

INVESTIGATION OF A SOUTHEASTERN COMMUNITY'S KNOWLEDGE
AND INTENT TO USE A NURSE PRACTITIONER

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Abstract

The concept of the advanced practice nurse was first conceived in the 1960s in an effort to provide patients with adequate primary health care. Changes in the health care delivery system since that time have facilitated this role. The past ten years has seen an increasing number of physicians utilizing nurse practitioners (NPs) in their practices. As physicians consider this alternative, they are interested in knowing how their patients will accept this change.

Review of the literature regarding the health care consumer's acceptance of the NP as a health care provider revealed that the majority of the research, thus far, has been accomplished with the medically underserved populations. The purpose of this study was to determine the relationship between consumer knowledge and intention to use a NP in an urban community that is not medically underserved. Imogene King's theory of goal attainment was used to guide the study. King describes her theory as being the only one to deal with choices, alternatives and participation of all individuals in making decisions about their health care

While visiting three local businesses in May, the participants filled out a researcher-generated questionnaire that assessed their knowledge and intention of using a NP. Thirty-six percent answered yes to all nine knowledge questions with 42% indicating they would be willing to use a NP for all nine inquiries. Pearson correlation coefficient was utilized to determine that there was a significant positive relationship between knowledge of the role of the NP and intent to use one as a health

care provider. The conclusion was reached that as knowledge of the role of the NP increases so does intent to use one. The data also revealed a knowledge deficit regarding the role of the NP among this population.

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Chapter 1: The Problem

Introduction

The advanced practice role for nurses is not a new concept. The first nurses to claim this title were nursing sisters who administered anesthesia in 1877 at St. Vincent's Hospital in Erie, Pennsylvania. However, Dr. Loretta Ford is the one person who is most responsible for the establishment of this role as we have come to know it today (Hawkins & Thibodeau, 1996). Ford and her colleague, Dr. Henry K. Silver, introduced the idea of a nurse with advanced training, practicing autonomously at the University of Colorado in the 1960s in response to a growing concern for the cost and quality of America's health care (Bullough, 1995).

Ford and Silver were eager to advance their ideas and initiated a project in 1965 with a program that offered students with a master's degree three to four months of didactic preparation followed by an assignment to a clinical practice. The emphasis of their program was on clinical judgement, management of the problem, and nursing accountability. Ford's co-professors at the University of Colorado began to criticize the program, saying that what she was promoting was not appropriate for the nursing profession. They felt that, because the students were using medical instruments such as the otoscope and ophthalmoscope, they were attempting to be doctors. The leading nurse educators at that time wanted nothing to do with the program. However, a group of other nursing professionals took the initiative when it appeared that the hostility encountered by Ford and Silver would not allow them to promote the idea of

a nurse practicing autonomously, even though under the supervision of a physician. As a result, a rash of programs were developed that prepared NPs without academic degrees or standards. This was eventually corrected with the current requirement being two years of preparation which includes a master's degree and is intermixed with clinical practice (Fondiller, 1995).

In 1992 the American Nurses' Association and the National Board for Pediatric Nurse Practitioners (American Association of Colleges of Nursing, 1994) began to require a master's in nursing degree as a prerequisite for taking the NP certification exam. The requirements for the majority of NP programs today include health assessment, pharmacology, theory development, management, and specific courses related to management of adult, children and women patients (Morgan & Trolinger, 1994).

In the intervening years since Ford and Silver fought to establish their vision of a new advanced practice role for nurses, the number of NPs has grown as has their responsibilities in the health care field. Although the number of NPs practicing in America has increased since their controversial beginning, the role remains a mystery to the majority of health care consumers, and their status in the health care community remains marked with skepticism. In order to fully utilize their education and practice, full acceptance by the consumer and a vote of confidence from the medical community is essential (Smith, Moody, Glenn & Garmony, 1996).

Health care in the 1990s is unavailable to a large percentage of American citizens due to the staggering cost. In the 1980s, the cost of medical care continued to escalate at such a frightening level that the Senate Committee on Appropriations requested the Office of Technology Assessment (OTA) to update a study that looked at the cost and effectiveness of NPs. The report helped the senators to realize that the advanced practice nurse had met obstacles in trying to practice as their education entitled them to. They felt that this role needed to be re-examined as to its usefulness in easing some of the strain that America's health care system was experiencing (OTA, 1986).

Numerous studies have been done in an effort to determine if NPs can help fill the gap in our health care system (Avorn, Everitt & Baker, 1991; Holmes, 1976; Lewis & Resnik, 1967; McGrath, 1990). The research has covered a variety of topics, including evaluation of the quality of care given by the NP, third party reimbursement for the NP, prescriptive authority, consumer acceptance of the NP and economic viability of the NP. A study by Safriet (1992) also revealed that the use of NPs as primary health care givers has increased consumer access to quality, cost effective medical care. Kassirer (1994), however, believes that most of the relevant studies evaluating the quality of care rendered by a NP are seriously flawed due to the fact that evaluation of the study designs did not involve high enough standards and were performed too long ago to be relevant today.

There are physicians in a variety of settings who are interested in adding NPs to their practice, but are unsure of what their patients' reactions will be to a nurse giving

health advice and even writing prescriptions. The average consumer has not read the research information that is available on advanced practice nurses. Instead, their information is obtained from a variety of sources which may or may not be accurate. Lack of knowledge and/or negative feelings regarding the role of the NP can result in consumers being hesitant about using a NP for their health care (Smith et al, 1996).

It is felt that a survey is needed in the East Tennessee area where a number of physicians have expressed interest in taking a NP into their practice. A survey in this area will provide helpful information to the physicians as well as to NPs who are searching for a position. The area chosen for the survey is not medically underserved, but rather offers superlative medical care, including the presence of a number of specialists. The physicians are interested in knowing what their own community's feelings and intentions are toward the use of NPs as opposed to a medically underserved area where, thus far, the great majority of studies on this subject have been performed.

Statement of the Problem

Lack of knowledge or incorrect information can lead consumers to avoid using the NP because most people want only what they conceive as the "best" when it comes to health care. To make an informed decision about a primary health care provider, the consumers must be aware of the unique capabilities that a NP has to offer.

Purpose of the Study

Due to changes in the health care system in the United States in the past ten years, especially with the advent of managed care, it is felt that the assessment of the health care consumer's attitude toward the NP is even more significant than it was 15 years ago. A major criticism of the medical community is that the majority of the studies on the use of the NP as a primary health care provider were performed 15-25 years ago, and therefore, are antiquated for consideration in today's health care environment (Kassirer, 1994). Physicians who are contemplating taking on an associate to assist in seeing patients want to see more recent studies before making a decision regarding the use of the NP in their practice. Another criticism of the NP studies is that the great majority were performed in medically underserved communities (Kassirer, 1994).

The purpose of this study was to determine a community's knowledge of and intention toward the use of the NP as a primary health care provider. This study correlated knowledge and intention to demographic variables of age, gender, educational level, type of insurance, the number of times the consumer visited their primary care provider in the last 12 months, and the use by the consumer or their family of a NP in the past for health care.

Research Questions

In order to relate the consumer's knowledge of the role of the NP to their intention toward the use of one as a primary health care giver, it was decided to assess

knowledge and intention simultaneously. Nine questions regarding knowledge of NP capabilities were asked, following which the participating consumers were asked if they would be willing to utilize the NP for these particular competencies depending on their knowledge of what the NP was trained to do. The questions to be answered by this survey are:

1. What knowledge does the consumer hold about the role of the nurse practitioner?
2. What is the consumer's intention toward the use of the NP as a primary health care provider?
3. Is there a relationship between consumer knowledge and intent to use a nurse practitioner as a primary health care giver with age, sex, race, education level, type of insurance, and frequency of visits to their primary care provider in the past 12 months?

Assumptions

The fact that consumers are expected to respond truthfully to the questions on the questionnaire is the only assumption of this study.

Theoretical Definitions

Intention. "A special case of beliefs, where the object is always the person himself and the attribute is always the behavior." Intention links the person with his "subjective probability" of performing the behavior in question. (Ajzen & Fishbein, 1975, p. 12).

Operational Definitions

Knowledge. A person's range of information and understanding of the role of the nurse practitioner, determined in this study to be adequate if a score of > 15 was obtained on the knowledge section of the questionnaire.

Intention. A health care consumer's intention toward the use of a nurse practitioner as a health care provider, determined to be adequate on this study if a score of >15 was obtained on the intent section of the questionnaire.

Nurse Practitioner. Any advanced practice nurse certified by successfully passing a national certification examination and/or who has earned a master's of science in nursing from an accredited nurse practitioner program.

Urban. Cities or incorporated areas with a population of equal to or greater than 2,500 people as identified in the 1990 census. The urban area sampled was Farragut, Tennessee in Knox County, Tennessee, with a population of 17, 784.

Conceptual Framework

Imogene King's theory of goal attainment (1981) was used to guide this study. King's theory focuses on the planning and execution phases of the nursing process. The nurse and patient interact, devise goals, decide how to attain these goals and evaluate to determine if the goals were met. King's theory of goal attainment arises from her personal philosophy about human beings and life. The major assumptions that are evident throughout the theory embrace the idea of human beings interacting with their environment. King maintains that this concept is the focus of nursing and

leads to a state of health for individuals. King has subdivided this main assumption into several smaller ones, four of which will guide this study:

1. The interaction process is influenced by perceptions, goals, needs, and values of both the client and the nurse.

2. Human beings as patients have rights to obtain information, to participate in decisions that may influence their life, health, and community services, and to accept or reject care.

3. It is the responsibility of members of the health care community to inform individuals of all aspects of health care to help them in making enlightened decisions about their health.

4. Health care professionals have a responsibility to gather relevant information on the perceptions of their clients so that their goals and the goals of the client are compatible (King, 1981).

The interactive process is the very heart of King's theory (King, 1981).

Interaction of the most personal nature is a requirement of the NP-client relationship. For the client to enter this relationship with anxiety regarding the competency and capability of the NP to provide excellent health care is unacceptable to both the NP and the patient. It is also unfair to both the NP and the client to allow misleading beliefs concerning the role of the NP to remain unchallenged.

King (1981) describes her theory as being the only one that deals with choices, alternatives and participation of all individuals in making decisions about their health care (cited in Marriner-Tomey, 1994). Many health care recipients feel that these decisions and choices are being taken away from them with the advent of managed care and assigned health care givers. They may perceive this as “second-rate” health care if they are assigned to a NP for their primary health care. A good example of this skepticism can be observed in some areas of occupational health where NP managed health care units are being utilized, and employers insist that the employees see the NP first (Marriner-Tomey, 1994). Education of these employees concerning the qualifications of the NP in these environments will go far in reducing their fears that they are receiving less than top-quality health care (Ferguson, 1996). Education and a caring attitude of the NP will create an environment where attainment of health care goals are possible.

The freedom to choose a health care provider is very important to the majority of consumers. As mentioned above, King (1981) maintains that her theory is the only one to address choices in health care. This assertion, along with King’s belief that it is the responsibility of the health care provider to gather information about their clients’ perceptions so their goals will be compatible and to inform their clients of all aspects of health care makes this a very appropriate framework for this study. The goal of this study is to determine what a specific community knows about the role of the nurse practitioner. When this information is assembled, the nurse practitioner can then

determine what information the community needs as well as the best way to convey this information to them. Physicians in the community can also use this information when trying to determine if they should ask a nurse practitioner to join their practice.

Significance of the Study

Assessing the intentions toward and knowledge of the health care consumer concerning the role of the nurse practitioner as a primary health care giver is necessary. A number of studies have been reported involving the medically underserved areas and populations. However, information is also needed which addresses the needs of the urban areas where there is an adequate number of health care providers for the population. As schools graduate more NPs, it must be determined what consumers know and think about this relatively new role. With this information, misconceptions can be corrected and the NP's role can be utilized as first intended 30 years ago.

Chapter 2: Review of the Literature

Introduction

Health care in America is currently in the midst of a revolution. When it will end or how is the subject of much conversation and concern in the fifty states. In the United States at the present time, medical care is extremely expensive and, therefore, unevenly distributed (Shi, Samuels, Ricketts, & Konrad, 1994). Research indicates that populations of the remote rural areas and inner cities are the ones most seriously lacking access to appropriate medical care (Ericson & Murphy, 1995). The advanced practice nurse is being presented as a partial answer to this problem. Review of nursing and medical literature reflects an overall acceptance of the nurse practitioner by the health care consumer. However, the literature review revealed also that the studies mainly sampled the populations who had inadequate access to medical care. These studies are certainly appropriate, but it is obvious that populations who lack access to any health care provider would, more than likely, accept someone other than a physician for health care.

Literature Related to the Competency and Effectiveness of Nurse Practitioners

Nurse practitioners have been the focus of many studies since the initiation of this controversial role in the 1960s. A study released in 1986 was completed by the Office of Technology Assessment (OTA) at the request of the Senate Committee on Appropriations. It was entitled Nurse Practitioners, Physician Assistants, and

Certified Nurse-Midwives: A Policy Analysis. The study assessed the contributions of these three professions in meeting the nation's health care needs. After careful review, this commission concluded that: "Within their area of competence, nurse practitioners, nurse mid-wives, and physician assistants provided care that was equivalent to that provided by physicians" (p. 25). This office also recommended third party reimbursement for the services of these workers, arguing that this could increase their use and result in cost savings to consumers.

A study by Avron et al. (1991) offers a good example of a study where one purpose was to determine the effectiveness and competency of the nurse practitioner. They used a stratified random sample of internists, family practitioners and general practitioners that were listed in the American Academy of Medicine census files along with a list from the American Academy of Nurse Practitioners.

During telephone interviews, the above participants were asked to consider a case scenario involving a new patient with intermittent sharp epigastric pain that was relieved by meals and worse on an empty stomach (Avron et al., 1991). A previous endoscopy report showed diffuse gastritis, but no ulcer. The participants were repeatedly asked if there was additional patient information they would need before prescribing treatment. If the participants chose to ask questions, they were given information which included the following facts: the patient took two aspirin tablets four times daily for stomach pain, the patient's son was killed in a car accident eight weeks ago, he drank five cups of coffee per day, had one large meal per day, drank

two cocktails at lunch and two glasses of wine in the evening.

When the results were tabulated, it was discovered that twice as many physicians as NPs chose to begin treatment without benefit of further information (Avron et al.(1991). When additional information was asked for, the NPs asked about the patient's diet and psychosocial situation far more often than the physicians. When intervention was recommended, 63 percent of the physicians chose to write a prescription, whereas the NPs more often opted to make a change in diet or offered counseling to help the patient deal with stress. The authors of this study felt that the fact that far more NPs than physicians took the time to gather the basic information necessary to make an intelligent diagnosis and treatment plan was of great significance. There have been many arguments among the physician community that the health care system must find a way to provide reimbursement for the time spent in history taking. In this particular study (Avorn et al. 1991), it is noted that the NPs, whose reimbursement is much less than the physicians, performed these tasks more completely.

It is interesting to note that other countries are also looking to NPs to help solve their health care problems. In England, Marsh and Dawes (1995), assessed the effectiveness and competency of the NPs in primary care. Over a time span of seven months, the NP saw 696 patients. With 602 of the patients, there was no doctor contact, in 53 the doctor saw the patient in addition to the NP, and in 41 there was a telephone discussion with the physician regarding the patient. Half of the patients

were given advice on self-care with or without a recommendation for over-the-counter drugs. One hundred and forty-nine received a prescription for antibiotics, and 119 had creams or applications prescribed. Most patients (549) did not consult again about that episode of illness.

The nurse saw the majority of the patients alone and handled 95% of the 696 patients with upper respiratory infections (Marsh & Dawes, 1995). The more serious illnesses were identified and referred to the physician. About 90% of the 696 patients accepted an appointment with the NP when offered the choice. A few patients who had seen the NP previously requested a return appointment. Almost 80% of the 696 patients did not return for further care, suggesting that the treatment was effective. Several of the doctors discussed patients they had followed with the NP, and there was never any evidence of serious errors in assessment and management. The conclusions drawn from this study (Marsh & Dawes, 1995) were that NPs could diagnose and treat a large portion of patients who were currently seeking a physician's care for minor illnesses and chronic disease exacerbations.

Literature Related to Consumer Satisfaction with Nurse Practitioners

A study by Ericson and Murphy (1995) was completed in a small village where a rural health clinic had been established by a large urban health corporation. Several physicians had practiced in this village but left after short stays. A family nurse practitioner who lived in the area was employed to provide primary care and triage services as well as definitive therapy in collaboration with a physician who lived in

another town, 15 miles away. Six months prior to data collection, 200 people had used the services of the NP. Of these 200, a random sample of 60 were selected. A total of 34 (57% of the random sample) agreed to participate in the study. Data was collected in the local senior center or in the patient's home. Trained staff conducted private interviews. For the one hour interview, the participants were paid \$10.00. Clinic records were also reviewed. Participants were asked to rate their satisfaction with eight different services or service providers on a scale of : 1=dissatisfied, 2=OK, 3=satisfied. Satisfaction was very high for services received in the clinic. This group of healthcare recipients reported substantial satisfaction with the NP who provided their primary care ($x = 2.91$, $SD = 0.3$).

A quantitative descriptive study by Larrabee, Ferri, and Hartig (1997) assessed patient satisfaction with care provided by four NPs. The sites for this study were four primary care clinics of a government hospital in the south central United States. The clinics were staffed by NPs who provided non-urgent care. The participants in the study were male (63%), married (56%), and retired (59%). Patient satisfaction with NP care was measured by a revised version of the DeTomasso-Willard Patient Questionnaire (DWPSQ). Internal consistency (Cronbach's alpha) was .96 for the DWPSQ, indicating high reliability. Patients who agreed to participate in the study were given the questionnaire and data sheet. Descriptive statistics were obtained for each item. Analysis of variance (ANOVA) was performed to determine any differences among the items. The aggregate mean scores and the mean scores for the

46 items were negatively skewed, indicating high satisfaction with NP care.

Thirty years ago it was beginning to be recognized that nurses with advanced education were capable of serving as primary care givers for adults with chronic illnesses (Lewis & Resnik, 1967). A study to investigate this idea was carried out at the University of Kansas with the purpose of evaluating a more active role for nurses in ambulatory patient care. Patients were interviewed with the use of a structured questionnaire that included information on socioeconomic background, illness behavior patterns, the frequency with which they made use of medical care resources, family and past history of the disease. The patients were randomly divided into control and experimental groups. The control group was seen in the medicine clinic by physicians, and the experimental group received care in a nurse-managed clinic. Standing orders were written for each chronic diagnosis, which also defined the limits within which the nurse might initiate or alter medical care (Lewis & Resnik, 1967).

After one year, all patients were retested. Tests of significance were done to compare the preferences expressed by the groups before and after the one year. Retesting of the control group (physician) revealed no changes. However, in the experimental group (NPs), several changes were noted. There was increased adherence to appointments, and the patients in this group also exhibited a decreased frequency of complaining and a less tendency to call for minor complaints. This group shifted their preference in favor of the nurse as a primary care provider and their satisfaction with care was rated higher as well on retest.

Armer (1994) looked at consumers' acceptance of the nurse practitioner in relation to the perceived health care crisis in the United States. Five hundred telephone interviews were conducted asking questions relating to satisfaction with the last physician or nurse practitioner encounter. Questions were also asked regarding a proposed expansion of the role of NPs in primary care. Seventy to ninety-four percent of the answers were favorable to the idea of examples of expanded nursing roles in areas of management of follow-up visits and chronic conditions.

Stark (1994) surveyed a community of 30,000 in a rural area with 315 questionnaires mailed to the participants. Compilation of the results revealed that 77% of the respondents would allow a NP to provide their primary health care.

Paynich (1997) also surveyed a rural community concerning their perceptions of the NP. The population was 6, 000 with 315 being surveyed by questionnaires via the mail. An adaptation of the Kviz Acceptance Questionnaire was utilized along with a researcher-developed questionnaire for data collection. Questions were asked regarding current acceptance and utilization of NPs providing primary health care in that area. The area was medically underserved with most residents having to drive at least 25 miles to access health care. Eighty-one percent of the respondents said they would allow a NP to prescribe medications and 80% would allow a NP to perform minor surgical procedures.

The overall results revealed that 78% of those surveyed would allow a NP to provide their primary health care, and 98% that currently received their care from a NP were very satisfied with care being received (Paynich, 1997). A significant finding of this study was that consumers were least likely to let a NP treat a minor illness, but would allow a nurse practitioner to prescribe medication, perform a prostate or pelvic exam and perform minor surgical procedures. It was felt that this response probably reflected the age of the respondents because older populations may have a different perception of “minor illness” than younger populations. As people age, they feel that they are more susceptible to disease and that no illness should be considered as “minor.”

Another survey that utilized mailed questionnaires was carried out in a Rocky Mountain state (Amtmann, 1997). Data was analyzed using descriptive statistics. Nearly two-thirds (61%) of those surveyed indicated they would allow a NP to provide their routine health care, including specific duties previously delegated to a physician. Demographics were not related to the rate of NP acceptance. Most importantly, the study found that if consumers have an increased awareness of the NP role, their likelihood to seek care from a NP is increased. It is interesting to note that these study results indicate that, in this particular sample, education possibly plays a part in consumers’ willingness to accept NP care since those with more education were more willing to use the NP. Respondents who answered unsure to allowing NPs to care for them were older, largely female, and had significantly less education than

the ones who answered yes to the question.

In 1988 a study was published by Salisbury and Tattersell and compared the work of a NP with that of a general practitioner. Both were equally available to the same patient population over the same ten week period. The study explored the overall pattern of a NP's work and the actual problems seen. During the study, 100 consecutive (different) patients consulting the NP were asked to complete a questionnaire after being seen. One of the items on the questionnaire asked how satisfied respondents were with their consultation. Of the 73 respondents, 70 were very satisfied with the NP and three were satisfied. None were dissatisfied and 71 would consult the NP again.

Stilwell (1988) studied patients' attitudes toward the role of NP to determine if patients would accept autonomous nursing services which meant that the nurse practitioner would make the treatment decisions and prescribe medications, if necessary, without having a doctor making the final treatment decisions. The findings suggest that patients continue to perceive the NP as having an advisory or supportive function in order to "save the doctor time for more urgent needs."(p. 90). Although patients are overwhelmingly satisfied with NP services, they don't perceive the services as being autonomous of medical services. Stilwell's study also suggests that patients continue to have a traditional view of nursing, and this greatly impacts the role of the NP.

Literature Related to Consumer Knowledge of the Role of the Nurse Practitioner

Robinson's (1997) study was quantitative descriptive in nature, and its purpose was to examine consumer knowledge, attitudes, intention, and beliefs about NPs in rural and urban areas in Southeastern Tennessee. Questionnaires were mailed after selecting subjects from the local phonebook, using a random convenience method of sampling. Using descriptive statistics, Robinson discovered that the majority of the subjects did not know the various roles of the NP, but most of the consumers surveyed did hold positive attitudes, beliefs and intentions toward the NP. In this study, the majority of the subjects knew that NPs perform traditional nursing roles, but only 26 (n=202) believed that NPs could prescribe medications, order and interpret laboratory tests and x-rays, and perform pap smears and prostate examinations. With the use of ANOVA, the researcher discovered there was a significant difference in beliefs about the NP based on rural and urban settings. Negative behavioral beliefs were significantly higher in urban subjects than in rural subjects. The study concluded that there was a community wide knowledge deficit regarding the role of the NP. One thousand questionnaires were mailed out with only 202 being returned.

The only other study that assessed the knowledge of the health care consumer regarding the role of the NP was carried out by Holmes and published in 1996. One hundred and fifty residents were surveyed and their knowledge assessed about NP

functions along with their willingness to utilize NP services. The study was descriptive correlational in design with no researcher control over the independent variables. A telephone interview was chosen because of the potential advantages of better response rates, lower costs, shorter data collection period, and better access to rural populations. The respondents were found to generally lack knowledge about the functions of the NP role. Thirty-one percent of the study participants who initially were “not sure” of using NP services became willing to allow a NP to provide their care after being informed of NP functions. The respondents who had received previous care from NPs were overwhelmingly satisfied with the care they had received.

Smith et al. (1996) maintain that there is a critical need to ensure the visibility and viability of the NP role through continued research because of the ignorance and misinformation that abounds about this role. They contend that as healthcare provider competition and controversy persists, the NP will not be able to trust in the adage that, “actions speak louder than words.”

Summary

A thorough search of the literature revealed no further studies that examined the consumer’s knowledge of the role of the NP. The majority of the studies tested acceptance of, satisfaction with, competency of, and effectiveness of the NP in a variety of settings. Also, it was noted that the majority of the populations utilized in these studies consisted of either the lower income community or their income was not

assessed. It is felt that the majority of the underserved populations would be happy to use a non-physician alternative for their medical care, since this might be all that is available to them in many instances. With few exceptions, the research has been quantitative in nature.

Chapter 3: Methodology

Design

The purpose of this study was to evaluate a southeastern Tennessee community's knowledge and intention regarding the use of NPs as health care providers. The research design was descriptive quantitative whose purpose was to answer the following questions:

1. What knowledge does the consumer hold about the role of the nurse practitioner?
2. What is the consumer's intention toward the use of the nurse practitioner as a primary health care provider?
3. Is there a relationship between consumer knowledge and intention to use a nurse practitioner as a primary health care giver with age, sex, race, education level, type of insurance, and frequency of visits to their primary care provider in the past 12 months.

Sample

A minimum of one hundred subjects was conservatively anticipated for this study. Three hundred and two usable questionnaires (Appendix A) were collected during the week of May 23-27 1998. The data was collected in Farragut, Tennessee, an incorporated city with a population of 17, 784 (United States Census Bureau, 1990) which was previously a suburb of Knoxville, Tennessee. This area has grown steadily in population in the last ten years, with an influx of residents followed by a

variety of business and professional establishments. Three of these businesses were utilized as data collection centers on five consecutive days in May, 1998.

Limitations

The following were limitations of this study:

1. Only the people who came to the particular store on the day and during the time the researcher was present were eligible to participate in the study.
2. One small geographic area was utilized for the study.

Protection of Human Subjects

Permission was sought and obtained from the University of Tennessee at Chattanooga Human Subjects Committee (Appendix B). There were no risks to the study participants. Anonymity and confidentiality were assured as the participants were not known to the researcher. No identifying data were contained on the questionnaire. No information that could be traced back to the subject was contained in the data collection tool. Completion and return of the questionnaire to the researcher indicated consent from the subject to participate in the study.

Procedure

The managers of each business were approached and permission obtained to offer their customers the opportunity of having their blood pressure taken during their visit to the business. Letters of permission were signed by the managers prior to collection of the data (Appendix C). Two tables were set up in the front of two of the businesses which allowed the researcher access to the customers as they were

entering or leaving the store. The other business gave permission to set up the table inside the store. Two large signs were attached to the tables advertising free blood pressure checks along with free refreshments to increase the interest of the passers-by. The blood pressure was taken and then written down and given to them on a sheet of paper which included information on the meaning of the blood pressure reading as well as the importance of keeping the reading within normal parameters. There was also information available on how to lower the blood pressure.

Most of the participants had several questions for the researcher regarding their pressure readings. After the blood pressure was taken, the customer was asked to fill out a two page questionnaire which assessed their knowledge and intent of using a nurse practitioner. The questionnaire had been estimated to take two-three minutes to complete. The majority of those asked to fill out a questionnaire were happy to do so. Letters were available for each participant which defined the nature of the study, assured maintenance of confidentiality and identified the institution from which the study originated (Appendix D).

Instrumentation

The data collection tool entitled “What Do You Know and Think About Nurse Practitioners?” was utilized to collect the desired information. This questionnaire was developed from one that was designed by Robinson for use in her 1997 study, A Southeastern Community’s Knowledge, Beliefs, Intentions, and Attitudes Toward the Nurse Practitioner. Permission to use Robinson’s questionnaire was obtained and can

be viewed in Appendix E. Section 1 on the questionnaire consisted of nine questions that were designed to assess the consumer's knowledge of the role of the NP. The consumers were asked if they thought a NP could perform certain procedures and functions. This was immediately followed by section 2, which was designed to assess the consumer's intention to use a NP for health care. The same questions were utilized except that they were stated as intent to use the NP instead of knowledge of the role. Sections 3 and 4 gave the participant an opportunity to explain why they answered as they did in sections 1 and 2. If they answered positively regarding the use of a nurse practitioner, there were five choices they could mark to explain their answer. If their answer was negative regarding the use of a nurse practitioner, they were also give five choices to mark to help explain their answer. In addition, there was space allowed to write in comments if desired.

The next inquiry involved the statement "Health care in America is currently very expensive and not available to everyone," which was followed by the question, "Do you think the use of nurse practitioners is a safe, effective way to help solve this problem?" The participants were given the choices for answers of 'yes', 'no', and 'unsure.' The demographic portion of the tool consisted of questions designed to obtain information regarding the subjects' age, sex, race, grade level attained in school, and medical insurance. Two health care questions were also inserted with the demographic data, asking how many times the subject had seen their doctor in the past 12 months and if they or their family had seen a nurse practitioner in the past 12

months. A statement at the end of the questionnaire invited the participant to share any thoughts they had on the subject.

The questions that addressed the prostate exam, pelvic exam and pap smear were responsible for some confusion among the participants. The questions should have been designated for male or female because the participants either felt the question did not apply to them or they did not know what the question was asking.

Data Analysis

Descriptive quantitative statistics were used to analyze the data retrieved from the study. There were two major sections of the questionnaire, with the first section being related to knowledge of the role of the NP and the second section related to intention to use the NP as a health care provider. These questions were answered with yes, no or unsure. These answers were consequently given a value of: yes = 3, unsure = 2, and no = 1. Using this data, knowledge and intent scores were then assigned to each patient with the following parameters: good (knowledge or intent) = 15-27, fair = 10-14, and poor = 0-10. With the answers then in rank order, the data was ordinal in nature and Spearman rho (Burns & Grove, 1993) was used to determine correlation between knowledge of the role of the NP and intention to use.

Pearson correlation coefficient (Burns & Grove, 1993) is the measure most often used to identify if a relationship exists between two variables if the data is interval or ratio. In this sample, Pearson correlation coefficient was used to determine if a relationship existed between the consumer's knowledge of the role of the NP and age

as well as intention to use to the NP and age. Chi square is the statistic of choice used to analyze nominal data (Burns & Grove, 1993). Therefore, this formula was used to determine if a relationship existed between knowledge, age, race, type of insurance, and the number of times the consumer had seen their doctor in the past 12 months as well as intention to use the nurse practitioner and the same variables. Frequency tables were then used to display the data and to help explain the information that was not suitable for statistical analysis. There were spaces left after questions 3 and 4 as well as at the end of the questionnaire where the participants were encouraged to write in comments about the subject. These were listed according to frequency of similar comments.

Summary

This study investigated knowledge of the role of the NP along with intention to use the NP as a health care provider and then the appropriate statistics were used to determine relationships. A minimum of 100 persons was anticipated for the study with a total of 302 persons filling out the prepared questionnaire. Descriptive statistics, correlational formulas, and frequency tables were utilized to describe the sample and answer the research questions. The comments of the consumers were reviewed and theme analysis performed for this qualitative data. The data were analyzed using the Statistical Package for the Social Sciences (SPSS).

Chapter 4: Findings

Introduction

The purpose of this study was to determine the relationship between knowledge of the role of the nurse practitioner and intention toward the use of a nurse practitioner as a health care provider. The study correlated knowledge of the role and intent to use the nurse practitioner with demographic variables of age, gender, ethnicity, education level, type of insurance, and the number of times the consumer had visited their doctor in the past 12 months.

Description of the Sample

Three hundred and two subjects filled out a questionnaire after having their blood pressure taken. Three hundred and twenty-one blood pressures were taken with 19 individuals refusing to fill out a questionnaire with the most common reason given of "I do not have time." One hundred and eighty-five of the participants were female (Table 1) with an average age of 48.80 (Table 2). Two hundred and nineteen were Caucasian and 46 were African-American (Table 3). Seventy-four of the subjects had attended some college with 103 being college graduates (Table 4). Two hundred and seven of the respondents had private insurance with 47 having Medicare (Table 5). Twenty-seven percent had seen their doctor two times in the past 12 months with 18% visiting their doctor three times in the last 12 months (Table 6). Fifty-five percent responded that neither they nor a member of their family had seen a NP in the past 12 months with only 22% percent responding that they or a family member had

seen a nurse practitioner in the past 12 months (Table 7).

Table 1

Frequencies for Sample Gender

Variable	n	%
Gender		
Female	185	61.5
Male	116	38.5

Table 2

Frequencies for Sample Race

Variables	n	%
<hr/>		
Race		
Caucasian	219	72.5
African American	46	15.2
American Indian	13	4.3
Hispanic	11	3.6
Asian Pacific	13	4.4

Table 3

Frequencies for Sample Education (grade level)

Variable	n	%
<u>Education</u>		
Less than high school	17	5.6
High School Grad/GED	67	22.2
Some College	74	24.5
College Graduate	103	34.2
Graduate Degree	41	13.5

Table 4

Frequencies for Sample Age

Variable	n	%
<u>Age in years</u>		
18-28	32	11
29-38	57	19
39-48	69	23
49-58	57	19
59-68	47	16
69-78	35	11
79-88	5	1

Table 5

Frequencies for Insurance

Variable	n	%
Private	207	68.5
TennCare	36	11.9
Medicare	47	15.6
No Insurance	12	4.0

Table 6

Frequencies for Sample Number of Visits to Primary Care Physician in Last 12 months

Variable	n	%
<u>Number of Visits</u>		
0-2	138	46
3-5	110	36
6-8	48	16
>8	6	2

Table 7

Exposure to Nurse Practitioner in Last 12 Months:

Answer to question: Have you or a family member been seen by a nurse practitioner in the past 12 months?

Response	n	%
Yes	69	22.9
No	167	55.2
Unsure	66	21.9

Research Questions

Data to answer the first research question that asked “What knowledge does the consumer hold about the role of the NP?” was obtained from question 1 which consisted of nine parts. The participants were asked if they thought a NP could perform nine different procedures related to health care. Most of the subjects marked yes to NPs performing traditional nursing procedures such as taking and recording a health history and teaching a person how to take care of their health. They also responded affirmatively but slightly less so, to a NP being able to perform a physical exam and refer a patient to a specialist. They were less sure about NPs performing non-traditional nursing procedures such as diagnosing, treating minor illnesses, prescribing medications, ordering and interpreting lab and radiological studies, and performing prostate and pelvic examinations and taking a pap smear. These answers were answered mainly with unsure or no. Thirty-two per cent answered yes to all nine questions (See table 8).

Table 8

Frequencies for Sample Knowledge of NP Role

Variable	Yes n/%	No n/%	Unsure n/%
Take and record a health history	285/94	2/4	5/2
Perform a physical exam	226/75	57/19	19/6
Make a referral	211/70	62/21	29/10
Diagnose, treat, prescribe medications	182/60	83/28	37/12
Perform prostate exam	157/52	52/17	93/31
Perform pelvic exam	165/5	2/14	95/31
Perform a pap smear	186/62	47/16	69/23
Order/interpret lab, x-rays	158/52	120/40	24/8
Teach about healthcare	289/96	3/1	10/3

Data retrieved to answer the second research question, “What is the intention of the consumer toward the use of a NP as a health care provider?” was measured by question 2. These were the same questions used for knowledge in question 1, but here, the consumer was asked if they would be willing to use the NP for these same procedures. The majority indicated that they would allow a NP to take and record their health history, perform a physical exam, make a referral to a specialist if necessary, and teach them how to take care of their health. A convincing number of the respondents answered that they would be willing to allow a NP to diagnose and treat minor illnesses and injuries as well as prescribe them a medication. The majority answered no or unsure regarding the NP performing a prostate exam and ordering and interpreting lab and x-ray studies. An interesting 42% answered yes to allowing the NP to perform all of the mentioned procedures (See table 9).

Table 9

Frequencies for Sample Intent to use Nurse Practitioner as a Health Care Provider

Variable	Yes n/%	No n/%	Unsure n/%
Take and record health history	282/94	4/1	15/5
Perform a physical exam	239/79	34/11	29/10
Make a referral	233/78	18/6	49/16
Diagnose/treat & prescribe medications	190/63	44/15	67/22
Perform prostate exam	155/55	44/16	86/30
Perform pelvic exam	170/58	52/18	74/24
Obtain pap smear	186/64	46/16	60/20
Order/interpret lab, x-rays	163/53	59/2	74/25
Teach about healthcare	284/95	1/.003	15/.05

The third research question, “Is there a relationship between consumer knowledge and intent to use a NP as a health care provider with age, sex, race, education level, type of insurance, and frequency of visits to their primary health care provider in the last 12 months was answered with the data from questions 1 and 2 along with the demographic data obtained from the questionnaires. The Pearson correlation coefficient was used to analyze the interval data of age, knowledge and intent to use the NP as a health care provider. The Spearman rank order was used to analyze the ordinal data of gender, race, and education level. Chi Square was used to identify if a relationship existed between consumer knowledge, intention, race, type of insurance, and number of primary care visits over the past 12 months. An alpha level of .05 was used for statistical tests. A significant positive relationship was found to exist between knowledge of the role of the NP and intent to use one as a health care provider (.69) with a significance of .05. As knowledge of the role rises, so does intent to use. There was no relationship seen between age or race and knowledge or intention. There was also no correlation with type of insurance and knowledge and intent. However, the Spearman Rho calculation for significance between gender and knowledge and intention to use a NP did show that females are slightly more likely to use a NP than are males.

Ninety of the participants took the time to write in a comment on NPs. The most frequent comment addressed the consumer’s observation that NPs seemed to care about their problems with the second most frequent comment being “they are

more helpful.” Ten of the participants wrote that they were unsure of a NP’s qualifications with seven commenting that they should be used for “certain things.” Five felt NPs should be used on a limited basis if under the supervision of a physician, and two wrote that, “I pay the same thing for a physician who has more training and experience” (see table 10).

Table 10

Comments From Health Care Consumers Regarding Nurse Practitioners

Comments	n
1. "Nurse Practitioners seem to actually care about my problems."	27
2. "Nurse Practitioners answer my questions and do not act rushed."	23
3. "Nurse Practitioners are more helpful than M.D.s."	16
4. "I am unsure about their qualifications."	10
5. "Nurse Practitioners should be used for certain things."	7
6. "They should be used on a limited basis under a physician's supervision."	5
7. "I pay the same price for a physician who has more training and experience."	2

*Note The questions are listed in order of frequency with the most frequent answer listed first.

Summary of the Findings

According to the findings of this survey, knowledge of the role of the NP is related to intention to use the NP as a health care provider. As knowledge of the role goes up, the intent to use the NP goes up. There was no correlation between age, race, education, insurance, and number of visits to the doctor with knowledge of or intent to use the NP. There was a slightly significant positive relationship between females and knowledge and intent to use the NP.

In answer to the question of why they answered yes to intent to use a NP, 99 said they had a good experience in the past with NPs, 229 said NPs are qualified to provide certain aspects of health care, 144 said that NPs talked to them as well as listened to them, 89 said that they did not have to wait a long time to see NPs, and 145 felt that NPs provided good care. In answer to why the participant would not use a NP as a health care provider, two responded that they had had a bad experience in the past with NPs, 30 felt that NPs were not qualified to provide their health care, 63 just preferred to see a doctor.

There was a question that began with the statement: Health care in America is currently very expensive and not available to everyone. The participants were then asked to answer if they felt that the use of NPs was a safe, effective way to help solve the problem. Two hundred answered yes to this, 13 answered no and 89 were unsure.

Chapter 5: Discussion, Conclusions and Implications

Introduction

This study was initiated when questions were raised among physicians in a community that is not medically underserved or disadvantaged regarding the acceptance of NPs as primary health care providers. In reviewing the literature (Armer, 1994; Ericson & Murphy, 1995; Larrabee et al., 1997), the physicians had noted that acceptance and willingness to use NPs was well-documented in a number of studies. However, it was also observed that the greatest majority of the studies (Ericson & Murphy, 1995; Paynich, 1997; Stilwell, 1988) were accomplished using medically underserved and disadvantaged populations as the sample. With these observations in mind, it was considered appropriate to survey an upscale urban community regarding the acceptance of NPs. The average income of this community was \$67, 745 (United States Census Bureau, 1990) and they also had access to a variety of physicians, including a number of specialists.

Discussion

Significance of the Findings.

The findings from this study indicate that as knowledge of the role of the NP increases, so does intent to use one as a health care provider. This fact is of significance to the medical community as well as to the advanced practice nurse. The average health care consumer is unaware of the choices in health care providers that are available. A nationwide effort to inform the population of the

qualifications and advanced education of the NP is certainly needful. The advanced practice nurse can be of substantial assistance to the physician by enabling them to provide improved, empathetic health care to the consumer. Before taking a NP into their practice, however, the physicians want to be assured that their patients will accept the NPs and follow their advice. Education of the public would certainly help to affirm the consumer's confidence in the advanced practice nurse. As more NPs graduate and seek positions, it would behoove the nursing population to educate the public on their qualifications and thereby assure them the positions they deserve.

Findings Related to Previous Studies.

In this study, the correlation between knowledge of the role of the NP and intent to use the NP as a health care provider did achieve statistical significance. Pearson correlation coefficient for knowledge and intention to use the NP as a health care provider revealed a significant positive relationship (.69) at a .05 level of significance.

These findings are consistent with a study completed by Armer in 1994. At this time, consumers were asked their opinion regarding the use of NPs in primary care in areas of management of follow up visits and chronic conditions. Ninety-four percent of the answers were favorable to the idea of expanded nursing roles in these areas.

Stark (1994) surveyed a community of 30,000 with 315 questionnaires mailed to the participants. Seventy-seven percent responded that they would be willing to allow a NP to provide their primary health care. In 1977, Paynich published a survey of a rural community with a population of 6,000. Questions were asked regarding acceptance and utilization of NPs providing primary care in the area. Seventy-eight percent of those surveyed indicated they would allow a NP to provide their primary care, and 98% of those that currently received their care from a NP were very satisfied with care being received.

Amtmann (1977) completed a study in a Rocky Mountain state where 61% of those surveyed indicated they would allow a NP to provide their routine health care, including specific duties previously delegated to a physician. Most importantly, the study found that if the consumers had an increased awareness of the NP role, their likelihood to seek care from an NP was increased.

Robinson's study in 1997 examined the consumer's knowledge, attitudes, intentions and beliefs about NPs. Using descriptive statistics, Robinson discovered that the majority of the subjects did not know the various roles of the NP, but most hold positive attitudes and intentions toward the NP. The majority of the subjects knew that NPs perform traditional nursing roles, but only 26 (n=202) believed that NPs could prescribe medications, order and interpret laboratory tests and x-rays, and perform pap smears and prostate exams. The study concluded that there was a community wide deficit regarding the role of the

NP.

Another study that assessed knowledge of the role of the NP was carried out by Holmes and published in 1996 in Idaho. These respondents were found to generally lack knowledge about the functions of the NP role. Thirty-one percent of the participants who initially were not sure of using NP services became willing to allow a NP to provide their care after being informed of NP qualifications.

Limitations.

Limitations of the study included the following two conditions: only the people who came to the particular store on the day and during the time the researcher was present were eligible to participate in the study, and only one small geographic areas was utilized for the study.

Application of Conceptual Framework.

Imogene King's (1981) theory of goal attainment was used to guide this study. The major assumptions that are evident throughout the theory embrace the idea of human beings interacting with their environment. King describes her theory as being the only one that deals with choices, alternatives and participation of all individuals in making decisions about their health care (cited in Marriner-Tomey, 1994). The freedom to choose a health care provider is very important to the majority of the consumers, and many health care recipients feel that these choices are being taken away from them. This study assessed the knowledge and

intention of a community to use a NP as a health care provider. The results reveal a knowledge deficit of this community regarding the role of the NP. King (1981) asserts that it is not only the responsibility of health professionals to gather information about the perception of their clients, but it is also their responsibility to inform their clients of all aspects of health care so they can make an enlightened decision about their health care.

Conclusions

This study indicates that there is a knowledge deficit in this community regarding the role of the NP. With the additional information obtained regarding the fact that as the knowledge of the role of the NP increases, so does the intent to use one, NPs are obligated to correct this deficit. Another finding of the study was that slightly more women than men are willing to use the NP as a health care provider. This finding might be explained by the fact that the majority of the NPs are female, and women can usually relate better to a member of the same sex when talking about personal matters. An appropriate project for a graduate nursing student would be to prepare a brochure to be distributed in the various businesses in the community that would inform the consumers of the education and qualifications of the NP.

The answers to the questions of why the participants answered as they did were interesting. These answers revealed that that the majority of the consumers who intend to use a NP in the future will do so because of the NPs attitude. The

reasons included: “the NP seems to actually care about my problems”, “they answer my questions and do not give the appearance of being rushed,” and “NPs are generally more helpful than physicians.” The ones who did not intend to use a NP gave the following reasons: “I am unsure about their qualifications,” they should be used only for certain things on a limited basis and under a doctor’s supervision”, and two people stated that “I pay the same thing for a doctor who has more experience and education than a NP.” It was also enlightening to note that those consumers with previous exposure to a NP, either personally or through a family member, were more likely to state they would use a NP in the future.

Implications

Nursing Education.

As noted in this study, the general public continues to need education regarding the qualifications of the nurse practitioner as well as their level of education. The role of the nurse is confusing enough, and the general public is inclined to call anyone with a white uniform on a nurse. The various levels of education that are available for the RN has served to confuse the health care consumer even further, and the term nurse practitioner might be interpreted to be ‘just another nurse’ to the average consumer. This survey has proven that when the consumer is informed about NPs as health care providers, they are willing to utilize them. King (1981) places this responsibility squarely on the shoulders of the nursing profession. As public understanding of the role of the NP grows, it is

even more important to prepare nursing practitioners who can maintain the public trust through the competence and relevance of their practice (Gilliss,1996). As part of the public education process, it should be emphasized that NPs cannot replace physicians, but seek to work with them on a collaborative basis with a goal of improving America's health care.

Nursing Practice.

The information obtained from this survey can be a source of encouragement for the nurse practitioner population. The participants who had had prior contact with a nurse practitioner were positive in their comments and indicated that they would be willing to utilize a nurse practitioner again when the opportunity presented itself. The fact that there was a positive correlation between knowledge of the role of the nurse practitioner and willingness to use one as a health care provider should incite nurse practitioners as well as nursing organizations to advertise and make sure the general public is aware of the health care choices that are available. This study also enforces the fact that the health care consumer does not appreciate being looked upon as a nonentity in today's health care environment. The average person needs someone to listen to them with an attentive ear, to answer their questions and give them enough time to relay their symptoms as well as their fears. Nurse practitioners can provide competent, professional health care and at the same time provide the empathy that so many consumers say is missing in today's health care atmosphere.

Nursing Research.

Research is the means by which nursing practice can be quantified as unique and, in some cases, superior to that of other health care professionals. Since nurse practitioners are, in a sense, competing for clients in today's health care system, we must be able to document that what we have to offer is unique (Hawkins & Thibedeau, 1996). This study reinforces the fact that education of the public on the role of the nurse practitioner should be a concern of this profession. A follow up survey in this community after information is provided on the educational preparation of the nurse practitioner as well as what health care services they are legally capable of performing would be interesting.

Summary

The conclusions of the gathered data reveal a community wide knowledge deficit regarding the role of the nurse practitioner. With the statistics showing that intent to use a nurse practitioner goes up as the consumer's knowledge about their role goes up, NPs would be negligent to their profession if this data is ignored. The data also supports the concepts of King's theory of goal attainment (1981) with one goal being to educate the health care consumer to all aspects of health care to help them in making an enlightened decision about their health care. It is hoped this study will help physicians as they make decisions regarding the use of NPs in their practice.

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Appendix A

Questionnaire

What Do You Know and Think About Nurse practitioners?

1. Based on what you know about nurse practitioners, do you believe that a nurse practitioner can do the following? (Please check your answer).

	Yes	No	Unsure
a. Take and record a health history?			
b. Perform a physical exam?			
c. Make a referral, if necessary, to a specialist?			
d. Diagnose and treat minor illnesses and injuries, including prescribing medications?			
e. Perform a prostate exam?			
f. Perform a pelvic exam?			
g. Perform a pap smear?			
h. Order and interpret blood and laboratory tests, including x-rays?			
i. Teach you how to take care of your health?			

2. Would You Be willing to use a nurse practitioner for the following health care services? (Please check your answers)

	Yes	No	Unsure
a. Take and record a health history?			
b. Perform a physical exam?			
c. Make a referral, if necessary, to a specialist?			
d. Diagnose and treat minor illnesses and injuries, including prescribing medications?			
e. Perform a prostate exam?			
f. Perform a pelvic exam?			
g. Perform a pap smear?			
h. Order and interpret blood and laboratory tests, including x-rays?			
i. Teach you how to take care of your health?			

If you answered yes to any of the above, please circle the number of the reason why you answered yes. You may use more than one reason, or you may write in your answer in #6 below.

1. Good experience in the past
2. They are qualified to provide certain aspects of health care
3. They talk to me and listen to me.
4. I do not have to wait a long time to see them.
5. They provide good care.
6. _____

Appendix A (Continued)

page 2

If you answered no to any of the above, please circle the number of the reason why you answered no. You may use more than one reason, or you may write in your answers in # 6 below.

1. Bad experience in the past
2. I do not feel they are qualified to provide my health care.
3. I just prefer a doctor.
4. My family and friends have had bad experiences with nurse practitioners.
5. They provide poor care.
6. _____

Health care in America is currently very expensive and not available to everyone. Do you think the use of nurse practitioners is a safe, effective way to help solve this problem?

Yes No Unsure

*****Please complete the following questions about yourself. This information will be used to describe the study sample and in no way will be used to identify individual participants.

1. Age ___ 2. Sex ___
3. Race (check one): Caucasian (white) African/American American Indian
 Hispanic American Asian/Pacific
4. Highest grade completed in school (Please check one):
 Less than high school
 High school graduate or GED
 Attended some college
 College graduate
 Graduate degree
5. What kind of medical insurance do you have? (Please check one) Private
 TennCare Medicare Medicaid None
6. How many times in the past 12 months have you seen your doctor? _____
7. Have you or a family member been seen by a nurse practitioner in the past 12 months?
 yes no unsure

Thank you for your time and participation in this survey. Please feel free to comment on this subject in the remaining space.

Appendix B

RESEARCH PROTOCOL FOR REVIEW BY UTC HUMAN SUBJECTS COMMITTEE

Project Director: Elizabeth Ann Park Dept.: Nursing
Co-Director: Dr. Barbara Andersen Dept.: Nursing

Address and Phone Number of Project Director and Co-Director: (for student projects, list both student and advisor)

Student: Elizabeth Ann Park Faculty Advisor: Dr. Barbara Andersen
1500 Jim Dyke Road 302 Guerry Center
Loudon, TN 37774 UTC School of Nursing
458-4365 755-4750

Title of Project: The relationship between consumer knowledge and intent to use a nurse practitioner as a primary health care provider.

Estimated Starting Date and Completion Date: May 1, 1998 - June 30, 1998

I. Objective(s) of Project: The purpose of this study is to determine the relationship between consumer knowledge and intent to use a nurse practitioner as a primary health care provider.

II. Subjects (selection method, populations, description): This study will utilize a convenience sample of one hundred (100) adults. Adults visiting a Farragut, TN, grocery store on two consecutive weekends will be randomly selected and solicited to participate in this study. These subjects will be able to read and write at a level sufficient to complete the questionnaire.

III. Methods or Procedures (attach copy of data gathering instruments and proposed consent form): Informed consent will be obtained and demographic data will be collected. Subjects will then be asked to complete the questionnaire on site and return to the researcher. Confidentiality for all subjects will be assured.

IV. School of Nursing Thesis Committee Decisions and Comments:

Approved

Signatures:

[Redacted signature area]

Investigator Date

Approved by School of Nursing Thesis Committee

[Redacted signature area]

MSN Program Coordinator Date

Chair, Thesis Committee Date

[Redacted signature area]

Director, School of Nursing Date

Chair, UTC Human Subjects Committee Date

April 30, 1998

Elizabeth Ann Park has my permission to take blood pressures in the front of Bi-Lo Grocery Store on Wednesday and Thursday, May 13-14, 1998. I understand she will be asking the customers to fill out a questionnaire, but will not coerce the customers in any way.

Richard Lewis
John Allan Snodderly



General Manager

Appendix C (Continued)

April 26, 1998

Elizabeth Ann Park, a student at the University of Chattanooga has my permission to take blood pressures in the Kroger Grocery store at Farragut, Tennessee on the Saturday and Sunday, May 9 -10, 1968. I understand she will be asking the customers to fill out a questionnaire, but will not coerce the customers in any way.

Richard Leon,


Manager

Appendix C (Continued)

April 27, 1998

Elizabeth Ann Park, a graduate student in nursing at the University of Tennessee at Chattanooga, has my permission to take blood pressures in front of Revco Pharmacy in Farragut, Tennessee on Monday and Tuesday, May 11-12, 1998. I understand she will be asking the customers to fill out a questionnaire, but will not coerce the customers in any way.

Denise Morgan, PhD

[REDACTED]
Pharmacist/Manager

Appendix D

**Elizabeth Ann Park
1500 Jim Dyke Road
Loudon, Tennessee 37774**


Dear Sir or Madam:

I am a graduate student at the University of Tennessee at Chattanooga, School of Nursing. I am conducting a study on knowledge of and intent to use a nurse practitioner as a primary health care giver. This research fulfills a requirement necessary to complete a Master of Science in Nursing degree. Please help me in this effort by taking a few minutes of your time to share your views on this subject with me.

Your completed questionnaire will serve as your permission to be a subject in the study. Your privacy will be maintained since no identifying data appears on the questionnaire. Your response is valuable to my study and may help influence future health care programs.

Thank you for your time.

Sincerely,


Elizabeth Ann Park, RN, BSN

Appendix E



Asthma, Immunology &
Allergy Associates, P.C.

Robert E. Younger III, M.D.
Diplomas: American Board of Allergy
and Immunology
American Board of Pediatrics

Michael C. Hollie, M.D.
Diplomas: American Board of Allergy
and Immunology
American Board of Pediatrics

Susan P. Raschal, D.O.
Diplomas: American Board of Allergy
and Immunology
American Board of Internal Medicine

Gwen Carlton, R.N., C.S., F.N.P.
Nurse Practitioner
Clinical Director

Susie Lynch, R.N., C.S., F.N.P.
Nurse Practitioner

Alan R. McMurray, Ed.D.
Administrative Director

1720 Gunbarrel Road
Suite 400
Chattanooga, TN 37421
Phone: (423) 499-4100
Fax: (423) 499-1945

1000 E. Third Street
Medical Towers
Suite 301
Chattanooga, TN 37403
Phone: (423) 499-4100
Fax: (423) 265-5567

1217 Memorial Drive
Suite 3
Dalton, GA 30720
Phone: (706) 217-6950
Fax: (706) 217-6967

May 8, 1998

Ann Park
1500 Jim Dyke Road
Loudon, TN 37774

Dear Ms. Parks:

I am writing to give you permission to duplicate my thesis entitled "A Southeastern Community's Knowledge, Attitudes, Intentions, and Beliefs Regarding the Role of the Nurse Practitioner." You may use any of the questions or questionnaires and alter them in any way that you see fit. If you need any further assistance with this study, please don't hesitate to contact me.

Sincerely,

Susan Robinson Lynch, RN, CS, FNP

SRL/sc

Vitae

Elizabeth Ann Park was born in Loudon, Tennessee in 1942. She graduated from Lenoir City High School in 1960. She attended Carson-Newman College from 1960-1961 and the University of Tennessee at Knoxville from 1961-1962. Her education was then placed on hold while she raised three children. She returned to school in 1978 and received an Associate Degree in Medical Records from Roane State Community College in Harriman, Tennessee. She served as Medical Records Director at Shannondale Health Care Center in Knoxville. In 1987, she returned to school at the University of Tennessee at Knoxville and earned a BSN. Following this, nursing experience was obtained at Fort Sanders Regional Hospital in Knoxville in Oncology and in home health as a field nurse and then a clinical supervisor. In 1998, she completed a master of science in nursing at the University of Tennessee at Chattanooga. Ms. Park currently lives in the East Tennessee area.