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THE RELATIONSHIP OF THE DESIRE TO PARTICIPATE IN DECISIONS REGARDING MENOPAUSE TO WOMEN'S KNOWLEDGE AND SATISFACTION WITH THE HEALTH CARE PROVIDER INTERACTION

By

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ABSTRACT

THE RELATIONSHIP OF THE DESIRE TO PARTICIPATE IN DECISIONS REGARDING MENOPAUSE TO WOMEN'S KNOWLEDGE AND SATISFACTION WITH THE HEALTH CARE PROVIDER INTERACTION

By

Kathleen A.Carlson

The lack of clear and concise information regarding menopause, difficulty in making decisions regarding treatment and care, and dissatisfaction with the health care interaction are barriers to cost-effective and quality care for menopausal women. This study utilized a convenience sample of 252 menopausal aged women to examine the relationship between knowledge of menopause, desire to participate in decision making regarding hormone replacement therapy (HRT), and satisfaction with the provider interaction. A self-care agency framework was used. Women scored 63% on knowledge; 88% thought they should make the HRT decision alone or in a shared mode; satisfaction with the interaction was reported as a mean of 3.4 on a 5 point scale. Little relationship was found among the variables. Implications include increased patient education and empowering the women within the advanced practice nurse's practice.

To Troy, who, through his constant
love, encouragement and strong faith, enabled me
to successfully reach my goal.

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INTRODUCTION

The issue of health care reform is at the forefront of debate and policy making as the country grapples with figures such as those from 1991 in which national health spending totalled $751.7 billion and accounted for 13.2 percent of the Gross Domestic Product (Rimkunas & Price, 1992). Realizing the critical role nurses can have in this reform, the American Nurses Association (ANA) (1991) has developed nursing's agenda calling for a reconstructed health care system that will focus on consumers and their health and a system that assures access, quality, and affordable care. The restructured health care system would be one that "fosters consumer responsibility for personal health, self care, and informed decision making in selecting health care services" (ANA, 1991, p.2). Furthermore, the ANA (1991) suggests that in order to accomplish reform a shift from the predominant focus on illness and cure to an orientation toward wellness and care is necessary.

In the first decade of the 21st century, more than 21 million women will reach the age of 50 and become menopausal (Office of Technology Assessment, 1992). The average woman can expect to live approximately one-third of her life in the postmenopausal period (Anderson, Hamburger, Liu, & Rebar, 1987). However, is this growing number of women going to receive the accessible, cost-effective and quality care that is currently being set as goals for reform? Can

the care be cost-effective and quality producing when 20 to 30 percent of women who are receiving hormone therapy for the first time never fill their prescription because they are not convinced of the advantages and safety of such therapy (Ravnikar, 1987)? How can our health care system be cost-effective and produce positive outcomes when there is research (Rothert et al., 1990) indicating that there are women of menopause age who feel disenfranchised from the health care system, faulting the provider for not listening to them, and feeling they could not make a decision concerning hormone therapy because of the inadequate information they had received?

If these women are disenfranchised, are they then dissatisfied with the provider interaction and the care they receive? Patient satisfaction has been discussed in the literature as influencing health related behaviors including the following: compliance with treatment regime (Buller & Bueller, 1987; Murphy-Cullen & Larsen, 1984; Pascoe, 1983; Ross, Frommelt, Hazelwood, & Chang, 1987; Weiss, 1988; Zweig, Kruse, & LeFevre, 1986), doctor-shopping (Gabel, Lucas & Westbury, 1993; Marquis, Davies, & Ware, Jr., 1983; Pascoe, 1983; Ross et al., 1987; Zweig et al., 1986), and utilization of health care services (Murphy-Cullen & Larsen, 1984; Weiss, 1988). Rother (1992) contends that "if a reformed health care system is to be successful, it must produce improved health outcomes. For these goals to be realized, greater attention must be paid to the issues of

patient behavior and consumer satisfaction" (p.116).

Women are still confronted with the popular opinion, also held by many medical experts, that portrays menopause as a major negative life event similar to the loss of a job or spouse (Avis & McKinlay, 1991). Current understanding of the association between menopause and disturbances of mood and behavior is based on myths and conclusions derived from outdated, poorly constructed studies (Gitlin & Pasnau, 1989). Women may, therefore, be confused about what to believe. The controversy and uncertainty may add to the failure of women to perform health behaviors or participate in decision making, thereby potentially increasing the likelihood of negative health outcomes.

According to the Office of Technology Assessment (OTA) (1992), "there is no consensus within the medical community about the definition of the menopause and the risks and benefits associated with hormone therapy, and little information about the natural progression through menopause and the years to follow" (p.52). OTA (1992) asserts that most women cannot identify risk factors for osteoporosis and do not understand the complex biological changes that are associated with the menopause. Martin-Burnham (1981) reports that 86 percent of the women in her study believe they would be better prepared for the menopause if they were given a chance to gain knowledge in advance. A woman who acquires and retains knowledge regarding a health issue is in a better position to participate in her own health care

(Freda, Andersen, Damus, & Merkatz, 1993; Fox, Klos, Tsou, & Baum, 1987; Greenfield, Kaplan, & Ware Jr., 1985; Mazzuca, 1982).

Finally, can providers expect the patient to participate in self-care activities related to menopause if the woman is not given the opportunity and support to participate in the decision making? Speedling and Rose (1985) suggest that by participating in clinical decision making, the patient is enabled to behave in ways that enhance well-being. By empowering the patient with responsibility in decision making the Advanced Practice Nurse (APN) can give the patient control over his/her body as well as a sense of self-reliance and self-esteem; and can enhance the provider-patient relationship by allowing for increased awareness of the patient's need, desires, values and preferences that will provide for more satisfactory care (Brody, 1980; Krouse & Roberts, 1989).

The lack of clear and concise information regarding menopause, difficulty in making decisions regarding treatment and care, and dissatisfaction with the health care interaction place potential roadblocks in achieving goals of cost-effective and quality producing health outcomes for menopausal women. Given this and the ability of the APN to be the facilitator of self care, the purpose of this research is to examine the relationship between women's knowledge of menopause, their desire to participate in decision making regarding hormonal therapy and their

satisfaction with the provider interaction.

Research Questions:

The research questions for this study are:

1) How much do menopausal women know about menopause?

2) To what extent do menopausal women desire to participate in decision making regarding menopause and hormone replacement therapy?

3) Are menopausal women satisfied with the patient-provider interaction?

4) What are the relationships among the three variables: a woman's knowledge of menopause, a woman's desire to participate in decision making, and a woman's satisfaction with the provider interaction?

Study Relevance

The results of this investigation have the potential to contribute to nursing practice in two ways. First, these data will contribute to the theoretical knowledge on self-care. Second, findings from this study can help APN's assess, plan and intervene with appropriate care for women experiencing the life cycle change of menopause. Nursing strategies can be based on what the study reveals about women's knowledge of menopause, desire to participate, and satisfaction with the patient-provider interaction. The APN can then be a facilitator and supporter of self-care and in the process, contribute to cost-effective and quality health outcomes.

THEORETICAL FRAMEWORK

The examination of the relationship among the variables in this research is based on the construct of self-care. A self-care theory commonly used in both clinical practice and research within the nursing domain is Orem's Self-Care Deficit Nursing Theory (SCDNT) (1991). According to Orem (1991), the SCDNT gives direction to practicing nurses in their endeavors to gather information about patients and their environment in order to make deductions and decisions about how nursing can help patients. The theory is based on the assumption that all individuals are capable of self-care and that nursing actions are aimed at assisting the patient to assume responsibility for that self-care. In accordance with Orem's (1991) self-care conceptual framework, the APN accepts that patients have the right and capability to be knowledgeable, active participants in their own health care. Utilizing Orem's assumptions enables the APN, in partnership with the patient, to facilitate and support self-care in women of menopause age.

Self-care, self-care deficit and nursing systems are the three theoretical constructs that constitute the SCDNT. According to Orem (1991), deficit refers to the relationship between the action individuals should take and the action individuals are capable of taking. As a result of this interpretation of the concept of deficit, the theory includes variables that determine the relationship. The variables include the two patient variables of self-care

agency and therapeutic self-care demand and one nursing variable, nursing agency. Orem (1985) contends that the conceptualizations "are theoretical concepts that are descriptively explanatory of properties, conditions, and actions of persons in nursing practice situations" (p.31). Therefore, the general theory known as SCDNT describes and explains the relationship between what actions individuals are capable of and their demand for self-care. This relationship is important to the discussion of self-care. For the purpose of this research, however, only one aspect of the model is utilized: self-care agency.

Self-care Agency

Self-care agency is "the complex acquired ability to meet one's continuing requirement for care that regulates life processes, maintains or promotes integrity of human structure and functioning and human development, and promotes well-being" (Orem,1985, p.105). Orem (1991) contends that self-care agency will vary with health state; with elements that influence educability; and life experiences that enable one to learn, be exposed to cultural influences and make use of resources in daily living. The development of self-care agency is aided by "intellectual curiosity, by instruction and supervision from others, and by experience in performing self-care measures" (Orem, 1991, p.146).

Simmons (1990) describes self-care agency as a collection of power and action elements. In conjunction

with Orem, as indicated in Figure 1, this researcher views these elements and indicators of action to include knowledge about self-care needs and measures for meeting them, the power to participate in decision making and the motivation to act as a result of being satisfied with the health care provider interaction.

Knowledge is an important element in performing phases of deliberative action involved with self-care. "Without sufficient knowledge, a person is not able to perform necessary self-care operations, operations such as making a judgement or decision" (Ward & Griffin, 1990, p.192). According to Orem (1991), the justification for appraising and attaching value to perform particular self-care actions is having knowledge of the purposes and meaning of those actions. This knowledge must be applied not only during inception of action but also throughout the performance of action.

Self-care is a learned behavior that requires use of knowledge as well as practical skills and motivation (Orem, 1991). Executing a self-care measure involves a decision, a choice.

> Persons who can produce effective self-care have knowledge of themselves and of environmental conditions. They have also affirmed the appropriate thing to do under the circumstances. Before they could affirm the appropriate thing to do, they had to gain

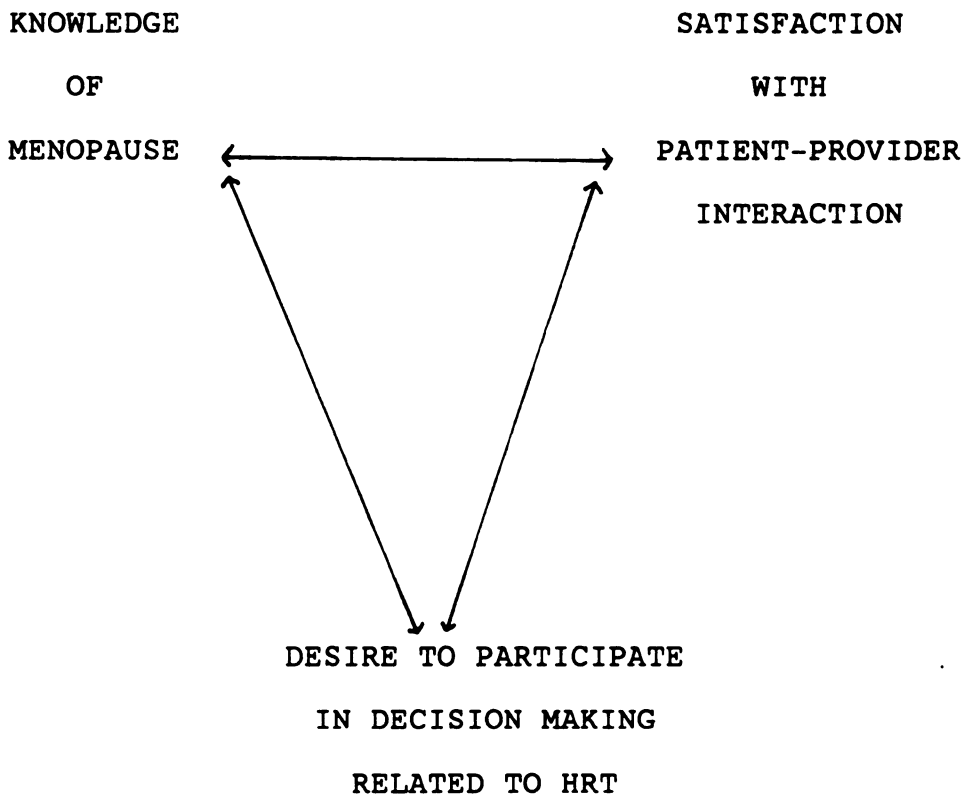


Figure 1. A Conceptual Framework for Self-Care Agency of the Menopausal Woman.

> knowledge of the courses of action. Effective producers of self-care bring the first phase of self-care to closure by making a decision about the actions they will take and those they will avoid (Orem, 1985, p.119).

Self-responsibility is, therefore, important to the construct of self-care. This responsibility can be an indicator of a person's exercise of self-care agency in an individual's ability to participate in decision making. Self-care agency discloses itself as the developed or developing capability to engage in the inquiry and decision making phase of self-care and the capability to then carry out the actions associated with the decision (Orem, 1991).

Finally, in order for the energy to be disbursed to meet self-care demands, the ability to initiate and continue in self-care is necessary. This energy is the product of many factors including being sufficiently motivated. This study will examine motivation as an outcome of a woman being satisfied with her patient-provider interaction. As discussed, satisfaction can play a role in determining initiation and continuation of actions to produce positive health outcomes. Rourke (1991) suggests that if the provider and patient interaction fosters a positive experience, the chance for commitment to health is greater and subsequently supports the developmental elements of Orem's model.

The APN can take advantage of her/his capability of

promoting and fostering the self-care agency of a patient by assessing and developing the patient's knowledge level, encouraging participation in decision making, and enhancing motivation by working toward, from the patient's perspective, a satisfactory health encounter.

CONCEPTUAL DEFINITIONS

Knowledge

According to the American Heritage Dictionary (1985), knowledge is "familiarity, awareness, or understanding gained through experience or study. The sum or range of what has been perceived, discovered, or inferred" (p. 705). For the purpose of this study a woman's knowledge of menopause includes being aware of the associated risk factors, symptoms, therapies, and self-care strategies related to this life cycle change. Knowledge is not innate, it is learned and requires the ability to seek and be open to experience and new discoveries, either on your own or through collaboration with a health care professional such as an APN.

Preference to Participate in Decision Making

As mentioned previously, Orem's (1991) general theory and the concept of self-care promote patient involvement in decision making; and the patient's self-control and ability to make decisions will improve by encouraging increased knowledge. Decision making, according to Coulton (1990), requires intellectual capacity. It is also influenced by cognitive, personality and emotional characteristics. The

process of decision making in the ideal situation would include the recognition that a decision is needed, the awareness of alternatives and their consequences, the ability to judge these consequences in terms of utilities, and the autonomy and ability to implement a choice (Coulton, 1990). It is this author's belief that this process must be given the opportunity to transpire by facilitating the patient's desire to participate.

For the purpose of this study, participation in decision making will be the degree to which women desire to make decisions about hormone replacement therapy. There are varying degrees of participation including women wanting to have complete decision making control; women wanting to make the decision but strongly consider the practitioner's opinion; women wanting it to be a shared decision making process; women wanting the practitioner to make the decision but strongly consider their opinion; and finally, women wanting only the practitioner to make the decision.

Patient Satisfaction

Patient satisfaction with its multidimensional constructs has multiple definitions within the literature. The satisfaction construct can be examined from the evaluation of global satisfaction to a more specific formulation that specifies what particular object in the health care system acts as the core of a patient's evaluation (Singh, 1989). For the purpose of this study, patient satisfaction is examined based on the definition

developed by Linder-Pelz (1982): "Patient satisfaction is the positive evaluation of distinct dimensions of the health care" (p. 578).

The distinct dimension measured in this study is the patient-provider interaction that has occurred or would occur when visiting a health care professional for consultation regarding menstrual or menopausal concerns. A visit to a health care provider for menstrual concerns is included in this study because it can be justified that women over forty experiencing menstrual problems may in fact be perimenopausaul. Assessment of a patient's satisfaction will not only include satisfaction with the general care received during the interaction but the extent to which the health care provider was responsive to the patient and the extent to which plan changes were made by the health care provider. Shore and Franks (1986) note that the individual patient-physician encounter is "the basic unit of medical care" and, therefore, measuring satisfaction for "individual encounters may contribute to a fuller understanding of the nature of physician-patient relationship" (p.580).

REVIEW OF LITERATURE

Within the health care literature, minimal research and little reference to all three variables under investigation in this study is found. Missing from the decision making and patient satisfaction related research is analysis of these concepts in the context of women and menopause. The study of Greenfield et al. (1985) on the

expansion of patient involvement in care and the effects on patient outcomes is the only research found in the last nine years of literature in which knowledge, active decision making, and satisfaction are examined together to better understand the provider-patient interaction. Greenfield et al. (1985), however, utilized an outpatient clinic population with peptic ulcer disease that was 91% male. A review and synthesis of previous investigations related to women's knowledge of menopause, patient decision making and patient satisfaction with the patient-provider interaction is presented.

Women's Knowledge of Menopause

LaRocco and Polit's (1980) work is the most frequently referenced nursing investigation on the subject of women's knowledge of menopause. These researchers examined the relationship between a woman's knowledge score and her sociodemographic characteristics. A majority of LaRocco and Polit's (1980) sample had completed high school but had not attended college. The 167 women between 40 and 60 years of age responded to a 12-item true/false questionnaire that included items about the relationship of menopause to the ability to get pregnant; the relationship of symptoms to menopause; and the relationship of estrogen drugs to the symptoms of menopause. At the time of this study, associated risk factors to HRT were not discussed and this fact could account for the absence of knowledge items related to risk by LaRocco and Polit (1980).

LaRocco and Polit (1980) reported the average number of correct responses was seven out of a possible twelve (SD = 1.8). Only half of the total sample were aware of the estrogen treatment for alleviation of menopausal symptoms. Background variables most strongly related to woman's knowledge were working status and level of education. Those who worked full time or part-time and those with a higher educational background had more knowledge. Marital status, religion, number of children, and family income were not related to knowledge.

Millette's (1981) survey of attitudes and knowledge of menopause utilized a nineteen item knowledge instrument: two items regarding average age of women at menopause, average length of menopause and a seventeen item checklist on commonly reported symptoms. No measurement was completed on knowledge of health risks and self care measures. The reliability analysis of the knowledge instrument only produced a coefficient alpha of .63. The convenience sample involved 130 both professional and blue collar employees of a community hospital and local school system. No mean scores, standard deviations, or ranges to reponses were reported. The average length of menopause was expected to be 5-10 years by 29 percent of the women. Only 37.7 percent of this sample were aware that vaginal dryness is part of menopause. Millette (1981), who had a sample of more college educated individuals with higher income levels then LaRocco and Polit's (1980) sample, found that women in the

upper income level showed a higher knowledge level. The difference in the relationship between income and knowledge level found by these two studies may be the result of the variability of the sample groups.

A recent investigation that examined women's knowledge of menopause was Cate and Corbin's (1992) analysis of age differences in knowledge and attitudes toward menopause. A convenience sample of 286 women, age 19 to 92 years with a mean age of 43, were participants in the study. Using a twelve item true/false test, the study found a mean knowledge score of nine (SD = 1.87). The study also found that older women exhibited less knowledge about menopause than younger women ($p < 0.05$), but older women had more positive attitudes toward menopause. Although the relationship between knowledge and attitude in all subjects was significant ($r = .20$, $p = .0011$), the relationship was weak, explaining only 4 percent of the variance among the subject's responses. Significant relationships were found between knowledge and overall health ($r = .22$, $p = .0004$) and between knowledge and life satisfaction ($r = .16$, $p = .0005$). Cate and Corbin (1992) caution that these, too, are weak relationships that "limits the ability to predict knowledge with any degree of accuracy" (p.38). In addition, Cate and Corbin (1992) found that perimenopausal women and women who had undergone surgical menopause were more knowledgeable than women who were premenopausal and postmenopausal ($p < 0.05$).

Finally, two studies were found that examined knowledge related to hormone replacement therapy specifically. Ferguson, Hoegh and Johnson (1989) studied 274 women between the ages of 19 and 90 years, average age of 60 years, and their knowledge about osteoporosis and the role of estrogen replacement therapy in reducing osteoporosis. The researchers used a 21 item questionnaire for analysis. Of those women not currently taking estrogen replacement therapy (ERT) only 27 percent knew that lack of estrogen was an important factor in osteoporosis compared with 89 percent of those woman currently taking ERT and 88 percent of premenopausal women. As with knowledge regarding risk factors, 28 percent of the women who had never taken ERT knew that estrogen could decrease one's risk of osteoporosis compared with 86 percent of women taking ERT and only 50 percent of premenopausal women.

Roberts (1991) utilized a questionnaire consisting of open and closed questions covering three main areas: background information, expectations of and attitudes toward the menopause, and hormone replacement therapy. In a smaller sample of 64 women aged 40 to 65 years, the researchers found knowledge about hormone replacement therapy (HRT) to be variable; 87 percent of the women knew HRT was not a form of contraception and two thirds knew that it could prevent osteoporosis. However, 52 percent of the sample did not know of any side effects, with 21 women reporting cancer risks and 4 reporting that there was a risk

of cardiovascular problems.

In summary, the literature reflects a lack of recent attention to women's knowledge of menopause. Studies found indicated a tendency to use a small number of items to measure knowledge with very few of the psychometric properties of the instrument being reported, and a lack of measurement of women's knowledge of self-care measures, health risk associated with menopause and HRT. This review of the literature provides support for further exploration of the concept of women's knowledge of menopause within a self-care framework.

Desire to Participate in Health Care Decision Making

The research reported in the literature that focuses on the concept of a patient's desire to participate in the decision making process has studied patients with cancer (Blanchard, Labrecque, Ruckdeschel, & Blanchard, 1988; Cassileth, Zurkis, Sutton-Smith, & March, 1980; Degner & Sloan, 1992; Degner & Russell, 1988), hypertension (Strull, Lo, & Charles; 1984), diabetes (Pendleton & House, 1984), patients who are experiencing a surgical procedure (Larsson, Svardsudd, Wedel, & Saljo,1989; Lidz & Meisel, 1982), and rehabilitation (Beisecker & Beisecker, 1990; England & Evans, 1992). Another focus of research has been the relationship between information seeking behaviors and the desire to participate in health care decision making (Beisecker & Beisecker, 1990; Ende, Kazis, Ash, & Moskowitz, 1989; England & Evans, 1992; Strull et al., 1984). The

literature, except for the work done by Rothert et al. (1990), is lacking in the examination of decisions related to health promotive care such as the decision women face regarding hormone replacement therapy during menopause.

The most cited study of the patient's desire to participate in the decision making process was the work done by Strull et al. (1984) in which 210 hypertensive patients and 192 of their providers in three different sites were asked how decisions regarding therapy were made and how they should be made. Sixty-three percent of the patients reported that the clinician usually makes the decision. On the other hand, the clinician reported that the clinician makes the decision 20 percent of the time. Similarly, 80 percent of the clinicians reported patient participation in decision making while only 37 percent of the patients reported any participation. Nearly 47 percent of the patients preferred that the clinician make the therapeutic decision alone while only 19 percent wanted the decision to be made with both the patient and clinician input. In this case, the clinicians overestimated the degree of participation with 78 percent believing the patients wanted to help make decisions. It is important to note that despite the disparity between the patients' and clinicians' beliefs, 89 percent of the patients reported being 'very' or 'extremely' satisfied with their overall medical care received from their current clinician.

In an earlier study by Cassileth et al.(1980),

participation preferences among inpatient and outpatient cancer patients were examined by having the patients choose between two statements, one indicating a preference to leave decisions to the doctor and the other a preference to participate in decisions regarding medical care and treatment. In a sample comprised of 256 patients with metastatic disease with a median age of 55.5 years, 58.6 percent were outpatients in the Hematology/Oncology and Radiation Therapy Clinics. Unlike the hypertensive population of Strull et al. (1984), 63 percent of this more acutely ill sample preferred to participate in decisions surrounding medical care and treatments. Although 59.8 percent of the sample were women, preferences in treatment decisions were independent of the patients' gender. Patients who preferred to participate versus those who wanted to leave decisions up to the doctor were younger ($p < 0.001$) and better educated ($p < 0.001$) as found using point biserial correlations. No examination of the relationship to health status was conducted.

To assess the patient's preference for participation in decisions regarding care and treatment, Blanchard et al. (1988) had 439 hospitalized cancer and medical oncology patients answer the question utilized by Cassileth et al. (1980). Similarly, Blanchard et al. (1988) found that 69 percent of the patients preferred to participate in the decision making. In contrast, this sample was 54 percent male and it was found that those who did not want to

participate in decision making were more likely to be male ($\underline{x}^2 = 8.75$, $\underline{p} < 0.01$), however, the gender ratio was equal for those who wished to participate in the decision making. Noteworthy is the finding that those who preferred to leave the decision to the physician were those patients who were in bed more than half of the day or totally bed-ridden ($\underline{x}^2 = 20.6$, $\underline{p} < 0.001$).

A more recent study by Degner and Sloan (1992) included 482 members of the general public and 436 newly diagnosed cancer patients. This study utilized a card sort method, two sets of five cards each, for assessing preferences in participation. It was in the first set of cards that the participants selected the role the patient and physician should assume. The roles ranged from the patient selecting his own treatment to a collaborative model and finally, a scenario where the physician alone made the decision. Degner and Sloan (1992) using this different method for measurement and a sample of patients newly diagnosed with cancer found that 59 percent of the patients preferred that the physician make treatment decisions on their behalf. On the other hand, 64 percent of the householders preferred to play an active role in treatment decision making if they were to develop cancer. Age, education and gender were found by univariate analysis to be related to preferences about keeping, sharing, or giving away control. In the sample of patients with cancer, a trend was found for women to prefer more control then men in the decision making and

for the more highly educated patients to prefer more control. However, in both the sample of patients with cancer and the householders, the older individual preferred less control. No difference was found in preference for participation in relation to stage of disease or symptom distress.

Other investigations are found in the literature that indicate different degrees of desire for participation in decision making based on the methodology used. For instance, using eight vignettes, Degner and Russell (1988) found among cancer patients a preference for joint control. Ende, Kazis, Ash, and Moskowitz (1989), studying 312 patients from a hospital-based primary care clinic, reported a moderately low desire to participate based on nine vignettes that represented different levels of illness severity. Noteworthy is a Ende et al. (1989) finding that 75 percent of the patients preferred more decision control during a minor illness then during a major illness. Beisecker and Beisecker (1990) utilized a 13 item Locus of Authority Scale with 106 outpatient rehabilitation patients. Results indicated that medical decision making authority rested more with the physician. However, the scale asked the sample who should make final decisions on such questions as what drug to use, what dosage to give, and whether to change a medication. It would be hard to imagine that a patient would want the responsibility of determining what dosage of a drug to use. Finally, Greenfield (1985), based

on an experimental designed study assessing an educational intervention to increase an ulcer patients involvement in decision making, found that the experimental group, 23 patients, had a 30 percent increase over the control in scores measuring preference for active involvement in decision making. Results would suggest that by increasing the information given to patients, the desire to participate in decision making may increase.

As suggested earlier, lacking in the literature is an assessment of the desire to participate in decision making in women's health issues including the decisions surrounding hormone replacement therapy. Also, missing is the examination of participation preferences in populations that are making decisions regarding preventive and health promotive care. Finally, it could be said that different degrees of participation are reported based on the methodology of the study and the composition of the sample.

Patient Satisfaction with Health Care Professional Interaction

Hall and Dornan (1988) reported in a meta-analysis of the satisfaction literature that there are multiple categories of investigations into the concept of patient satisfaction including satisfaction with access, cost, overall quality, humaneness, competence, amount of information supplied by the provider, bureaucratic arrangements, physical facilities, or provider's attention to psychosocial problems of the patient. This literature

review will be limited to the research which has examined patient satisfaction with the patient-provider interaction and the care received during the clinical encounter.

Linder-Pelz (1982) was one of the first to examine social psychological determinants of patient satisfaction with a clinic visit for the purpose of theory development. The sample of 125 patients was comprised of people who were attending one of the primary care clinics of Columbia-Presbyterian Medical Center for the first time. Before seeing the physician, the patients were asked to rate their expectations, entitlement and values with regards to distinct aspects of the encounter; after the visit the same patients rated their satisfaction with the encounter. Patient expectations, i.e., what is anticipated will happen, explained most of the variance in satisfaction ratings compared to values, entitlement and perceived occurrences. However, less than 10 percent of the variance in patient satisfaction with the visit was explained by these social psychological variables. Later, Linder-Pelz and Struening (1985), using the same sample, found that doctor-conduct and satisfaction with convenience explained 26 percent of the variation in patient satisfaction with a particular encounter.

Like and Zyzanski (1987) examined social psychological determinants of patient satisfaction with the clinical encounter utilizing a convenience sample of 144 adult patients prior to and following visits to University of

Cleveland Family Practice Center. Like and Zyzanski (1987) found that patient sociodemographic characteristics, i.e., race, marital status, employment status, occupation, annual income, level of education and method of health care payment, were not statistically related to patient satisfaction with the encounter. Other independent variables not found to be correlated with satisfaction with the encounter were patient illness behavior characteristics, health care system characteristics, and physician encounter characteristics. Increased patient encounter satisfaction was found among older patients, patients of lower social class, and patients who felt that they had spent more time with the doctor. After controlling for the effects of patient sociodemographic variables, patient illness behavior, and physician encounter variables, request fulfillment accounted for at least 19 percent of the variance in patient satisfaction with the encounter.

Further study of the relationship between patients' satisfaction with their physician and the interventions they desired and received was conducted by Brody, Miller, Lerman, Smith, Lazaro and Blum (1989). The sample population, comprised of 118 symptomatic adult primary care patients (mean age 31.7 years, 62% women and 85% minorities), completed questionnaires before and after their medical visits. The 10-item satisfaction scale examined the patients' perceptions about both the art of care and the technical quality of care. It was found, using a one-way

ANOVA, that patients who reported they received one of the nontechnical interventions: education ($p < 0.001$), stress counseling ($p < 0.05$), and negotiation ($p < 0.01$), were significantly more satisfied than those who had not received these interventions. However, in contrast to Like and Zyzanski (1987), a significant relationship was not found between patient-intervention desires and perceptions about intervention received; and there was no significant correlations between patient satisfaction and age.

Robbins, Bertakis, Helms, Azari, Callahan and Creten (1993) examined the influence of physician practice behaviors on visit-specific satisfaction. In a randomly selected sample of 100 new patients from a university medical center outpatient facility, participants completed a pre and post visit-specific questionnaire consisting of 18 satisfaction questions adapted from the work by Ware, Jr., Davies-Avery and Stewart (1978). Total visit-specific satisfaction was found to be positively related to previsit satisfaction ($r = .23$, $p \leq 0.05$) and time spent on health education ($r = .37$, $p \leq 0.001$), physical examination ($r = .21$, $p \leq 0.05$), and discussion of treatment effects ($r = .25$, $p \leq 0.01$). Time spent on history taking was found to have a negative relationship ($r = -.29$, $p \leq 0.01$). These five variables explained slightly more than 25 percent of the variability in visit-specific satisfaction ($R^2 = 0.26$).

Conlee, Olvera, and Vagim (1993), assessing physicians nonverbal immediacy relationship to patient satisfaction

with the care, utilized their 13-item Patient Satisfaction with Physician Care (PSPC) scale in a sample of 117 upper division education students, 75 percent were women. Four factors were indicated within the satisfaction scale including respect/attention, competence, humility, and accessibility. The researchers' found a significant positive correlation between nonverbal immediacy and patient satisfaction (r = 0.68, p = 0.001). Caution was given to the generalizability of the results since the PSPC scale was developed using an undergraduate student population, a population which is characterized by good health.

Finally, an investigation into the nurse-patient interaction was done by Krouse and Roberts (1989) in which the actively negotiated process of decision-making with the practitioner compared to partially negotiated approach was thought to result in a patient demonstrating a greater feeling of contentment, as opposed to frustration, with the interaction and treatment plan. However, this pilot study utilized a undergraduate nursing student sample making it difficult to generalize the results because of the confounding nature of the sample.

In summary, research has previously focused on those sociodemographic characteristics, i.e., age, income, educational level, and gender, that may be predictive of a patient's desire to participate in a decision and a patient's satisfaction with a health care encounter. Also, the majority of these studies only examined these concepts

within the context of a physician-patient interaction and did not consider the involvement of other health care providers. Methodological issues have also made it difficult to generalize any of the research findings found in the literature. Recent research examining a woman's knowledge of menopause has been limited by lack of information and lack of focus on self-care.

Missing in the literature is the assessment of how knowledge, desire to participate in decision making, and satisfaction with the health encounter may relate to each other in regards to a specific health encounter and women's health promotive issues such as menopause. The purpose of this research, then, is to conduct an exploratory investigation of what women, today, know about menopause, to what degree these women want to participate in decision making related to hormone replacement therapy, whether these women are satisfied with the patient-provider interaction and finally, whether and how these three concepts are related.

METHOD

Design

The questions for this research study were addressed using secondary analysis from the "Decision Making in Menopause Study" conducted by principal investigator Rothert (1990) (Appendix A). A descriptive correlational design was utilized since there was reason to believe a relationship exists among the variables identified through

previous research (Wood & Brink, 1989). This design does not test Orem's (1991) theory but describes relationships among variables that have not been examined in this particular population.

Operational Definitions of Variables and Instrumentation

For the purpose of this research three scales were utilized from the original 121 item questionnaire developed by Rothert et al. (1990). All the instruments were developed and reviewed by a multidisciplinary team consisting of nurses, physicians, researchers in the field of menopause, psychologists and representatives of the lay population to assess face validity, conceptual appropriateness, and clinical accuracy (Rothert, 1990). Following is a discussion of these measurement tools (Appendix B) including the parameters and operational definitions of the concepts being measured.

Knowledge - (Questions 68 thru 91). This variable is defined as the score on the 24 item knowledge scale. This scale measures the knowledge subjects have about risk factors related to hormone replacement therapy (HRT), symptoms, therapies and self-care strategies related to menopause.

The knowledge scale contains 24 questions, eleven multiple choice and thirteen true-false. The number of correctly answered items are summed, with higher scores reflecting greater knowledge about the menopause, lower scores reflecting less knowledge. Each individual has a

single knowledge score. Correct answers are coded with a "1" and incorrect answers and blank questions were coded with a "0".

To measure the internal consistency of the knowledge scale a coefficient alpha was computed. In the original pilot study of 120 women recruited from faculty and staff of Michigan State University the 21 question knowledge scale produced a coefficient alpha of 0.77. The tool was then modified with several items rewritten and deleted to clarify the questions. Additional items were added to address the relative risk of the various factors related to HRT, and to assess knowledge about estrogen, HRT and self-care strategies. After these changes were completed, the knowledge scale produced a coefficient alpha of 0.85 in a sample of 252 women. The knowledge items were found to be relevant to the subject of menopause with accurate answers when compared to OTA's (1992) report on menopause, HRT and women's health. Although this study was only interested in assessing a woman's general knowledge level of menopause and not the development of separate knowledge subscales, exploratory factor analysis was completed on the knowledge scale. Findings indicated an unidimensional scale. Test-retest reliability was not completed because this study was based on secondary analysis of a previous investigation.

Desire to Participate in Decision Making Related to HRT - (Question 101). This variable measures the participants' desire to make decisions about hormone replacement therapy.

The one question is designed to explore who the women believe should make the decisions.

The question utilized in this study is based on a similar question used by Strull et al. (1984) in their work measuring 210 hypertensive outpatients' desire to participate in medical decision making. Similar to Strull's et al. (1984) question, the women are asked to choose between five preference categories for decision making, ranging from making the decision alone based on their knowledge to having the practitioner make the decision alone based on what he/she may know. Modification to the wording of the categories used by Strull et al. (1984) was done to refer to a "practitioner" rather then a "clinician" and to the woman as "I" instead of the "patient".

The following introductory statement to the question was used in this study and by Strull et al. (1984) to minimize bias in responses:

> Some people want practitioners to make all decisions about medicines based only on the best medical practice. Other people want the clinician to ask them their opinion about the decision. Finally, some people want to make the decision themselves, after getting advice or opinion.

To contribute to the reliability of the question, Strull et al. (1984) conducted open-ended post questionnaire interviews will all the patients, with extensive discussion taking place with one-third of the sample. The researchers

reported that this interviewing process "generally confirmed the responses to the more structured questions " (p.2993). However, this interviewing process was not reported in this investigation.

Using five preference categories for decision making within the one question was intended to provide criterion-related validity compared to those (Blanchard et al., 1988; Cassileth et al., 1980) who have used a one question item to measure the desire to participate in decision making, but have employed fewer participation categories from which the subjects choose. Cassileth et al. (1980) and Blanchard et al. (1988), in their work with both outpatients and hospitalized patients, had the patients select the following statement that best described their point of view: I prefer to leave decisions about my medical care and treatment up to my doctor or I prefer to participate in decisions about my medical care and treatment. Although these researchers found in a pilot test that the item showed both that the wording was meaningful and comprehensible to the patients and the item discriminated among patients' viewpoints, it is questionable whether it measures the varying degrees to which the patient would like to participate.

Satisfaction with Provider Interaction - (Questions 102-111). This variable is defined by the score on the 10 item satisfaction scale. The scale measures the participants' general satisfaction with a health care professional interaction. It refers to the health care

provider the participant would likely consult about menstrual or menopausal problems. Included are questions about likelihood to return to the same health professional, attention given to the participant by the health professional, quality of care received and overall satisfaction with the visit.

The general satisfaction scale contains ten items with responses based on a five-point Likert scale, strongly disagree to strongly agree. The ten items are summed to obtain a mean score for satisfaction with an encounter. The highest possible score is 5 with a range of 1 to 5. Women who indicate they feel satisfied with the interaction will have a higher mean score and women who indicate they feel dissatisfied with the health care episode will have a lower mean score.

The general satisfaction scale was developed and modified from Linder-Pelz and Struening's (1985) general satisfaction subscale from their "The Patient Satisfaction Questionnaire". Linder-Pelz and Struening's (1985) 22 item questionnaire was developed after submitting a large pool of satisfaction items to four judges; the items judged the best were then piloted in clinical groups. The final questionnaire was comprised of the items that elicited the best distribution of responses. Linder-Pelz and Struening (1985) used a sample of 155 first time patients to a group of medical primary care clinics in upper Manhattan; 60 percent were black and 30 percent were hispanic with a

median age of 54. Factor analysis identified three dimensions of satisfaction with a health encounter: doctor conduct, convenience and general satisfaction. The seven item general satisfaction subscale was reported by Linder-Pelz and Struening (1985) to have an alpha coefficient of .77. Factor analysis was not done on the patient satisfaction scale utilized in this study because it was based on a subscale of Linder-Pelz and Struening (1985) 22 item questionnaire.

While the general satisfaction scale includes mostly positive statements, Linder Pelz and Struening (1985) found in their study that the tendency to agree was as great as the tendency to disagree, therefore, they concluded response bias did not play a vital role in determining questionnaire responses.

Modification of the Linder-Pelz and Struening (1985) general satisfaction subscale involved generalization to a broader category of health care providers. Items were added to measure extent to which the health care provider was responsive to the patient and extent to which plan changes were made by the health care provider. Following these modifications, Rothert (1990) reported an alpha coefficient of 0.91.

Sample

This investigation utilized a convenience sample. The women were recruited from the Mid-Michigan area by press releases to the media, including radio, newspaper and

television.

The sample consisted of 252 women 40 years of age or older. "The age 40 criteria is a common age indicator for mid-life issues (e.g., Preventive Services Task Force, 1990) and is expected to include the age at which women confront the issues of menopause" (Rothert, 1990, p.36). The sample did not exclude women because of menopausal status, hysterectomy or current medication taking behavior.

The study sample resembled somewhat the demographics of the local area population. Noteworthy is a higher percentage of college and post graduate degrees held by the sample. Study participants were more likely to be white, employed, college educated and from households with incomes of $15,000 per year or more than women from the tri-county area. This is significant when considering the generalizability of the research outcomes.

Data Collection Procedure

Data collection for this study was completed during Time 1 of the 12 month primary investigation. Time 1 was data collection prior to subjects participating in the three sessions that involved the intervention under investigation. Although the women were initially randomly assigned to one of three treatment groups, the data from all three groups were pooled for this study.

Data collection was conducted on the campus of a mid-western university within a classroom setting. Two members of the research team were present at each of the three

different sites to provide similar instruction to the women. The 121 item questionnaire was completed on site prior to any intervention or discussion.

Data Analysis

Data analysis was done with the SPSS/PC+ computer program. Descriptive statistics were used to determine frequency distributions, means, and percentages of the women's summed knowledge scores in answering what these menopausal women know about menopause; and to define the extent women desire to participate in decision making from the single item responses. Similarly, frequency distributions and percentages were utilized with satisfaction with the interaction mean scores to determine if this sample population is satisfied with the patient-provider interaction. Using a Pearson's r on the three measurements, correlation coefficients were used to determine the associations among the knowledge of menopause score, the satisfaction with the interaction mean score, and the degree to which the sample population wants to participate in decision making regarding menopause and HRT. Since this is a descriptive correlational study, no attempt was made to determine a causality relationship among the three variables. Items that were either left blank or had two responses marked by the women were considered missing in the analysis of the data.

Protection of Human Subjects

The rights of the individuals who participated in this study were protected according to the guidelines developed by the University Committee on Research Involving Human Subjects (UCRIHS) at Michigan State University. Approval to conduct this investigation was received from UCRIHS prior to data analysis (Appendix C).

Confidentiality is safeguarded through assignment of an indentification (ID) code number to each participant. This number is used to match data from each person. Participants signed an informed consent form on which the ID number appears. The responses of all study participants remain confidential. All study results are reported in aggregate form only.

RESULTS

Description of Study Sample

The convenience sample for this study consisted of 252 women 40 years of age or older. The sample did not exclude women because of menopause status, hysterectomy or current medication taking behavior, therefore, these predisposing characteristics along with age, education, employment status, household income, race and religion were collected (Table 1). Subjects ranged from 40 to 65 years of age with 46 percent (n = 115) between the age of 46 and 50. Almost all of the sample were white (94%, n = 237), more then half married (65.9%, n = 166) and employed full-time (62.3%, n = 157), and almost half had a household income between $50,000

Table 1

Sociodemographic Characteristics of Sample

(N = 252)

Characteristic	n	%
Age(years)		
40-45	95	(37.7)
46-50	115	(45.6)
51-55	34	(13.5)
56-60	6	(2.4)
61-65	2	(0.8)
Race		
African-American	9	(3.6)
Hispanic	4	(1.6)
American Indian	1	(0.4)
White	237	(94.0)
Other	1	(0.4)
Marital Status		
Married	166	(65.9)
Divorced	65	(25.8)
Single	17	(6.7)
Widowed	3	(1.2)
Separated	1	(0.4)
Employment Status		
Full-time	157	(62.3)
Part-time	49	(19.4)
Retired	12	(4.8)
Not employed	28	(11.1)
Other	6	(2.4)

(Table continues)

Table 1 continued

	n	%
Income		
< $14,999	10	(4.0)
$15,000-$29,999	32	(12.7)
$30,000-$49,999	69	(27.4)
$50,000-$99,999	116	(46.0)
100,000-$200,000	22	(8.7)
> $ $200,000	2	(0.8)
Education		
< 12 years	2	(0.8)
High school graduate	24	(9.5)
> 12 years	65	(25.8)
Technical trade/community college	33	(13.1)
Bachelors degree	60	(23.8)
Masters degree	42	(16.7)
PhD/professional degree	21	(8.3)

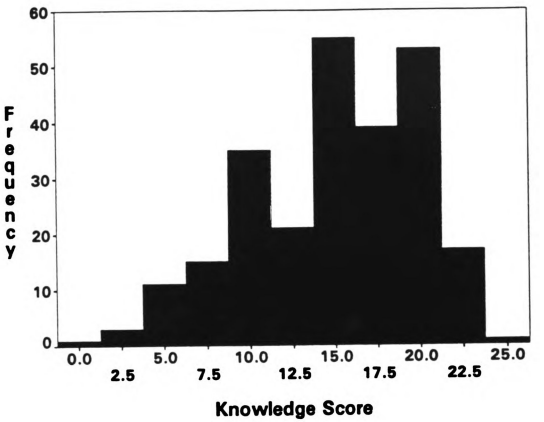
and $99,999 (46.0%, n = 116), and a bachelors or more advanced degree (48.8%, n = 123). Among the 252 women, more than half (58.3%, n = 147) reported still having natural menstrual periods, 14.3 percent (n = 36) reported having had a hysterectomy and about one-tenth (n = 25) reported having had one or both ovaries removed. Half of the women reported that they currently considered themselves as experiencing menopausal symptoms; however, nearly one-quarter (24.2%, n = 61) of the women were not sure if they were having symptoms. Finally, more then half of women were not certain whether they would or would not take either estrogen replacement therapy (52%, n = 131) or estrogen/progesterone combined therapy (55.6%, n = 140).

Analysis by Research Question

Question 1

The purpose of this research is to answer four questions about menopausal women. The first is: What is their level of knowledge about menopause?

The mean knowledge score from the 24 item knowledge scale is 15.0 with a standard deviation of 4.96 and a range of 1 to 24 (Figure 2). A mean score of 15 indicates the women on average correctly answered 62 percent of the items. Surprisingly, the item with the most correct responses (96.4%, n = 234) assessed women's awareness that with menopause a woman still needs to be concerned with breast cancer or other female cancers. Interesting is the item most frequently answered incorrectly by this sample.



Std. Dev = 4.96
Mean = 15
N = 251

Figure 2. Frequency Distribution of Knowledge Scores

Only a little more then one quarter of the women (28.2%, n = 71) knew that although many women have menopausal symptoms, very few seek medical relief. On the other hand, more then three-quarter of the women (79%, n = 199) correctly identified that a decreased production of estrogen by the ovaries caused symptoms of menopause.

Those items which examined knowledge related to progesterone appeared to cause the most difficulty among the women. Three-fifths of the women (60%, n = 151) did not know that estrogen without progesterone increased the risk of cancer of the uterus. Similarly, close to seven-tenths (67%, n = 168) of the women believed that one would be increasing the risk of uterine cancer by adding a progesterone agent to estrogen. And likewise, over three-fifths (61.6%, n = 154) of the women did not know that adding a progestational agent to ERT frequently results in monthly menstrual flow.

Two items within the knowledge scale examined what women knew about the relationship between heart disease and menopause. Although close to seven-tenths (69%, n = 174) of the women knew that a woman's risk of heart disease increases after menopause, only about half (48.4%, n = 122) of the women correctly answered that ERT can decrease that risk.

A high degree of accuracy is revealed on those items assessing knowledge about osteoporosis and its association to menopause. More then nine-tenths (91%, n = 228) of the

women responded correctly that menopause increased the risk of osteoporosis. Similarly, on both items examining risk of osteoporosis and hormone therapy, close to four-fifths (78%, n = 197) of the women answered the items correctly. It was only when asked whether a woman's chance of dying from uterine cancer is greater then the chance of experiencing an osteoporosis fracture did the women demonstrate a lack of knowledge, with more than half (53%, n = 133) answering that this statement was true.

Knowledge regarding symptoms of menopause and their relief is variable among these women. Although more then nine-tenths (92.1%, n = 232) of the women knew that hormone replacement therapy (HRT) can be used to help relieve symptoms of menopause and slightly more then four-fifths (81%, n = 204) know that hot flashes and night sweats are the most frequently reported symptoms, only three fifths (60%, n = 152) of the women knew that wearing layers of clothing so they can be removed is a way to help reduce uncomfortable feelings associated with hot flashes; and only slightly more than half (56%, n = 140) knew that ERT could relieve the vaginal dryness that close to nine-tenths (87% n = 220) knew could be due to menopause. On the other hand, slightly more than half (56%, n = 140) of the sample did not know that the vaginal dryness caused by menopause increases the chance of vaginal infection. The women also demonstrated uncertainty about birth control after menstruation stops; more than half (57.1%, n = 144) did not

know that birth control should be used for one year following cessation of menses, although the same percentage of women knew that ovulation may occur without menstrual bleeding.

In summary, the women in this sample reveal having an overall moderate level of knowledge of menopause with a high degree of accuracy on osteoporosis and symptom items, and low degree of accuracy on those items relating to progestogen. Important to note is the large percentage of women that are uncertain about risk factors and birth control issues surrounding menopause, information considered essential to successful coping with this developmental stage.

Question 2

The second research question asks to what extent these women desire to participate in decision making regarding menopause and hormone replacement therapy (Table 2). Surprising is the finding that close to half of the women (46%, n = 117) indicated that they should make the decision but strongly consider the practitioner's opinion. Only one-tenth of the women (10%, n = 26) indicated that the decision is only for them to make based on what they may know or learn about hormone replacement therapy (HRT). Only five women requested that the practitioner make the decision alone based on what he or she knows about the medicines. A collaborative decision making process about hormone replacement therapy is desired by almost one-third of the

Table 2

Preference for Participation in Decision Making

Preference Categories	Patient Preferences % (n)
1. I should make the decision, using all I know about the medicines.	10 (26)
2. I should make the decision but strongly consider the practitioner's opinion.	46 (117)
3. My practitioner and I should make the decision together, on an equal basis.	32 (81)
4. My practitioner should make the decision, but strongly consider my opinion.	8 (20)
5. My practitioner should make the decision, using all that's known about the medicines.	2 (5)

N = 249

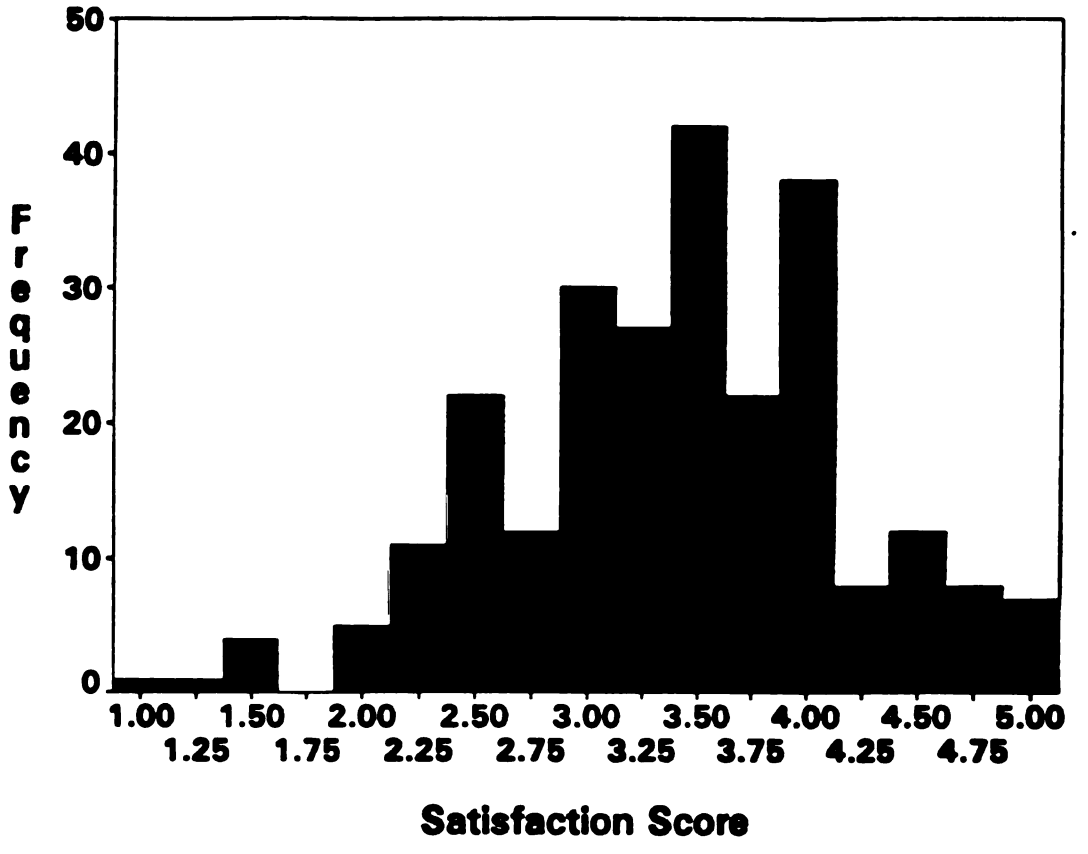
women (32%, n = 81).

In summary, the women want at least an equal part in the decision making responsibility, with more then half (56%, n = 143) wanting to take the lead.

Question 3

The third research question ask if these women are satisfied with the patient-provider interaction. The mean satisfaction score is 3.4 out of a possible 5, with a standard deviation of .77 (Figure 3). Overall, this indicates that these women are more satisfied than not with the interaction. However, there is evidence that the women are not completely satisfied with a large number of women responding neutrally to the satisfaction items (Table 3).

A significant finding is that close to one third of the women (29%, n = 74) indicated that their questions were not answered to their complete satisfaction during the patient-provider interaction and another 26 percent (n = 65) were uncertain answering "neither agree or disagree". Similarly, 29 percent (n = 73) responded with either strongly disagree or disagree to the item that 'all things considered, I was completely satisfied with the visit' and another 25 percent (n = 63) neither agreed nor disagreed with the item. On the other hand, more then half of the women (64%, n = 160) are satisfied with the amount of attention the provider gave to what the women had to say about their concerns. This high degree of satisfaction is also found in the responses given to the item that the health professional took the woman's



Std. Dev = .77
Mean = 3.4
N = 250

Figure 3. Frequency Distribution of Satisfaction Scores

Table 3. Frequency of Response to Satisfaction Scale

N=249	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
As a result of my most recent visit with my health professional, I understand my health state better.	3.6% (n = 9)	16.7% (n = 42)	23% (n = 58)	43.7% (n = 110)	11.9% (n = 30)
The medical care I received is better than most people get.	2.8% (n = 7)	6% (n = 15)	42.1% (n = 106)	38.1% (n = 96)	10.3% (n = 26)
The health professional seemed to understand exactly what was bothering me.	6% (n =15)	17.1% (n = 43)	32.1% (n = 83)	35.3% (n = 89)	7.9% (n = 20)
I don't want to see the same health professional next time.	25% (n = 63)	37.7% (n = 95)	16.3% (n = 41)	12.7% (n = 32)	7.1% (n = 18)
The health professional was one of the best you can find anywhere.	3.2% (n = 8)	13.9% (n = 35)	53.2% (n = 139)	19.8% (n = 50)	8.7% (n = 23)
My questions were answered to my complete satisfaction.	5.2% (n = 13)	24.2% (n = 61)	25.8% (n = 65)	35.3% (n = 89)	8.7% (n = 22)
All things considered, I was completely satisfied with the visit.	4.8% (n = 12)	24.2% (n = 61)	25% (n = 63)	34.1% (n = 86)	11.1% (n = 28)
The health professional took my news into consideration.	4% (n = 10)	9.1% (n = 23)	25.8% (n = 65)	46.4% (n = 117)	13.9% (n = 35)
I felt pressured to do what the health professional recommended.	14.3% (n = 36)	40.5% (n =102)	24.6% (n = 62)	17.5% (n = 44)	2.4% (n = 6)
The health care professional gave adequate atttention to what I had to say about my concern.	4% (n = 10)	15.1% (n = 38)	16.7% (n = 42)	47.2% (n = 119)	16.3% (n = 41)

view into consideration; 60 percent (n = 152) responded agree or strongly agree to this item. It also appears that these women (63%, n = 158) will continue to see the same health professional for their next health encounter. However, when comparing the health professional these women interact with to others they can find, slightly half of the women (53%, n = 134) are unsure if their provider is one of the best.

In summary, these women were satisfied with the last visit they had with a health care professional for menstrual or menopausal problems indicating that adequate attention was given to them and their views were considered by the provider. However, it is this author's belief that it is significant that one-third of the women were not completely satisfied with the visit and indicated that their questions had not been answered to the women's satisfaction.

Incidental Findings

There is, based on a one-way analysis of variance, a significant difference between a woman's satisfaction with the health encounter and whether the provider was a female or male ($\bar{X}_f$ = 3.54, sd .69; $\bar{X}_m$ = 3.28, sd .80; $F(1,247)$ = 6.758, $p < .05$). These results are significant considering that slightly more then half (55%, n = 141) of the professionals the women answered the questions about were male.

Question 4

What then are the relationships among the three variables: a woman's knowledge of menopause, a woman's desire to participate in decision making, and a woman's satisfaction with the provider interaction? Only one statistically significant linear relationship is present among the three variables based on Pearson correlation coefficients (Table 4). A weak negative association is present between a woman's knowledge and desire to participate in decision making regarding HRT ($r = -.2163$, $p < .001$) (Appendix D)

DISCUSSION

Study findings are interpreted in this section. First, an overview of findings is given; this is followed by a discussion of the four research questions. Second, implications of study findings in terms of the self-care agency framework and the APN's roles in the primary health care setting are presented. Finally, limitations of the study are discussed with topics for future research suggested.

This study utilized a convenience, or non-probability, sampling method. The resulting sample was fairly homogeneous, which is often the result of such sampling techniques. Sociodemographic characteristics of the women in this sample were very similar: the majority were white (94%), married (65.9%), and employed full-time (62.3). More than half reported a household income of $50,000 or more.

Table 4

Correlation Matrix of the Three Major Variables

	Participation	Satisfaction	Knowledge
Participation	1.0000	.0651	-.2163
	(n = 249)	(n = 249)	(n = 249)
	p = .	p = .307	p = .001
Satisfaction		1.000	.1085
		(n = 250)	(n = 250)
		p = .	p = .087
Knowledge			1.0000
			(n= 251)
			p = .

Similarly, almost half of the women (48.8%) have earned a bachelors or higher degree.

These characteristics can be considered unique and, therefore, can only be generalized to a population with same the same characteristics. For example, one might wonder if a woman in a lower socioeconomic status or a woman from a different ethnic or cultural background would demonstrate the same amount of knowledge or preference for decision making. A woman's preference for decision making may be determined by previous role models within her culture. However, the findings from this descriptive study will provide beginning hypotheses upon which to build further research in the area of self-care and decision making by the menopausal woman.

Research Questions

Knowledge

While most previous studies (Cate & Corbin, 1992; Ferguson et al., 1989; Martin-Burnham, 1981; Millette, 1981; Roberts, 1991) examined women's knowledge on only one aspect of menopause, this study examined a woman's knowledge of menopause related to associated risk factors, symptoms, therapies, and self-care strategies related to this life cycle change. A mean score of 15 (only 62.5 percent of the items answered correctly) on the knowledge test suggests that the APN or other providers cannont assume that well educated women have a high level of general knowledge regarding menopause. It is also evident that there is a

missing link in educating and preparing these women for this period in their lives even though there is an increasing amount of attention given to the subject of menopause in written lay print and seminars offered by health professionals (Cate & Corbin, 1992). The missing link may be the manner in which the information is provided or it may be that the information itself is missing what the women want and feel they need to know.

Findings from this study indicate that these women may hold stereotypes about the subject of menopause. For example, almost three-fourths of the women (71%, n = 180) believed that most women consult a physician when they are experiencing menopause when in fact only 20 percent of women do. As suggested by LaRocco and Polit (1980), the incorrect answer to this question might reflect "the stereotype belief that menopause is a disease or illness which ought to be brought to the attention of a physician" (p.12), rather then a reflection of their personal experience. Although the women may believe that it is necessary to discuss menopause with a health care professional, their previous dissatisfaction with the provider or uncertainty of what a visit might produce may prevent them from seeking assistance.

Of concern and interest to this researcher was the finding that although these women were aware that vaginal dryness can be due to menopause, more than half of the women (56%, n = 140) were not aware that this vaginal dryness

increases the chance of vaginal infection and over two-fifths (44%, n = 111) did not know how to best relieve this dryness. Similarly, over half of these women (57%, n = 144) did not demonstrate knowledge about birth control after menstruation stops. This researcher contends that the symptom of hot flashes is most often associated with menopause and most often brings the woman to the health care setting. However, these findings indicate the health care provider and or the information these women obtain elsewhere is not addressing the full scope of symptomatology and self-care issues associated with menopause. Not discussing birth control or the risk of vaginal infection and prevention of it could place unnecessary strain on both the woman and the health care system.

Although the OTA (1992) reports that very few women can identify the risk factors for osteoporosis, this study and Robert's (1991) research suggest that there is an awareness that menopause increases the risk of osteoporosis and that HRT can decrease that risk. However, awareness of other risk factors such as heart disease, uterine cancer and breast cancer and their relationship to HRT appears to be lacking. This may be the result of the provider not taking the time to explain such risk factors, the lack of knowledge held by the provider on the subject, and/or the conflicting and confusing information making it difficult for a woman to understand and apply to her own situation. Women are also not presented with comparable risk factors in a manner that

does not skew the utility of that risk. For example, 52.8 percent (n = 133) of the women did not know that the chance of dying from uterine cancer is less then the chance of experiencing osteoporosis fractures and 55.2 percent (n = 139) could not identify the graph that correctly shows the number of women who die each year from endometrial cancer, heart disease and osteoporosis. Similarly, 66.7 percent (n = 168) of the women indicated that adding progesterone to ERT would increase a woman's risk of uterine cancer. This incorrect information could be crucial to making an informed decision regarding self-care and therapy during menopause.

Desire to Participate in Decision Making Regarding HRT

There was a difference between the findings of Strull et al. (1984) and this study using the same instrument. Strull et al. (1984) found that almost half of the hypertensive patients (47%, n = 98) prefer the health care provider make the decision without input from the patient while this study found only 2 percent (n = 5) indicating this preference for decision making. This may be in part related to the different samples used in the studies, the different health states or the different decades in which the studies were conducted. The chronic hypertensive patient may not feel competent in making decisions concerning treatment options. They may conclude that there is no choice in the matter. On the other hand, women who are confronted with decisions in which they believe there are options and alternative self-care measures available may

consider themselves more capable of making decisions. Health promotive decisions may be different then those perceived to be more life threatening. Women may also believe that menopause and what they are experiencing can only be understood from their frame of reference and therefore, any decisions regarding care and treatment requires the woman's participation.

Similar findings to this investigation were found by Cassileth et al. (1980), and Blanchard et al, (1988). In both investigations that examined preference for decision making with cancer patients, over three-fifths of the patients preferred to participate in decisions about their care and treatment comparable to this study's finding that four-fifths of the women preferred some degree of participation in decisions regarding HRT. However, methodologic concerns limit the interpretation of both investigations because the data is taken from a single item without any qualification of the degree to which the patients actually wanted to participate in the decision making process.

The findings from this study indicate that many women may want to take the lead in making decisions related to HRT. Further data are clearly needed to examine differences that may occur in preference for participation based on the specific decision being made, by whom, and with whom. This researcher believes that the APN must assess each individual's preference and allow the woman to act on her

desire to control the decision making regarding HRT.

Satisfaction with the Provider-Patient Interaction

Women in this study indicate a moderate level of satisfaction with their last encounter with a health care professional regarding menstrual or menopause problems. A mean score of 3.4 indicates a tendency by the women to neither agree or disagree with a satisfaction item. This may be due to the known phenomenon of patient's reluctance to admit to dissatisfaction with their health care providers. The findings may also be the result of the elapsed time between responding to the scale and the actual date of the health care encounter. The women may not be able to recall the degree of satisfaction they had at the time, and therefore, hesitate in responding strongly in either direction. The alpha coefficient, however, was high (alpha = .91), indicating strong reliability for this scale.

The findings of this study reveal that women appear to be satisfied with the providers' conduct, with more then half of the women indicating that providers gave adequate attention to their concerns and took their view into consideration. Nonetheless, it seems that these women perceived that they were allowed to express themselves but were not heard or understood by the providers, with more then half of the women (56%, n = 141) not agreeing to the statement that the health professional understood exactly what was bothering her. This could explain why findings also indicate a desire by these women to take the lead in

making decisions regarding HRT. A woman who perceives she is not understood or does not get her questions answered to her satisfaction by the provider may believe that she is the only one that can make decisions regarding her health. In this study, less then half of the women (44%, n =111) agreed that their questions were answered to their complete satisfaction. Similarly, a large number of women (43.3%, n = 109), in this researcher's mind, did not report coming away from the visit with a better understanding of their health state. These findings support the previously stated notion that women might not be getting the information that they need and want.

Each patient-provider interaction is an opportunity to enhance a patient's knowledge and understanding of her health concern. Therefore, the provider, before the interaction is completed, must take the time to ask the woman if she is satisfied with the encounter, including if her questions were answered and if she understands her situation better. This study's findings suggest that there is room for improving upon the level of satisfaction a woman has with a visit regarding menstrual of menopausal problems.

Further study is needed to determine the factors that may increase the satisfaction level and to determine the provider's perception of the encounter. One of those factors, as indicated by this study, may be found in those differences between a male and female provider. The finding that these women were more satisfied with a female provider

also contributes to the hypothesis that women are in need of someone who understands them for who they are and what they are experiencing; this individual may be a fellow woman provider.

Caution must be given to the generalizabiltiy of these satisfaction scores. "Satisfaction is always relative; satisfaction rates change when, for example, standards of comparison or expectations change even though the object of evaluation (such as the actual health care one receives) may stay constant" (Linder-Pelz, 1982, p.581). Also, the methodological variations along with the multiple factors that have been found to play a role in patient satisfaction with the clinical encounter may have produced results only specific to this sample (Like & Zyzanski, 1987). For example, responses can differ depending on whether the patient is being asked when s/he is ill and actively seeking care, as compared to when s/he is healthy; the study is being undertaken in a hospital, outpatient clinic, private office, or health maintenance organization; collection of data occurs both before and after the encounter with a provider; or the patient is asked based on one visit versus a series of visits.

Knowledge, Participation in Decision Making and Satisfaction with the Encounter; Relationships among the Variables

Based on the self-care agency framework adapted from Orem's (1991) SCDNT, it was proposed that relationships would exist among the three variables (Figure 1). Findings

indicate only a weak inverse relationship between knowledge of menopause and desire to participate in decision making with HRT.

It could be postulated that those who are found to have a higher level of knowledge are aware of the complexities associated with making a decision about use of HRT and would rather the decision not be theirs to make alone. This researcher contends that this finding reflects that a knowledgeable woman has already made a decision surrounding her health; the decision being that she is not capable of having the final decision making responsibility based on what she knows about HRT. A woman's choice to not participate in the decision making associated with HRT may not be a true indication of decreased desire. On the contrary, the decision making may be occurring earlier and not during the patient-provider interaction itself. Orem (1991) describes phases of action toward self-care. The first phase ending by the woman making decisions about the actions she will take and will avoid. Phase two begins with the decision as to the course of action to be carried out in relation to the demand for self-care. It is evident that further data is necessary in examining the decision making process and how women might use or not use the knowledge they possess.

This study suggests that satisfaction is not linearly associated with a woman's level of knowledge or desire to participate in decision making. This would indicate that

the framework for self-care agency does not include the construct of patient satisfaction with the encounter. This may be due, however, to other intervening variables not investigated in this study and thus missing from the model and construct of satisfaction. For example, a woman's high level of life satisfaction or positive perception of well-being and health status may contribute to her desire to participate in health care decision making.

Further relationships among the variables of knowledge, participation, and satisfaction may not have been found because of the lack of variablity within the sample and or the restricted range in the responses.

Relation to Conceptual Framework

The model of self-care agency, based on Orem's (1991) Self-Care Deficit Nursing Theory (SCDNT), used in this study was helpful in giving focus to where research could begin to examine and describe women of menopause age and their capabilities for self-care. These capabilities for action, during an health encounter, could be facilitated and or enhanced by the health care professional. This model also allowed for and supported further investigation into how and if those traits a woman brings to the encounter may be related. The framework has the potential of providing the advanced practice nurse with assessment and intervention strategies for assisting the menopausal woman in performing self-care and maintaining well-being. Due to the descriptive nature of this investigation examination of how

these variables might affect self-care behaviors was not completed.

The data from this study fails to support the proposed relationships, depicted in the conceptual framework of self-care agency of the menopausal woman (Figure 1), between satisfaction with the encounter and menopause knowledge or preference for participation in decision making. As suggested, inclusion of predisposing characteristics of the woman into the framework, such as age, educational level, cultural background and health status, may illuminate relationships that are not evident now. Orem (1991) contends that the scope of self-care activities a person can perform is determined by such individualized factors as age, developmental state, and health. Also, Orem (1985) writes that "the activities of self-care are learned according to the habits, beliefs, and practices that characterize the cultural way of life of the group to which the individual belongs" (p.108). Therefore, a woman might have learned early in life that it is the responsibility of the individual to make decisions regarding a person's health. Similarly, a woman's belief system may have been developed to trust the health professional and be satisfied with the care she receives. Finally, it may be necessary to better define and examine the concept of motivation as a product of satisfaction in order to understand the self-care agency of a menopausal woman and potential relationship it has to knowledge and decision making. Orem (1991) contends that

not only does self-care require use of knowledge but enduring motivation and skill.

Implications for Advanced Nursing Practice and Primary Care

Since an increasing number of women will be reaching the age of menopause and a number of this study's sample (n = 116, 46%) reported seeing a family practitioner, the implications are many for primary care and the primary care advanced practice nurse. Primary care is comprehensive, coordinated, and continuous care. It is the primary care provider's responsibility to approach an individual, family, and community holistically; to gather and coordinate the right resources for the client; to enhance and facilitate the responsibility of the individual with their self-care; and to embody the philosophy of wellness, health promotion, and preventative and maintenance care. It is the APN, via her/his role characteristics and the nursing theory that she/he brings to practice, that can step forward and act on what this study suggest are the needs of women during their menopausal years.

Most significant for the APN is that she/he act as a client advocate for these women. As this study would suggest, these women of menopause age desire to be active participants in decision making surrounding HRT. Therefore, as an advocate the APN has the capability to promote a transfer of responsibility to the client or respect the responsibility of decision making the client has already demonstrated. According to Orem's (1991) self-care

conceptual framework, the client has a right and the capability to accept this decision making responsibility. The APN should seize this desire to participate by empowering the woman with choice and knowledge, thereby assisting the client in exercising her rights and improving the self-care agent in her. Also, the APN needs to empower those women who may hesitate to use the knowledge they already possess. The findings would suggest that an APN cannot assume that if the woman does not want to participate that she does not have the capability (knowledge) to do so. It may be necessary for the APN to assess if the woman has discussed HRT with others and whether this may have influenced a previously made decision not to participate. Therefore, with each encounter, participation and sharing of knowledge should be encouraged by the APN. As the findings would indicate, a portion of these women do not feel understood by the provider and have not been getting their questions answered to their satisfaction. As an advocate, the APN could suggest that the woman bring to the next encounter questions she may have to ensure that her concerns and questions are given adequate attention and are answered.

As important as acting as an advocate, the APN needs to function as an educator, applying learning theories and alternative learning methods to teaching and assisting women to identify and meet their health knowledge needs. The APN must address all facets of the menopause years, not just those that appear to be most familiar to these women,

i.e, hot flashes and night sweats, but address areas such as changes that occur with a woman's reproductive system and self-care measures to assist in coping with these changes. This researcher would also suggest that educating a woman about menopause begin early. The APN can introduce menopause and other life cycle changes when menses begins in a young girl's life. By introducing menopause at an early age the topic may not be as foreign to that girl as she grows older and may help her understand what may be occurring in older woman within her family.

Discussion of menopause should include general population, as well as personal risk factors so that the woman can make a decision based on accurate utilities. Findings reveal that a large percentage of women are not aware of associated as well as comparable risk factors. A woman cannot make any informed decision about HRT if she believes that the risk of dying from heart disease or osteoporosis fractures is less then the risk of dying from endometrial cancer. The APN must continue to be responsible for keeping up to date and then conveying to the client new knowledge and research that address these risk factors.

As indicated by this study's findings and suggested by this researcher, there may be missing links in the information these woman are receiving from the provider. It is possible that the APN and other providers do not have the knowledge. This researcher would propose that all academic institutions review the amount of menopausal content that is

included within the curriculum and provide professional continuing education programs on the subject. If a provider is to be seen as a resource for these women, they must have adequate preparation in understanding holistically the life cycle change of menopause.

The patient-provider interaction is not one way. Both patient and provider have information to bring to the decision making process. Together thru sharing of information and discussion a joint decision can be negotiated that will be most likely to have a positive outcome and be implemented be the patient. The provider must be educated that he/she needs to make informed decisions based on what the patient reveals about themselves. This process takes knowledge about how patients may interact during a visit and how to facilitate the open relationship needed for exchange of information.

Similar to the educator, the APN can act as a consultant to others in the community and health care field on the subject of menopause and women's health so that this population is not misunderstood. The APN has a unique knowledge base that can complement and broaden the scope of menopausal care and planning for other health professionals. The APN can function as a consultant within her/his own practice to other members of the health care team who would benefit from the APN's knowledge about women and menopause. The APN can share her/his nursing expertise by developing workshops and writing articles on the subject of menopause.

This study suggests that the APN needs to and can bring to the primary care setting the role of an evaluator and researcher. Although these women appear to be moderately satisfied with the patient-provider interaction, it is vital that the APN continue to act as an evaluator of the encounter. As an evaluator, the APN is responsible for developing and implementing standards to guide practice and promote accountability for the quality of that interaction. This study would suggest that besides examining general satisfaction with the encounter, the APN may need to determine a woman's level of life satisfaction and belief system regarding a health encounter. This may then help the APN understand the woman's knowledge level and preference for participation. With this understanding, the APN can better meet the needs of the woman. As a researcher, the APN can continue to test Orem's (1991) SCDNT and foster the spirit of inquiry into how primary care providers can render comprehensive, coordinated and continuous care that seeks to give menopausal women quality, affordable, and accessible care. Continued research will not only advance nursing knowledge but bring to practice the ability to produce positive health outcomes for all women.

Finally, findings indicate that satisfaction responses are based on the gender of the provider seen during the health care visit. In this study, it is also interesting that the women indicate 43% of the providers seen are woman. These findings indicate woman are seeking out the female

health care provider. Women are seeking to be heard and understood and the female provider may be the provider who will be most sensitive to their needs.

Limitations Due to Secondary Analysis

Limitations in this study can be linked to the homogenous convenience sample, the data collection process and the tools used to measure the variables being investigated. The most significant limitation in this study may be the inability to generalize the research findings to a larger population of women of the same age range. The sample lacked equal representation of minority women, women of lower socioeconomic status and those women from a rural background.

The data collection process produced limitations within this study, however, this limitation was due to this study being a secondary analysis. For example, it is not known when the visit about which information was gathered occurred. A difference in satisfaction levels may be present as a result of the time between the encounter and data collected. Similarly, an effort was not made to determine if the women were referring to a first visit with a provider or if the visit occurred with a provider they had been seeing for a number of years when responding to the satisfaction scale.

Other limitations of this investigation are the result of the structure and substance of the measurement tools. Most obvious is the use of only one item to measure a

woman's preference for participation. Adding additional items related to decision making may have provided critical data for interpretation of findings. These items could have included the woman's perception of how both she and her provider felt the decision is usually made and how the provider preferred the decision making process to unfold.

Finally, because this study was based on secondary analysis certain data related to knowledge are not present. Missing is an item asking where the women obtained their knowledge of menopause. Similarly, an item was missing that assessed the women's perception of how much they knew and if they felt they needed to know more.

Recommendations for Future Research

This investigation was designed to be descriptive in nature in order to provide a better understanding of what the menopausal woman of today brings to a health care encounter. The study provides the first level of inquiry upon which to base more in depth research.

Further study of the relationship between knowledge level and preference for participation in decision making is recommended by expanding upon the theoretical framework of self-care agency. It might be helpful also to examine what perceptions, motivation risks and barriers these women have to obtaining knowledge and to participating in their care. In the same regard, a woman's satisfaction might be determined by similar perceptions and barriers. And because the health care system will continue to focus on patient

outcomes, it will be vital that theoretical frameworks such as self-care agency be utilized to assess what type of outcomes are produced based on a woman's knowledge, participation and satisfaction level.

Future research examining these variables over time and during multiple visits could provide a better description of a woman as she experiences menopause. It could lead to the development of appropriate interventions based on what and how she may be coping with the gradual or sudden changes during this time in her life. An effort needs to be made to also examine the provider's perceptions over a series of encounters. If health care is to be a mutual process, investigation of both parties involved in the relationship and process is necessary.

To understand the decision making process better, studies could examine a) the situations during which women want to participate in joint decision making, b) their changing preferences for participation based on the type of decision that needs to be made during their menopausal years and beyond and, c) satisfaction of decision made by these women.

Similarly, examination into these women's attitude toward menopause and subsequent effect on preference for participation and satisfaction level could be beneficial. Are women with a higher life satisfaction and perception of overall good health going to participate more and be more satisfied with the care they receive? Finally, it would be

important to understand where these women are obtaining information and knowledge about menopause and what form of learning best suits these women so that appropriate interventions could be developed to enhance every woman's knowledge of her body, self-care measures and treatment options.

Summary

This study has addressed what a sample of 252 women today know about menopause, to what extent they want to participate in decision making related to HRT, and if women are satisfied with the patient-provider interaction. Examination of potential relationships among the variables based on a self-care agency framework was completed. The findings indicate that to provide such care, an effort to better educate women on the risk factors associated with menopause and HRT, as well as self-care measures they can perform to assist in coping with this life cycle change is needed. Findings also suggest that these women want to take the lead or at least equally participate in the decision making related to HRT. However, the provider must be cautious in assuming that a woman who does not demonstrate a high level of knowledge does not want to participate in the decision making. This study has suggested otherwise. These women also appear to be satisfied with the health care encounter. However, there are women who believe they are not being understood as well as not adequately having their questions answered by the provider. Further research could

examine the role this form of dissatisfaction with the encounter, preference for participation and knowledge level may have with a woman's future attempt to perform self-care activities. It was this researcher's intention to provide descriptive data on the menopausal woman so that health care providers, such as the APN, may better understand this population of women and in turn, be able to provide quality, accessible and affordable care.

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APPENDIX A

Research Team

APPENDIX A

Research Team

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APPENDIX B

Instrument

APPENDIX B

Instrument

DECISION MAKING IN MENOPAUSE STUDY
Menopause Information

The following questionnaire contains questions about menopause, (the change of life) a time which signifies the end of the menstrual cycle. In this section we are interested in your knowledge about the process of menopause. Answers to some of the questions will depend on whether or not a woman has a uterus. Please answer all questions assuming the woman has a uterus.

68. What can be said about birth control after menstruation stops?

1 = Birth control should be used for 1 year
2 = Birth control should be used up to 5 years
3 = Birth control should be used as long as sexually active
4 = Birth control is not necessary
5 = Don't know

69. What causes the symptoms of menopause?

1 = The pituitary gland stops functioning
2 = The uterus will not allow egg implantation
3 = The fallopian tube becomes blocked
4 = The ovaries produce less estrogen (female hormone)
5 = All of the above
6 = Don't know

70. Menopause increases the risk for which of the following?

1 = Liver disease
2 = Eye disease
3 = Kidney disease
4 = Lung disease
5 = Osteoporosis
6 = All of the above
7 = None of the above
8 = Don't know

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Check your answer sheet. You should now be filling in row number 71

71. What physical changes can occur in the vagina due to menopause?

1 = It becomes dryer, shorter and less elastic
2 = It becomes less easily injured
3 = The vagina remains the same following menopause
4 = Don't know

72. Risk of osteoporosis (brittle bones) can be reduced by:

1 = Vitamin C
2 = Estrogen pills
3 = Relaxation exercises
4 = Don't know

73. To help reduce the uncomfortable feelings associated with hot flashes, a person can...

1 = Increase caffeine intake
2 = Take vitamins above recommended daily allowance
3 = Wear several light wraps so one can be removed
4 = Increase spices and seasoning in food
5 = Don't know

74. Vaginal dryness caused by menopause may lead to...

1 = Increased chance of vaginal infection
2 = Decreased chance of vaginal infection
3 = No change in chance of vaginal infection
4 = Don't know

75. Vaginal dryness can best be relieved by...

1 = Using a petroleum jelly lubricant (Vaseline®)
2 = Estrogen replacement therapy
3 = Using cold cream
4 = Don't know

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Check your answer sheet. You should now be filling row number 76

76. After menopause, a woman's risk of heart disease:

    1 = Decreases
    2 = Increases
    3 = Is the same as before menopause
    4 = Don't know

77. Estrogen replacement therapy:

    1 = Increases a woman's risk of heart disease
    2 = Decreases a woman's risk of heart disease
    3 = Has no effect on a woman's risk of heart disease
    4 = Don't know

Please answer questions 78-90 using the following scale:

    1 = True
    2 = False
    3 = Don't Know

78. Although many women have menopausal symptoms, approximately 20% seek medical relief.

79. Hormone therapy (estrogen) after menopause increases the risk of osteoporosis.

80. Hormonal therapy (estrogen) can be used to help relieve the symptoms of menopause.

81. Estrogen therapy without progestogen increases the risk of cancer of the uterus.

82. If a menopausal woman unexpectedly bleeds or spots a year after she completely stops menstruating she should report this to her physician.

83. Symptoms most often reported during menopause are hot flashes and night sweats.

84. Once a woman is through menopause she no longer has to be concerned with breast cancer or other female cancers.

85. As long as a woman is ovulating she can still become pregnant.

86. Ovulation may occur without menstrual bleeding occurring.

Check your answer sheet. You should now be filling in row 87

87. The addition of a progestational agent (Provera®) to estrogen replacement therapy frequently results in monthly menstrual flow.

88. The addition of a progestational agent (Provera®) to estrogen replacement therapy increases the risk of cancer to the uterus.

89. The most common cause of death among women is breast cancer.

90. A woman's chance of dying from cancer of the uterus is greater than her chance of experiencing osteoporosis fractures.

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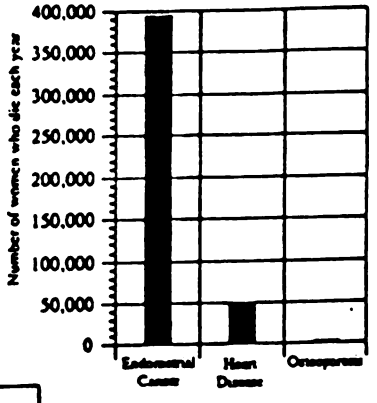
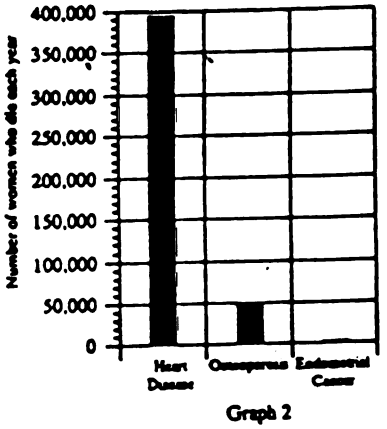
Check your answer sheet. You should now be filling in row 91

91. Choose the graph below which correctly shows the number of women who die each year from these medical problems. Darken the circle on your answer sheet corresponding to the correct graph. Use the following scale:

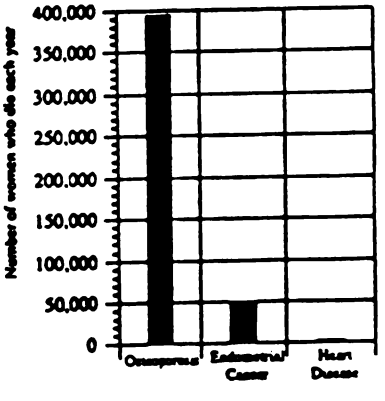
1 = Graph 1
2 = Graph 2
3 = Graph 3
4 = Don't Know



Graph 1



Graph 2



Graph 3

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DECISION MAKING IN MENOPAUSE STUDY
Satisfaction With Interaction
With Health Professional Instrument

Please darken completely the circle on your answer sheet which corresponds to your answer. Fill the circle completely using a No. 2 pencil. Choose one of the following for each of the following items.

For items 92-100, indicate which health professionals (if any) you have consulted for menstrual or menopausal problems by choosing one of the following responses.

1 = I have consulted this professional for menstrual or menopausal problems in the past 12 months.
2 = I have consulted this professional for menstrual or menopausal problems, but NOT in the past 12 months.
3 = I have never consulted this professional for menstrual or menopausal problems.

92. Physician (Ob-Gyn specialty)

93. Physician (Internist specialty)

94. Physician (General or Family Practitioner)

95. Physician (Other specialty)

96. Advanced Nurse Practitioner (Ob-Gyn specialty)

97. Advanced Nurse Practitioner (General or Family Practitioner)

98. Advanced Nurse Practitioner (Other specialty)

99. Pharmacist

100. Other health professional

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Check your answer sheet. You should now be filling in row number 101

101. Some people want practitioners to make all decisions about medicines based only on the best medical practice. Other people also want the clinician to ask them their opinion about the decision. Finally, some people want to make the decision themselves, after getting the clinician's advice or opinion. Who do you think should make decisions about hormone replacement therapy for you?

1 = I should make the decision, using all I know or learn about the medicines.
2 = I should make the decision but strongly consider the practitioner's opinion.
3 = My practitioner and I should make the decision together, on an equal basis.
4 = My practitioner should make the decision but strongly consider my opinion.
5 = My practitioner should make the decision, using all that's known about the medicines.

We are asking a series of questions about your last visit to the health professional you've consulted for menstrual or menopausal problems. If you have never consulted a health care professional for menstrual or menopausal problems, answer the questions about your last visit to the health professional you would be most likely to consult. Please indicate the extent to which you agree with each statement listed by filling in the appropriate number.

Use the following scale to answer questions 102-111.

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

102. As a result of my most recent visit with my health professional I understand my health state better.

103. The medical care I received is better than most people get.

104. The health professional seemed to understand exactly what was bothering me.

105. I don't want to see the same health professional next time.

106. The health professional was one of the best you can find anywhere.

107. My questions were answered to my complete satisfaction.

108. All things considered, I was completely satisfied with the visit.

109. The health professional took my views into consideration.

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Check your answer sheet. You should now be filling in row number 110

Use the following scale to answer questions 110-111.

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

110. I felt pressured to do what the health professional recommended.

111. The health care professional gave adequate attention to what I had to say about my concern.

112. What is the specialization of the health care professional about whom you answered the questions above?

1 = Physician (Ob-Gyn Specialty)
2 = Physician (Internist Specialty)
3 = Physician (General or Family Practitioner)
4 = Advanced Nurse Practitioner (Ob-Gyn Specialty)
5 = Advanced Nurse Practitioner (General or Family Practitioner)
6 = Pharmacist
7 = Other Health Professional

113. What is the sex of the health care professional about whom you answered the questions above.

1 = Male
2 = Female

[redacted]
October 27, 1992

APPENDIX C

Approval Letter from UCRIHS

APPENDIX C

Approval Letter from UCRIHS

MICHIGAN STATE
UNIVERSITY

January 12, 1994

TO: Ms. Kathleen A. Carlson
3118 South Creek Dr., SE #204
Kentwood, MI 49512

RE: IRB #: 93-592
TITLE: THE RELATIONSHIP OF THE DESIRE TO PARTICIPATE IN DECISIONS REGARDING MENOPAUSE TO WOMEN'S KNOWLEDGE AND SATISFACTION WITH THE HEALTH PROVIDER INTERACTION
REVISION REQUESTED: N/A
CATEGORY: 1-E
APPROVAL DATE: 12/22/1993

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project including any revisions listed above.

Renewal: UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must use the green renewal form (enclosed with the original approval letter or when a project is renewed) to seek updated certification. There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

Revisions: UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please use the green renewal form. To revise an approved protocol at any other time during the year, send your written request to the UCRIHS Chair, requesting revised approval and referencing the project's IRB # and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable.

Problems/
Changes: Should either of the following arise during the course of the work, investigators must notify UCRIHS promptly: (1) problems (unexpected side effects, complaints, etc.) involving human subjects or (2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.

If we can be of any future help, please do not hesitate to contact us at (517) 355-2180 or FAX (517) 336-1171.

Sincerely,

David E. Wright, Ph.D
UCRIHS Chair

DEW:pjm

cc: Dr. Marilyn L. Rethorst

OFFICE OF
RESEARCH
AND
GRADUATE
STUDIES

University Committee on
Research Involving
Human Subjects
(UCRIHS)

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APPENDIX D

Correlation Scatterplot

APPENDIX D

Correlation Scatterplot