identifying gaps and weaknesses in prior studies to justify new investigations (Polit & Beck, 2004). For the purpose of this investigation, databased and theory-based manuscripts were reviewed and critiqued concerning the nurse practitioners role in health promotion to prevent childhood obesity. Literature reviewed totaled 8 databased manuscripts and 2 theory-based manuscripts, which represented reviews of another 289 references. In this chapter, an overview of the study variables is presented and reviewed. Studies reviewed will include studies relating to nurse practitioners role in health promotion and childhood obesity related studies.

An Overview of Healthcare Literature

Regarding Health Promotion

According to a research article by Grey (1998), which was indexed in MEDLINE a number of variables were explored. In this project the “Put Prevention into Practice” materials, developed by the Office of Disease Prevention and Health Promotion of the United States Public Health Service, were disseminated to members of the National Association of Pediatric Nurse Associates and Practitioners and evaluated for their impact on Child health outcomes. The major subjects include health promotion, nurse practitioners, prevention, and children. The research method was a longitudinal descriptive survey design. Useable data was received from 14 pediatric nurse

practitioners representing 194 patients. The strength of the study was the component of design in which the impact of “Putting Prevention into Practice” on the outcomes of children was explored. Data were collected on a form designed to the study at the time of introduction of materials to the PNP’s practice and also 6 months later. Number of visits for health maintenance, illness, and emergency department use were compared before and after materials. The Child Health Guide (a guide sent home with parents as a home-based health record) was compared before and after materials was introduced to know whether the guide was brought by the parents to the visits. In addition immunization status, recording of height and weight, developmental screening, and hearing and vision screenings were conducted before and after materials. The results indicated that the use of the “Put Prevention into Practice” program increased immunization rates, health maintenance visits, documentation of developmental, hearing and vision screening and car seat use. No change was seen in the documentation of height, weight, and emergency department and illness visits. A weakness to the study was the small sample size. The study showed an opportunity to provide a foundation for further research on this subject. A threat to the application of the findings is the idea that the data could have been altered therefore the results could have been skewed. The key findings suggest that the use of the “Put Prevention into Practice” materials can improve consistency of preventative care for young children.

Reeve, Byrd, and Quill (2004), indexed a research article in CINAHL, which explored Healthy People 2010, health promotion, and nurse practitioners. The authors

used a descriptive cross-sectional survey to examine the health promotion attitudes and practices of Texas nurse practitioners (NPs). The research was implemented by utilizing the Health Promotion Practices of Nurse Practitioners Instrument developed by the researcher and completed by 442 Texas NPs. The instrument measured attitude, subjective norm, perceived behavioral control and intention to engage in health promotion. The theoretical framework used as a foundation in this project include the theory of reasoned action and the theory of planned behavior. The strength of this study as the large sample size. The weakness of the study was that Texas nurse practitioners attitudes and practice behaviors may not necessarily represent those of the entire country. This study provides an opportunity to the foundation for further research on the health promotion attitudes and practices of nurse practitioners. The threat to this study was the questionable reliability of the self-administered questionnaire. The key findings indicated that overall NP's have positive attitudes toward health promotion practices. However, the findings of this study indicate that improvement can be made in the adoption of certain health promotion practices.

A research article, indexed in CINAHL, by Kelley and Daly (2001) examined the following variables of health promotion and disease prevention. The authors used a systemic literature review to explore literature on and describe approaches to implementing health promotion and disease prevention practices in the inpatient setting. This was a comprehensive review of nursing and medical literature, clinical practice guidelines, and U.S. government documents. This study provides opportunity to the

foundation for further research on implementing health promotion and disease prevention practices. The literature selection methodology could account for skewed findings. The key findings to this literature review show that preventative screening has been shown to reduce morbidity and mortality from many diseases. Health promotion and disease prevention activities form the foundation of practice for many nurse practitioners. As increasing number of NPs begin to practice in the acute care setting, it is important that they incorporate prevention into the inpatient setting.

Duran, (2003), in an article indexed in CINAHL, the author explored the variables health promotion, stages of change, motivational interviewing, and health behavior change. The purpose of this extensive article review is to provide the nurse practitioner (NP) with a practical prescription for acquiring expertise in health behavior change using integrated principles from the transtheoretical model of change and motivational interviewing. This article provides opportunity for further research on the subject. The article's threat is the literature selection methodology could account for skewed findings. The key findings show that expertise in motivating health behavior change is essential to effective health promotion and to the NP role.

Resnick (2003) indexed a research article in CINAHL containing several variables. The author explored health promotion, health behavior and older adults. The purpose of this descriptive statistical study was to explore the factors that influence health promotion behaviors and to describe the impact of an individualized approach to decision-making with regard to health promotion activities in a group of older adults living in a continuing care retirement community. The study used a pre- and post-test

design that included a total of 134 residents. The strength of this study was the large sample size. The weakness of the study was the elderly people were used and the ability to answer the tests appropriately is questionable. The study provides opportunity by providing a foundation for further research. The threat of the application is the selection of subject's mental capacity may skew results. The key findings indicated that with the exception of monitoring dietary fat intake, there was not statistically significant difference in primary and secondary health promotion behaviors pre- and post-testing. There was, however, a decline in smoking and alcohol use, an increase in physical activity, and a slight decline in the percentage of older adults who engaged in cancer screenings. A individualized approach may be a useful way to help older adults make health decisions and engage in those health promotion activities that will increase their quality of life.

An Overview of the Healthcare Literature

Regarding Childhood Obesity

According to Chamberlin, et al. (2002) in a research article indexed in CINAHL, numerous variables were explored. The authors examined prevention, childhood obesity, low income, and preschool children. The purpose of this study is to examine the need for new approaches to address the different perceptions about obesity that are held by clients and healthcare professions to improve counseling efforts by the Special Supplemental Program for Women, Infants and Children (WIC). To develop these new approaches, the WIC health professionals' perceptions about the challenges that exist in preventing and managing childhood obesity were explored. A qualitative study using data from 19

healthcare professionals' transcriptions of audiotapes of focus groups and individual interviews were used. The authors independently read each transcript and coded themes; then, the common themes were selected through group meetings of the authors. The strength of this study is the findings were presented in three separate areas. The weakness of the study is the small sample size. The opportunity the study provides is a foundation for further research. The threat to the application of the study is the lack of a research tool could account for skewed findings. The results indicated that 12 major themes were clustered into 3 domains: (1) how WIC healthcare professionals perceived the life experiences, attitudes, and behaviors of the mothers they counseled (2) WIC healthcare professionals perceptions of counseling interactions (3) programmatic suggestions WIC healthcare professionals offered to address childhood obesity. The key findings offered that to become more responsive to the problem of childhood obesity, WIC should consider the following: (1) providing staff training in counseling skills that educate parents on child development and child-rearing and that elicit the clients social context and personal goals (2) shifting time allocation and programmatic emphasis on the WIC visits away from nutritional risk assessment and toward counseling (3) developing collaborations with primary healthcare providers and community agencies that impact childhood obesity.

Hardus, van Vuuren, Crawford, and Worsley (2003), indexed a research article in MEDLINE, which explored perception, causes, prevention, childhood obesity. The purpose of this study is to investigate the lay perceptions of the causes and prevention of obesity among primary school children. The study design was a cross-sectional survey of

315 randomly selected adults. The subjects completed a self-completion questionnaire, in which they rated the importance of 25 possible causes of obesity and the importance of 13 preventative measures on a four-point scale. Demographic information about the respondents were also collected. The strength of the study was the investigation purposes. The weakness of the study was the small sample size. The opportunity the study provided is the foundation to further research the threat to the application is the self-completion questionnaire can have questionable answering techniques and lead to skewed findings. The results indicated that the most important causes of childhood obesity were related to overconsumption of unhealthy food, parental responsibility, modern technology, and the mass media. Principle components analysis of the causes data revealed eight factors, provisionally named: parental responsibility, modern technology and media, overconsumption of unhealthy foods, children's lack of knowledge and motivation, physical activity environment, lack of health food, lack of physical activity and genes. The key findings suggest that the public appears to hold quite sophisticated views of the causes and prevention of children's obesity. They suggest that a number of prevention strategies would be widely supported by the public, especially by parents.

According to Society of Nutrition Education (2003), a research article indexed in CINAHL, a number of variables were explored. The variables include childhood obesity, promoting health, prevention programs, and guidelines. The society for Nutrition Education, Weight Realities Division, developed guidelines for childhood obesity prevention programs from several carefully reviewed research articles. These guidelines for obesity prevention programs encourage a health-centered, rather than weight centered,

approach that focuses on the whole child, physically, mentally, and socially. The emphasis is on living actively, eating in normal and healthy ways, and creating a nurturing environment that helps children recognize their own worth and respects cultural foodways and family traditions. It is recognized that obesity, eating disorders, hazardous weight loss, nutrient deficiencies, size discrimination, and body hatred are all interrelated and need to be addressed in a comprehensive way that is therapeutic to the patient.

Muller, et al. (2001) indexed an article in MEDLINE that explored a number of variables. The variables include childhood obesity, prevention, nutrition education, and Kiel Obesity Prevention Study (KOPS). This cross-sectional statistical study's objective is to analyze the first results of the Kiel Obesity Prevention Study. Obesity prevention is necessary to address the steady rise in the prevalence of obesity. Although all experts agree that obesity prevention has high priority there is almost no research in this area. KOPS is an ongoing 8-year follow up study started in 1996. KOPS allows further analysis of the role of individual risk factors as well as long-term effectiveness of different intervention strategies. From 1996 to 1999 a representative group of 2440 5 to 7 year old children was recruited and a full data set was obtained from 1640 children. The strength of this study is the large sample size. The weakness of the study is no model for practice provided. The opportunity of this research provides a foundation for further research. The threat to application is the selection of children that there is a possibility of inconsistent exams and this could lead to skewed data. The results showed of the children 20.77% were considered overweight and obese, 67.6% were normal weight, and 11.7% underweight. Of the normal weight children 31% were at risk of becoming obese. Data

provided evidence that there is an inverse social gradient in childhood overweight as well as health-related behaviors as well as the fact that parental fatness had a strong influence on childhood overweight. Considerable changes were observed in health-related behaviors within 1 year after combined “school” and “family” based interventions. The key findings indicated the first results of KOPS are promising. Besides health promotion, a better school education and social support seem to be promising strategies for future interventions.

According to Koplan, Liuerman, and Kraak (2005), an article indexed in MEDLINE a number of variables were explored. The variables included childhood obesity and prevention. This is an executive summary from the Institute of Medicine (IOM) report, *Preventing Childhood Obesity: Health in the Balance*. The prevalence of childhood obesity in the United States has led to policy makers to rank it as a critical threat. The IOM Committee on Prevention of Obesity in Children and Youth was charged with developing a prevention-focused action plan to decrease the prevalence of obesity in children and youth. The primary emphasis of the committee’s task was on examining the behavioral and cultural factors, social constructs, and other broad environmental factors involved in childhood obesity and identifying promising approaches for prevention efforts. The plan consists of explicit goals for preventing obesity in children and youth and a set of recommendations, all geared toward achieving those goals, for different segments of society.

Summary

The prevalence of obesity is increasing numerous among children. A thorough review of the literature concluded that prevention is perhaps the best method to combat the epidemic of obesity. The literature also agreed that early detection and prevention strategies need to be implemented not only by primary care providers but also by the family.

CHAPTER III

Design and Methodology

The purpose of this investigation is an integrated review of the literature concerning the level of nursing knowledge regarding the nurse practitioners role in health promotion to prevent childhood obesity. An integrative literature review is a systematic summary of data based and theory-based literature representing the status of current knowledge available on the topics of interest (Polit & Beck, 2004).

Approach

An integrated literature review, which is a review of research that amasses comprehensive information on a topic, weighs the piece of evidence, and integrates information to draw conclusions about the state of knowledge, will be used for this study. This investigation is an evidence-based practice systematic review. While an integrative literature review summarizes research on a topic of interest, by placing the research problem in context and identifying gaps and weakness in prior studies to justify the new investigation (Polit & Beck, 2004). A summary of the current literature regarding the role of the nurse practitioner in promoting health to prevent childhood obesity is provided.

Literature Selection Procedure

A search of CINAHL, MEDLINE, and COCHRANE Library was conducted concerning the role of the nurse practitioner in health promotion to prevent childhood obesity. The reference list accompanying each article was then further reviewed for other articles pertaining to the subject. Search terms included “health promotion,” “childhood obesity,” “nurse practitioner,” “Pender,” and “promoting health.” Articles were selected

based on inclusion of at least one of the relevant concepts, whether as the focus of the article or as part of a broader topic. Other informative articles were also included to further explore the knowledgebase.

The systematic review of the literature began with CINAHL to find relevant literature on the nurse practitioners role in health promotion. Next MEDLINE and COCHRANE Library were evaluated for further relevant literature. Journal articles were obtained through the Mississippi University for Women library, via Internet databases and interlibrary loan. The review incorporated data beyond nursing literature to expand knowledge base for a thorough review, thus providing a multi-disciplinary approach.

References utilized were relevant and applicable to this investigation. The evidence-based practice procedure (Sackett, et al., 2000)for the systematic review comprises the following steps:

1. convert the need for information (about prevention, diagnosis, prognosis, therapy, causation, etc.) into research questions.
2. track down the best evidence with which to answer the questions using a variety of database strategies.
3. critically appraise the evidence for its validity (closeness to the truth), impact (size and effect), and applicability (usefulness in clinical practice addressing both sensitivity and specificity).
4. integrate the critical appraisal with clinical expertise and the patient's unique biology, values and circumstances (p. 3-4).

Literature Analysis Procedure

For the purpose of this study the articles will be critiqued by source and date, variables of interest, literature type and research tools, research design and sample size, theoretical foundation, references, and key findings. The article summary is not limited to contain all of these criteria but were summarized according to the relevancy of each of these criteria within the article. The findings document the current state of knowledge available that is discussed in Chapter IV according to the research questions regarding the role of the nurse practitioner in health promotion to prevent childhood obesity.

Summary

This chapter discussed the approach, literature selection procedure, and literature analysis procedure used to investigate the role of the nurse practitioner in health promotion to prevent childhood obesity. A search of CINAHL, MEDLINE, and COCHRANE Library was conducted for the relevant literature analysis. Nurse practitioners will hopefully increase their knowledge on health promotion to prevent childhood obesity and be motivated to further the education and research needed to utilize these methods for cost effective, high quality care to decrease the prevalence of childhood obesity in this vulnerable population.

CHAPTER IV

Knowledgebase Findings and Practice-Based Application

The aim of this chapter is to present the findings of the knowledgebase that was derived from this evidenced-based systemic literature review. Tables showing pertinent findings from the knowledgebase developed are provided with practice-based applications emerging from current clinical practice guidelines. Findings from the literature reviewed are addressed in this section in terms of each research question generated for the scope of the study.

Due to the limited level of nursing knowledge concerning the role of the nurse practitioner in health promotion and childhood obesity, a need for this study was warranted. Results from this investigation confirm the need for increased awareness, open communication, and aggressive education on childhood obesity by the nurse practitioner dealing with children and their families.

Knowledgebase Findings

In order to obtain the knowledgebase findings, a systemic literature search of CINAHL, MEDLINE, and the COCHRANE Library was conducted by this author. The literature reviewed totaled 10 citations, which represented another 289 references. Three research questions were posed in Chapter One. The pertinent findings will be discussed according to each of the research questions in Chapter One.

Research Question One

Research question one asks what is the level of nursing knowledge regarding the

role of the nurse practitioner in health promotion? The review of literature completed during this study revealed that nurse practitioners are avid supporters of health promotion practice and education. Since the origin of the nurse practitioner role, the NP has been a strong advocate of health promotion and prevention. Based on the five articles reviewed and found relevant to the above question the level of nursing knowledge regarding the nurse practitioner in health promotion is seen as abundant.

Table 2

Characteristics of Citation Reviewed

Citation	Type	Database
Grey, 1998	Data-based	MEDLINE
Kelly & Daly, 2001	Data-based	CINAHL
Reeve, Byrd, & Quill, 2004	Theory-based	CINAHL
Duran, 2003	Theory-based	CINAHL
Resnick, 2003	Data-based	CINAHL

Note. Total number of citations reviewed = 5

Research Question Two

Research question two asks: What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion and childhood obesity? The literature regarding nurse practitioners specifically in childhood obesity is limited. Since nurse practitioners are considered primary care providers, some of the articles pertain to the nurse practitioners and their role in childhood obesity. The following findings of three articles provide evidence that there is an inadequate extent to which there is nursing

knowledge regarding the role of the nurse practitioner in health promotion and childhood obesity?

Table 3

Characteristics of Citations Reviewed

Citation	Type	Database
Chamberlain, et al., (2002)	Data-based	CINAHL
Society for Nutrition Education (2003)	Data-based	CINAHL
Koplan, Liverman and Kraak (2005)	Data-based	MEDLINE

Note. Total number of citations reviewed = 3

Research Question Three

Research question three asks: What is the role of the nurse practitioner in health promotion and childhood obesity? Nurse practitioners in the primary care setting are challenged daily with children and their families who lack the knowledge of obesity and the motivation to prevent the problem. Theory-based, technology-assisted approaches have been proven effective in changing the behaviors of children and their families by using health promotion as a guide. Based on the three articles reviewed and found relevant to the above question the role of the nurse practitioner in health promotion and childhood obesity has not been adequately researched.

Table 4***Characteristics of Citations Reviewed***

Citation	Type	Database
Chamberlain, et al., (2002)	Data-based	CINAHL
Society for Nutritional Education (2003)	Data-based	CINAHL
Koplan, Liverman, and Kraak (2005)	Data-based	MEDLINE

Note. Total number of citations reviewed = 3

Practice-Based Application

In order to obtain the practice-based findings, a search for the best practices housed in the World Wide Web (www) was conducted by this author. Since clinical practice guidelines representing the role of the nurse practitioner in health promotion and the childhood obesity is inadequate, attention was given to the best practice approaches through exploration of web sites such as the Centers for Disease Control, National Center for Health Statistics, and Agency for Healthcare Research and Quality. Statistics which were reviewed for information regarding the nurse practitioners role in health promotion and childhood obesity. Findings from this review are addressed in this section in terms of each research question generated for the scope of this systemic literature review. The websites reviewed are as follows:

Table 5***Summary of Clinical Practice Guidelines***

Source of Guidelines	Website URL
Centers for Disease Control and Prevention	www.cdc.gov
National Health and Nutrition Examination of Survey (NHANES)	www.cdc.gov/nchs
Agency for Healthcare Research and Quality	www.ahrq.com
National Association of Pediatric Nurse Practitioners (NAPNAP)	www.napnap.org

Note. Total number of guidelines reviewed = 4

Research Question One

Research question one asks: What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion? The idea of health promotion is realistic as a value for dealing with medical problems. Health promotion is closely tied with prevention and it only makes sense to have enough self-initiative to take actions to prevent health problems such as obesity from occurring in the first place. An example of this would be the AHRQ competencies for the nurse practitioner including health promotion, health protection, disease prevention, and treatment strategies to improve or maintain optimum health. The nurse practitioner should be competent in gathering information about patient goals, perceptions, and resources regarding healthcare choices. Based on the information gathered from the above sites, the level of nursing knowledge regarding the role of the nurse practitioner and health promotion is abundant.

Research Question Two

Research question two asks: What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion and childhood obesity? One of the goals of Healthy People 2010 is to reduce the proportion of overweight and obese children aged 6-19 from the current 20% in all ethnic groups to less than 6% based on results from the next National Health and Nutrition Examination Survey NHANES. When comparing NHANES III (1999-2002) to NHANES II (1976-1980) the prevalence of overweight children increased dramatically. Based on data collected from the NHANES (2000), the BMI-for-age and gender growth charts are used by practitioners to identify at risk, overweight, and obese children. These guidelines give abundant information on the level of nursing knowledge regarding the role of the NP in health promotion and childhood obesity.

Research Question Three

Research question three asks: What is the role of the nurse practitioner in health promotion and childhood obesity? The literature concluded that most practitioners use multiple methods to identify overweight children and adolescents. A screening tool developed by the CDC (2006) contains a formula to calculate the body mass index, which divides a person's weight in kilograms by the square of the person's height in measurements. If the child's weight is greater than the 85% then the child is considered overweight or great than the 95th or rapidly rising percentiles are noted, and this merits focused attention on the issues of obesity. NAPNAP has initiated the Healthy Eating and

Activity Together (HEAT) initiatives to provide interventions to pediatric nurse practitioners in order to educate families on prevention methods for overweight children.

Summary

This chapter presents the findings of the knowledgebase that was derived from this evidence-based systematic literature review. Pertinent findings were discussed according to each of the research questions posed in Chapter One. A search of the World Wide Web was performed to find the best practice guidelines pertaining to the three questions posed in Chapter One.

CHAPTER V

Evidence-Based Conclusions, Implications, and Recommendations

This literature review was undertaken with the focus on exploring the available literature regarding the role of the nurse practitioner in health promotion and childhood obesity. Due to the limited level of nursing knowledge concerning the role of the NP in health promotion and childhood obesity, a need for the study was warranted. This chapter provides a summary of the literature review, including interpretation of the findings, as well as limitations of the study and recommendations for further research.

Summary of the Investigation

The purpose of this study was to explore the role of the nurse practitioner in health promotion and childhood obesity. The role of the nurse practitioner in health promotion and childhood obesity is not well supported and poorly documented as far as literature specifically related to the actual care of the obese children. Pender's Health Promotion Model offers a theoretical foundation for health promoting behavior that served to guide the investigation. Limited nursing knowledge concerning the variables of interest was found to exist, thereby establishing the need for further investigation and research. The review of literature indicated limited documentation relating the role of the nurse practitioner in health promotion and childhood obesity. Three research questions directed this study.

Interpretation of Findings with Conclusions

According to the literature analysis, the findings from this investigation

demonstrate a gap in the literature regarding the role of the nurse practitioners role in health promotion and childhood obesity. This project has attempted to consolidate the available material on this issue. An examination of the literature revealed that this is an area that requires further investigation because of its relevance to the health of this population. Conclusions that can be drawn from the findings of this investigation is that childhood obesity is a great problem that requires a multidisciplinary approach to treatment involving the individual, family, and healthcare professionals. In this section, the interpretation of the findings will be presented in response to each research question.

Research Question One

Research question one asks: What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion? The level of nursing knowledge regarding the nurse practitioners role in health promotion is abundant. The research on health promotion even more supports the fact that appropriate health promotion practices can help prevent the problem of obesity before it becomes a health threat to the child in its adult years.

Research Question Two

Research question two asks: What is the level of nursing knowledge regarding the role of the nurse practitioner in health promotion and childhood obesity? Clinical practice guidelines concluded that the best approach to identifying overweight and obese children is calculating BMI. The literature identified the evaluation of overweight children was under par. The actual level of nursing knowledge relating to the role of the NP in health promotion and childhood obesity is very limited.

Research Question Three

Research question three asks: What is the role of the nurse practitioner in health promotion and childhood obesity? The literature regarding the role of the NP in health promotion and childhood obesity is very limited also. The individual concept of health promotion the individual concept of childhood obesity are well defined and covered in the literature. There are a few guidelines available for NP's to incorporate into their treatment of obese children. There is not any literature that specifically covers the nurse practitioners role in health promotion and childhood obesity.

Limitations

Limitations were identified in this study. There was a lack of published literature available to use as a resource. Therefore, information obtained cannot be generalized beyond the scope of the literature reviewed since most of the literature is limited to specific locations and types of clients, the findings may not prove reliable when tested in other locations. The smaller samples sizes of nurse practitioners and obese children would limit the research and may not prove reliable with larger populations. Potential for the literature selection bias is possible due to the limited number of research studies available.

Implications and Recommendations

The investigation of literature regarding the role of the nurse practitioner in promoting health in a child with obesity resulted in implications and recommendations focused on nursing theory, nursing research, advanced nursing practice, nurse practitioner education, and health policy. The focus of this section is to further evaluate each of these

attributes.

Nursing Theory

The theoretical foundation for this investigation was guided by Pender's Health Promotion Model (Pender, Murdaugh, & Parsons, 2006) to explore the literature regarding the role of the nurse practitioner in promoting health in a child with obesity. Pender's theory postulated that the goal of nursing care was optimal health for the individual. This theory provided a framework for several of the articles in the investigation of the literature.

Nursing Research

The research on the individual concepts of health promotion and childhood obesity is abundant. Further nursing research is needed on evidenced-based interventions that focus on health promotion and childhood obesity and the role the nurse practitioner plays within. Research empowers practice and enhances the status of nursing as a profession. Research findings not only improve patient care but also affect the health care system (Polit & Beck, 2004). Research leads to evidence-based practice that contributes to cost effective quality care.

Advanced Nursing Practice

The advanced practice arena is the most logical place to research and implement studies regarding health promotion and childhood obesity. The nurse practitioner is already well versed in health promotion and has always been an enthusiastic supporter of implementing disease prevention into practice. The nurse practitioner is professionally prepared, has clinical expertise, is wellness oriented, and has the skill to provide patient education. The nursing process can also be capably utilized by the nurse practitioner to

assist each individual and family entity to make health-promoting decisions in regard to obesity.

Nurse Practitioner Education

Education for the nurse practitioner has increased over time. The knowledge and skill of assessing, diagnosing, and treating illnesses. Because of the history and background of the profession, nurse practitioners position themselves to incorporate health promotion strategies to individuals and families in their treatment. Education and practice must coincide to include health-promoting behaviors for children in order to prevent rise of obesity.

Health Policy

Nurse practitioners have gained the respect of providing cost effective quality healthcare. NPs can also lead the fight as activist lobbying for policies addressing issues necessary to combat obesity in children. Still, compensation for preventative healthcare from a nurse practitioner is not always reimbursed. Therefore, a stand must be taken for nurse practitioners for the preventative care to be reimbursed. Since the research is limited regarding the promotion of health in an obese child, it deems necessary for local, state and national governments to fund for further research to be conducted on the issue.

Summary

Statistics have proven time and time again that childhood obesity is a growing problem. Family nurse practitioners see children in primary care on a daily basis, yet often fail to seize the opportunity to evaluate knowledge on obesity issues, educate, and implement the appropriate interventions to address the problem. Despite the reported

focus of health promotion in the primary care setting, the combination of the concepts of nurse practitioner, health promotion, and obesity in children remain concepts that are difficult to find in nursing and advanced practice literature.

A systemic review of the literature using a computer search of CINAHL, MEDLINE, and COCHRANE Library identified gaps in the nursing knowledge regarding the combination of the role of the nurse practitioner in health promotion and childhood obesity. Of these, only three explored the variables of nurse practitioner, health promotion, and childhood obesity. Many explored the individual variables. Literature on this individual concepts are widely available.

The family nurse practitioner is well educated on providing health promoting information and has been found to provide cost-effective, quality healthcare with positive clinical outcomes (Grey, 1998). Therefore, the nurse practitioner with access to the adolescent population should optimize the skills by listening, educating, and implementing interventions for health promotion regarding obesity in children. The prevention of the serious health threats obesity can bring to children is the answer, not diagnosis and treatment after the fact.

Recommendations from this integrated literature review include the need for further research investigating the health promotion methods used by nurse practitioners when evaluating children. Other recommendations include the need for research from nurse practitioners regarding evidence-based interventions that reduce behavioral risk factors that put children at high risk of becoming obese. Therefore the need for further attention to obesity in children to focus on prevention and early diagnosis is critical.

REFERENCE

- Centers for Disease Control and Prevention. (2006). Retrieved June 14, 2006 from www.cdc.gov
- Chamberlin, L.A., Sherman, S.N., Jain, A.J., Powers, S.W., & Whitaker, R.C. (2002). The Challenge of Preventing and Treating Obesity in Low-Income, Preschool Children. *ARCH Pediatrics Adolescents Med*, 156, 662-668. Retrieved June 13, 2006 from CINAHL database.
- Duran, L.S. (2003). Motivating health: strategies for the nurse practitioner. *Journal of the American of Nurse Practitioners*, 15, 200-205. Retrieved November 15, 2005 form CINAHL database.
- Dorland's Illustrated Medical Dictionary* (29th ed.). (2000). Philadelphia, PA: Saunders.
- Grey, M. (1998). The Impact of the "Put Prevention Into Practice" Initiatives on Pediatric Nurse Practitioner Practices. *Journal of Pediatric Health Care*, 12, 171-175. Retrieved June 13, 2006 from CINAHL database.
- Hardus, P.M., van Vuuren, C.L., Crawford, D., Worsley, A. (2003). Public perceptions of the causes and prevention of obesity among primary school children. *International Journal Of Obesity and Related Metabolic Disorders*, 27, 1465-71. Retrieved June 13, 2006 from MEDLINE database.
- Hockenberry, M.J., Wilson, D., Winkelstein, M.L., & Kline, N.E. (2003). *Wong's Nursing Care of Infants and Children* (7th ed.). St.Louis: Mosby.
- Kelley, C.G., & Daly, B.J. (2001). Prevention in the Inpatient Setting. *Journal of the American Academy of Nurse Practitioners*, 13, 354-358. Retrieved June 13, 2006 from CINAHL database.

- Koplan, J.P., Liverman, C.T., & Kraak, V.I. (2005). Preventing Childhood Obesity: Health in the Balance: Executive Summary. *Journal of the American Dietetic Association*, 105, 131-138. Retrieved June 13, 2006 from MEDLINE database.
- Muller, M.J., Asbeck, I., Mast, M., Langnase, K., & Grund, A. (2001). Prevention of obesity- more than an intention. Concept and first results of the Keil Obesity Prevention Study (KOPS). *International Journal of Obesity*, 25, 556-574. Retrieved June 13, 2006 from MEDLINE database.
- Pender, N.J., Murdaugh, C., & Parsons, M. (2006). *Health Promotion in Nursing Practice* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Polit, D.F. & Beck, C. T. (2004). *Nursing Research: Principles and Methods* (7th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Reeve, K., Byrd, T., & Quill, B.E. (2004). Health promotion attitudes and practices of Texas nurse practitioners. *Journal of American Academy of Nurse Practitioners*, 16, 125-133. Retrieved June 13, 2006 from CINAHL database.
- Resnick, B. (2003). Health promotion practices of older adults: testing an individualized approach. *Journal of Clinical Nursing*, 12, 46-55. Retrieved June 13, 2006 from CINAHL database.
- Sackett, D.L., Straus, S., Richardson, W., Rosenbuerg, W. & Haynes, R. (2000). *Evidence-based medicine: how to practice and teach EBM*. Edinburgh: Churchill Livingstone.
- Taber's Cyclopedic Medical Dictionary (20th ed.). (2005). Philadelphia: F.A. Davis Company.

Toomey, A.M., & Alligood, M.R. (2002). *Nursing Theorists and Their Work*. St. Louis:

Mosby.