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PERCEPTIONS OF FEMALE MENOPAUSE:

A COMPARISON BETWEEN WOMEN FROM THE GENERAL POPULATION

AND FEMALE NURSE PRACTITIONERS

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of the requirements for

Master of Science degree in Nursing

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**PERCEPTIONS OF FEMALE MENOPAUSE:
A COMPARISON BETWEEN WOMEN FROM THE GENERAL POPULATION
AND FEMALE NURSE PRACTITIONERS**

By

Billie Sue Loper Berman

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
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College of Nursing

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ABSTRACT

PERCEPTIONS OF FEMALE MENOPAUSE: A COMPARISON BETWEEN WOMEN FROM THE GENERAL POPULATION AND FEMALE NURSE PRACTITIONERS

By

Billie Sue Loper Berman, R.N., C., B.S.N.

In this study, a comparison of differences is described regarding perceptions of menopause between a convenience sample of women ($N = 271$) of the general population and female certified nurse practitioners ($N = 74$) from Michigan. The "Positive and Negative Perceptions Scale" (Alpha .81) measured positive and negative perceptions of menopause. The scale means for both women ($\bar{M} = 3.32$) and female nurse practitioners ($\bar{M} = 3.65$) indicated a positive perception of menopause, although nurse practitioners were significantly ($p < .01$) found to be more positive in their perceptions to the scale.

Menstrual symptom severity, and menopausal symptoms experienced, were found to be the only variables which were significantly related to perceptions of menopause but did not explain differences found between the groups. Age, education, race, religion, income, employment status, and mother's difficulty were not significantly related to the scale. Interpretation of the findings were discussed as they relate to nursing theory, practice and education. The "Menopause Transition Scale" may be used to evaluate women's perceptions of menopause in the practice setting.

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1991

This thesis is dedicated to my mother
Jean Arlee Westbrook Loper,
my husband Harry Berman,
for his patience and support
my dog "Pepper"
who is always at my side and
to my thesis committee who helped me through the
process of research.

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CHAPTER I
THE PROBLEM

Introduction

Female menopause may be one of the most misunderstood transitions that women experience. Women experience physical, psychological, developmental, familial and social changes surrounding menopause. Women's perceptions of menopause are formulated through personal and interpersonal experiences and reflect the culture, society and environment in which women live (Barlow, Grossett, Hart & Hart, 1989; Beyene, 1986; Boulet, Leheret & Raphagen, 1988; Davis, 1986; Engle, 1987; Flint, 1975; Lock, 1986b).

This research focuses on a comparison of perceptions of female menopause as a positive or negative transition between women from the general population and female nurse practitioners. The introduction to this thesis includes a discussion of views that may be related to menopause as a positive and/or negative transition. The problem, purpose and need for the research is developed. The research questions are presented and the concepts defined. The scope and assumptions of the study are followed by a summary of the problem. The contents of this thesis are provided in an overview of the study.

Perceptions of Menopause

Women's perceptions of female menopause can be both positive and negative (Cowan, Warren, & Young, 1985; Engle, 1987; Millette, 1981; Neugarten, Wood, Kraines & Loomis,

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CHAPTER I

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Perceptions of Menopause

Women's perceptions of female menopause can be both positive and negative (Cowan, Warren, & Young, 1985; Engle, 1987; Millette, 1981; Neugarten, Wood, Kraines & Loomis,

1963). Many women find renewed pleasure and positive changes surrounding menopause while others experience physical and/or psychological distress (Adams, 1986; Carroll, 1983; Farabaugh, 1988; Masling, 1988; McKeon, 1988; McKeon, 1989; Notman, 1984). Not knowing what to expect may be the worst thing for women who approach menopause (Masling, 1989).

Positive aspects of menopause include the end of monthly periods, the end of "premenstrual syndrome" and removal of the fear of pregnancy which may be major concerns for some women. Women may experience a resurgence of sexual activity from an increase in adrenergic hormones and become more assertive after menopause (Heilman, 1980; McKeon 1988; Travis, 1987). There may be more time for couples and opportunities for women to pursue other achievements during this transitional period. During this transitional period, women may look forward to family achievements and grandchildren, after their own children are launched (Engel, 1987; McKeon, 1989).

According to McKeon (1988);

Contemporary thinking views menopause as a normal physiological event and a change in direction. The perimenopausal transition-the 10 to 20 years surrounding the actual menopause-is seen as a natural process and a time of development and change...which can be a new and exciting time of life for most women (p.29).

Some experts believe that women become more positive, self-assertive and productive after menopause (Reitz, 1977; McKeon, 1988). Margaret Mead equated menopause with energy and creativity, and stated that the most creative force in the world is a menopausal woman with zest (Reitz, 1977).

Menopausal women are often in role modeling positions for both men and women. Women in powerful positions are often near the age of menopause and demonstrate positive perceptions of self, body image, growth and development.

In addition to some of the positive perceptions just reviewed, negative perceptions of menopause exist. The "change of life" is a common term used to describe menopause and connotes a negative image and stereotype of menopausal women (Adams, 1986). Negative images of menopausal women embrace the view that something must be wrong with women who experience menopause or that menopause is a disease (Dickson, 1990a; Fee, 1982; Kaufert & Gilbert, 1986; Mac Pherson, 1981; Mac Pherson, 1985; Martin, 1988; Reitz, 1977; Voda & George, 1986).

Some menopausal myths and stereotypes exist such as the notion that menopause ends a woman's sexual life; women suffer mental breakdowns as a result of their inability to manage internal conflict when there is a decline in estrogen; menopausal women are unstable, unbalanced, irritable or cranky; and women are at the mercy of their hormones (McKeon, 1988; McKeon, 1989; Reitz, 1977).

Negative views of menopause may be related to the association of menopause to the aging process (Lock, 1986a; McKeon, 1988). Women who lived beyond menopause, before this century, were considered extremely old and the undesirable aspects of old age came to be associated with menopause (Farabaugh, 1988; McKeon, 1988). In a society with an

emphasis on youth and physical attractiveness, the aging process tends to be perceived as negative (Masling, 1988).

The end of the childbearing years may be a loss for women, especially for those who regret never having had children. The menstrual cycle, which is an integral part of a women's body image and perception of self, ends. Women who experience menstrual problems may anticipate that menopause may also be difficult. Sexual response may decrease during menopause because of loss of desire and/or vaginal dryness (Beard & Lindsay, 1989; Sarrel, 1987; Wilson, 1966). The physical changes associated with menopause may be related to negative perceptions.

Women who approach menopause may be forced to consider the risks associated with menopause against the risks of whether to use hormone replacement therapy (HRT) or alternative management for health promotion. The controversy that centers around the treatment of menopausal women with HRT may be a concern. The fear of cancer risk and the discomfort of menstrual symptoms associated with HRT may outweigh the benefits which are thought to be prevention of menopausal symptoms, osteoporosis and cardiovascular problems (Barber & Studd, 1989; Barrett-Conner, Wingard & Criqui, 1989; Barzel, 1988; Bergkvist, Adami, Person, Hoover & Schairer, 1989; Dupont, Page, Rogers, & Parl, 1989; Ettinger, 1988; Gambrell, 1987; Knopp, 1988; LaRosa, 1988; Lufkin & Ory, 1989; Stevenson, 1990).

The media may have an impact on women's perceptions of

the menopausal experience. For example, the CIBA Pharmaceutical Company, in a recent advertisement promoting Estraderm, depicted a beautiful woman in expensive clothing with the logo, "Now the Change Of Life Doesn't Have To Change Yours: Estraderm, The Enlightened Approach To Menopause", (Better Homes and Gardens, 1990). The back of the advertising page provides a discussion of the risks of endometrial and breast cancer related to estrogen replacement therapy. Women may perceive from this type of advertising, that if they do not use estrogen, they may not have the characteristics of the desirable woman depicted in the advertisement and confusion concerning health risks may result.

Menopause Models

The presentation of menopause found in the literature may influence in a positive or negative direction, the perceptions that women and health care providers have about menopause. Biomedical, feminist and sociocultural literature related to menopause, present separate and conflicting views (Dickson, 1990b; Voda, 1986). These views may confuse women and health professionals about menopause.

The biomedical model characterizes menopausal women as changing organ systems and presents menopause as an endocrinopathy which is associated with osteoporosis, cardiovascular disease, emotional problems and other bothersome symptoms which are best treated by HRT (Barbo, 1987; Beard, 1989; Collins, 1988; Hawkinson, 1938; Notelovitz, 1989; Silverberg & Lindsay, 1987; Stevenson, 1990; Utian,

1989; Wilson, 1966). The risk/benefit ratio and compliance in taking HRT are emphasized and alternative management strategies are mentioned, if HRT is contraindicated (Barzel, 1988; Beauchamp, 1984; Bergkvist, Adami, Person, Hoover, & Schairer, 1989; Dupont, Page, Rogers & Parl, 1989; Ettinger, 1988; Ferguson, Hoegh & Johnson, 1989; Hahn, 1989; Henderson, 1989; Ladwig 1985; La Rosa, 1988; Lobo & Whitehead, 1990; Utian, 1989; White, 1986). Women who perceive menopause as a positive transition may reject the biomedical view and management of menopause.

Feminists recognize that menopause is a naturally occurring event in women's lives which cannot be separated from the aging process. Feminist philosophy challenges what is believed to be gender-biased social practices, the dominance of patriarchal medicine, the medicalization of a naturally occurring event and questions the beliefs and values from which such practices arise (Dickson, 1990b; Voda & George, 1986; Sampsel, 1990). Feminists analyze and criticize the politics and economics involved with gains from drug companies, physicians, and media advertising at the cost of women's health (Dickson, 1990a; Fee, 1982; Mac Pherson, 1981; Mac Pherson, 1985; Martin, 1988; Sandelowski, 1981). The politics and economics of health care is a reality and a concern for all who provide, access and pay for health care. The feminist model may help us understand the perceptions which women may have of menopause.

In the sociocultural model, menopause is viewed as a

culturally constructed event, one to which individuals bring preconceived ideas which influence the behavior and reactions of women experiencing menopause (Beyene, 1986; Davis, 1986; Flint, 1975; Lock, 1986b). Role changes, or cultural attitudes toward aging and menopause, are identified in relation to the discomforts that women experience (Engle, 1987; Lock, 1986a). Researchers who compare cultures indicate that differences in prevailing views and norms concerning menopausal women may determine differences in the responses of menopausal women within these cultures (Beyene, 1986; Flint, 1975). The belief that sociocultural influences determine the discomforts of menopausal females cannot negate the changes in body functions and perceptions that women experience during the transition of menopause.

The Problem

The problem addressed in this research is to determine whether or not similarities or differences in perception of menopause exist between women from the general population and female nurse practitioners. Exploration of variables that may be related to perceptions of menopause, as a positive or negative transition, may provide insight into women's perceptions of menopause. The relationship of these variables to any differences that may be found between the groups is explored.

Women from the general population and female nurse practitioners may view menopause differently. Female nurse practitioners are likely to have different life experiences,

view life differently, have more knowledge about menopause and be more familiar with the literature related to issues and health management of menopause than women from the general population. The perceptions of menopause of nurse practitioners may be influenced by their interactions with women experiencing problems. Assisting women to adapt to menopausal changes may be rewarding for nurse practitioners and influence their perceptions in a positive direction. Negative influences may result when outcomes of interventions are not favorable. Additionally, both female nurse practitioners and women from the general population may have similar experiences related to menopause and are faced with the same dilemma and decision making about management of their own menopause (Holmes, Rovner, Rothert, Holzman, Hoppe, Metheny, & Ravitch, 1987). Perceptions of menopause may influence the judgements and decisions regarding menopause which are made by those within the consumer and provider role. Perceptions may influence actions related to health care.

Differing views about menopause exist. Therefore, any differences in perceptions of menopause that may exist between women from the general population and female nurse practitioners, may contribute to knowledge about perceptions of menopause and may provide helpful information for future transactions. Personal awareness of perceptions is important to the process of communication with others since perception is an integral part of the transactions that occur between individuals (King, 1981). Past and present experiences, and

future expectations, may be attributed to how one perceives their internal and external environment and may be related to perceptions that women have of menopause (King, 1981). A greater understanding of how personal experiences, interpersonal relationships and social influences may be related to perceptions of menopause may provide us with a more holistic view of women's perceptions of menopause and set the stage for creative interventions.

Purpose

The purpose of this study is to compare women from the general population and female nurse practitioners' perceptions of menopause as a positive or negative transition. This research further explores the relationship menstrual symptom severity, menopausal status, menopausal symptoms experienced, the extent of mother's difficulty with menopause and certain demographic variables have to the perceptions of menopause of these two groups.

Need for the Study

The life expectancy of women has increased from 48.3 years of age in 1900, (U. S. Department of Commerce, 1976) to approximately 78 years of age in 1986 (U. S. Bureau of the Census, 1986). The average age at the onset of naturally occurring menopause is approximately 50 years (McKinlay, Jefferys & Thompson, 1971). In 1985, approximately 49.5 million women in the United States were older than 50 years of age. The number is expected to increase to over 52.5 million by the year 2000 (Lane, 1987).

In the future, women will be spending an increasingly greater portion of their lives in the post menopausal state and comprise a larger portion of health care recipients. Greater knowledge and understanding about menopause, and the perceptions that the consumer brings to the health care setting, is needed. Insight into managing the care of women experiencing the transition of menopause is a need for all professionals who provide health care for women (Littlefield, 1986).

Study of the perceptions of a life event, such as menopause, may assist the professional in understanding menopause and also how perceptions may relate to the consumer-provider interaction. Awareness of differences in perceptions may influence the communication process that occurs within the nursing situation and may influence outcomes occurring outside the health care setting.

New insight and knowledge about perceptions of menopause held by women from the general population and female nurse practitioners is needed. One must keep in mind that it is not possible to measure all variables that may influence perceptions of menopause. The perceptions that the consumer and the health care provider bring to the clinical interaction may partly determine the actions which follow. Perceptions that are involved in the interactions between provider and consumer may determine the judgements and decisions that women make regarding menopause.

Research Questions

This study addresses the following research questions:

- 1) Do women from the general population and female nurse practitioners differ in their perceptions of menopause as either a positive or negative transition?
- 2) Is there a relationship between the respondent's perceptions of menopause and the following background characteristics: age, race, religious preference, household income, employment status, educational level, extent of mother's menopausal difficulty, menstrual symptom severity, menopausal status, and menopausal symptoms experienced?

Definitions of Concepts

Perception, female menopause and positive and negative transition are the central concepts for this research and are defined below for this study.

Perception is defined as an ongoing process of organizing, interpreting and transforming information from sensory data and memory. Perception is formulated from personal experience, interaction with others, and information available within the environment. Perception involves the process of human transaction with the environment. An individual's perception of their internal and external environment influences their behavior and gives meaning to their experience and image of reality (King, 1981).

Female menopause is defined as beginning with the final menstrual period and is determined after 12 months of

menstrual cessation (Utian, 1987). Menopause represents the transition from a reproductive state to a non-reproductive state, occurring either naturally or surgically induced. Perimenopause, post menopause, and climacteric are terms often used to describe the transition of menopause.

Positive and negative transition, in this study, refers to the view that menopause is perceived as either a positive or negative event. Women who welcome menopause, and expect to or do feel better after menopause, without negative effects, perceive menopause as a positive transition. Negative transition refers to the view that menopause is a disturbing and an unpleasant experience and that the individual expects to, or experiences, physical and emotional problems as a result of menopause.

Scope of the Study

The focus of this research is on possible differences in perceptions of menopause between two groups of women; women from the general population and female nurse practitioners. Variables which may be related to any differences in perceptions of menopause are described and a comparison is made between the two groups. This research does not employ an experimental or causal design to explore the relationship of perception of menopause to women's beliefs, values, psychological behaviors, habits or outcomes of therapeutic intervention. Additionally, this study does not explore the formulation of awareness of perception or any differences in socialization between women from the general population and

female nurse practitioners.

Assumptions

It is assumed that women and female nurse practitioners participating in this study:

- 1) understood the terminology presented in the instruments administered;
- 2) accurately completed the questionnaires; and,
- 3) completed the research instruments based on their perception of reality about menopause.

Summary

In this chapter, various views concerning positive and negative perceptions of menopause and models found in the literature were presented as an introduction to this research. The importance of understanding whether women from the general population and female nurse practitioners differ in their perceptions of menopause was presented. The purpose of the study and the need for the research was addressed. The research questions were presented and the concepts were defined. The scope of the study and assumptions for the research were provided.

Overview of the Study

This research study is divided into six chapters. In Chapter I, the problem which is the focus of this research is presented. In Chapter II, the problem is further developed by adapting King's conceptual framework to explain the relationship of the concepts of this research. A review of the literature, relevant to the study concepts, is provided in

Chapter III. A description of data collection, limitations of the design and methods used for analysis of the data are described in Chapter IV. Characteristics of the sample, analysis of the research findings, and a summary of the data are presented in Chapter V. In Chapter VI, a comparison of previous research findings to those of this study are discussed. Additionally, the findings of this research are interpreted in relation to nursing theory, nursing practice and nursing education. Finally, recommendations for further research are delineated based on the findings of this research.

CHAPTER II

CONCEPTUAL FRAMEWORK

Introduction

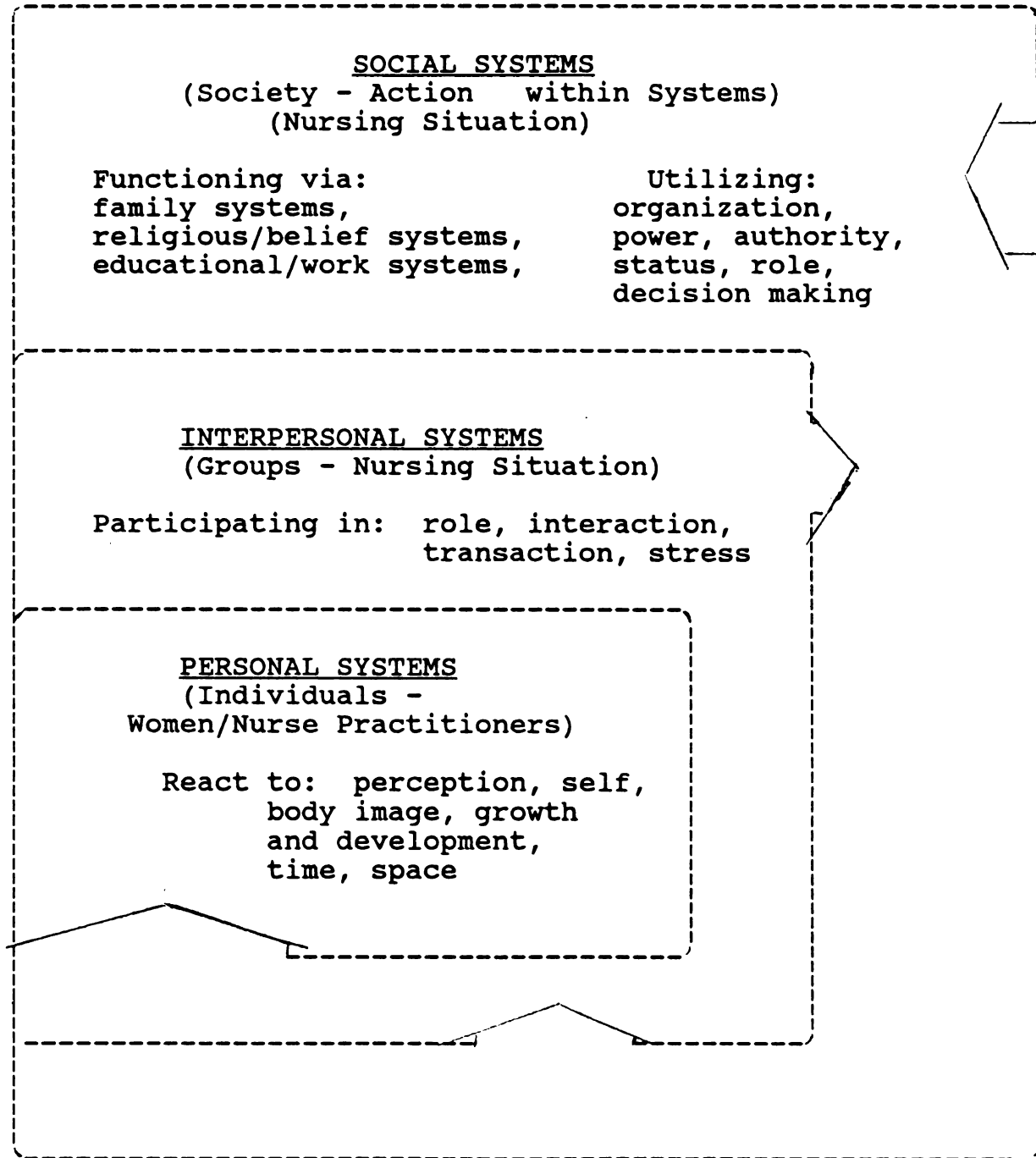
In this chapter, the conceptual framework for this study is presented. King's (1981) theory of dynamic interaction and theory of goal attainment provide the basic framework for the thesis. Models based on King's (1981) theories are presented to show the relationship among the concepts used in this study.

King's Conceptual Framework

The focus of King's (1981) theory of dynamic interaction is the individual's interaction within his/her environment. King (1981) describes environment as three dynamic interacting open systems which include personal systems, interpersonal systems and social systems (Figure 2.1). The environment of the individual allows the personal system to function, process information through the senses, experience perceptions, interact and act within interpersonal and social systems. Within each of these systems the exchange of matter, energy and information occurs through dynamic interaction.

Personal systems, or the world of experience in which individuals actively process information and feelings from their internal environment and perceive information from their external environment, provide a framework to study the perceptions of menopause. The personal system represents a single individual that openly interacts with all other systems and reacts to perception of self, body image, growth and

THE DYNAMIC INTERACTING SYSTEMS

ENVIRONMENT

(Adapted from: King, 1971 & 1981).

Figure 2.1

development, time and space (King, 1981). King (1981) assumes that individuals are social, sentient, rational, reacting, perceiving, controlling, purposeful, action-oriented and time-oriented beings.

Personal systems interact to form dyads, triads and small and large groups called interpersonal systems. The interpersonal systems are open systems which involve interaction and transaction, role and stress (King, 1981). The process of communication involves transactions between individuals and objects which result in the formulation of perceptions, judgments, actions, and reactions, and may result in changes of perception (King, 1981).

Groups, with special interests and needs, form organizations which make up communities and societies called social systems. Social systems are characterized by organization, authority, power, status and decision making. King (1981) suggests that social systems involve the types of relationships that are developed in social groups, characterized by the family system, religious belief systems, educational and work systems, health care systems and other systems that support organization, power, authority, status, decision making and role. Social systems tend to influence an individual's perceptions, judgments and behavior (King, 1981).

Perceptions are involved in every type of interaction and influence judgments and human actions. The individual perceives and reacts to feelings from the internal and external environment and perceives the reality of the

environment based on personal experiences. Perceptions are based on each person's background of experiences and change within the context or situation experienced. Perception is personal, selective and subjective, as each individual experiences spatial and temporal relationships differently, possessing individual integrity and/or disturbances and differing levels of development. Perceptions, judgments, mental actions and reactions are not directly observable, unless communicated. Inferences are made about perceptions between individuals who interact. One cannot assume each person in a situation perceives the events similarly (King, 1981).

The Nursing Situation

The nursing situation is the framework for King's (1981) theory of goal attainment. King (1981) conceptualizes the nursing situation as a dynamic system of interaction and views this process of interaction occurring within open systems. "Behavior or action flows from one's perceptions and perceptions influence one's behavior" (King, 1981, p. 61). Perceptions brought to the interaction may provide the basis of the transaction, may change during the interaction and may help determine goal achievement. The goals formulated are based on perceptions brought to and communicated within the interaction (King, 1981).

The focus of this study is not the dynamic process of the interaction as a whole entity, but the measurement of perception of menopause as a positive or negative transition

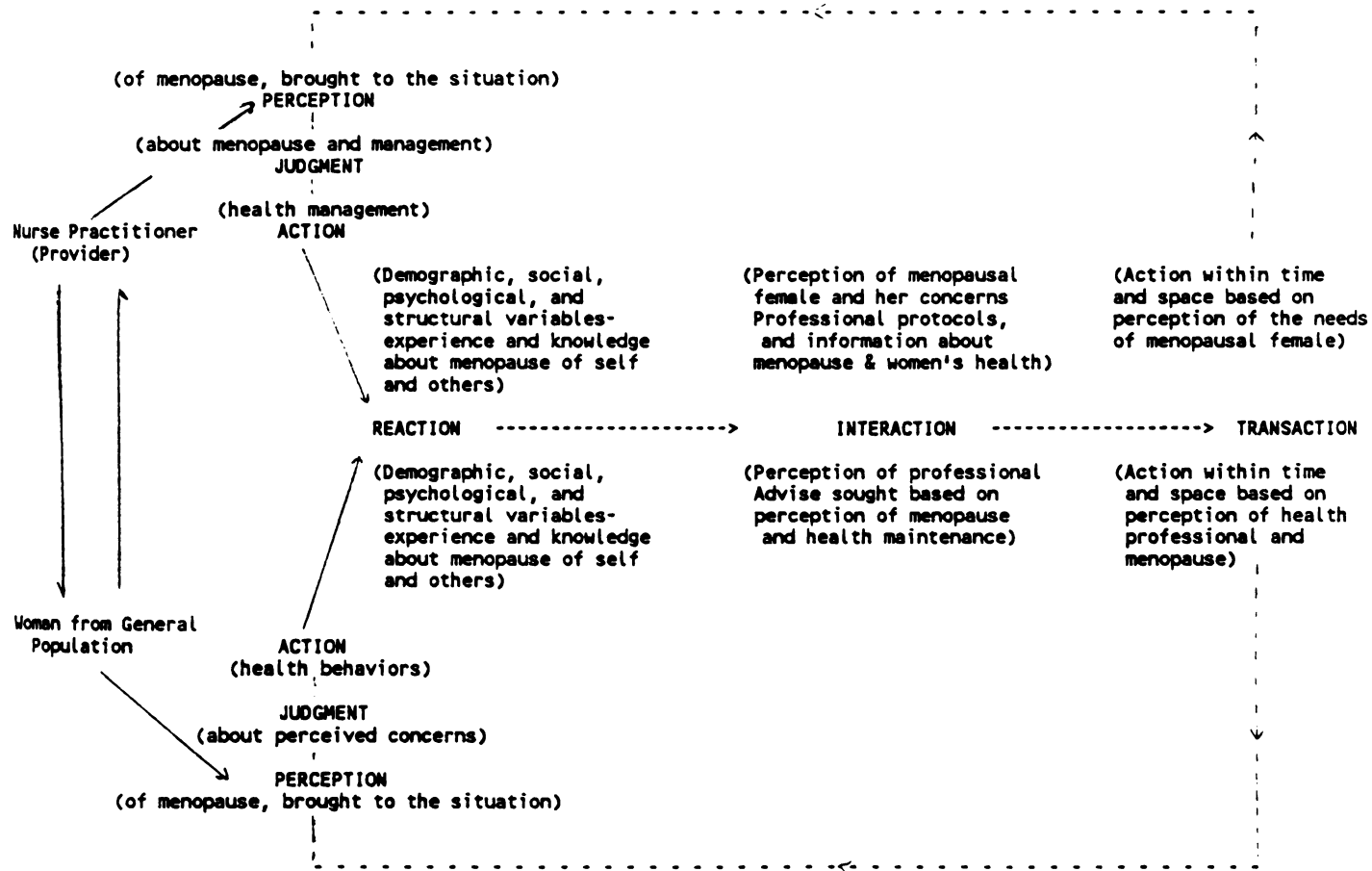
and how these perceptions may be similar or different between women and female nurse practitioners. Being aware that similarities or differences may exist between nurse practitioners' and women's perception of menopause may be useful information for those entering and interacting within the nursing situation.

In this study, perceptions are recorded at a single point in time by the respondents. In this research, perceptions of menopause are explored in relation to demographic characteristics and personal experiences of the respondents. The perceptions of menopause measured in this study are those that may be brought to the nursing situation by women from the general population and female nurse practitioners. When the respondents recorded their past and present experiences, and future expectations, in the instruments, at a set point in time, a form of dynamic interaction took place.

An adaptation of King's (1981) model, (Figure 2.2) provides a framework that illustrates the importance of the role of perceptions to the process of goal attainment. The model depicts a hypothetical nursing situation involving a woman from the general population and a female nurse practitioner. Perceptions, judgment, action, reaction, interaction and transaction, are shown in a feedback loop that starts from and returns to the participants. The dynamic process that occurs within the nursing situation begins with perceptions initially held by the participants that are brought to the "nursing situation". These perceptions may be

THEORY OF GOAL ATTAINMENT

The Nursing Situation and the Relationship of Perceptions of Menopause



(Adapted from: King, 1971 & 1981).

Figure 2.2

communicated through the dynamic process illustrated.

The model illustrates how the participants entering the situation perform different roles. Each individual is characterized by different variables that may influence their perceptions of the menopausal transition. Each participant may influence changes in perceptions of the other within the situation. The reactions, interactions and transactions that may take place would also be partly attributed to the perceptions and judgments communicated between these individuals. The model illustrates that reactions are also based on demographic, physiological, psychological, and developmental experiences. Judgments about goal attainment are established through interaction of the participants. The decisions regarding health related actions, and the behaviors of the consumer which follow the interaction, are partly determined from the perceptions of those participating in the nursing situation.

Relationship of Concepts to the Study

The concept of perception is central to the understanding of the personal system and is defined in relation to the theoretical framework. Perception is different for each individual depending on past experiences, present situations and future plans (King, 1981).

Women who perceive menopause as a positive transition may anticipate and/or experience menopause differently from women who have a negative view of menopause. Likewise, the practitioner who perceives menopause negatively, may practice

differently from one who views menopause as a positive experience. Female nurse practitioners who subscribe to the disease model of menopause may differ from those who adhere to the feminist or sociocultural view of menopause.

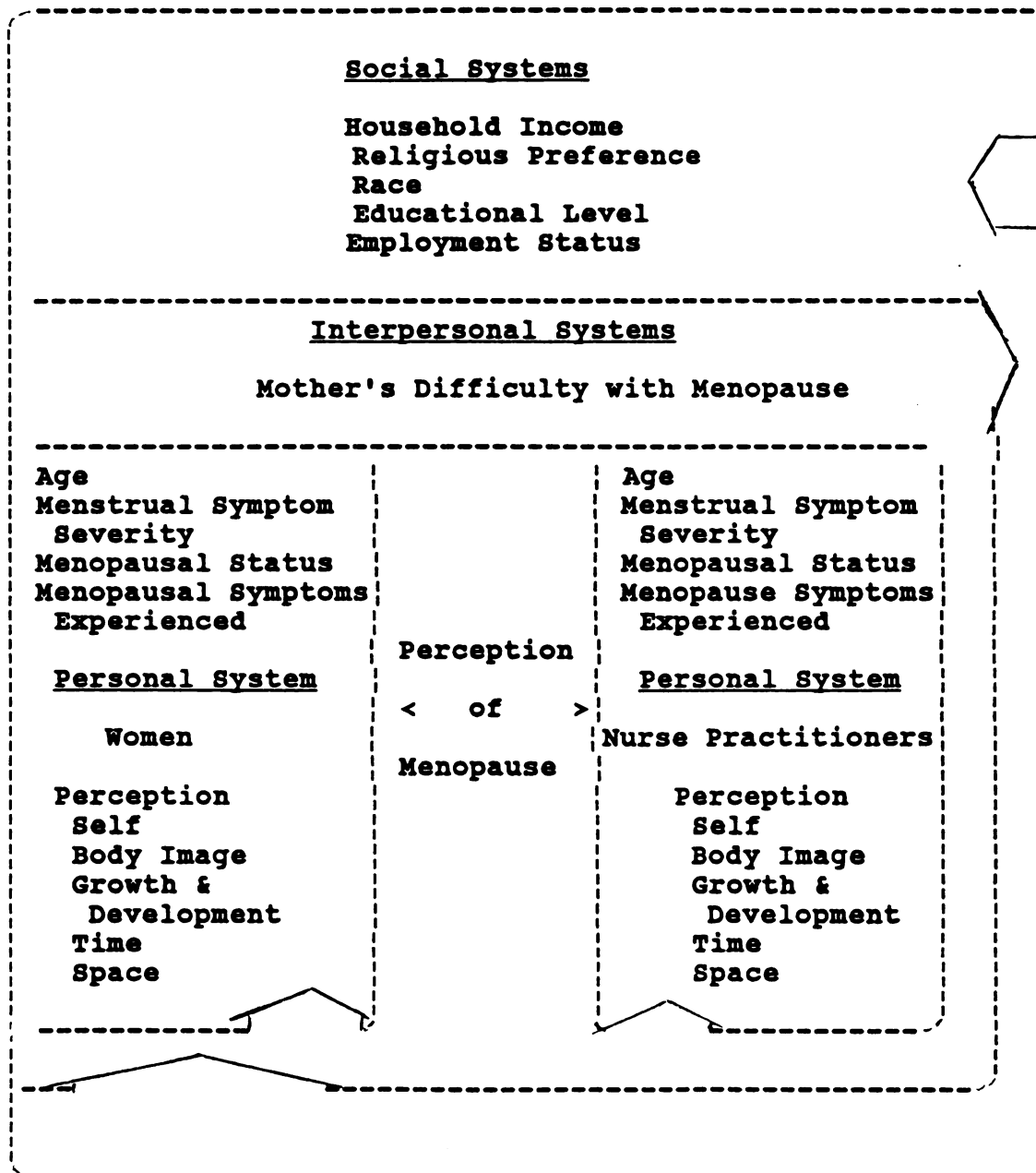
The demographic data presented in Chapter V provides some information about the personal, interpersonal and social systems of the participants. Aspects of the family system, religious or belief systems, educational and work systems, income status, menstrual and menopausal history of the participants, and how they view their mother's experience of menopause, are presented for this research as variables that may influence perceptions of the menopausal transition.

Conceptual Model

The conceptual model for this thesis represents how the relationship of the concepts of this research may be related to the dynamic interacting systems of King's (1981) theory (Figure 2.3). Women and nurse practitioners are illustrated as separate personal systems. The model illustrates each personal system within the same environmental system to represent the similar concepts being studied for each group of women. The dotted lines represent the permeability of boundaries and the ability of how each of the systems interact within the environment.

The personal systems shown in the model represent the groups of women being studied. The variables listed within each personal system may be related to perceptions of menopause. Perception, self, body image, growth and

CONCEPTUAL MODEL

Environment

(Adapted from King 1971 & 1981).

Figure 2.3

development, time and space are represented as concepts related to the personal system (King, 1981). Age, menstrual symptom severity, menopausal status and menopausal symptoms experienced are considered to be related to the personal systems that cannot be separated from perception of self, body image, growth and development. These variables may be related to women's perceptions of menopause.

King (1981) defines the concept of self as a dynamic, open, goal oriented individual with thoughts, ideas, feelings, values and beliefs that change with each new experience and in relation to others (King, 1981). Changes in self perception that women experience during the transition of menopause may be related to disturbances or changes in physiology, as well as, how they perceive attitudes of others.

Patterns of growth and development are characterized by cellular, molecular, and behavioral changes of the self over time which occurs during the transition of menopause. Age is a critical variable which helps to measure various stages of growth and development (King, 1981). The age of the onset of menopause varies among women, however, the mean age is thought to be around 50 years (McKinley, Jefferys & Thompson, 1971). Women of this age group may experience physical and mental changes that may be influenced by positive or negative forces within their environment. The acquisition of acquiring positive growth and development, surrounding menopause, is reflected by meaningful and satisfying life experiences. Interpersonal relationships within a supportive environment

are conducive to helping the individual move toward maturity and successful completion of developmental tasks (King, 1981).

Body image is an integral part of growth and development and is a person's perception of his/her own body, others' reactions to his/her appearance and other's reactions to self. Menopause may influence women's image of their bodies because of the changes that occur such as, change in menstrual cycling, hot flashes, weight gain, changes in facial hair, and/or dryness of the skin.

Menopause is thought to be a transition that occurs during a set point in time. Individual responses, occurring during the process of cellular change, occur over a greater period of time and within space. Space is an essential component of open system frameworks (King, 1981). The women represented by personal systems use space for communication of verbal and nonverbal responses. Personal space is individual and subjective and moves with the person, whereas, territory or boundaries are fixed areas that the individual moves within. The experience of menopause may effect the personal interaction which women experience within their environment. For example, women who experience hot flashes may separate themselves from others because of embarrassment.

Time is change and is relative to mass within space. According to King (1981), time is the subjective perception of a succession of events from past, to present, to future, and is irreversible. Menopause is the point in time when women experience the last menstrual period and the end of

childbearing years. Menopause may be experienced by some women as a significant loss and by others as a gift. Menopause marks a transitional period for women and may be associated with other life events. Women may have increased personal time for pursuing hobbies, traveling, attending college, and/or changing or beginning a new career.

In the conceptual model, perception of menopause is illustrated between women from the general population and female nurse practitioners and represents the central concept being measured. The "Perceptions of Menopause" instrument helps respondents to identify their perceptions of menopause and it is assumed that the reality of their perceptions were recorded. The data presented in Chapter V will provide information that will show whether there are similarities or differences in perceptions of menopause between these two groups.

Mother's difficulty with menopause is shown as a component of the interpersonal system of the women and female nurse practitioners as each personal system may have perceptions of their mother's experience with menopause. The respondents' perceptions of the extent of their mothers difficulty with menopause are shown as part of the interpersonal system. A woman's perception of menopause may be influenced by her mother's menopausal experience.

Household income, race, religious preference, employment status, and educational level, are variables that may be related to perceptions of menopause. The variables are listed

within the circle of social systems to represent characteristics of social systems. Knowledge of the menopause, types of symptoms identified by individuals as bothersome, management of symptoms, and judgments regarding hormone replacement therapy are factors that may be associated with women's and nurse practitioners' perceptions of menopause, but are not analyzed in this research.

Summary

In summary, King's (1981) model of dynamic interacting systems is presented as a framework for studying the perceptions of menopause experienced by women of the general population and female nurse practitioners. King's (1981) theory of dynamic interaction (Figure 2.1) and theory of goal attainment (Figure 2.2) help to explain the concepts related to the problem of this study. The nursing situation illustrates the process of interaction between women from the general population and the importance that perception of menopause may have when brought to the interaction. The focus of this research is the differences in perception that women of the general population and female nurse practitioners have toward menopause. The model for this research, (Figure 2.3), illustrates the relationship of perception of menopause to variables associated with personal, interpersonal and social environmental systems. In chapter III, a review of the literature related to perception of menopause for women and health professionals is presented.

CHAPTER III

REVIEW OF THE LITERATURE

Introduction

This review includes research literature contributing to the understanding of perceptions that women and health professionals have about menopause. Studies which address positive and negative attitudes or perceptions of menopause, by lay women and/or health professionals, are reviewed.

Research Related to Perceptions of Menopause

The scope of this review includes research studies found which are designed to measure perceptions or attitudes that lay women and/or health professionals have toward menopause and the relationship of these attitudes or perceptions to other variables. Neugarten, Wood, Kraines, and Loomis (1963) developed and administered a 35 item checklist entitled "Attitudes Toward Menopause" (ATM) that measures attitudes on a bipolar four point scale. The items were drawn from exploratory interviews and from literature about menopause and were worded in terms of "other women", or "women in general" rather than "self". Through factor analysis, the researchers differentiated seven content areas of attitude which included; negative affect, post menopausal recovery, extent of continuity, control of symptoms, psychological losses, unpredictability and sexuality.

The ATM was administered to 267 women 21 to 65 years of age. The convenience sample was recruited from lists of mother's of graduates from high schools in the Chicago

metropolitan area. Responses to the ATM were analyzed for differences between women by age and educational level. Neugarten et al., (1963) found that younger women's attitudes toward all content areas surrounding menopause were different from those of middle aged women. Younger women expressed more negative attitudes toward menopause than older women ($p = < .05$). No significant differences were found between women who had, and those who had not, attended college to the ATM scores.

The findings of Neugarten et al., (1963) are significant because several other studies have used the ATM or similar instruments to examine relationships among demographic characteristics, attitudes and perceptions of menopause. The "Perceptions of Menopause" instrument employed in this study has similar questions to the ATM. In this study, age and educational level are also explored in relation to self perception of menopause.

Millette (1981) administered a 22 item attitudinal questionnaire, developed from the ATM, to 130 women in a small New England city. Although the researcher did not report statistical data, she reported that the majority of women in her study had a moderately positive attitude toward menopause and a greater percentage of menopausal women had more positive attitudes than those who were not menopausal. Of the sample, 44.6 % indicated that "women should expect some trouble in menopause" and 48.5% believed that "women think of menopause as the beginning of the end". No significant relationships

between the subject's attitudes toward menopause to age, educational level, number of children, length of time working, family income, or mother's menopausal experiences were reported.

Frey (1981), utilizing the ATM, translated the attitudinal responses of 78 women, 40 to 60 years of age, into a wellness-illness continuum. In addition, Frey (1981) presented data describing demographic characteristics of the participants in the study and physical symptoms in relation to menopause. Frey (1981), included the type and frequency of menopausal symptoms experienced, menarche, and current menopausal status. The population was described by analyzing age, marital status, number of children, employment status, race, age of mother's experience with menopause, educational background, family income, and subject's occupation. Women in Frey's (1981) sample were shown to exceed U.S. percentages in areas of income, educational levels, employment status, white ethnicity and profession.

The results of Frey's (1981) study indicated that, in general, the sample surveyed did not have an illness-orientation in their attitudes toward menopause. The mean score was 2.59, when attitudinal item responses were translated into a wellness-illness continuum, (wellness = 4, illness = 1). Twenty eight percent of the women surveyed were post menopausal, 30 percent were going through menopause and 24 percent were post-menopausal, of which 18 percent had undergone a hysterectomy. Frey (1981), indicated that women

40 to 60 years of age, who were going through menopause, showed no greater frequency of physical symptoms than pre-or post-menopausal women. However, this study found that career orientation and type of occupation may have a significant influence on an individual's experience at the time of menopause. The strongest relationship was found between the type of occupation and attitudes toward menopause ($p = .016$), which was translated into a wellness-illness continuum. Women in professional occupations had the highest wellness orientation and women in blue collar occupations were found to have the most illness-oriented responses. Frey (1981) also found that employed women reported lower numbers of symptoms than women not employed ($p = .04$).

In Frey's (1981) study, significance also was found in the relationship between the number of worrisome symptoms and subjects' perceptions of their mothers' experiences with menopause, ($p = .04$). Although significance was found, no meaningful pattern for this variable was established by the results. The relationship of female nurse practitioners' and women's perceptions of menopause to the extent of mother's menopausal difficulties are variables analyzed in the research.

^v Cowan et al., (1985) compared the perceptions of menopausal symptoms among 35 physicians in family practice or gynecology from Florida and California, 43 practicing nurses from a class of students working toward a Bachelors degree at California State University and 35 women who were described as

menopausal (14) or postmenopausal (21) who were recruited from a local church, tennis and exercise club in San Bernardino, California. The age of physicians ranged from 28 to 69 years, the age of the nurses ranged from 23 to 49 years and the age range of the women was 47 to 80 years. Four of the physicians were female and one of the nurses was male.

Cowan et al., (1985) were interested in whether these different groups agreed regarding the frequency, severity, cause and treatment of menopausal symptoms. Subjects were asked to rate the frequency, severity and causality of 15 menopausal symptoms commonly reported in the literature. Subjects were also asked to rate their preference for four possible menopausal treatments; counseling, estrogen therapy, mood-altering medications, and no treatment. In addition, open-ended questions were asked to elicit what major factors contributed to a woman's experience of menopause. Based on the findings, Cowan et al., (1985) suggested that physicians and practicing nurses view menopausal symptoms as more pathological than women who have experienced or are experiencing menopause. Additionally, physicians (male and female), adhere to a more psychogenic model in which psychological causality and symptoms are given greater emphasis than that assigned by menopausal women.

Women rated menopausal symptoms significantly less frequent ($p = < .01$) and less severe ($p = < .01$) than did the physicians and nurses and more somatically caused ($p < .05$) than did the physicians. There were no significant



differences between physicians and nurses for symptom frequency and severity. Additionally, women rated somatic symptoms more severe than psychosomatic symptoms ($p < .01$). Physicians rated psychological symptoms more severe than somatic symptoms ($p < .01$), and nurses' severity ratings did not differ across symptom types. These findings suggest that lay women emphasize somatic symptoms as more frequent and severe, physicians stress psychological symptoms, and nurses do not differentiate by symptom type.

Physicians rated estrogen more favorably than did either lay women ($p < .05$) or nurses ($p < .01$). Physicians were also more in favor of counseling than both lay women ($p < .01$) and nurses ($p < .05$). No differences between groups were found for attitudes toward mood-altering drugs or no treatment. All groups preferred counseling to mood-altering drugs and no treatment (all p 's $< .01$). Both physicians and nurses preferred counseling to estrogen treatment (p 's $< .01$). Lay women did not differ in their preference for counseling versus estrogen treatment. All groups preferred estrogen treatment to mood-altering drugs (all p 's $< .01$). Lay women and physicians preferred estrogen treatment to no treatment ($p < .05$; and $.01$), respectively. The groups did not differentiate between no treatment and mood-altering drugs. Overall, counseling was preferred to estrogen treatment, and both were seen as preferable to mood-altering drugs and no treatment.

The answers tabulated in relation to the open ended

question of "What do you see as the major factor in determining whether a woman will experience difficulty at menopause?" were categorized on the basis of content similarity. A striking result was the extent to which psychological and social factors were identified as the major determinants of menopausal difficulties by participants in each group, with 87% of menopausal women, 85% of nurses, and 67% of physicians identifying at least one psychological or social factor.

Bowles (1986) constructed and validated a semantic differential instrument that measured adult women's attitudes toward menopause. A volunteer sample of 504 women, 18 years of age or older, completed the pilot instrument of bipolar adjective scales. The revised instrument, called the "Menopause Attitude Scale" (MAS), was administered to a second sample of 419 women along with one additional instrument for assessment of convergent and discriminant validity. Three previously developed instruments were used to estimate construct validity in the form of convergent and discriminant validity. Convergent validity was demonstrated by a correlation of $r = .63$ for the MAS with Neugarten's et al., (1981) "Attitudes Toward Menopause" checklist (ATM), ($n = 138$). Discriminant validity was demonstrated by a correlation of $r = .42$ with the MAS with the "Attitudes Toward Old People" instrument (ATOP), ($n = 135$), and a correlation of $r = -.04$ with MAS and the "Attitudes Toward Women" instrument (ATW), ($n = 146$). Factor analysis of MAS scores revealed that

one factor accounted for 61.5 % of the variance for the 20 scales. The Cronbach's alpha reliability coefficient for the MAS was .96.

Multiple regression analysis identified age and menopausal status as significant explanatory variables for the MAS scores. Age and menopausal status were highly correlated with one another. Younger women of 18 to 25 years, and 26 to 35 years, had lower scores which indicated a more negative perceptions of menopause, than older women.

Kroll (1989) developed the "Control Scale" from the "Perception of Menopause" instrument. The "Control Scale" was used to determine the correlates of perceived control relating to menopause for women of the general population. In Kroll's (1989) secondary study, the sample of women were the same women from the general population which are also in the present study. The "Perception of Menopause" and "Sociodemographic" instruments that are used in this study were used in Kroll's study. Additionally, Kroll, (1989) used the Information, Management of Menopause, and Judgment instruments from the primary study. When comparing individuals who were higher and lower in perceived control, there were no significant differences found to the variables of religion, marital status, employment status and household income. A small but significant correlation was found between educational level and perceived control ($r = .13$; $p < .05$) indicating that more highly educated women perceived greater control over the experience of menopause.

A high level of internal perceived control was found to correlate with symptoms experienced, ($r = -.24$; $p < .05$), and with symptoms expected by those not yet experiencing menopause, ($r = -.35$; $p < .05$). Women who experienced or expected to experience fewer menopausal symptoms perceived higher internal control toward menopause than women who reported experiencing more symptoms.

Women whose periods were still regular perceived more internal control relating to menopause than women whose last period was 3 to 12 months ago, or were greater than 12 months ago. A one-way ANOVA determined a statistically significant difference for perceived control over menopause experience from premenopausal women ($p < .05$).

Women who scored higher in knowledge of menopause perceived more internal control, related to menopause, than did women who scored lower ($r = .2365$; $p < .05$). Kroll (1989) also found that women who perceived greater internal control, related to menopause, were more likely to choose taking hormone therapy than women who perceived less control ($r = .1271$; $p < .05$). It was concluded that an intervention addressing women's needs during menopause should be sensitive to the variation in perceived control among women as it relates to differing knowledge and symptom experiences.

Comparisons of perceptions of menopause between women from the general population and female nurse practitioners have not been found in the literature. Additionally, no research studies were found which discuss the relationship of

menopause to sociodemographic variables between these two groups.

Summary

Research related to women's perceptions of menopause indicated that women often have positive views of menopause. Older women may have a more positive view of menopause than younger women. The studies presented show some inconsistency in findings regarding the relationship of women's attitudes or perceptions of menopause to sociodemographic variables. The ATM checklist, or similar instruments have often been used in research related to developing an understanding of the views of women toward menopause. Only one study was found which compares the differences in views of menopause between lay women and health professionals and indicated that health professionals perceived menopause as more pathological than lay women (Cowan, et al. 1985).

Much of the research regarding menopause is limited to narrowly defined problems for this complex transition involving biological, psychological, sociological, and cultural variables. To meet consumer needs, health providers need a greater understanding of life events. Creative approaches to studying perceptions of life events will add to the body of knowledge which helps meet the needs of the consumer.

The literature review, in this Chapter, has provided the reader with a review of research related to attitudes and perceptions of menopause by women and health professionals.

In Chapter IV, the methods and procedures related to this research are presented.

CHAPTER IV

METHODOLOGY AND PROCEDURES

Overview

This study was designed to describe perceptions regarding female menopause, to compare differences in these perceptions between women of the general population and female nurse practitioners and to examine variables that may be related to these perceptions. The samples of the two groups are described using demographic data provided in the two studies.

In this chapter, a discussion of the sampling procedures and criteria for selecting participants is presented. The data collection procedures are also described. The procedure for the protection of human subjects is discussed. Variables are operationally defined, reliability and validity of the instruments are discussed and scoring procedures are provided. A summary of the research design is presented.

Sample

The data for this study was drawn from two studies conducted at Michigan State University. One of these studies was funded through the U.S. Department of Health and Human Services, National Center for Nursing Research, (R01-NR-01245-04), entitled "Women's Judgments of Estrogen Replacement Therapy" conducted by a research team with M. Rothert, Ph.D., R.N., Principal Investigator and co-investigators, G. Talarczyk, N. Schmitt, M. Holmes and D. Rovner. The second study was funded through a Michigan State University All University Research Initiative Grant entitled,

"Nurses' Judgments of Estrogen Replacement Therapy", G. Talarczyk, Ed.D., R.N., Principal Investigator. The sample for the current secondary analysis is based on two convenience samples, women of the general population from the greater Lansing and Detroit areas in Michigan and female certified nurse practitioners from the State of Michigan. Similar sets of questionnaires were administered in the two studies. All of the participants were English speaking and able to respond to written material.

Recruitment

Subjects for the study of women were recruited through churches, synagogues, local women's organizations, and media requests for participation. Newspaper articles, newsletters and a television interview describing the study helped recruit the women. Inclusion criteria for the study were women: 1) 44 to 55 years of age, 2) not presently taking hormone replacement therapy, and, 3) not having had a hysterectomy. Recruitment strategies for the study of women of the general population included contacting organizations and scheduling data collection sessions. Participants recruited by advertisements were asked to attend sessions scheduled in their community. There were full data available on 271 of 283 women recruited. Seventy women from the Detroit area and 201 from the Lansing area were included in this study.

The sample of nurse practitioners was derived from a list of certified nurse practitioners provided by the Michigan Board of Nursing, Department of Licensing and Regulation. The

nurses who were included in the study were all practicing in the State of Michigan. Nurse practitioners who were thought not to have professional experiences with women experiencing menopause (Nurse Anesthetists, Midwives, Pediatric Nurse Practitioners, and Child Psychiatric Nurse Practitioners) were excluded from the study. Nurse practitioners were not excluded from the study if they were older or younger than 44 to 55 years of age, presently taking hormone replacement therapy and/or having had a hysterectomy. Only one male nurse practitioner responded to the questionnaires and was excluded due to the inability to compare the population by gender. Seventy four female nurse practitioners were included in this study.

Field and Data Collection Procedures

Questionnaires were administered to 283 women who volunteered to participate. Women were invited to participate in a question and answer period and debriefing session conducted by nurses following data collection. The nurses answered questions regarding the research instruments and other concerns expressed by the women. Discussion was voluntary but almost all women participated.

Data were collected by having the women complete the written questionnaires at sessions conducted by a Graduate Assistant from Michigan State University and supervised by the research team. Data from the "Sociodemographic" instruments and the "Perceptions of Menopause" instruments (see Appendix A to D) were used for analysis in this study. The consent

form and introduction explaining the women's study are found in Appendix E.

The content of the instruments for the nurse practitioner study were reviewed and approved by the research team. The questionnaires were then mailed to nurse practitioners along with a letter requesting participation in the study and a consent form (Appendix F) explaining the study. Materials were mailed to 200 nurse practitioners, certified in the State of Michigan. There were full data available for 74 female nurse practitioners of the 80 nurses who responded. The nurses were encouraged to phone or write the researchers if they had any questions regarding the study.

Protection of Human Subjects

The funded primary studies were reviewed and approved by the University Committee on Research Involving Human Subjects at Michigan State University. The protection of human rights for this study follows the same criteria as the two funded studies and the letter of approval is found in Appendix G.

Participants were given the opportunity to ask any questions regarding participation in the studies and were given the choice to drop out at any time. Signed consent forms were separated from the questionnaires to maintain confidentiality. No names were attached to the questionnaires. Any publications which result from this study will not reveal the individual identification of the participants in any way.

Operational Definition of the Variables

The instruments for this study were developed in 1987 by the research team headed by M. Rothert, Ph.D, R. N., Principal Investigator, and are described in this section to help explain the variables. The "Sociodemographic" instruments contain similar items for comparison between groups. The instrument administered to the women (Appendix A) had 28 items while the instrument mailed to the nurse practitioners (Appendix B) contained 42 items.

Similar items from the "Sociodemographic" instruments were used to describe and compare the two groups of this sample. In this study, age, household income, religious preference, race, employment status and educational level describe and compare the two groups in the sample. Additionally, data that measured mother's difficulty with menopause, the respondents number and severity of menstrual symptoms, menopausal status and menopausal symptoms experienced were derived from the instruments for group comparison.

The extent mother's difficulty with menopause was determined from item 19, of the women's instrument, and item 41, of the nurse practitioner's instrument. Menstrual symptom number and severity was derived from item 15, A through H, of the women's instrument and item 33, A through H, of the nurse practitioner's instrument. Menopausal status was determined by analyzing the last menstrual period of the respondents. The information derived from item 13, of the women's

instrument, and item 30, of the nurse practitioner's instrument, provided data that indicated menopausal status. Data which described whether or not the women experienced menopausal symptoms were derived from item 18, of the women's instrument, and item 31, of the nurse practitioner's instrument. Additional data were collected on the "Sociodemographic" instruments but not used in this study.

The "Perceptions of Menopause" instrument consisted of 32 items assessing the participant's subjective assessment of the experience or expectations of menopause. The instrument for the women (Appendix C), and nurse practitioners, (Appendix D) provided instructions that asked the respondents to record their perceptions of menopause regardless of whether or not menopause had been experienced. The instrument items are identical. The instructions are written differently but have similar meaning. The "Menopause Transition A priori Scale", shown in Table 4.1, is an A priori scale derived from the "Perception of Menopause" instrument. The scale items were chosen to reflect positive and negative perceptions about menopause.

The response choices formed a Likert-type scale and were "strongly agree", "agree", "neither agree nor disagree", "disagree", and "strongly disagree". Responses were coded 1 through 5, with 5 indicating a more positive perception and 1 indicating a more negative perception for the first four scales. A test for reliability identified items to be removed from the A priori scale because they lacked a consistent

correlated pattern with other items of the scale.

Table 4.1. Menopause Transition A priori Scale.

<u>Item #</u>	<u>Statements</u>
1	Menopause has been/will be an unpleasant experience for me.
2	The thought of menopause is disturbing to me.
10	I expect to (do) experience physical trouble during the menopause.
11	I expect to (do) experience emotional trouble during the menopause.
12	Menopause will bring/has brought many changes to my life.
16	I have been/will be able to experience menopause without problems.
17	Menopause causes problems no matter what you do.
18	Menopause will/did cause me to be sick a lot.
19	Menopause probably will not/did not have a negative effect on me.
23	Women are more tired than usual during the menopause.
25	Menopause is associated with mood changes.

Validity and Reliability

The "Menstrual Reaction Scale" was developed to describe the number and type of menstrual symptoms experienced by the respondents based on a "yes" or "no" response to symptoms listed. The "Menstrual Severity Scale" was developed to describe the level of menstrual symptom severity of the respondents based on a scale of 1, not severe, to 9, extremely severe. Scale items were tested for reliability and resulted in an Alpha of .65 for the "Menstrual Reaction Scale" and an Alpha of .71 for the "Menstrual Severity Scale."

Content for the "Perception of Menopause" instrument was supported by the literature. The instruments were completed by faculty members at Michigan State University, College of Nursing, who volunteered to provide feedback regarding the

validity of the items. This procedure helped insure the content validity of the instrument (Polit & Hungler, 1987).

The reliability of the "Menopause Transition A priori Scale" was assessed by the internal consistency approach which reflects the degree to which the instrument is free of variations due to extraneous factors such as measurement error. A high level of internal consistency was found for a new sub-scale, consisting of six items, the "Positive and Negative Perceptions Scale". The Cronbach's alpha coefficient were ($\alpha = .81$) for women from the general population and female nurse practitioner's and therefore was determined to be a reliable measure of positive and negative perceptions of menopause (Polit & Hungler, 1987).

Table 4.2. Positive and Negative Perceptions' Scale.

<u>Item #</u>	<u>Statements</u>
1.	Menopause has been/will be an unpleasant experience for me.
10.	I expect to (do) experience physical trouble during menopause.
11.	I expect to (do) experience emotional trouble during the menopause.
16.	I have been/will be able to experience menopause without problems.
17.	Menopause causes problems no matter what you do.
19.	Menopause probably will not/did not have a negative effect on me.

Description and Design

The "Positive and Negative Perceptions Scale" was used to compare the differences of perception between the two groups. Comparison of responses from nurse practitioners and

women of the general population to the scale was used to assess possible differences in their perceptions of the female menopause. Data from the "Sociodemographic" instrument were used to describe and compare the two groups. The variables were selected to reflect personal, interpersonal and social influences that may be related to perceptions of menopause and to assess any differences that may be found between the two groups.

Limitations of the Design

A discussion of the limitations of the design follow:

- 1) Responses to written questionnaires may vary from behavior observed in clinical practice. The data which was presented did not simulate the practice setting, however, inferences about clinical practice are concluded from the information provided in this study.
- 2) The study utilizes a convenience sample with the following characteristics:
 - a. The geographic location of the female nurse practitioners is more widely dispersed over the state than the location of women. Therefore, there may be differences in cultural or environmental influences experienced.
 - b. Volunteer subjects perceptions of menopause may differ from those of women who did not volunteer. Therefore, findings cannot be generalized to the population and are limited to the groups identified in this study.

- c. Data were collected over a nine month period at different points in time. Measures of perception over time may differ based on historical influences.
- 3) In a non-experimental design, the differences observed between women of the general population and female nurse practitioners, may be due to a host of other characteristics and not to the differences in professional training. Therefore, any differences found between these two groups of women may be attributed to other factors which may not be identified in this study.

Statistical Analysis

Frequencies, percentages and measures of central tendency were applied, as appropriate, to describe the two groups. A comparison of the descriptive statistics were made between the two groups. Mean scores of the "Positive and Negative Perceptions' Scales" were used to examine how the groups differed in their perceptions of menopause. One way analysis of variance provided the method for determining the statistical significance of difference between the two groups.

The relationship of the variables of age, household income, religion, race, employment status and education, to perception of menopause, were examined employing ANOVA and Pearson correlations depending on the level of measurement of the background variable. Pearson correlations were employed to determine the relationship between mother's difficulty with menopause and the "Positive and Negative Perceptions' Scale".

To determine whether menstrual severity explained any relationship to the scale, Pearson correlation was employed between the scores of the "Menstrual Severity Scale" and the "Positive and Negative Perceptions' Scale". Menopausal status was established for both groups through cross tabulation. ANOVA, employing two way interactions, for analysis of menopausal status and menopausal symptoms experienced, to the scale, was used to examine differences between the groups.

Summary

In this chapter, an overview of the study provided an explanation of the basic design of the study. A discussion of the sampling techniques and criteria for selecting participants was provided. The data collection procedures were discussed. The procedure for the protection of human subjects was presented. The variables were operationally defined and the instruments were explained in terms of content and analysis procedures. The reliability and validity of the scales were presented. A summary of the statistical analysis was provided. In Chapter V, the data for this research study will be presented and interpreted.

CHAPTER V

DATA PRESENTATION AND ANALYSIS

Overview

A summary of the research findings are presented in Chapter V. The characteristics of the sample are described, including a descriptive comparison of women from the general population and female nurse practitioners. The findings related to the research questions are presented, followed by a summary of the findings.

Sociodemographic Characteristics of the Study Sample

The sample for this research consisted of two groups of women. Two hundred and seventy one were women from the general population of the greater Lansing and Detroit areas of Michigan. Seventy four were female nurse practitioners, certified by the State of Michigan, and were from all regions of Michigan. Demographic data describing both groups were age, race, religious preference, employment status, household income, and educational preparation. Additional data for both groups included the extent of mother's menopausal difficulty, history of menstrual symptoms and severity, menopausal status and menopausal symptoms experienced. Mother's menopausal difficulty was derived from the respondent's description of their mother's having no, or some to serious difficulty, during menopause. Data that clarified menstrual symptom severity, included the number and severity of menstrual symptoms experienced by the respondents. Menopausal status was derived from data that measured whether or not women had

experienced a menstrual period in the last 12 months. Finally, data were collected describing whether or not menopausal symptoms were experienced by the respondents.

Description of the Sample

Demographic Characteristics

A summary of demographic data for women of the general population and female nurse practitioners is shown in Table 5.1. The majority of women participating in this study were protestant, caucasian and employed.

Women of the general population ranged in age from 44 to 55 years with a mean age of 49.2 years. The range of age for the nurse practitioners was 28 to 65 years with a mean age of 43.7 years. The majority of nurse practitioners (55.4%) were younger than 44 years and 35.1 % were between 44 and 55 years. Those older than 55 years accounted for only 9.5 % of the sample group.

The household income for the total sample ranged from under \$9,999 to over \$50,000 per year. Seventy one percent of women and 93% of nurse practitioners had household incomes of over \$30,000 per year. Because the data does not measure income beyond \$50,000 per year, mean incomes cannot be determined for comparison.

All of the nurse practitioners had either a diploma or degree in nursing and also some had degrees in other disciplines. In comparison, women from the general population had lower levels of education and 51 % had college degrees.

Table 5.1. Summary of the Distribution of Demographic Variables and Comparison of Women from the General Population and Female Nurse Practitioners.

AGE	Women (n = 271)		Nurse Practitioners (n = 74)	
		Percent		Percent
< 44 years	-	-	41	55.4
44-55 years	271	100	26	35.1
> 55 years	-	-	7	9.5
Total	271	100 %	74	100 %
<u>HOUSEHOLD INCOME</u>				
Under \$9,999	2	.7	-	-
10 - \$14,999	8	3.0	-	-
15 - \$19,999	15	5.5	-	-
20 - \$24,999	19	7.0	1	1.4
25 - \$29,999	21	7.7	3	4.1
30 - \$34,999	33	12.2	9	12.2
35 - \$49,999	55	20.3	19	25.7
Over \$50,000	105	38.7	41	55.4
Missing cases	13	4.8	1	1.4
Total	271	100 %	74	100 %
<u>RACE</u>				
White	255	94.1	73	98.6
Black	7	2.6	1	1.4
Hispanic	6	2.2	-	-
American Indian	1	.4	-	-
Asian/Pacific	2	.7	-	-
Total	271	100 %	74	100 %
<u>RELIGIOUS PREFERENCE</u>				
None	23	8.5	7	9.5
Jewish	15	5.5	3	4.1
Protestant	153	56.5	47	63.5
Catholic	58	21.4	15	20.3
Other	22	8.1	2	2.7
Total	271	100 %	74	100 %
<u>EMPLOYMENT STATUS</u>				
Working full time	136	50.2	58	78.4
Working part time	71	26.2	15	20.3
Retired	6	2.2	-	-
Not employed	50	18.5	-	-
Other (volunteer)	8	3.0	1	1.4
Total	271	100 %	74	100 %

Table 5.1. (Cont'd.)

EDUCATIONAL LEVEL	Women (n = 271)		Nurse Practitioners (n = 74)	
		Percent		Percent
Less than 12 years	4	1.5	-	-
H.S. graduate	61	22.5	-	-
> H.S./No degree	67	24.7	-	-
Tech/Assoc. Degree	16	5.9	15	20.3
Baccalaureate Degree	68	25.1	12	16.2
Masters Degree	42	15.5	45	60.8
Doctoral Degree	8	3.0	2	2.7
Other Education	5	1.8	-	-
Total	271	100 %	74	100 %

A summary of all educational degrees held by the group of nurse practitioners in this sample are shown in Table 5.2. Only 44 nurse practitioners (59.5 %) were prepared with Masters of Science degrees in Nursing. Twenty nurses had degrees in other disciplines in addition to their nursing education.

Table 5.2. Summary and Distribution of Educational Preparation of Female Nurse Practitioners.

	n = 74	Percent = 100%
Diploma Nursing Degree	27	36.5
Associate Degree/Nursing	11	14.9
Associate Degree/Other	0	0
Bachelors Degree/Nursing	48	64.9
Bachelors Degree/Other	15	20.3
M. S. in Nursing	44	59.5
M. S. in Other Discipline	4	5.4
Ph. D. in Nursing	1	1.4
Ph. D. in Other Discipline	1	1.4
Nurse Practitioner Program	29	39.2

Mother's Menopausal Difficulty

Mother's menopausal difficulty was determined by asking the respondents to indicate level of mother's difficulty with menopause. One hundred twenty seven women from the general population (46.9 %) and 62 nurse practitioners (83.7 %) indicated that their mother had some to serious difficulty when experiencing menopause.

Menstrual Symptoms and Severity

The number of menstrual symptoms were determined by a "yes" or "no" response. An average of 4.44 symptoms were experienced by the total sample. All women in the sample indicated experiencing at least one menstrual symptom. The "Menstrual Reaction Scale", ($N = 345$; $\bar{M} = 4.44$; $S.D. = 2.84$; $\text{Alpha} = .65$) shown in Table 5.3, illustrates by group, the numbers of respondents who experienced menstrual symptoms and the type of symptom experienced.

Table 5.3. Menstrual Symptoms Experienced by Group Membership.

<u>Symptom</u>	<u>Women</u>	<u>Percent</u>	<u>Nurse Practitioners</u>	<u>Percent</u>
Cramps	194	71.6	56	75.7
Excessive Bleeding	178	65.7	38	51.4
Spotting	130	51.7	38	51.4
Irregular Periods	118	43.5	23	31.1
Water Retention	172	63.5	49	66.9
Tension	218	80.4	54	73
Headaches	120	44.3	33	44.6
Other Symptoms	84	31.0	26	35.1
	n = 271	100 %	n = 74	100 %
Mean Symptoms	$\bar{M} = 4.48$		$\bar{M} = 4.28$	

The "Menstrual Severity Scale" formed a reliable scale ($\text{Alpha} = .71$) which provided a measure of severity on a scale of 1 (not severe) to 9 (severe) of the symptoms identified on the "Menstrual Reaction Scale". The mean scale score for items of the "Menstrual Symptom Severity Scale" was 2.45 with a standard deviation of 3.63, which indicates for the entire sample of women ($n = 335$), relatively low levels of menstrual symptom severity were experienced. The mean scale score of the "Menstrual Symptom Severity Scale" for women was 2.46, and for nurse practitioners was 2.34.

Menopausal Status and Symptoms

In order to determine menopausal status, the respondents were asked to identify when they experienced their last menstrual period. Fifty eight women from the general population (21.6%) and 15 nurse practitioners (20.6%) indicated not having had a menstrual period for over 12 months and were therefore considered menopausal. Those who indicated they continued to have menstrual periods, and considered not menopausal, included 211 women from the general population (78.4%) and 58 nurse practitioners (79.4%).

The respondents were asked whether or not they had experienced menopausal symptoms. One hundred forty eight women from the general population (55%) and 17 nurse practitioners (23.3%) indicated having experienced menopausal symptoms. One hundred twenty one women from the general population (45%) and 56 female nurse practitioners (76.7%) indicated they had never experienced menopausal symptoms. One

hundred eleven women from the general population (41.3%) and 13 nurse practitioners (17.8%), who were not menopausal, indicated experiencing menopausal symptoms. Only 37 women from the general population (14.8%) and four nurse practitioners (5.5%), who were menopausal, indicated having experienced menopausal symptoms.

The number of menopausal symptoms experienced by the total sample of women included 165 women (48.3%). One hundred seventy seven women (52.7%) did not experience symptoms. A small percentage of the sample indicated having experienced menopause (21.1 %). A greater percentage of women from the general population (54.5 %) indicated having experienced menopausal symptoms, compared to nurse practitioners (23.3 %). The data presented in Table 5.4 shows, for women from the general population and female nurse practitioners, the relationship between menopausal status and presence or absence of menopausal symptoms.

Table 5.4. Menopausal Status by Menopausal Symptoms: A Comparison of Women from the General Population and Female Nurse Practitioners.

Women				Nurse Practitioners			
Menopausal				Menopausal			
M	S	Yes	No	Total	Yes	No	Total
E	Y	37	111	148	4	13	17
N	M	13.2%	41.3%	54.5%	5.5%	17.8%	23.3%
O	P						
P	T	No	21	100	11	45	56
A	O		7.8%	37.2%	15.1%	61.6%	76.7%
U	M						
S	S	Total	58	211	15	58	73
E			22.6%	78.4%	20.6%	79.4%	100 %

Summary of the Sample Characteristics

The two sub-groups in the sample differed in group size and age of subjects. Greater percentages of nurse practitioners were employed, had higher household incomes and higher levels of education. In addition, the educational preparation of nurse practitioners differed in that they pursued nursing education.

A greater percentage of nurse practitioners indicated that their mother's had some to serious difficulty during menopause. Menstrual symptoms were experienced by the entire sample. The percentage of women who experienced menstrual symptoms were similar for both groups. Relatively low levels of menstrual severity existed for the sample groups.

Finally, a larger portion of the group of women from the general population experienced menopausal symptoms, however, the portion of women and nurse practitioners that indicated experiencing menopause was similar.

Perceptions of Menopause Among Women from the General

Population and Female Nurse Practitioners

Findings of the Study

Data were presented in relation to the research questions of this study:

- 1) Do women from the general population and female nurse practitioners differ in their perceptions of menopause as either a positive or negative transition?
- 2) Is there a relationship between the respondent's perceptions of menopause and the following background

characteristics: age, race, religious preference, household income, employment status, educational level, mothers menopausal difficulty, menstrual symptom severity, menopausal status, and menopausal symptoms.

Mean scale scores on the six item "Positive and Negative Perceptions' Scale" were computed, employing a one way ANOVA, to address the first research question. Female nurse practitioners were shown to perceive menopause significantly more positively than women from the general population (3.65 compared to 3.32; $p < .01$). However, both groups had scale means greater than 3.0, given the possible range of scores from 1 to 5. This indicated, on average, that both groups viewed the menopausal experience as positive. Table 5.5 displays the findings.

Table 5.5. Comparison of Mean Scale Scores from the "Positive and Negative Perceptions' Scale" for the Sample Groups.

	n	Mean	S.D.	% of Variance Explained	Probability
Women	271	3.32	.6460		
Nurse Practitioners	74	3.65	.5818		
Total	345	3.39	.6470	4.61%	.0001

To address the second research question, the relationship of demographic characteristics, perception of mother's menopausal difficulty, menstrual symptom severity, menopausal status and menopausal symptoms experienced were analyzed in relation to the scale scores of the "Positive and Negative

Perceptions' Scale".

Pearson correlations were employed to analyze the relationship of age to the scale scores. No significant correlation between age and the scale scores were found for the total sample ($N = 345$) or for female nurse practitioners ($n = 74$). A weak, but significant correlation, was found for women aged 44-55 years from the general population ($n = 271$; $r = .012$; $p < .05$) to the scale. The interpretation of this finding was that among women from the general population, older women perceived menopause more positively.

Table 5.6. Relationship of Age and Mean Scale Scores on the "Positive and Negative Perceptions' Scale" for Sample Groups.

	n	(r)	Probability
Nurse Practitioners	74	0.1232	.296
Women	271	0.1520	.012
Total Sample	345	0.0122	.821

Employing a one-way ANOVA, a comparison of scores on the "Positive and Negative Perceptions' Scale" by religion, race, employment status and household income yielded no significant findings ($p > .05$). Therefore, the differences found between women from the general population and female nurse practitioners cannot be explained by demographic variables.

Since the educational level of women from the general population and female nurse practitioners was different, examination of the relationship between educational level and the "Positive and Negative Perceptions' Scale" scores were

done separately for each group. There were no significant relationships found between educational levels and scale scores for either group, ($p > .05$).

Pearson correlations were computed for the combined sample to analyze the relationship of mother's menopausal difficulty to the scale scores of the "Positive and Negative Perceptions' Scale". The findings indicated that mother's menopausal difficulty was not significantly related to mean scale scores of the "Positive and Negative Perceptions' Scale," ($p > .05$).

Menstrual Symptom Severity

Table 5.7 is a summary of the relationship between menstrual symptom severity, derived from the "Menstrual Severity Scale" scores, and the scores on the "Positive and Negative Perceptions' Scale". Pearson correlations for both groups, and the combined sample, were significant ($p = < .01$). The negative correlations indicated that for women who experienced a higher level of menstrual severity, a more negative perception of menopause resulted.

Table 5.7. Relationship of "Menstrual Severity Scale" and the "Positive and Negative Perceptions' Scale" for the Sample Groups.

	n	(r)	Probability
Women	262	-0.2986	< .01
Nurse Practitioners	73	-0.2175	< .01
Combined Sample	335	-0.2823	< .01

Menopausal Status and Menopausal Symptoms

There were no significant findings, ($p > .05$), between menopausal status and the "Positive and Negative Perceptions Scale", employing ANOVA. That is to say, for the combined sample, menopausal women, ($n = 73$; $M = 3.45$), did not differ in their perceptions of menopause when compared to women who were not menopausal, ($n = 269$; $M = 3.38$).

In the combined sample, women who experienced menopausal symptoms ($n = 165$), have a mean perception scale score of 3.27 when compared to those without menopausal symptoms ($M = 3.50$; $n = 177$). When comparing menopausal symptoms to the scale scores, a weak but significant ($p < .05$) difference was found for the combined sample. The findings of the two-way interactions, employing ANOVA, revealed that both symptomatic experience and group membership had an independent effect on women's perception of menopause. In addition, since the differences in perceptions between women from the general population and female nurse practitioners persisted, even after controlling for the effects of symptomatic experience, it was clear that differences in symptomatic experience cannot explain the observed differences between women from the general population and female nurse practitioners.

Table 5.8. Comparison of Mean Scale Scores on the "Positive and Negative Perceptions' Scale" by Menopausal Symptoms and Group Membership.

	Women	Nurse Practitioners	Total
Menopausal Symptoms	150	17	167
	M = 3.21	3.73	3.26
No Menopausal Symptoms	121	57	178
	M = 3.44	3.63	3.58
Total	271	74	345
	M = 3.32	3.65	3.39

Two Way ANOVA	Sum of Squares	Degree of Freedom	Probability
Main Effects:			
Absence/Presence of Menopausal Symptoms	2.49	1	.012
Group Membership (Women vs. Nurse Practitioners)	4.26	1	.001
Interaction Effect: Symptoms By Group	<u>1.15</u>	1	.088
Total Sum of Squares	144.01		

In order to control for the possible effect of age differences, women of the general population were compared to only those nurse practitioner's within the same age group of 44 to 55 years. In Table 5.9, a one-way ANOVA indicated that differences in perceptions of menopause between the groups persist when age is controlled.

Table 5.9. Comparison of Mean Scale Scores of the "Positive and Negative Perceptions' Scale" for Women 44 to 55 Years.

	n	Mean	S.D.	% of Variance Explained	Probability
Women (44-55)	270	3.31	.6471		.0001
Nurses(44-55)	25	3.85	.5988	5.07%	

Summary

In this chapter, data were presented to describe and compare the demographic characteristics of the study sample. Additionally, data were presented which described mother's menopausal difficulty, menstrual symptom severity, menopausal status and menopausal symptoms. Analysis and presentation of data which described the research questions for this study were presented along with a summary of the findings.

The variables for this research design were presented to describe and compare women from the general population and female nurse practitioners and their perceptions of menopause as a positive or negative transition. Analysis of the data indicated that female nurse practitioners have a significantly more positive view of menopause than women of the general population. Variations in race, religious preference, household income, employment status, and educational level were not significantly related to the scale scores. There were no significant correlations for perceptions of mother's menopausal difficulty to the perceptions of menopause for women, or female nurse practitioners, or for the combined groups.

The findings of this research included information about menstrual symptoms experienced. Menstrual symptom severity was shown to be significantly related to perceptions of menopause. For women who experienced a higher level of menstrual severity, a negative perception of menopause was indicated.

Menopausal status was not found to be related to perceptions of menopause. Menopausal symptoms were significantly related to perceptions of menopause. Menopausal symptoms did not explain any differences found between the two groups to the "Positive and Negative Perceptions' Scale".

In Chapter VI, a comparison of the findings of this study to previous research is described. The discussion will include a presentation of the findings which are discussed in relation to the theoretical framework, implications for nursing practice, education, and future research.

CHAPTER VI

Recommendations and Implications

Overview

In this chapter, the significant findings of this research are presented. A comparison is made to previous research found in the literature. The conceptual model proposed for this research is analyzed in relation to the study findings. Implications for nursing education and practice are delineated. Based on the findings of this research, recommendations for future research are offered.

Presentation of Significant Findings

The total sample of women in this study, on average, had positive perceptions of menopause. Female nurse practitioners were significantly more positive in their perceptions of menopause than women from the general population. There were no significant findings which explained how the groups differed in perceptions of menopause.

Variables which were significantly related to the "Positive and Negative Perceptions' Scale" included age of only the women from the general population, and for the combined sample, menstrual symptom severity and menopausal symptoms experienced. Among the group of women from the general population, older women had a more positive perception of menopause. For the combined sample, those who indicated a higher level of menstrual symptom severity held a more negative perception of menopause regardless of age. For the combined sample, women who experienced menopausal symptoms had

a significantly lower scale mean than those who did not have menopausal symptoms, regardless of menopausal status. Household income, religious preference, race, employment status, educational level, menopausal status, or how the respondents viewed their mothers difficulty with menopause, were not found to be related to positive or negative perceptions of menopause.

Comparison of Findings in Relation to Previous Research

There were no previous research studies found that compared positive or negative perceptions of menopause between women from the general population and female nurse practitioners. Cowan's et al. (1985) study, provided a comparison of physicians', practicing nurses' and lay women's views regarding frequency, severity, causality and treatments of menopausal symptoms. Cowan's et al. (1985) findings indicated that when comparing physicians, nurses and lay women, the health professionals demonstrated a more pathological view of menopause than the lay women. Estrogen therapy was more frequently chosen by physicians as the best treatment for menopause. Additionally, women indicated more often that psychological and social factors were a determinant for menopausal distress when compared to the nurses and physicians in the study. The findings of this research differed from Cowan's et al. (1985), in that female nurse practitioners had more positive perceptions of menopause than women from the general population. The research design and convenience sampling, in Cowen's et al. (1985) study, differed

from this research study and may contribute to differences in the direction of the views between lay women and health care professionals.

The Neugarten et al. (1963) study was designed to test lay women's attitudes toward menopause and found that younger women had a more negative view of menopause than older women. Similar findings were found for the group of women from the general population in this study. The items of the "Perceptions of Menopause" instrument developed for this study were similar to items in Neugarten's et al. (1963) "Attitude Toward Menopause" (ATM) instrument. Neugarten et al. (1963) found no significant relationship between the educational level of women and menopausal attitudes, which is similar to the findings of this research.

Millette (1981), found that lay women demonstrated a positive attitude toward menopause when utilizing Neugarten's ATM instrument. No significant relationships for the variables of age, education, employment status, income or mother's menopausal experience were found in relation to the scale. Millette's (1981) study, indicated no relationship between age and attitude toward menopause, while this study found a weak but significant correlation ($r = .15$; $p < .05$) between age of women from the general population to the "Positive and Negative Perceptions' Scale". Although the instruments were different, the findings for this study have similarities to Millette's (1981) findings.

The women in Frey's (1981) study did not have a negative



attitude or illness orientation toward menopause. The finding that women had positive attitudes toward menopause is congruent with the findings of this research.

Bowles, (1986) employed more advanced statistical analyses to test the validity of the "Menopause Attitude Scale" (MAS) than was used for the present study. In this study, validity of the scale items of the "Positive and Negative Perceptions' Scale" were established through conceptual clarification of the items and were drawn from literature review. Reliability was tested through Chronbach's alpha coefficient similar to that done for the MAS. In Bowles' (1986) study, age and menopausal status were found to be significantly related to the MAS scores.

In Bowles' (1986) study, the range of age was between 18 to 65 for lay women participants. Women who were older, and were menopausal, had more positive perceptions of menopause. Menopausal status was not found to be related to perceptions of menopause in this study, although age was shown to have a weak relationship for women of the general population, but not for the female nurse practitioners. The differences in the scales, statistical design and age range for women from the general population in this study, may account for the different findings when comparing the results of Bowles' study to the present study.

In summary, this study was consistent with the findings of Millette (1981) and Frey (1981) who reported that women have positive perceptions of menopause. The findings of



Neugarten (1963) and Bowles (1985) suggested that older women, had a more positive attitude, or perception of menopause, than younger women, which was consistent with the findings of this study for women from the general population but not for female nurse practitioners. Consistency with Neugarten et al. (1963) and Millette (1981), in relation to educational level to views of menopause, was also found. The findings of this research differed from Bowles' (1985) finding that menopausal status was related to attitudes of menopause, and Cowen's (1985) finding, that health professionals view menopause more pathologically than lay women.

Implications for Nursing

Theoretical Framework

King's (1981) theory of dynamic interaction and theory of goal attainment guided this research. The theoretical framework helped to explain the concepts of the design of this research. In Chapter II, a conceptual model was proposed. The findings of this research are discussed in relation to King's (1981) theoretical framework and the proposed conceptual model.

In this research, the focus of the interaction was not the interaction between the woman or nurse practitioner, but between the personal system of the respondents and their environment. The respondents communicated their perceptions at a set point in time, drawing from past and present experiences and future expectations about menopause. One may view the actions of the participants who responded to the



instruments as a process of dynamic interaction. The respondents recorded past and present experiences and future expectations regarding perceptions of menopause. They also communicated personal characteristics and health related information. The findings suggest that personal experience, derived from internal perceptions, is related to the perception women have toward menopause.

The model, (Figure 2.3), illustrated the personal systems of the two sample groups within the environment of the systems framework. Perception of menopause, which was found to be significantly different between the two groups, was illustrated as the central concept between the two personal systems shown in the model. The finding that menstrual symptom severity and menopausal symptoms were related to perceptions of menopause, support an understanding of King's (1981) concept of perception. Perceptions of individuals are derived from feeling states. Symptoms elicit feelings and perceptions of self and body image. The experience of menstrual and menopausal symptoms may also have an effect on growth and development, over time, and within spacial relationships. Age, which was thought to be a personal characteristic, was related to perceptions for only the women from the general population. Menopausal status, which is not a feeling state, was not found to be related to perceptions of menopausal.

The non significant findings of this research illustrate that within interpersonal and social systems were not related



to perceptions of menopause. These variables were helpful in describing the groups depicted in the personal systems. Other variables, of an interpersonal and social nature, that were not analyzed in this study, may be related to differences in perceptions found between the groups.

Perception is the central concept of King's (1981), theory of goal attainment and theory of dynamic interaction. By using King's (1981) theory as a guide, a greater understanding of the relationship of the concepts of this research was provided. The findings support an understanding of the concept of perception, but do not support or discredit King's (1981) theory.

Nursing Education

The following recommendations for nursing education could be applied to undergraduate, graduate, and continuing education programs for nurses. Nursing education should include theoretical frameworks for understanding and predicting perceptions of individuals within the interaction process within their environment. Variables that may affect the quality of the interaction between the nurse and consumer, such as differences in perception, would be especially important to include in nursing education. Educating nurses about how perceptions may differ between themselves and others may contribute to their understanding of the communication process.

Nurse educators must prepare nurses to meet the demands and challenges of caring for the menopausal female. Based on

the findings of this study, nursing education should include curricular content regarding how women may view menstruation and menopause. The content should encompass supportive and holistic approaches for helping women during life transitions. Components of sex education for all ages of women, especially for older women, and how this may influence perceptions of menopause, should be included. The study of growth and development, self perception, body image and the study of developmental life transitions are important components of nursing education.

Nursing education should include content on family assessment and the effect that developmental transitions have on family relationships. The dynamic interaction within a supportive family structure may be a determining factor for the successful transition toward positive growth and development of menopausal women. Nurses must be aware of how developmental transitions are affected by others and how to assist the individual and significant others to be supportive. Nurses prepared to understand the impact of developmental transitions in relation to the individual, family and society, will be able to creatively practice the art and science of nursing.

Nursing Practice

Implications for nursing practice are delineated based on the findings of this research and the discussion of nursing theory and education. The central concept studied in this research was perceptions of menopause. The basic assumption

of nursing practice is that the nurse and consumer come together to share perceptions, communicate information, mutually set goals and take action to attain goals (King, 1981).

Awareness of how perceptions, brought to the practice setting, may differ between practitioners and those with whom they interact, should be considered. Awareness of how perceptions may change, and affect the formulation of goals through the transactions that take place, is also an important consideration for nursing practice. The quality of the interaction would include accurate assessment of health related problems and life events which may influence perceptions of the menopausal transition.

Findings of this research have implications for nursing practice, particularly in relation to assessment of perceptions and differences that may occur between the practitioner and the consumer. Assessment involves a variety of interviewing techniques for validation of perceptions and may include value clarification and active listening, as well as the utilization of a variety of tools for assessment of knowledge, perceptions and health risk assessment. Accurate assessment of menstrual and menopausal symptoms would contribute to a greater understanding of how women perceive menopause. Additionally, assessment of women's perceptions of menopause may help to establish appropriate intervention and mutually formulated goals.

The "Positive and Negative Perceptions' Scale", developed

from this study, could be utilized as a tool to assess positive or negative perceptions of menopause as part of the history taking process within the practice setting. Discussion of item responses between the practitioner and menopausal female would help to clarify any differences in perceptions and lead to more accurate assessment of concerns.

Nursing diagnoses generated from assessment of the individual, facilitate nurses in planning interventions and in identifying desired outcomes. Formulation of nursing diagnoses of health perceptions are helpful in planning to meet the health related needs of the menopausal female (Houldin, Saltstein, & Ganley, 1987; Gordon 1987).

Health promotion and maintenance activities for menopausal women involve appropriate health screening, medical treatments and more conservative management based on an accurate health risk assessment (U.S Preventive Health Service, 1989). A variety of interventions exist that can assist women through the transition of menopause. Nurses are in a position to respond to the needs of menopausal women (Carroll, 1983; Cutick, 1984; Farabaugh, 1988; Lark, 1990; Ladwig, 1985; Masling, 1988; Shangold 1990; White, 1986). Interventions that address the needs should involve education and counseling based on the assessment of perceptions (Bulechek & McCloskey, 1985).

It is important that health professionals provide women, who seek assistance for menopause, with accurate and appropriate information so that they are able to make choices

which will best provide them with a healthy life past menopause. Health professionals should anticipate differences in women's concerns and tailor counseling and interventions appropriately (Rothert, Rovner, Holmes, Schmitt, Talarczyk, Kroll, & Gogate, 1990).

In the evaluation phase of the nursing process, an ongoing assessment of the progress of the individual toward goal attainment is appraised. The ability of the menopausal female to attain a positive self concept and body image, and benefit from meaningful growth and developmental processes through time and space, will promote a more positive perception of self and a positive image of the menopausal female within society. The interaction which the nurse has with the menopausal female, over time, may promote a healthful internal and external environment of the personal systems of women. Nurses, in the advocacy role, may be able to support and enhance women's positive perceptions of menopause.

Recommendations for Further Research

Future studies regarding perceptions of menopause should include a culturally diverse population and other variables to further test differences between women from the general population and female nurse practitioners. Further analysis of variables that may influence perceptions may include values and beliefs, health related behaviors, knowledge about menopause, numbers and levels of bothersome symptoms, types of management strategies for menopause, policy decisions regarding use of HRT, attitudes of others and relationships to

significant others.

The sample for this comparative study included women who were between the ages of 44-55 years, with no history of complete hysterectomy and were not presently taking HRT. The nurse practitioners in this study were not limited by age, menopausal status, history of hysterectomy, or whether or not they took HRT. Research including women of matched ages, that take HRT, and have had history of hysterectomy, would expand our understanding of differences between these two groups. Further comparison of the perception of menopause between women, and all other health care professionals, may provide greater insight to the differences between lay and professionals views.

A longitudinal design would facilitate a more meaningful understanding of how perceptions change in relation to personal experience of menopause. Studies monitoring the changes in perception that occur between the consumer and health care provider, as a result of their interaction, would contribute to our understanding. The changes in perception of menopause, that result from the interaction between consumer and health care provider, would contribute to the knowledge of how perceptions are influenced or changed through the use of varying techniques of communication.

The "Perception of Menopause" instrument may require further testing for validity. Further testing for construct validity may require correlation of responses from other existing instruments that measure perception or attitudes

toward menopause (Bowles, 1986). A comparison with other existing scales, that measure attitude or perceptions of menopause, may provide additional information about the validity of the "Perceptions of Menopause" instrument.

A qualitative approach observing the interaction process between the nurse practitioner and menopausal woman may contribute to an understanding of perception formulation. There must be further conceptual clarity of the formulation of perception and the role of perceptions about life events and how perception relates to the decision making process.

Nurse researchers could also design and test interventions for women who seek assistance for menopause. Community interest, self help or support groups, educational and exercise sessions concerning menopause, could be utilized. Experimental designs which test the differences of interventions, and approaches to menopausal women, and how perceptions are affected as a result, would contribute to understanding this transition. Exploration of alternative interventions, such as self or directed hypnosis, relaxation and imagery techniques, Yoga, acupressure massage, and music therapy, in relation to the effect on perception of menopause and outcomes of response, would help to understand women's perception and management of menopause (Lark 1990).

Summary

This study has provided a comparative analysis between women of the general population and female nurse practitioners in relation to their perceptions of menopause as a positive or



negative transition. The findings of this study have shown that a significant difference in perception of menopause does occur between women of the general population and female nurse practitioners. This finding alone has implications for nursing education and practice.

Menstrual severity and menopausal symptoms were shown to be related to perceptions of menopause. Age had a weak, but significant, relationship to perceptions of menopause for lay women. Awareness of the role of perception, when brought to the practice setting, and how perceptions may change during the interaction process, by both professionals and non-professionals, are important considerations which may have an impact on outcomes. Accurate assessment is paramount to health care assessment and should include examination of these variables.

The findings of this research contribute to a greater understanding of how women and nurse practitioners may differ in their view of menopause. This thesis provides the reader with a greater understanding of perceptions, menstruation, menopause, women, nurses, health related issues, nursing theory, education, practice and research. Findings from this study generated additional questions about the differences between the two groups regarding their perceptions of menopause. The answers to these questions may be discovered in future menopause research.

Appendix A



Appendix A

ERT STUDY

SOCIODEMOGRAPHIC INSTRUMENT

The following questions ask you to give some background information about yourself. This information will help us to understand and interpret the study's results. The information will be kept completely confidential. Please answer each question.

1. How old are you? _____ YEARS.
2. What is your present marital status?
 - _____ 1. MARRIED
 - _____ 2. DIVORCED
 - _____ 5. SINGLE
 - _____ 4. WIDOWED
 - _____ 5. SEPARATED
3. What is your principal employment status? (This question refers to work which you are paid to do.)
 - _____ 1. EMPLOYED FULL-TIME
 - _____ 2. EMPLOYED PART-TIME
 - _____ 3. RETIRED
 - _____ 4. NOT EMPLOYED
 - _____ 5. OTHER (specify _____).
4. If you are employed, what job title best describes what you do? If retired or unemployed, what job title describes what you did?
(WRITE IN)

5. What was your total household income (before taxes) during the past year? (CHECK ONE)
 - _____ 1. Under 9,999
 - _____ 2. \$10,000 - \$14,999
 - _____ 3. \$15,000 - \$19,999
 - _____ 4. \$20,000 - \$24,999
 - _____ 5. \$25,000 - \$29,999
 - _____ 6. \$30,000 - \$34,999
 - _____ 7. \$35,000 - \$49,999
 - _____ 8. \$50,000 or more



6. What was the highest grade or class you completed in school? (CHECK ONE)

☐ 1. LESS THAN 12 YEARS
☐ 2. HIGH SCHOOL GRADUATE (INCLUDES G.E.D.)
☐ 3. GREATER THAN 12 YEARS, BUT NO DEGREE
☐ 4. TECHNICAL TRADE/COMMUNITY COLLEGE DEGREE
☐ 5. BACHELOR'S DEGREE
☐ 6. MASTER'S DEGREE
☐ 7. Ph.D./PROFESSIONAL DEGREE
☐ 8. OTHER (specify _____)

7. Please indicate your religious preference.

☐ 1. NONE
☐ 2. JEWISH
☐ 5. PROTESTANT
☐ 4. CATHOLIC
☐ 5. OTHER (specify _____)

8. What is your race? (CHECK ONE)

☐ 1. BLACK
☐ 2. HISPANIC
☐ 5. AMERICAN INDIAN
☐ 4. WHITE
☐ 5. ASIAN/PACIFIC ISLANDER
☐ 6. OTHER (specify _____)

9. How many pregnancies have you had?

(WRITE IN NUMBER)

10. How many people live in your household including yourself? (CHECK ONE)

☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8 OR MORE

11. How are those who live with you related to you? (CHECK ALL THAT APPLY)

☐ 1. HUSBAND/SIGNIFICANT OTHER
☐ 2. PARENT (S)
☐ 5. CHILDREN
☐ 4. OTHER (specify _____)
☐ 5. NOT APPLICABLE

B) Please indicate your major source of stress (CHECK ONE)

1. WORK
2. FAMILY
3. ILLNESS
4. FINANCIAL
5. COMBINATION OF _____ AND _____ specify)
6. OTHER (specify _____)

The following questions ask about your menstrual cycle. All of your answers will be kept confidential.

13. How many months ago was your last menstrual period.
(CHECK ONE)

1. STILL HAVE PERIODS REGULARLY
2. LESS THAN 3 MONTHS AGO
5. 3 TO 12 MONTHS AGO
4. 12 OR MORE MONTHS AGO

14. On the following line, circle the number that best shows how bad you think your menstrual problems are or were.

1	2	3	4	5	6	7	8	9
No Problem							Severe Problems	

15. Consider the following menstrual problems. Indicate whether you have experienced or are experiencing each problem by marking a check you YES or NO. Even if you experience (d) the problem occasionally, answer, YES. For each problem that your mark YES, circle the number on the line that follows that best shows how severe you think the menstrual problems was or is for your.

- A) CRAMPS NO
 YES

1 2 3 4 5 6 7 8 9

Not Severe Extremely Severe

B) EXCESSIVE BLEEDING _____ NO
(HEAVY FLOW, FLOODING) _____ YES

1 2 3 4 5 6 7 8 9
Not Severe Extremely Severe

C) SPOTTING _____ NO
_____ YES

1 2 3 4 5 6 7 8 9
Not Severe Extremely Severe

D) IRREGULAR PERIODS _____ NO
_____ YES

1 2 3 4 5 6 7 8 9
Not Severe Extremely Severe

E) WATER RETENTION _____ NO
_____ YES

1 2 3 4 5 6 7 8 9
Not Severe Extremely Severe

F) TENSION _____ NO
_____ YES

1 2 3 4 5 6 7 8 9
Not Severe Extremely Severe

G) HEADACHES _____ NO
_____ YES

1 2 3 4 5 6 7 8 9
Not Severe Extremely Severe

H) OTHER _____ NO
_____ YES

1 2 3 4 5 6 7 8 9
Not Severe Extremely Severe

Specify: _____



16. What do you do (or did you do) to relieve and discomfort you feel or felt just before or during your period?
(CHECK ALL THAT APPLY)

☐ 1. PAIN RELIEVER (ex. Advil, aspirin, Tylenol)
☐ 2. REST
☐ 3. EXERCISE
☐ 4. HEATING PADS
☐ 5. DIET CHANGES (specify _____)
☐ 6. OTHER MEDICATIONS (specify _____)
☐ 7. OTHER (specify _____)
☐ 8. NOTHING NEEDED

17. Within the past five years have you ever sought medical help for problems with your menstrual periods or menopause?

☐ 1. YES ☐ 2. NO - go to question 18.

If yes what did the health care provider recommend?

(specify _____)

18. Do you currently consider yourself to be experiencing menopausal symptoms?

☐ 1. YES
☐ 2. NO
☐ 3. NOT SURE

19. Which of the following responses best describes your mother's menopausal experience? (CHECK ONE)

☐ 1. NO DIFFICULTY
☐ 2. SOME DIFFICULTIES
☐ 5. SERIOUS DIFFICULTIES
☐ 4. DON'T KNOW

20. Have you had a hysterectomy (an operation where the doctor removed all or part of you uterus)? (CHECK ONE)

☐ 1. YES ☐ 2. NO

21. Have on or both of your ovaries been removed? (CHECK ONE)

☐ 1. NO
☐ 2. YES, BOTH OVARIES REMOVED
☐ 5. YES, ONE OVARY REMOVED
☐ 4. NOT SURE



22. A) Are you currently taking estrogens (female hormones) of any kind including birth control pills)? If in doubt, please list the name of your medication. _____

_____ 1. YES _____ 2. NO - go to question 23

- B) If yes, please specify the type by checking one of the following:

_____ ESTROGEN PILLS ALONE
 _____ ESTROGEN PILLS AND PROGESTIN PILLS
 _____ ESTROGEN PATCH
 _____ ESTROGEN PATCH AND PROGESTIN PILLS
 _____ BIRTH CONTROL PILLS

23. What would be your source of payment for any medicines you take which are prescribed by a physician?

_____ Payment is provided completely out of your pocket.

_____ Payment is provided completely by a source other than you or your family (ex., insurance, government agency).

_____ Payment is provided partly out of your pocket and partly by another source (ex., insurance, government agency).

_____ Don't know

The following questions are about your health history and your health care behaviors. Again, they are to help us interpret the results of the study. All answers will be kept confidential.

24. A) How often have you seen a health care professional (doctor, nurse) in the last 12 months?

_____ TIMES
 (WRITE IN)

- B) What was the purpose of your visit(s) to a health care professional? (CHECK ALL THAT APPLY)

_____ 1. ROUTINE CHECK-UP (Includes internal)
 _____ 2. CHRONIC PROBLEMS
 _____ 3. MENSTRUAL PROBLEMS
 _____ 4. SICKNESS (Ex., Colds, Flu)
 _____ 5. INJURIES
 _____ 6. MENOPAUSAL SYMPTOMS
 _____ 7. OTHER (specify _____)



25. Have you ever had cancer? (CHECK ONE)

_____ 1. YES _____ 2. NO

26. Do you take any prescribed medications regularly? (CHECK ONE)

_____ 1. YES _____ 2. NO

27. Do you take over-the-counter medications regularly? (CHECK ONE)

_____ 1. YES _____ 2. NO

28. Please check the birth control method you now use. (CHECK ONE)

- _____ 1. ORAL CONTRACEPTIVE
- _____ 2. INTRAUTERINE DEVICE (IUD)
- _____ 3. BARRIER METHOD (Diaphragm, Condom, Sponge)
- _____ 4. STERILIZATION (You or your partner)
- _____ 5. PERIODIC ABSTINENCE, (Rhythm)
- _____ 6. NO BIRTH CONTROL METHOD USED
- _____ 7. OTHER (specify _____)

/sc

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Appendix B

Appendix B

NURSE PRACTITIONER STUDY

SOCIODEMOGRAPHIC INSTRUMENT

The following questions ask you to give some background information about yourself. This information will help us to understand and interpret the data. The information will be kept completely confidential. Please answer each question.

1. How old are you? _____ YEARS.
2. Sex: _____ Male _____ Female
3. What is your present marital status?
 - _____ 1. MARRIED
 - _____ 2. DIVORCED
 - _____ 5. SINGLE
 - _____ 4. WIDOWED
 - _____ 5. SEPARATED
4. Please indicate your religious preference.
 - _____ 1. NONE
 - _____ 2. JEWISH
 - _____ 3. PROTESTANT
 - _____ 4. CATHOLIC
 - _____ 5. OTHER (specify _____)
5. What is your race? (CHECK ONE)
 - _____ 1. BLACK
 - _____ 2. HISPANIC
 - _____ 3. AMERICAN INDIAN
 - _____ 4. WHITE
 - _____ 5. ASIAN/PACIFIC ISLANDER
 - _____ 6. OTHER (specify _____)
6. What was your total household income (before taxes) during the past year? (CHECK ONE)
 - _____ 1. Under 9,999
 - _____ 2. \$10,000 - \$14,999
 - _____ 3. \$15,000 - \$19,999
 - _____ 4. \$20,000 - \$24,999
 - _____ 5. \$25,000 - \$29,999
 - _____ 6. \$30,000 - \$34,999
 - _____ 7. \$35,000 - \$49,999
 - _____ 8. \$50,000 or more



7. What is your educational background in nursing? (Check all that apply and specify the name of the educational institution Hospital/College/University from which you received your diploma/degree).

☐ 1. DIPLOMA NURSING PROGRAM (Institution_____)
 ☐ 2. ASSOCIATE DEGREE (Institution_____)
 ☐ 3. BACHELOR DEGREE (Institution_____)
 ☐ 4. MASTER'S DEGREE (Institution_____)
 ☐ 5. DOCTORAL DEGREE (Institution_____)
 ☐ 6. PRACTITIONER PROGRAM (Institution_____)

8. What is your educational background in disciplines other than nursing? (Check all that apply and specify the discipline).

☐ 1. ASSOCIATE DEGREE (Discipline_____)
 ☐ 2. BACHELOR DEGREE (Discipline_____)
 ☐ 3. MASTER'S DEGREE (Discipline_____)
 ☐ 4. DOCTORAL DEGREE (Discipline_____)
 ☐ 5. OTHER (Specify_____)

9. Which of the following certificates do you currently hold?

☐ 1. Do not have national or state certification as a nurse practitioner.
 ☐ 2. ANA Certification as a Nurse Practitioner. (Specialty area_____)
 ☐ 3. State Certification as a Nurse Practitioner. (Specialty area_____)
 ☐ 4. Have prescriptive authority.
 ☐ 5. OTHER (Describe_____)

If you do not have certification go to question 10.

If you have certification go to question 11.

10. Have you applied for certification as a nurse practitioner? ☐ 1. YES ☐ 2. NO

11. How long have you practiced as a nurse practitioner or Clinical Nurse Specialist? (CHECK ONE)

☐ 1. 0-6 MONTHS ☐ 4. 25-60 MONTHS (5 YRS)
 ☐ 2. 7-12 MONTHS ☐ 5. 61 MONTHS TO 10 YRS
 ☐ 3. 13-24 MONTHS ☐ 6. OVER 10 YEARS

12. What is your current employment status? (CHECK ONE)

☐ 1. EMPLOYED FULL-TIME
☐ 2. EMPLOYED PART-TIME
☐ 3. NOT EMPLOYED
 ☐ 4. OTHER (specify_____)

13. What job title best describes what you do? (WRITE IN)

14. How long have you been in your present employment setting?
- | | | | |
|----------|--------------|----------|----------------------|
| _____ 1. | 0-6 MONTHS | _____ 5. | 25-36 MONTHS |
| _____ 2. | 7-12 MONTHS | _____ 6. | 37-60 MONTHS (5yrs) |
| _____ 3. | 13-18 MONTHS | _____ 7. | 61 MONTHS TO (10yrs) |
| _____ 4. | 19-24 MONTHS | _____ 8. | OVER 10 YEARS |
15. Which of the following best describes the site of your practice? (CHECK ONE)
- | | |
|-----------|-------------------------------|
| _____ 1. | HOSPITAL INPATIENT |
| _____ 2. | HOSPITAL OUTPATIENT |
| _____ 5. | PUBLIC HEALTH |
| _____ 4. | PHYSICIANS OFFICE |
| _____ 5. | EXTENDED CARE FACILITY |
| _____ 6. | NEIGHBORHOOD/COMMUNITY CLINIC |
| _____ 7. | VISITING NURSES ASSOCIATION |
| _____ 8. | UNIVERSITY HEALTH CENTER |
| _____ 9. | OCCUPATIONAL HEALTH SETTING |
| _____ 10. | OTHER (specify _____) |
16. How are you reimbursed for your services? (CHECK ONE)
- | | |
|----------|------------------------------------|
| _____ 1. | SALARIED |
| _____ 2. | FEE FOR SERVICES - GROUP PRACTICES |
| _____ 3. | SELF EMPLOYED |
| _____ 4. | OTHER (Describe _____) |
17. What other health professionals work in your practice setting? (Check all that apply excluding yourself).
- | | |
|-----------|---------------------------------|
| _____ 1. | MEDICAL DOCTOR |
| _____ 2. | DOCTOR OF OSTEOPATHY |
| _____ 5. | NURSE PRACTITIONER |
| _____ 4. | REGISTERED NURSE |
| _____ 5. | PHYSICIAN ASSISTANT |
| _____ 6. | OCCUPATIONAL/PHYSICAL THERAPIST |
| _____ 7. | DENTIST |
| _____ 8. | PODIATRIST |
| _____ 9. | NUTRITIONIST |
| _____ 10. | OTHER (Describe _____) |
18. How many hours per week are you in direct contact with patients? (CHECK ONE)
- | | | | |
|----------|------------|----------|--------------|
| _____ 1. | 40 OR MORE | _____ 4. | 10-19 |
| _____ 2. | 30-39 | | |
| _____ 3. | 20-29 | _____ 5. | LESS THAN 10 |



19. Approximately how many patients are in your case load?
_____ (Number of Patients)
20. What percentage of patients in your case load are 45-55 years of age? _____%
21. What percentage of the 45-55 year old patients in your case load are women? _____%
22. For how many of the 44-55 year old female patients in your case load are you listed as the primary provider?
_____ (Number of female patients).
23. In your practice, do you prescribe estrogen replacement therapy? (CHECK ONE)
- ____ 1. UNDER A PHYSICIAN'S PROTOCOL
____ 2. INDEPENDENTLY
____ 3. DO NOT PRESCRIBE ESTROGEN REPLACEMENT THERAPY
24. Check all of the following options that are available to you in your current practice and your management of the issues related to menopause.
- ____ 1. RECOMMEND MEDICATION (OTHER THAN ERT)
____ 2. RECOMMEND ERT
____ 3. PRESCRIBE MEDICATION (OTHER THAN ERT)
____ 4. MONITOR PATIENT MEDICATION AND ALTER DOSAGE
____ 2. REFER TO A PHYSICIAN FOR MEDICATIONS
____ 6. TEACH PATIENTS ABOUT MEDICATIONS
____ 7. OTHER (Specify _____)
25. Would your patient's ability to pay for medications effect your recommending/prescribing pattern for medications?
- ____ 1. YES ____ 2. NO
- (Explain _____)

The following questions are about your health history, your health care behaviors and your menstrual cycle. The questions will help us interpret the data in this study. All of your answers will be kept confidential.

26. Have you ever had cancer? (CHECK ONE)
- ____ 1. YES ____ 2. NO

27. Have you had a hysterectomy? (CHECK ONE)
- ____ 1. YES ____ 2. NO
28. Have one or both of your ovaries been removed? (CHECK ONE)
- ____ 1. NO
 ____ 2. YES, BOTH OVARIES REMOVED
 ____ 3. YES, ONE OVARY REMOVED
 ____ 4. NOT SURE
29. Which of the following best describes your menstrual periods?
- ____ 1. STILL HAVE PERIODS REGULARLY
 ____ 2. PERIODS ARE IRREGULAR BUT CLOSER TOGETHER THAN PREVIOUSLY EXPERIENCED
 ____ 3. PERIODS ARE IRREGULAR BUT FARTHER APART THAN PREVIOUSLY EXPERIENCED
 ____ 4. NO LONGER HAVING PERIODS
30. How many months ago was your last menstrual period. (CHECK ONE)
- ____ 1. LESS THAN THREE MONTHS AGO
 ____ 2. 3 TO 12 MONTHS AGO
 ____ 3. 12 OR MORE MONTHS AGO
31. Do you currently consider yourself to be experiencing menopausal symptoms?
- ____ 1. YES ____ 2. NO ____ 3. NOT SURE

If you are currently experiencing or have experienced menopause please answer question 32. If not go to question 33.

32. On the following line, circle the number that best shows how severe you think your menopausal symptoms are or were.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
Not							Extremely	
Severe							Severe	

33. Consider the following menstrual problems. Indicate whether you have experienced or are experiencing each problem by marking a check you YES or NO. Even if you experience (d) the problem occasionally, answer, YES. For each problem that you mark YES, circle the number on the line that follows that best shows how severe you think the menstrual problems was or is for you.



A) CRAMPS

☐ NO
☐ YES

1 2 3 4 5 6 7 8 9
 Not Severe Extremely Severe

B) EXCESSIVE BLEEDING
(HEAVY FLOW, FLOODING)
☐ NO
☐ YES

1 2 3 4 5 6 7 8 9
 Not Severe Extremely Severe

C) SPOTTING

☐ NO
☐ YES

1 2 3 4 5 6 7 8 9
 Not Severe Extremely Severe

D) IRREGULAR PERIODS

☐ NO
☐ YES

1 2 3 4 5 6 7 8 9
 Not Severe Extremely Severe

E) WATER RETENTION

☐ NO
☐ YES

1 2 3 4 5 6 7 8 9
 Not Severe Extremely Severe

F) TENSION

☐ NO
☐ YES

1 2 3 4 5 6 7 8 9
 Not Severe Extremely Severe

G) HEADACHES

☐ NO
☐ YES

1 2 3 4 5 6 7 8 9
 Not Severe Extremely Severe



H) OTHER (Specify _____) ☐ NO
☐ YES

1 2 3 4 5 6 7 8 9
 Not Severe Extremely Severe

34. What do you do (or did you do) to relieve and discomfort you feel or felt just before or during your period? (CHECK ALL THAT APPLY)

☐ 1. PAIN RELIEVER (ex. Advil, aspirin, Tylenol)
☐ 2. REST
☐ 3. EXERCISE
☐ 4. HEATING PADS
☐ 5. DIET CHANGES (specify _____)
☐ 6. OTHER MEDICATIONS (specify _____)
☐ 7. OTHER (specify _____)
☐ 8. NOTHING NEEDED

35. Within the past five years have you ever sought medical help for problems with your menstrual periods or menopause?

☐ 1. YES ☐ 2. NO

If yes what did the health care provider recommend?

(specify _____)

36. A) How often have you seen a health care professional (doctor, nurse) for your health care needs in the last 12 months? _____ Times
 (NUMBER OF)

- B) What was the purpose of your visit(s) to a health care professional? (CHECK ALL THAT APPLY)

☐ 1. ROUTINE CHECK-UP (Includes internal)
☐ 2. CHRONIC PROBLEMS
☐ 3. MENSTRUAL PROBLEMS
☐ 4. SICKNESS (Ex., Colds, Flu)
☐ 5. INJURIES
☐ 6. MENOPAUSAL SYMPTOMS
☐ 7. OTHER (specify _____)

37. Do you take any prescribed medications regularly? (CHECK ONE)

☐ 1. YES ☐ 2. NO

38. A) Are you currently taking estrogens of any kind (including birth control pills)?

_____ 1. YES _____ 2.

- B) If yes, please specify the type by checking one of the following:

_____ ESTROGEN PILLS ALONE
 _____ ESTROGEN PILLS AND PROGESTIN PILLS
 _____ ESTROGEN PATCH
 _____ ESTROGEN PATCH AND PROGESTIN PILLS
 _____ BIRTH CONTROL PILLS
 _____ DON'T KNOW

39. Do you take over-the-counter medications routinely? (CHECK ONE)

_____ 1. YES _____ 2. NO

40. Please check the birth control method you now use. (CHECK ONE)

_____ 1. ORAL CONTRACEPTIVE
 _____ 2. INTRAUTERINE DEVICE (IUD)
 _____ 3. BARRIER METHOD (Diaphragm, Condom, Sponge)
 _____ 4. STERILIZATION (You or your partner)
 _____ 5. PERIODIC ABSTINENCE, (Rhythm)
 _____ 6. NO BIRTH CONTROL METHOD USED
 _____ 7. OTHER (specify _____)

41. On the following line, circle the number that best shows how severe you think your mother's menopausal symptoms are/were.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
Not							Extremely	
Severe							Severe	

42. Has your mother ever taken estrogens?

_____ 1. YES
 _____ 2. NO
 _____ 3. Not Sure

Appendix C



Appendix C

PERCEPTIONS OF MENOPAUSE INSTRUMENT

ERT STUDY

Perceptions of Menopause

Some of you will have not experienced menopause yet, and some of you are experiencing menopause now. We are interested in finding out what your perceptions are about menopause regardless of whether or not you are experiencing menopause. In the questions that follow, please circle the response that most represents how you feel about each statement.

1. Menopause has been/will be an unpleasant experience for me.

Strongly		Neither		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

2. The thought of menopause is disturbing to me.

Strongly		Neither		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

3. My body may change during the menopause, but I will not change personally.

Strongly		Neither		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

4. On the whole, I expect to feel better after the menopause than I did before the menopause.

Strongly		Neither		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

5. I welcome the menopause.

Strongly		Neither		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

6. Menopausal symptoms that I might have can be helped.

Strongly		Neither		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

7. Women should be under a health provider's care during menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

8. Hormones are necessary for the management of menopausal symptoms.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

9. There are things that I can do to feel good during the menopause other than going to a health care provider.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

10. I expect to (do) experience physical trouble during the menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

11. I expect to (do) experience emotional trouble during the menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

12. Menopause will bring/has brought many changes to my life.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

13. I am confused about all of the controversy over hormone treatment and menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

14. Despite what health care providers say, I believe I should make the decisions about management of my menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

15. There is little that an individual can do to control the symptoms of menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

16. I have been/will be able to experience menopause without problems.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

17. Menopause causes problems no matter what you do.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

18. Menopause will/did cause me to be sick a lot.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

19. Menopause probably will not/did not have a negative effect on me.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

20. I believe that I can control menopausal symptoms.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

21. Taking hormones for menopausal symptoms can make me feel better.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

22. Special diets & foods may help control some of the symptoms of menopause.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

23. Women are more tired than usual during menopause.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

24. Menopause is something I just have to put up with.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

25. Menopause is associated with mood changes.

Strongly		Neither	Agree		Strongly
Agree	Agree	Nor	Disagree	Disagree	Disagree

26. Most women make too much of menopause.

Strongly		Neither	Agree		Strongly
Agree	Agree	Nor	Disagree	Disagree	Disagree

27. Health care providers don't really understand the problems women experience with menopause.

Strongly		Neither	Agree		Strongly
Agree	Agree	Nor	Disagree	Disagree	Disagree

28. There is a difference between male and female health care providers in how they understand the problems that women experience with menopause.

Strongly		Neither	Agree		Strongly
Agree	Agree	Nor	Disagree	Disagree	Disagree

When I experience menopause I feel that...(PLEASE CHECK ONLY ONE ANSWER FOR EACH QUESTION)

29. ☐ A) My sex life will be/is more satisfying.

☐ B) My sex life will be/is relatively the same.

☐ C) My sex life will be/is less satisfying.

30. ☐ A) My sleep patterns will get/are better.

☐ B) My sleep patterns will remain/are relatively the same.

☐ C) My sleep patterns will get/are worse.

31. ☐ A) Participating in social activities will be/is much more enjoyable.

☐ B) Participating in social activities will be/is no more or less enjoyable.

☐ C) Participating in social activities will be/is much less enjoyable.

32. ☐ A) It will be/is much easier for me to do the things that I normally do during the day.

☐ B) There will be/is little change in how I do the things that I normally do during the day.

☐ C) It will be/is much more difficult for me to do the things that I normally do during the day.

Appendix D

Appendix D

PERCEPTIONS OF MENOPAUSE INSTRUMENT

NURSE PRACTITIONER STUDY

Perceptions of Menopause

We are interested in finding out what your perceptions are about menopause regardless of whether or not you have experienced menopause. In the questions that follow, please circle the response that most represents how you feel about each statement.

1. Menopause has been/will be an unpleasant experience for me.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

2. The thought of menopause is disturbing to me.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

3. My body may change during the menopause, but I will not change personally.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

4. On the whole, I expect to feel better after the menopause than I did before the menopause.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

5. I welcome the menopause.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

6. Menopausal symptoms that I might have can be helped.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

7. Women should be under a health provider's care during menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

8. Hormones are necessary for the management of menopausal symptoms.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

9. There are things that I can do to feel good during the menopause other than going to a health care provider.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

10. I expect to (do) experience physical trouble during the menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

11. I expect to (do) experience emotional trouble during the menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

12. Menopause will bring/has brought many changes to my life.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

13. I am confused about all of the controversy over hormone treatment and menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

14. Despite what health care providers say, I believe I should make the decisions about management of my menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

15. There is little that an individual can do to control the symptoms of menopause.

Strongly		Neither Agree		Strongly
Agree	Agree	Nor Disagree	Disagree	Disagree

16. I have been/will be able to experience menopause without problems.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

17. Menopause causes problems no matter what you do.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

18. Menopause will/did cause me to be sick a lot.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

19. Menopause probably will not/did not have a negative effect on me.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

20. I believe that I can control menopausal symptoms.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

21. Taking hormones for menopausal symptoms can make me feel better.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

22. Special diets & foods may help control some of the symptoms of menopause.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

23. Women are more tired than usual during menopause.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

24. Menopause is something I just have to put up with.

Strongly		Neither		Strongly
Agree	Agree	Nor	Disagree	Disagree

25. Menopause is associated with mood changes.

Strongly		Neither	Agree		Strongly
Agree	Agree	Nor	Disagree	Disagree	Disagree

26. Most women make too much of menopause.

Strongly		Neither	Agree		Strongly
Agree	Agree	Nor	Disagree	Disagree	Disagree

27. Health care providers don't really understand the problems women experience with menopause.

Strongly		Neither	Agree		Strongly
Agree	Agree	Nor	Disagree	Disagree	Disagree

28. There is a difference between male and female health care providers in how they understand the problems that women experience with menopause.

Strongly		Neither	Agree		Strongly
Agree	Agree	Nor	Disagree	Disagree	Disagree

When I experience menopause I feel that...(PLEASE CHECK ONLY ONE ANSWER FOR EACH QUESTION)

29. ___ A) My sex life will be/is more satisfying.
 ___ B) My sex life will be/is relatively the same.
 ___ C) My sex life will be/is less satisfying.
30. ___ A) My sleep patterns will get/are better.
 ___ B) My sleep patterns will remain/are relatively
 the same.
 ___ C) My sleep patterns will get/are worse.
31. ___ A) Participating in social activities will be/is
 much more enjoyable.
 ___ B) Participating in social activities will be/is
 no more or less enjoyable.
 ___ C) Participating in social activities will be/is
 much less enjoyable.
32. ___ A) It will be/is much easier for me to do the
 things that I normally do during the day.
 ___ B) There will be/is little change in how I do the
 things that I normally do during the day.
 ___ C) It will be/is much more difficult for me to do
 the things that I normally do during the day.

Appendix E

Appendix E

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Consent Form - Phase I Survey

One option for dealing with some menopausal symptoms is taking hormones or estrogen replacement therapy. The College of Nursing at Michigan State University is conducting a study to better understand how women make decisions about whether or not to use estrogen. The results from this study will be used to design materials which can be used to help women make informed decisions about whether or not to take estrogen replacement therapy.

In this survey, you will be asked a number of questions about your perceptions, expectations and experience with menopause and what you would decide about estrogen replacement therapy given some hypothetical situations. You will also be asked to give information about such things as your marital status, age and education.

By signing this form I understand that:

1. I have freely consented to take part in this study.
2. The study has been explained to me. Furthermore, I understand the explanation that has been given to me and what my participation will involve.
3. I am free to discontinue my participation in the study at any time without penalty.
4. My responses will be treated with strict confidence and all participants will remain anonymous.
5. I will be responding to written information.
6. It will take approximately 60 minutes to complete the questionnaires.
7. I am not guaranteed any beneficial results from my participation in this study.
8. I may be contacted at a later time to participate in a later phase of the research. Based on preliminary analysis of responses from the initial study, a second study will be done with selected representatives of participants from the original study. If I am contacted at a later time, I will be under no obligation to participate further in the study.
9. Results of the study will be made available to me at my request.

Address: _____

Signed: _____

Date: _____

Phone: _____

INTRODUCTION

117.

The Michigan State University College of Nursing is trying to better understand what is important to women when they decide whether or not to take estrogen (hormone) replacement therapy for menopausal symptoms. We know that some women decide that they want hormonal therapy as they approach menopause, others decide that they do not, and others are undecided or don't feel they have enough information.

Our goal is to better understand how women make this decision. At the completion of this project, we will use what we have learned to develop materials to help women have the information they need to make the best decision regarding hormonal or estrogen therapy.

We are asking you to help us with the project by answering some questions and giving us your thoughts about some written situations. We are asking women who are between 45-55 years of age who have not had a hysterectomy (removal of the uterus or womb) to participate in the study. This will include women who are approaching menopause and women who are now experiencing menopause.

The information you give us will be used only for this study. All information obtained will be treated with strict confidence. People will remain anonymous, that is, the information collected will be identified only by a code number and the researchers will be the only ones who know which number is assigned to whom.

Your decision to participate or not to participate in this study has nothing to do with the health care you receive. You have the right to withdraw from the study at any time without penalty. While we appreciate you answering all of the questions, you have the right not to answer a question if you choose.

This task is estimated to take about 1 hour. First you will be asked to answer some written questions about menopause. Then you will be asked to read some situations and tell us how likely you would be to take hormone therapy in those situations.

The results of the study, while not of direct benefit to you, will help us find ways to help women have the information they need to make the best decision for themselves regarding estrogen replacement therapy. Without your help we could not do this study, and we greatly appreciate your cooperation. If you would like a report of the study when completed, please indicate it on the enclosed form.

Thank you for your help.

Please send me a copy of the results of this study.

Name _____
Street _____
City _____ Zip _____

Appendix F

Appendix F

Consent Form

One option for dealing with some menopausal symptoms is taking hormones or estrogen replacement therapy. The College of Nursing at Michigan State University is conducting a study to better understand how nurse practitioners make decisions about whether or not to recommend/prescribe estrogen replacement therapy. The results of this study will be used with those of a similar concurrent study of women 45-55 years of age to design materials which can be used to help women make informed decisions about whether or not to take estrogen replacement therapy.

In this survey, you will be asked a number of questions about your perceptions, expectations and experience with menopause and/or menopausal women. In addition you will be asked what your decisions would be about recommending/prescribing estrogen replacement therapy given some hypothetical situations. You will also be asked to answer some questions about your own health status and sociodemographic information.

By signing this form I understand that:

1. I have freely consented to take part in this study.
2. The study has been explained to me. Furthermore, I understand the explanation that has been given to me and what my participation will involve.
3. I am free to discontinue my participation in the study at any time without penalty.
4. My responses will be treated with strict confidence and all participants will remain anonymous.
5. I will be responding to written information.
6. It will take approximately 60 minutes to complete the questionnaires.
7. I am not guaranteed any beneficial results from my participation in this study.
8. The results of this study will be made available to me at my request.

Signature: _____		Date: _____
Address: Street _____		Apt. # _____
City _____	State _____	Zip _____
Phone: Home () _____		Office () _____
(Area Code)		(Area Code)

MICHIGAN STATE UNIVERSITY

COLLEGE OF NURSING

EAST LANSING • MICHIGAN • 48824-1317

March 25, 1988

Ms.

Dear Ms. :

The Michigan State University College of Nursing is trying to better understand what is important to nurse practitioners when they decide whether or not to recommend or prescribe estrogen replacement therapy. The results of the study will be combined with those of a similar concurrent study of women from the general population who are 45-55 years of age. Our goal is to use the information from these two studies to help nurse practitioners provide their female clients with information they need about estrogen replacement therapy in order to make informed decisions.

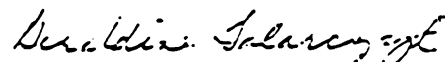
We are asking nurse practitioners in Michigan to participate in the study. The information you give us will be used only for this study and will be treated with strict confidence. Study participants will remain anonymous, that is, the information collected will be identified only by a code number and the researchers will be the only ones who know which number is assigned to whom. While we appreciate you answering all of the questions, you have the right to not answer a question if you choose or to not participate in the study.

Completing the questionnaires is estimated to take about 1 hour. First you will be asked to answer some written questions about yourself and your perceptions and expectations and/or experience of menopause. Then you will be asked to read some situations and tell how likely you would be to recommend or prescribe hormone therapy in those situations. Please, complete the questionnaires in the order in which they are presented.

Without your help we could not do this study, and we greatly appreciate your cooperation and interest in nursing research. If you would like a report of the study when completed, please indicate your request on the enclosed form and return it with the signed consent form and the completed questionnaires in the self-addressed envelope enclosed with the materials you have received. Please return these materials by April 18, 1988.

If you have any questions regarding the study I may be reached by telephone at (517) 355-6523. Thank you for your help.

Sincerely,



Geraldine Talarczyk, R.N., Ed.D.

Appendix G

Appendix G

MICHIGAN STATE UNIVERSITY

OFFICE OF VICE PRESIDENT FOR RESEARCH
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

April 17, 1991

Billie Sue Berman
3222 Melody Lane
Lansing, MI 48912

RE: PERCEPTIONS OF FEMALE MENOPAUSE: A COMPARISON BETWEEN WOMEN FROM THE
GENERAL POPULATION AND FEMALE NURSE PRACTITIONERS, IRB#91-144

Dear Ms. Berman:

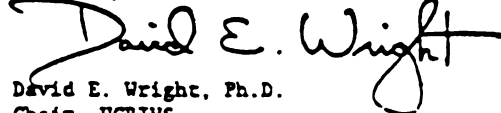
The above project is exempt from full UCRHS review. I have reviewed the proposed research protocol and find that the rights and welfare of human subjects appear to be protected. You have approval to conduct the research.

You are reminded that UCRHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRHS approval one month prior to April 16, 1992.

Any changes in procedures involving human subjects must be reviewed by the UCRHS prior to initiation of the change. UCRHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,


David E. Wright, Ph.D.
Chair, UCRHS

DEW/deo

cc: Dr. Marilyn Rothert



LIST OF REFERENCES

LIST OF REFERENCES

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