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The Role Of The Nurse Practitioner In Health Promotion During Pregnancy

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THE ROLE OF THE NURSE PRACTITIONER IN HEALTH PROMOTION DURING PREGNANCY

being

A Research Project Presented to the Graduate Faculty

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Partial Fulfillment of the Requirements for

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by

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DEDICATION

I wish to dedicate the project to my parents, Randy and Sandy, my family, Jo Ellen, Randel, Sandra, Jeff, Grace, Jessica, and Lucy, and my friends. Without your support, encouragement, and patience I would not be where I am today.

THE ROLE OF THE NURSE PRACTITIONER IN HEALTH PROMOTION DURING PREGNANCY

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Abstract

Health promotion is fundamental to nurse practitioner practice. To be effective in health promotion, the nurse practitioner must have a clear understanding of the nature of behavioral change, the individual issues each client brings to a particular behavior, and have expertise in health promotion. The nurse practitioner must possess specific skills to facilitate the client's movement along the continuum of health behavior change.

Health promotion that enhances prenatal care has been described and established by evidence-based research and professional practice guidelines. The purpose of this evidence-based research project was to develop a current nurse practitioner knowledgebase regarding the role of the nurse practitioner in health promotion during pregnancy. Literature indicated that health promotion during pregnancy is crucial, yet the current level of health care knowledge regarding the role of the nurse practitioner is limited. Further research into the role of the nurse practitioner is critically needed to better serve nurse practitioners and their clients.

Nola Pender's Health Promotion Model (HPM) was used to guide this project. The HPM has served as a framework for research aimed at predicting overall health-promoting lifestyles and specific behaviors and using wellness orientation to clarify health-promoting behaviors.

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CHAPTER I

Dimensions of the Problem

The Centers for Disease Control and Prevention's National Center for Health Statistics (2004) states that there were 4.1 million births in 2004, up nearly one percent from 2003. Every year, nearly one million American women deliver babies without receiving adequate prenatal care. Babies born to mothers who receive no prenatal care are three times more likely to be born at a low birth weight and five times more likely to die than those whose mothers received prenatal care (MCHB, 2006). These statistics make health promotion during pregnancy arguably one of the most important, cost-effective services offered to the public.

Problem Statement

For over two decades, there has been interest in the relationship of health promotion during pregnancy and prenatal care to perinatal outcome. Lifestyle factors before and throughout pregnancy have been implicated in the incidence of preterm birth and have been described in the literature with conflicting results (Chopra & Ford, 2005; Croghan, 2005; Curry, 1989; Freda et al., 1990; Jackson, 2005; Maupin et al., 2004; Rautava, Erkkola, & Sillanpaa, 1991; Sword, 1998). Observational studies of mothers receiving proper prenatal care and health promotion during pregnancy have demonstrated fewer preterm births, higher birth weights, and fewer stillbirths and neonatal deaths (Gortmaker, 1979; Malloy, Kao, & Lee, 1992; Mustard & Roos, 1994; Scholl, Miller, Salmon, Cofsky, & Shearer, 1987; Shiono, Klebanoff, Graubard, Berendes, & Rhoads, 1986; Tyson et al., 1990).

The nurse practitioner, as both a health practitioner and health promoter, is in an especially advantageous position to educate women in preparation for pregnancy. Nurse practitioners are in a key position to identify at-risk women and encourage them to adopt behaviors which will promote an optimal state of health before they become pregnant as well as while they are pregnant. Because education is a major component of nursing, nurse practitioners in any setting should reexamine their work patterns to include more time for health promotion. Efforts should be directed to develop an ongoing health care system linkage to correct behaviors and to facilitate health. In order to do this, these problems need to be identified. Expertise in motivating health behavior change is essential to effective health promotion and to the nurse practitioner's role.

Statement of Purpose

The purpose of this study is to explore current health care literature related to the role of the nurse practitioner in health promotion during pregnancy. Additionally, this study of literature will determine appropriate and relevant evidence-based practice guidelines and health promotion activities as a focus for future research and clinical treatment options. The term evidence-based was coined to describe a teaching-learning strategy designed to mold clinical decision making (Evidence-Based Medicine Working Group, 1992; Guyatt & Rennie, 2002; Sackett, Straus, Richardson, Rosenburg, & Haynes, 2000). Evidenced-base practice guidelines can be used to improve the quality of primary care (Hamric, Spross, & Hanson, 2005).

Significance of the Study

The current level of health care knowledge regarding the role of the nurse practitioner in health promotion during pregnancy is limited. A computer search utilizing

CINAHL, MEDLINE, and the Cochrane Library revealed only several articles on this subject. Terms utilized in the search included the following:

Table 1

Summary of Literature Searches

Search Terms	Number of Citations	Database
nurse practitioner and health promotion	73	CINAHL
	91	MEDLINE
	0	Cochrane
nurse practitioner and pregnancy	43	CINAHL
	123	MEDLINE
	47	Cochrane
nurse practitioner and pregnancy and health promotion	0	CINAHL
	1	MEDLINE
	6	Cochrane
nurse practitioner and Pender	2	CINAHL
	1	MEDLINE
	2	Cochrane
health promotion and pregnancy	459	CINAHL
	1492	MEDLINE
	314	Cochrane
health promotion and Pender	101	CINAHL
	45	MEDLINE
	29	Cochrane

pregnancy and Pender	17	CINAHL
	15	MEDLINE
	1	Cochrane

Note: CINAHL = Cumulative Index to Nursing and Allied Healthcare Literature, MEDLINE = Medical Literature Online, Cochrane = Cochrane Library (Cochrane Database of Systematic 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 during pregnancy is focused on the need for cost-effective, high-quality care. According to Pender, Murdaugh, & Parsons (2006), cost-effectiveness is the most inexpensive way to achieve a given outcome; therefore, the key to cost-effective, high quality and effective care is health promotion.

Theoretical Foundation

Theory and research share an equally beneficial relationship. Theory guides and creates ideas for research. Research must have a formally recognized theory in order to contribute to nursing practice. Nola Pender's Health Promotion Model (HPM) will be used to guide this project. The HPM has served as a framework for research aimed at predicting lifestyles that promote health and specific behaviors (Pender, 1996). Pender's model focuses on clarifying these behaviors while using a wellness orientation (Polit & Beck, 2004). Pender (1987) believes that such behaviors are activities that are an integral part of an individual's lifestyle. If these activities are not part of a person's lifestyle, old behavior patterns must be changed and new patterns learned in order to maintain health and avoid risks

According to HPM, health promotion involves activities directed toward developing resources that preserve or improve a person's well-being. The original HPM

includes two phases, the decision-making phase and the action phase (Polit & Beck, 2004). In the decision-making phase, the model emphasizes seven cognitive-perceptual factors including importance of health, perceived control of health, perceived self-efficacy, definition of health, perceived health status, perceived benefits of health-promoting behaviors, and perceived barriers to health-promoting behaviors. These cognitive-perceptual factors compose five modifying factors which indirectly influence patterns of behavior. These factors are demographic characteristics, biological characteristics, interpersonal influences, situational factors, and behavioral factors. In the action phase, barriers and cues to action trigger activity in health-promoting behavior (Tomey & Alligood, 2002). The revised version of the HPM adds three new variables: activity-related affect, commitment to a plan of action, and immediate competing demands and preferences (Pender et al., 2006). Pender's (1996) Health Promotion Model is based on seven major assumptions:

"1. Persons seek to create conditions of living through which they can express their unique human health potential.
2. Persons have the capacity for reflective self-awareness, including assessment of their own competencies.
3. Persons value growth in directions viewed as positive and attempt to achieve a personally acceptable balance between change and stability.
4. Individuals seek to actively regulate their own behavior.
5. Individuals in all their biopsychosocial complexity interact with the environment, progressively transforming the environment and being transformed over time.

6. Health professionals constitute a part of the interpersonal environment, which exerts influence on persons throughout their lifespan.
7. Self-initiated reconfiguration of person-environment interactive patterns is essential to behavior change" (pp. 54-55).

These assumptions identify the role that each individual must develop to sustain a level of health and well-being. The individual must take responsibility to modify his or her environment and lifestyle in search for health-promoting behaviors (Pender, 1996).

Nola Pender has identified health promotion as a goal for the 21st century (Tomey & Alligood, 2002). Pender's HPM is founded on theories of human behavior. There is an enhanced acknowledgment of the role of behavior in primary prevention and health promotion, and health professionals are giving more attention to helping clients assume healthy behaviors. Incentive for healthy behavior may be based on a need to prevent illness (primary prevention) or to realize a higher level of well-being and self-actualization (health promotion). Pender's belief is that when a person has high-perceived competence or self-efficacy in a certain behavior, it results in a greater possibility that the person will commit to action and actually achieve the behavior (Peterson & Bredow, 2004). The HPM is applicable to any health behavior in which threat is not proposed as a major source of motivation for behavior; therefore, the model is applicable across the entire life span (Pender et al., 2006).

Definition of Terms

Nurse Practitioner

Theoretical. According to the American Academy of Nurse Practitioners (2005), "Nurse practitioners are registered nurses with advanced education and advanced clinical

training. They bring a unique perspective to health services in that they place emphasis on both care and cure. Along with clinical services, nurse practitioners focus on health promotion, disease prevention, and health education and counseling, guiding clients to make smarter health and lifestyle choices. Nurse practitioners practice under the rules and regulations of the state in which they are licensed, are nationally certified in their specialty, and are recognized as expert health care providers. Nurse Practitioners provide high-quality, cost-effective health care in both rural and urban settings and in facilities such as clinics, hospitals, emergency/urgent care sites, private physician or nurse practitioner practices, nursing homes, schools and colleges, and public health departments, to name a few" (pp. 1-2).

Operational. The American Academy of Nurse Practitioners Scope of Practice (2002) states that, "Nurse practitioners are primary care providers who practice in ambulatory, acute and long term care settings. According to their practice specialty, these providers make nursing and medical services available to individuals, families, and groups. In addition to diagnosing and managing acute episodic and chronic illnesses, nurse practitioners emphasize health promotion and disease prevention. Some of these services include ordering, conducting, supervising, and interpreting diagnostic and laboratory tests, as well as prescription of pharmacologic agents and non-pharmacologic therapies. Teaching and counseling individuals, families and groups are a major part of nurse practitioner's duties. Nurse practitioners work autonomously and in collaboration with healthcare professionals and other individuals to diagnose, treat and manage the client's health problems. They serve as health care researchers, interdisciplinary consultants, and patient advocates" (p. 1).

Health Promotion

Theoretical. Green & Kreuter (1990) state that health promotion is "the combination of educational and environmental supports for actions and conditions of living conducive to health."

Operational. Health promotion is defined by Pender et al. (2006) as "behavior motivated by the desire to increase well-being and actualize human health potential."

Pregnancy

Theoretical. Taber's Cyclopedic Medical Dictionary (1997) defines pregnancy as "the condition of carrying an embryo in the uterus."

Operational. For the purpose of this study, pregnancy is defined as any woman identified as pregnant in each article reviewed in this research project.

Research Questions

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

1. What factors impact health promotion during pregnancy?
2. What is the role of the nurse practitioner in health promotion during pregnancy?

Delimitations

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

1. Literature written in the English language
2. Literature available through CINAHL, MEDLINE, and the Cochrane Library
3. Literature available through the Mississippi University for Women and Interlibrary loan

4. Literature that pertains to the role of the nurse practitioner in health promotion during pregnancy

Limitations

For the purpose of this investigation, a particular limitation 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 related to the role of the nurse practitioner in health promotion during pregnancy.

Summary

Because of the staggering number of pre-term births each year, it is apparent that high quality, cost-effective prenatal care is needed. Health promotion during pregnancy is undeniably one of the most important, cost-effective services offered to the public. Health promotion that enhances prenatal care has been described and established by evidence-based research and professional practice guidelines (Korenbrot et al., 2005). The factors influencing health promotion during pregnancy are multifaceted.

Nola Pender's Health Promotion Model (HPM) will be used to guide this project. Pender's model focuses on clarifying health-promoting behaviors by using a wellness orientation (Polit & Beck, 2004). The HPM has served as a framework for research aimed at predicting overall health-promoting lifestyles and specific behaviors (Pender, 1996).

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 study, data-based and theory-based manuscripts were reviewed, critiqued, and synthesized concerning health promotion during pregnancy. This research resulted in 39 articles of which 19 were found to be pertinent to the review of literature on health promotion during pregnancy. In this chapter, an overview of each study variable is presented as it emerged from the developing knowledge base.

Overview of Health Care Literature Related to Health Promotion During Pregnancy

According to a theory-based study by Capik (1998), which was indexed in CINAHL, childbirth educators are in a key position to teach and promote healthy behaviors and lifestyles within the childbearing family. Health promotion interventions discussed were assessment, education, support, advocacy, and promotion of self-care. The Health Promotion Model of Nola Pender was used, which attempts to explain why individuals engage in healthful behaviors. This Health Promotion Model can be linked to the practice of perinatal education as well as serve as framework for wellness programs and research. Capik states that the role of the childbirth educator in health promotion is that of values clarification, health status self-assessment, goal setting, behavioral change planning, self-care competency development, the provision of social and physical resources, and the promotion of autonomy and individuality among family members. One

strength of this study was that the Health Promotion Model can be linked to the practice of perinatal education. A weakness of this study was that it only looked at the childbirth educator's position in promoting healthy behaviors within the childbearing family.

A data-based article by Jackson, Howes, Gupta, Doyle, and Waters (2005), indexed in Cochrane, concluded that health promotion strategies should involve communication of healthy messages and the creation of health promoting environments. These authors believe that high risk behaviors should be studied further. Jackson et al. state that health promotion strategies should reach all age groups and awareness of healthy behaviors is of paramount importance. The review of literature utilized research that had used study designs that incorporated an evaluated intervention and comparison; however rigorous evaluation techniques were not employed.

In a study by Chopra and Ford (2005), indexed in MEDLINE, health promotion was defined as "communication strategies that support families and communities in preventing disease, optimizing care, creating the demand for services and holding service providers accountable." Some of the barriers that affect health promotion are differences in the values and experiences of the health care providers and clients, poor delineation of roles and responsibilities, lack of institutional capacity, and lack of communication channels for the most poor and vulnerable. They believe that by overcoming these barriers, communities will engage in improved health care. A strength of this data-based article was the number of references researched. No weaknesses were identified.

In a literature review by Cross (2005), indexed in MEDLINE, the concept of nurses' attitudes towards health promotion was studied. This data-based article found that nurses have a positive attitude about health promotion. The author also found that

continued and increased education in communication skills and education in health promotion might contribute to a sound knowledge base for nurses and promote confidence and competence in practice. The vast number of references reviewed was a strength for this study, and the limited sample size ($N = 11$) was found as a weakness.

Jackson (2005), in a theory-based article indexed in CINAHL, used Nola Pender's Health Promotion Model as a conceptual framework and the Health Promotion Lifestyle Profile as a measurement tool. This study sought to determine whether women who have received childbirth education have health promotion behavior which differs from women who have received little or no childbirth education and if infant birth weight differed between these two groups. In this review, the areas of literature examined were those specific to health promotion as defined by Pender and also the impact of health education programs on birth outcomes. These health promotion behaviors were nutritional practices of the mother, the personal health habits of smoking, use of alcohol and drugs, the ability to seek care or the availability of care, social support, stress management, age, parity, ethnicity, education, marital status, and income. Health educators and clients felt that the sociodemographic variables were often outside their control. Yet, behaviors such as smoking, alcohol use, and stress management were variables which could be manipulated by the mother, thereby decreasing the likelihood of secondary complications and improving pregnancy outcome.

This study found that sociodemographic variables such as educational level, income, and family size significantly accounted for differences in birth outcomes. Based on the results of this study, the routine incorporation of formal childbirth education into prenatal care appears to be beneficial to the outcome of pregnancy. Providers must

include formal, planned education as a basic component of competent care. The strength of this study was that numerous variables affecting pregnancy were included. The weakness of this study was that the majority of participants studied were already identified as high risk for low birth-weight infants.

In one of the first efforts to quantify risk and evaluate the impact of behavioral change, Freda et al. (1990) investigated the impact of lifestyle change on women with numerous risk factors for preterm delivery. In this data-based article indexed in CINAHL authors identified 12 lifestyle factors from reviewed literature which were most frequently related to preterm delivery. Study participants (N=202) were interviewed extensively about the prevalence of these lifestyle factors. Each woman in the study was then offered comprehensive education specific to symptom recognition and modification of lifestyle activities. The women were also given information on how to facilitate entrance into the health care system if any symptoms of preterm labor occurred. Analysis revealed that when a change in lifestyle was made in the reduction of activity or stress, they were less likely to deliver early. The most important stressors associated with prematurity were unemployment in the household, moving, and the existence of more than three stressors. A decrease in work, commuting, lifting groceries, and sexual activity were associated most often with a term delivery. One strength of this study was the amount of literature reviewed to identify the lifestyle factors. Weaknesses of this study were that the sample size was small, and there was no control group.

Korenbrot, Showstack, Loomis, and Brindis (1989) demonstrated that participation in coordinated medical, educational, and social services reduced the

incidence of low birth weight infants among the participants in a teenage pregnancy and parenting program. This data-based article indexed in CINAHL found that the mean birth weight of infants born to mothers (N=411) who participated in this program was significantly higher than those in the general population after adjusting for race, infant gender, parity, and age. This was a reduction in the rate of low birth weight infants from 12% to 8.1%. The strength of this study was the thoroughness of the pregnancy and parenting program. A weakness of this study was that participants were from a limited region.

In a data-based report by Rautava et al. (1991), indexed in CINAHL, the influence of a mother's knowledge about childbirth on birth outcomes was investigated. In an ex-post-facto study, these authors administered a postpartum questionnaire to 1238 women after giving birth to their first child. The women were divided into groups according to their knowledge of childbirth. The conditions of the newborns were equal between groups as matched by their Apgar score. Results of the research indicated that the low knowledge level group often experienced a poorer pregnancy outcome, more small for gestational age infants, more frequent treatment of the newborns in the pediatric ward, and were more unwilling to experience another pregnancy. These authors indicated that low level of childbirth knowledge may imply a set of problems which may include poor interparental relationships, socioeconomic situations, the need for closer antepartal surveillance, and enriched education. A strength of this study was the large sample size. The limited review of literature was identified as a weakness in this study.

In an article by Curry (1989), non-financial barriers to prenatal care were studied. Curry states that the assumption has generally been that if financial barriers to prenatal

care were removed, problems with access to prenatal care would be solved. Recently there has been an increasing appreciation of the significance of non-financial barriers to prenatal care and recognition that even if all the financial barriers were removed, there would still be access problems. This data-based article indexed in MEDLINE pointed out that barriers to prenatal care cannot be ignored if care during pregnancy is to be improved. Five major categories of nonfinancial barriers to care were limited availability of providers of maternity care; insufficient prenatal services in some sites routinely used by high-risk populations; experiences, attitudes and beliefs among women which make them disinclined to receive prenatal care services; poor or absent transportation or child care; and inadequate systems to recruit hard-to-reach women into care. A major strength of this study was the in-depth breakdown of the non-financial barriers. The author noted that it would take a combination of professional effort, political effort, and public effort to erase these barriers. A weakness of this study was that the author only looked at the non-financial barriers affecting health care in pregnancy.

Sword (1998) attempted to understand barriers to prenatal care for women of low income. In this data-based article indexed in CINAHL, this author found that a socio-economic approach to health care led to an enhanced appreciation of behavior as a social product and was more consistent with the ideology of health promotion. She defined health promotion as a focus on broad determinants of health and health-related behavior. Sword concluded that if the experiences and perceptions of socio-economically disadvantaged women were not altered by informed health care delivery, that the low income women would probably continue to encounter significant barriers to prenatal care and relationships that reinforce positions of powerlessness. A strength of this article was

the in-depth review of literature that took place. A weakness was that this article only looked at low income women.

According to Croghan (2005), women and their families can be helped to adopt healthier lifestyle behaviors if they are encouraged to do so for personal gain or internal motivation. If health care providers support clients in making healthy lifestyle changes during pregnancy for themselves, rather than for the health and welfare of their baby or because they are pregnant, they are more likely to maintain those lifestyle changes in the long term. An example of internal motivation would be explaining to the mother that if she eats healthy she will have more energy and regain her pre-pregnancy shape faster after the baby is born. This provides health benefits for the baby, although the mother is motivated because of how her behavior will positively benefit her. The mother can be encouraged to go to prenatal classes in order to make friends, while all along benefiting the baby. A strength of this data-based article indexed in CINAHL was that the article attempted to support women during pregnancy. A weakness of this article was the limited review of literature performed by the author.

In a randomized controlled trial conducted by McDuffie et al. (1996), the effect of frequency of prenatal care visits on perinatal outcome among low-risk women was studied. A hypothesis was tested that was put forth by the Expert Panel on the Content of Prenatal Care in 1989 which stated there were no significant increases in adverse perinatal outcomes when low-risk women were seen on a prenatal care visit schedule of fewer visits than routinely advised. This data-based article indexed in CINAHL selected a group of 2,764 pregnant women who were judged to be at low risk of adverse perinatal outcomes from a health maintenance organization. This large sample size was a strength

of the study. Following risk assessment, participants were randomly assigned to an experimental schedule of nine visits or a controlled schedule of 14 visits with additional visits as desired by the client. A weakness of the study was that the client could have more visits if desired, such as for acute illness. More visits would alter the number of scheduled visits for the purpose of this study. Outcome measures for adequate prenatal care were preterm delivery, preeclampsia, cesarean delivery, low birth weight, and clients' satisfaction with care. On average, there were 2.7 fewer visits observed in the experimental group than in the control group. There was no significant increase in the main outcomes of the experimental group to the control group. This study demonstrated that both perinatal outcome and client satisfaction are maintained when low-risk pregnant women undergo the prenatal visit schedule suggested by the Expert Panel on the Content of Prenatal Care. These results can be generalized to the study population of primarily Caucasian, reasonably well-educated women. A threat to this study would be the difficulty of replicating this study in other populations.

Lewallen (2004) conducted a descriptive correlational study on healthy behaviors and sources of health information among low-income pregnant women. This data-based article indexed in MEDLINE examined 150 English speaking pregnant women age 18 and over. These women were interviewed at a public prenatal clinic in the Southeastern United States at their first prenatal visit. Healthy behaviors were placed into seven mutually exclusive categories: food-related behavior, substance-related behavior, exercise/rest/activity, self-awareness/appearance, learning, focus on the baby, and no specific behavior. Sources of information questions were placed into seven mutually exclusive categories: family, health personnel, reading, hearing, other people, self-

intuitive, and no response. Lewallen found that low-income pregnant women are aware of healthy behaviors and report practicing them during their pregnancies. A weakness of this study was that the sample was not randomly selected; therefore, generalizations cannot be made to the larger population of low-income women. Additionally, with no information about the women's pre-pregnancy healthy behaviors, it cannot be assumed that most of the healthy behaviors noted by the women represent a change in their usual behaviors when not pregnant. A strength of this study was the large number of references reviewed.

A comparative study by Goss, Lee, Koshar, Heilemann, and Stinson (1997) was conducted in California to examine the number of prenatal visits and the outcomes of Hispanics born in Mexico and Hispanics born in the United States. This data-based article indexed in CINAHL reviewed the obstetric and medical records for 783 women with an age range of 14 to 46. Pregnancy outcomes included in this study were maternal complications that were documented in the medical record during pregnancy, labor and delivery, and the postpartum period. Pregnancy outcomes also included fetal and newborn complications documented in the mothers' or infants' medical record. Included in the study were 468 Hispanic women born in Mexico and 315 Hispanic women born in the United States. There were 105 women (13%) in the sample who had inadequate prenatal care, which was defined as one to three prenatal visits. There were 54 of the women (7%) with no prenatal care documented.

This study found that there was no statistical difference in the number of prenatal visits and pregnancy outcome according to the place of mother's birth. Both groups of women had the same rate of complications relative to the adequacy of prenatal care. The results from this study indicate that more visits do not necessarily improve the outcome

of pregnancy as defined by complications during pregnancy, labor, and the immediate postpartum period. The lack of significance between the number of visits and the number of complications indicated that the prenatal visit is not doing what it is designed to do: decrease the number of perinatal complications. Simply increasing the number of prenatal visits did not reduce the complications or improve outcome as defined by this research. A strength of this study was the vast review of literature. A weakness of this study was the limited population that was studied.

A data-based article indexed in CINAHL states that the primary goal of prenatal care has been to decrease the morbidity and mortality rates of newborns (Whitcher, 1989). This author also states that although much emphasis has been given to the need for early prenatal care and for intensive care for high risk newborns, even more progress could be made if risks were reduced prior to pregnancy. Efforts to assist women to prepare for a healthy pregnancy must focus on increasing each woman's awareness of environmental hazards and ways to prevent exposure to those hazards. This knowledge is crucial because the developing embryo is vulnerable to those hazards before conception as well as during the first few weeks of after conception. Exposures that present common hazards include infectious diseases, radiations, and occupational risks. Healthy behaviors such as including proper nutrition, avoidance of smoking, and avoidance of drug abuse are also important. A strength of this article was the multiple concepts identified to promote a healthy pregnancy. Another strength was the in-depth review of literature that the author completed. No weaknesses were identified.

The objective of a study by Maupin et al. (2004) was to compare the characteristics, morbidities, and pregnancy outcomes of women with no prenatal care and

women who received some prenatal care. Medical records were abstracted for demographic variables as well as for information concerning substance abuse, sexually transmitted diseases, and perinatal outcome. The study in this data-based article indexed in MEDLINE took place over the time period of one year and included 2,410 women. The large sample size and long time frame were both strengths of this study. Women not seeking prenatal care were more likely to be multigravid, having had at least one prior delivery with at least one living child. These women also lacked medical insurance. Maternal smoking, a reported history of substance abuse, and documented positive urine toxicology studies at the time of delivery for cocaine and opiates were found more often in women with no prenatal care. In the metropolitan region serviced by the hospital in this study, prenatal care was available at little or no charge through numerous non-hospital, readily accessible, community-oriented programs. Despite this availability, prenatal care was usually not obtained.

The authors noted that a prior survey of clients who delivered at this hospital indicated that they possessed a broad knowledge about key components of prenatal care and its importance, and the majority of those women had a prior experience with the health care systems in that metropolitan area. The authors also noted that the clinical consequences of not receiving prenatal care were substantial, and this was reflected by the high rates of prematurity and low birth weights. The difference in stillbirth rates between cases and controls were striking, with all fetal deaths occurring among women who received no prenatal care. Syphilis and HIV were observed in nearly 5% of gravidas without prenatal care. The authors concluded that intensive interventions are needed for women who fail to receive prenatal care so as to link these high-risk women to needed

services. A weakness of this study was that it only examined the prenatal care of women from one metropolitan area.

An exploratory study in a data-based article indexed in MEDLINE looked at the range of health behaviors pregnant women undertake to keep themselves healthy. Higgins, Frank, and Brown (1994) stated that this was the first study reported in the United States that allowed women to identify their own health behaviors. One hundred fifteen women were interviewed during their pregnancy. An inductive approach was used to ask the women, "What health behavior changes have you made since you became pregnant?" Use of an open-ended question was a strength of this study. These women identified 18 changes in health behaviors they had made during pregnancy. More than 49% of the women made changes in their diet, exercise pattern, smoking habits, vitamin intake, and alcohol use. Weaknesses identified in this study were the small sample size, and the assumption that all women during pregnancy chose to make healthy behavior changes.

Issel (2000) stated, "Comprehensive case management is a multidisciplinary, community-based service designed to increase appropriate use of health and social services, with simultaneous attention to multiple medical and social problems of individuals within a family and community context" (p. 120). The purpose of this data-based article indexed in MEDLINE was to identify the variety of maternal outcomes which were attributable to comprehensive prenatal case management. This qualitative study used a social-ecological approach. Twenty-four women were interviewed about the outcomes they experienced as the result of comprehensive prenatal case management. The women attributed improvements of various types to the actions of the case manager,

specifically in the areas of emotional well-being, learning, lifestyle behaviors, financial situations, services utilization, and maternal and infant health. Women reported making their prenatal visits more often because of case management. This finding was also consistent with research from other studies reviewed by Issel. The author states that case management appeared to have immediate and intermediate effects, such as changes in lifestyle behaviors and services utilization. The women included in this study attributed those changes to having a healthy pregnancy. A notable strength of this study was that the author looked at a wide range of factors which affect pregnancy. The small sample size was a weakness of this study.

York, Williams, and Munro (1993) attempted to identify factors from the client's perspective that influence inadequate prenatal care when it is free and easily accessible. The data-based article indexed in CINAHL is the result of a convenience sample of 57 women who were enrolled consecutively in the labor and delivery suite in an inner-city, university-affiliated hospital and who were from a group meeting the definition of having received inadequate prenatal care. Inadequate prenatal care was defined for the purpose of this study as prenatal care beginning after 19 weeks gestation or no prenatal care at all. The hospital in this study offered free prenatal care on site and at satellite clinics which could be reached by public transportation. The sample age range was between 15 and 40; while 98.3% of the sample were African American, 96.5% received public assistance, 67% had not completed high school, and 81% were multigravidas. Only one woman had planned her pregnancy. The questionnaire contained two sections. Section one consisted of six questions on general demographic information, and section two asked 13 questions regarding matters such as the client's health service utilization, pregnancy, and prenatal

care. Respondents could give more than one answer to each question. These respondents identified 22 personal reasons and structural barriers for receiving inadequate prenatal care. The most frequently cited reasons were small children at home, no medical assistance card, sadness or ambivalence about the pregnancy, and the fact that they just moved to the area. The clinical environment (busy telephones, full clinics, and unpleasant staff) was also identified as a deterrent to seeking care. Nine percent did not register because they were informed of the long waiting period and did not want to wait. Respondents indicated that the services they most desired from the prenatal clinic included more information about their pregnancy, child care, labor and delivery, a play area for children, and evening hours. A strength of this article was the comprehensive questionnaire, while its weaknesses were the limited sample size and population.

Summary

A systematic review of literature concerning health promotion and pregnancy revealed that there is a great deal of literature and research on health promotion and a great deal of literature and research on pregnancy. Information on health promotion and pregnancy is limited to barriers that affect or inhibit health promotion during pregnancy and reasons that women do not receive prenatal care. Great variation was noted in the identified factors that affect health promotion during pregnancy. Limited research exists regarding actual recommendations for activities that promote health during pregnancy. This investigation provides a foundation for future research into health promotion during pregnancy.

CHAPTER III

Design and Methodology

This chapter will present the specific parameters used for this research investigation. Pertinent literature was selected and analyzed for evidence of health promotion during pregnancy. Evidence-based research concerning health promotion and pregnancy was reviewed. The literature selection procedure and literature analysis procedure for this research project is explained in detail in this chapter.

Approach

An integrated literature review, which is a review of research that amasses comprehensive information on a topic, weighs pieces 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 by identifying gaps and weaknesses in prior studies to justify the new investigation (Polit & Beck, 2004), evidence-based practice seeks to integrate best research evidence with clinical expertise and client values (Sackett et al., 2000). A summary of the current literature regarding the role of the nurse practitioner in health promotion during pregnancy is provided.

Literature Selection Procedure

A systematic search of CINAHL, MEDLINE, and the Cochrane Library was conducted for the relevant literature concerning the role of the nurse practitioner in health promotion during pregnancy. The reference list accompanying each article was then manually reviewed for further articles pertaining to the subject. 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 expand the knowledge base.

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

References utilized were relevant and applicable to this investigation. The references were obtained from reputable and respected scholarly journals in the health care field. The evidence-based practice procedure for systematic review is comprised of the following five steps (Straus, Richardson, Glasziou, & Haynes, 2005):

"1. Convert the need for information (about prevention, diagnosis, prognosis, therapy, causation, etc.) into answerable 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 of the effect), and applicability (usefulness in our clinical practice).

4. Integrate the critical appraisal with clinical expertise and the client's unique biology, values, and circumstances.

5. Evaluate the effectiveness and efficiency in executing steps one through four and seek ways to improve" (pp. 3-4).

Literature Analysis Procedure

For the purpose of this study, selected literature was organized by source, date, variables of interest, literature type, research tools utilized, research design, sample size, theoretical foundation, references, and key findings. Data was then analyzed in terms of relevancy of findings, summarized, and organized to assist in application of findings to the clinical problem. Chapter Four includes the findings which document the current state of knowledge available according to the research questions regarding the role of the nurse practitioner in health promotion during pregnancy.

Summary

This chapter detailed the specific parameters for this research project. This evidence-based systematic review of literature was conducted utilizing the literature selection procedure and literature analysis procedure detailed above. Through this process, the research questions regarding the role of the nurse practitioner in health promotion during pregnancy will be answered.

CHAPTER IV

Knowledge-Based Findings and Practice-Based Application

The purpose of this chapter is to present the findings of the knowledge base resulting from the evidence-based systematic literature review. Tables showing pertinent findings from this knowledge base are provided with practice-based applications 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 this study.

Knowledge-Based Findings

A systematic literature search of CINAHL, MEDLINE, and the Cochrane Library was conducted by the author in order to obtain the knowledge-based findings. Findings from the literature reviewed are addressed in this section relative to the research questions they generated.

Research Question One

Research question one asks: What factors impact health promotion during pregnancy? The results of this literature review reflected many factors which affect health promotion during pregnancy. The articles reviewed used the words "health promotion during pregnancy" and "prenatal care" interchangeably.

Jackson (2005) stated that nutritional practices of the mother, personal health habits of smoking, use of alcohol and drugs, the ability to seek or the availability of care, social support, stress management, age parity, ethnicity, education, marital status, educational level, income, and family size all have an impact on health promotion during pregnancy. Rautava, Erkkola, and Sillanpaa (1991) conducted research which indicated that mothers with a low knowledge base often experienced poorer pregnancy outcomes.

Curry (1989) studied how non-financial barriers affect prenatal care. The non-financial barriers that Curry found to affect prenatal care were: limited availability of providers of maternity care, insufficient prenatal services in some site routinely used by high-risk populations, experiences, attitudes and beliefs among women that make them disinclined to receive prenatal services, poor or absent transportation or child care, and an inadequate system to recruit hard-to-reach women into care. Chopra and Ford (2005) believe that the barriers that affect health promotion are differences in the values and experiences of the health care providers and clients, poor delineation of roles and responsibilities, lack of institutional capacity, and lack of communication channels for the most poor and vulnerable. They believe that by overcoming these barriers, communities will engage in improved health care.

Sword (1999) concluded that if the experiences and perceptions of socio-economically disadvantaged women were not altered by informed health care delivery, that the low income women would probably continue to encounter significant barriers to prenatal care and relationships that reinforce positions of powerlessness. Goss et al. (1997) found that more prenatal visits do not equate to a healthier pregnancy and fewer perinatal complications if the prenatal visit did not accomplish its purpose. A study conducted by Maupin et al. (2004) found that barriers which prevented women from seeking prenatal care and therefore from receiving health promotion during pregnancy were the fact that they were multigravid, lacked medical insurance, smoked, and had a history of substance abuse. Korenbrot et al. (1989) demonstrated that participation in medical, educational, and social services during pregnancy had a positive effect on the

pregnancy as well as the birth outcome of the infant. A group of women studied by Issel (2000) stated that comprehensive prenatal case management aided them in making their prenatal visits more often.

The review of literature completed suggests that there are a multitude of factors impacting health promotion during pregnancy or prenatal care. The most prevalent factors having a negative impact are low socio-economic status, lack of medical insurance, a history of smoking and drug abuse, lack of transportation, and a low level of education. The factor found to have the most positive impact was case management or comprehensive medical, educational, and social services.

Table 2

Research Question One: Characteristics of Citations Reviewed

Citation	Type	Database
Capik (1998)	Theory-Based	CINAHL
Chopra & Ford (2005)	Data-Based	MEDLINE
Croghan (2005)	Data-Based	CINAHL
Cross (2005)	Data-Based	MEDLINE
Curry (1989)	Data-Based	MEDLINE
Freda et al. (1990)	Data-Based	CINAHL
Goss et al. (1997)	Data-Based	CINAHL
Issel (2000)	Data-Based	MEDLINE
Higgins, Frank, & Brown (1994)	Data-Based	MEDLINE
Jackson (2005)	Theory-Based	CINAHL
Jackson et al. (2005)	Data-Based	Cochrane
Korenbrot et al. (1989)	Data-Based	CINAHL

Lewallen (2004)	Data-Based	CINAHL
McDuffie et al. (1996)	Data-Based	CINAHL
Maupin et al. (2004)	Data-Based	MEDLINE
Rautava, Erkkola, & Sillanpaa (1991)	Data-Based	CINAHL
Sword (1998)	Data-Based	CINAHL
Whitcher (1989)	Data-Based	CINAHL
York, Williams, & Munro (1993)	Data-Based	CINAHL

Note. Total number of citations reviewed = 19.

Research Question Two

Research question two asks: What is the role of the nurse practitioner in health promotion during pregnancy? A comprehensive review of literature found no research regarding the role of the nurse practitioner in health promotion during pregnancy. However, several articles discussed health promotion during pregnancy. Capik (1998) stated that health promotion interventions needed during pregnancy were assessment, education, support, advocacy, and promotion of self-care. Cross (2005) found that continued and increased education in communication skills and education for nurses in health promotion might contribute to a sound knowledge base and promote confidence and competence in practice. Jackson et al. (2005) concluded that health promotion strategies should involve communication of healthy messages and the creation of health promoting environments. Chopra and Ford (2005) believe that if barriers to health promotion were removed that communities would engage in improved health care and individuals would be more likely to receive prenatal care.

Table 3

Research Question Two: Characteristics of Citations Reviewed

Citation	Type	Database
Capik (1998)	Theory-Based	CINAHL
Chopra & Ford (2005)	Data-Based	MEDLINE
Cross (2005)	Data-Based	MEDLINE
Jackson et al. (2005)	Data-Based	Cochrane

Note. Total number of citations reviewed = 4.

Practice-Based Applications

In order to obtain clinical practice guidelines, this author conducted a search for the best practices on the World Wide Web (WWW). Findings from this review are addressed in this section in terms of each research question generated for the scope of this study.

Research Question One

Research question one asks: What factors impact health promotion during pregnancy? Research produced a great number of factors that impact health promotion during pregnancy. The viewpoints from leading health care authorities in federal government have been reviewed including The National Institute of Child Health and Human Development, The Agency for Healthcare Research and Quality's U. S. Preventive Services Task Force, The Centers for Disease Control and Prevention, The Department of Health and Human Services Healthy People 2010, and The Health Resources and Services Administration's Maternal and Child Health Bureau.

A major part of the mission of The National Institute of Child Health and Human Development (NICHD) (2005) is to make sure that women experience no harmful effects

from reproductive processes including pregnancy. The NICHD states that having a healthy pregnancy is one of the best ways to promote a healthy birth. Health care before and during pregnancy, folic acid and prenatal vitamins, and proper immunizations for the mother are all discussed as health promotion activities important to pregnancy. The NICHD also states that a healthy diet, normal weight level, and regular physical activity can help to reduce problems for both the mother and fetus during pregnancy. Research conducted by the NICHD shows that smoking, drinking, alcohol, and using drugs during pregnancy can cause life-long health problems for the fetus. They recommend that women completely stop smoking, drinking alcohol, and using drugs as early as possible before they start trying to get pregnant.

The Agency for Healthcare Research and Quality's (AHRQ) U. S. Preventive Services Task Force (USPSTF) was convened by the Public Health Service to thoroughly evaluate clinical research in order to assess the merits of preventive measures, including screening tests, counseling, immunizations, and preventive medications. The USPSTF does not set forth guidelines for health promotion during pregnancy, but does address bacterial vaginosis in pregnancy, breastfeeding, gestational diabetes, neural tube defects, preeclampsia, Rh incompatibility, and rubella.

The Centers for Disease Control and Prevention (CDC) (2006) states that safe motherhood begins before conception with appropriate nutrition and a healthy lifestyle, and it continues with appropriate prenatal care, the prevention of complications when possible, and the early and effective treatment of complications. The ideal result is a full-term pregnancy without needed interventions, the delivery of a healthy infant, and a healthy postpartum period in an encouraging environment that supports the physical and

emotional needs of the woman, infant, and family. To better understand the burden of maternal complications and mortality and to decrease disparities among populations at risk of death and complications from pregnancy, the Division of Reproductive Health supports national and state-based surveillance systems to monitor trends and investigate health issues; conducts epidemiologic, behavioral, demographic, and health services research; and works with partners to translate research findings into health care practice, public health policy, and health promotion strategies.

Healthy People 2010 is a comprehensive, nationwide health promotion and disease prevention agenda set forth by the Department of Health and Human Services (2004). Healthy People 2010 includes 468 objectives intended to serve as a road map for improving the health of all people in the United States during the first decade of the 21st century. The objectives are organized into 28 focus areas important to public health, including maternal and infant health. Two goals of this agenda are to increase quality and years of healthy life and to eliminate health disparities. The leading health indicators which will be used to measure the health of the nation pertaining to pregnancy are physical activity, overweight and obesity, tobacco use, substance abuse, responsible sexual behavior, mental health, injury and violence, environmental quality, immunizations, and access to health care.

The Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB) defines prenatal care as "medical attention given to an expectant mother and her developing baby." Prenatal care also includes health promotion activities which involve the mother's caring for herself by following her health care provider's advice, practicing good nutrition, getting plenty of rest, exercising sensibly, and avoiding

things that could harm her baby. MCHB states that there are five ways to have a healthy pregnancy and baby: (1) see a doctor or other health care provider from the start of the pregnancy, (2) don't drink alcohol, smoke cigarettes, or take drugs, (3) eat healthy foods, including fruits, vegetables, low-fat milk, eggs, cheese, and grains, (4) stay healthy and exercise sensibly, and (5) have the baby checked by a doctor or health care provider immediately after birth and throughout childhood.

Table 4

Research Question One: Summary of Clinical Practice Guidelines Reviewed

Source of Guidelines	Website URL
Agency for Healthcare Research and Quality	www.ahrq.gov
Centers for Disease Control and Prevention	www.cdc.gov
Healthy People 2010	www.cdc.gov/nchs
Maternal and Child Health Bureau	www.mchb.hrsa.gov
National Institute of Child Health and Human Development	www.nichd.nih.gov

Note. Total number of guidelines reviewed = 5.

Research Question Two

Research question two asks: What is the role of the nurse practitioner in health promotion during pregnancy? The positions from leading health care authorities in federal government have been researched including The National Institute of Child Health and Human Development, The Agency for Healthcare Research and Quality's U. S. Preventive Services Task Force, The Centers for Disease Control and Prevention, The Department of Health and Human Services Healthy People 2010, and The Health Resources and Services Administration Maternal and Child Health Bureau. There was no

information located pertaining to the role of the nurse practitioner in health promotion during pregnancy.

Table 5

Research Question Two: Summary of Clinical Practice Guidelines Reviewed

Source of Guidelines	Website URL
Agency for Healthcare Research and Quality	www.ahrq.gov
Centers for Disease Control and Prevention	www.cdc.gov
Healthy People 2010	www.cdc.gov/nchs
Maternal and Child Health Bureau	www.mchb.hrsa.gov
National Institute of Child Health and Human Development	www.nichd.nih.gov

Note. Total number of guidelines reviewed = 5.

Summary

The purpose of this investigation was to examine current information regarding the role of the nurse practitioner in health promotion during pregnancy and factors that impact health promotion during pregnancy. A systematic review of evidence-based literature and current practice guidelines revealed significant findings that were answered with each research question.

CHAPTER V

Evidence-Based Conclusions, Implications, and Recommendations

This literature review was carried out with the focus of exploring the available literature related to the role of the nurse practitioner in health promotion during pregnancy. Based on the findings of the study, this researcher reached several conclusions concerning the subject matter under examination. These conclusions, implications, and recommendations are based on the findings from a systematic review of literature.

Summary of the Investigation

The purpose of this investigation was to explore the available literature regarding the role of the nurse practitioner in health promotion during pregnancy. A systematic review of literature revealed the need to increase the level of nursing knowledge regarding this issue. This chapter provides a summary of the literature review, including interpretation of the findings and conclusions drawn from the findings, limitations, and implications and recommendations for nursing theory, nursing research, advanced nursing practice, nurse practitioner education, and health policy.

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 practitioner in health promotion during pregnancy. This research project has attempted to consolidate the available material. Conclusions which can be drawn from the findings of the research are that health promotion during pregnancy is imperative and more research is needed regarding the role of the nurse practitioner.

Research Question One

The findings of this comprehensive review of literature and pertinent clinical practice guidelines indicated that there are a multitude of factors that impact health promotion during pregnancy. Both negative and positive factors were identified. Low socio-economic status, lack of medical insurance, a history of smoking and drug abuse, lack of transportation, and a low level of education were established as variables producing a negative impact on health promotion during pregnancy. Positive factors found to have an impact on health promotion during pregnancy were case management or comprehensive medical, educational, and social services, a healthy diet, a healthy weight, regular physical activity, health care before and during pregnancy, proper immunizations for the mother, screening tests, counseling, and preventive medications such as prenatal vitamins and folic acid.

Research Question Two

The role of the nurse practitioner in health promotion during pregnancy is not discussed in the current evidence-based literature or in clinical practice guidelines; however, health promotion during pregnancy was found in the literature reviewed. The following health promotion interventions were identified as important during pregnancy: assessment, education, support, advocacy, and promotion of self-care. Health promotion strategies should also involve communication of healthy messages and the creation of health-promoting environments.

Limitations

Several limitations were identified in this study. The information obtained cannot be generalized beyond the scope of the research reviewed. The conclusions were further

impacted by the lack of nursing research available from the perspective of nurse practitioners. Most of the research found was limited to a specific population; therefore, findings may not prove reliable when tested in other populations. The potential for literature selection bias was another possible limitation of this study.

Implications and Recommendations

The investigation of the literature regarding the role of the nurse practitioner in health promotion during pregnancy resulted in several implications and recommendations focused on nursing theory, nursing research, advanced nursing practice, nurse practitioner education, and health policy. Each of these areas will be discussed in the following sections.

Nursing Theory

The theoretical foundation that provided the framework to explore the current literature regarding the role of the nurse practitioner in health promotion during pregnancy was Nola Pender's Health Promotion Model (HPM). This model presents nurse practitioners with practical guidelines for explaining, predicting, and altering health-promoting activities. Pender's HPM is founded on theories of human behavior, and has served as a framework for research aimed at predicting overall health-promoting lifestyles and specific behaviors. Pender's model focuses on clarifying health-promoting behaviors while using a wellness orientation. The Health Promotion Model is applicable to any health behavior; therefore it is applicable across the entire life span.

Nursing Research

The level of nursing knowledge is limited regarding the role of the nurse practitioner in health promotion during pregnancy. The level of nursing knowledge is

also limited regarding health promotion during pregnancy in general. Further research is needed to discover the full range of behaviors which pregnant women believe are associated with health promotion and that would therefore produce healthy outcomes for the mothers as well as the babies. Only when client-directed behavior change and the rationale for those changes are understood can delivery systems be altered to provide readily accepted health promotion. It is the recommendation of this researcher that additional research in these areas be conducted in order to better serve nurse practitioners and their clients.

Advanced Nursing Practice

Advanced nursing practice can only be enhanced by the implications of this research project. Further research into the role of the nurse practitioner in health promotion during pregnancy is needed to aid in advanced nursing practice. The long-term effects of health promotion also need to be examined for effectiveness.

Nurse Practitioner Education

Education for each nurse practitioner is an ongoing process. It is imperative that providers remain current on standards of care, healthcare information, and technology. With the challenge of providing high-quality, cost-effective care, it is crucial that nurse practitioners provide adequate health promotion to increase compliance with healthcare regimens and prolong longevity in their clients.

Health Policy

Increasing awareness about health promotion is imperative to health care. The nurse practitioner is in an ideal position to identify health promotion activities and their effects in order to improve quality of life for everyone. Health promotion must be

integrated into all client visits. Nurse practitioners must assume a leadership role through education, legislation, and policy change. Content relevant to health promotion should be included in nursing education on every level. Professional organizations should also become involved in the agenda of health promotion.

Summary

This chapter presented the evidence-based conclusions, implications, and recommendations which were derived from this systematic literature review. Interpretation of these findings and conclusions along with the research questions put forth were answered. Implications and recommendations for nursing theory, nursing research, advanced nursing practice, nurse practitioner education, and health policy were all discussed. These findings from the review of literature were detailed as well as the limitations for this research project.

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