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Personal Health Screening Practices Among Female Nurse Practitioners

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PERSONAL HEALTH SCREENING PRACTICES AMONG FEMALE NURSE PRACTITIONERS

by

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Abstract

Health screening is an important part of primary health care. The United States Preventive Services Task Force (1996) has established guidelines and recommendations for females including breast exams, mammograms, and Pap smears. Nurse practitioners advocate routine health screenings for all females. Thus, the purpose of this descriptive study was to determine the degree of compliance with the established guidelines. Nola Pender's Health Belief Model served as the theoretical framework. Data were collected from a sample (N = 54) of female nurse practitioners in Mississippi using mailed questionnaires. Personal health screening practices were measures through the Health Screening Survey. Demographic data were collected to describe the sample. Analysis of the data included descriptive statistics. Frequency and percentage were determined for each question on the survey. The sample participants ranged in age from 27 to 64 years with a median age of 45 years. The majority were Caucasian, family-certified, and worked 40 hours or less per week.

The findings of this study indicated that the majority of the nurse practitioners received annual Pap smears. Almost all of the sample indicated they did self-breast exams while less than half had received a clinical breast exam within the last year. More than 45% of the respondents received mammograms within the last year. Over half of the nurse practitioners surveyed receive annual physical exams. Recommendations include replication of this study using a larger, more diverse sample, including male subjects for comparison and conduction of a correlational study to relate demographic variables to performance and conduction of a descriptive study to investigate barriers of health.

Dedication

This work is dedicated to my very best friend and the love of my life, my husband, Danny. You always believe in me even when I don't believe in myself. You are always there with encouraging words and unconditional love. Thank you with all my heart.

This work is also dedicated to my children, Crystal, Seth, and Tanner. Thank you for all the sacrifices during the past year. You all mean the world to me. Thank you for helping me reach this goal.

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Chapter I

The Research Problem

Health care, or the lack thereof, has become one of the most important social issues of our time. Health screening and preventive practices are an essential part of primary health care. Health care providers readily hand out advice aimed at making sure patients live long and healthy lives. However, a study by Birchard (1999) noted that 99% of doctors surveyed admitted to being their own practitioner, not having the recommended screening procedures and having a general lack of health care. There is minimal research on whether nurse practitioners are in compliance with recommended screenings. Nurse practitioners work long hours and have a considerable amount of stress in their lives, putting them at risk for health problems.

Nurses are a very vocal and highly visible group of professionals and are often looked upon by the public as health care examples to follow (Haughey, Kuhn, Dittmar, & Wu, 1992). Nurse practitioners who serve the public in an

expanded role are also looked upon to set examples for their patients.

Establishment of the Problem

Nurse practitioners have traditionally maintained a philosophy of health promotion and prevention of disease. National guidelines recommend that all females, including nurse practitioners, have selected routine health screenings (DiGuiseppi, 1996). However, the perceived notion is that nurse practitioners do not take care of themselves or take time to have regular screenings.

Nurse practitioners are at risk for the same diseases affecting the rest of the female population. For instance, breast cancer accounts for approximately 32% of all newly diagnosed cancers in women today. In 1995 there were 182,000 new cases of breast cancer diagnosed in the United States and 46,000 deaths from the disease. Breast cancer claims more lives of women over the age of 65 years than any other form of cancer. Annual mammography and clinical breast exams are recommended for women age 40 years and younger in high-risk cases. Mammography is recommended by the American Geriatric Society for women up to the age of 85 years and beyond if life expectancy is 3 years or longer. A study by Balducci and Phillips (1998) recommend

an approach to cancer that includes prevention and appropriate screenings for early detection.

Nurse practitioners are also at risk for cervical cancer along with the rest of the female population. Each year approximately 16,000 new cases are diagnosed, and nearly 5,000 women die annually from the disease. The primary screening method is the pap smear which is recommended annually for any female who is sexually active and still has a cervix. The last 40 years has seen a dramatic decline in the number of invasive cervical cancers. This is credited to the organized early detection systems in place today (DiGuiseppi, 1996)).

Nurse practitioners should be aware of the recommended guidelines and the benefit early detection has on the lives of their clients. Significant research exists regarding the impact of health screening; however, there is little research to determine the extent to which nurse practitioners are taking advantage of the available tests for themselves. Thus, the focus of this study was to determine the level of compliance with United States Preventive Services Task Force Guidelines among female nurse practitioners.

Significance to Nursing

The undesirable personal health practices among health care professionals have a define effect on one's ability as an educator (Nelson et al., 1994). Whether intentional or unintentional, nurse practitioners influence clients and the community they serve. This study is significant to nursing practice, education, and research.

Primary care practitioners must be aware of the current recommended routine screening and preventive practices. The result of this study will establish what recommendations are not being followed. Nurse practitioners, as a result of this study, will stress the importance of screenings to all patients.

The significant findings of this study should be taught to undergraduate and advanced practice students. Undergraduates must be made aware of health screening practices. Advanced practice nursing students, in particular, need to be taught recommended guidelines for screening practices for clients of all ages. Through this study nurse practitioners will be made aware of the practices not likely to be followed and incorporate into a plan of care for self and clients.

Review of the literature revealed several anecdotal references concerning women following recommended guidelines. Additionally, a few studies were found relating to physician compliance. No research was found related to personal health screening practices among nurse practitioners; therefore, this study contributes to nursing science as it adds to the body of knowledge for nursing research.

Theoretical Framework

The theoretical framework for this study was Pender's (1997) Health Promotion Model. The Health Promotion Model grew out of a national movement in the 1980s for improving the health of Americans by 1990. An approach-oriented model, the Health Promotion Model, does not include fear or threat as a motivating factor (Pender, 1997).

The Health Promotion Model identifies seven cognitive-perceptual factors and five modifying factors including demographic characteristics, biological characteristics, interpersonal influences, situational factors, and behavioral factors that result in participation in health-promoting behaviors (Pender, 1997).

The seven motivational factors deemed as primary in influencing behavior include the importance of health, perceived control of health, perceived self-efficacy, definition of health, perceived health status, perceived benefits of behaviors, and perceived barriers to health promotion (Pender, 1997).

Pender (1997) assumes that health is seen by individuals as a positive state of functioning. Individuals who seek health-promoting activities are those who place a high value on health. Motivation for health comes from an individual's control of personal health. One's own perceived ability to make changes in health can bring about a desire for change (Pender, 1997).

An individual must first believe that a change is possible for the behavior to occur. Health-promoting behaviors are influenced by an individual's own personal definition of health. This varies between individuals, from absence of disease to a high level of well-being (Pender, 1997).

Pender's study identified that current health status, an individual's perception of feeling well or ill, also determines initiation of health-promoting behavior (Marriner-Tomey, 1994). If an individual feels the

benefits of health-promoting behavior is high, they will be more likely to begin or continue the actions (Pender, 1997).

Barriers to health promotion have also been determined to influence behaviors. Individuals who deem it difficult to begin or continue activities are less likely to have healthy behaviors (Pender, 1997).

Pender's model is very popular among nurses. With the emphasis in health care leaning more toward health promotion and prevention, it is important for the health profession to be aware and be able to motivate consumers.

Nurse practitioners know the value of health promotion through education and practice. This study sought to determine if nurse practitioners participate in activities that are known to promote health.

Assumptions

The assumptions of this study were as follows:

1. Nurse practitioners are aware of the recommendations by the United States Preventive Services Task Force.

2. Routine health screening practice can be measured.

3. Health beliefs of nurse practitioners impact health screening practices.

Purpose of the Study

The purpose of this study was to determine the extent to which female nurse practitioners within the state of Mississippi are in compliance with the United States Preventive Services Task Force Guidelines. The researcher sought to determine if nurse practitioners, in a sense "practice what we preach," and if health care practices are influenced by health beliefs.

Statement of the Problem

Nurse practitioners, as primary health care providers, make recommendations to clients on a daily basis and are aware of the benefits of early detection through screening and preventive care. Yet, there has been little research on the adherence of nurse practitioners to regular personal health screenings. Therefore, the purpose of this study was to determine if female nurse practitioners have recommended health screenings.

Research Question

One research question was generated for this study. The research question posed was as follows: What are the selected personal health screening practices among female nurse practitioners?

Definition of Terms

For the purpose of this study, terms were defined as follows:

1. Health screening: Theoretical: preventive services in which a test or standardized examination procedure is used to identify patients requiring special intervention (DiGuiseppi, 1996). Operational: For the purpose of this study, health screening was further defined as the recommended routine tests including pap smears, mammograms, and breast exams.

2. Female nurse practitioner: Theoretical: the advanced practice nurse who is prepared through formal, organized educational program to provide a full range of primary health care services to individuals, families, and groups across the life span (American Nurses' Association, 1985). Operational: For the purpose of this study, female nurse practitioner was further defined as an advanced

practice nurse who is currently licensed in the state of Mississippi and is not male.

Summary

In summary, the current study was descriptive research designed to examine the extent to which female nurse practitioners within the state of Mississippi were in compliance with the recommended guidelines for pap smears, breast self-examinations, and mammography. Using the Demographic Survey and the Health Screening Survey, the knowledge gained through this research was deemed germane to advanced nursing in the areas of practice, research, and education.

Chapter II

Review of the Literature

A review of the literature revealed little research concerning the health practices of female nurse practitioners and whether or not they are in compliance with recommended screening guidelines. There was, however, some anecdotal information available about women in general and compliance issues related to breast and cervical cancers.

Bergman-Evans and Walker (1996) conducted a study to determine if women age 65 and older were following United States Preventive Services Task Force guidelines for preventive services. The purpose of this study was to determine how many women age 65 years and older were in compliance with the recommendation of the United States Preventive Services Task Force. Bergman-Evans and Walker used a qualitative design. Data were collected from the National Health Interview Survey-Health Promotion and Disease Prevention supplement containing statistics

provided by the National Center for Health Statistics which was appropriate for the information sought.

Recommendations for older women from the United States Preventive Services Task Force and the National Health Interview Survey-Health Promotion and Disease Prevention included five diagnostic tests, six physical examination procedures, and seven history questions. Recommendations also included lifestyle counseling, dental visits, eye exams, and immunizations including yearly flu vaccination, tetanus-diphtheria booster every 10 years, and pneumococcal vaccine.

A sample of 5,574 women were selected from those responding to the National Health Interview Survey-Health Promotion and Disease Prevention Survey. The group was subdivided by age, residence (rural vs. metropolitan), and poverty status.

Data revealed that of the women in all the age categories (young-old, 65 to 74 years; aged, 75 to 84 years; and oldest-old, 85 years and older) more than 60% reported having had a routine check-up within the last year, and the percentage rose to 78% reporting checkups within the last 2 years. Information about the primary provider was not sought; therefore, the number seen by

nurse practitioners is not known. Of these women, less than 40% received a complete history, and less than 1% had actually been asked all seven of the recommended questions. As age increased, the proportion of women asked all of the questions decreased. Data regarding the physical examination part of the screening revealed only 7% to 7.7% received all of the recommended services. Analysis of the diagnostic recommendations indicated that as women age they are less likely to receive a pap smear.

The percentage receiving the counseling recommendations revealed almost 50% of the women in the oldest-old category received no counseling services, whereas women in all the categories received at least one type. Of the lifestyle and behavior changes recommended, dental visits were the most likely to be recommended.

Three immunization items were analyzed and revealed that approximately 5% were in compliance with the recommended immunizations. Of all the age categories, women were more likely to receive a flu vaccination. Less than 25% in any category was in compliance with the pneumococcal vaccine.

Data from this research indicated a failure to meet the Healthy People 2000 target of 40% of the population of

women aged 65 and older to receive all of the preventive services available. Noted also, even though certain conditions such as vision and hearing changes increase with age, most women age 65 years and older report they do not even receive regular vision and hearing screenings at their physicals. Further emphasized, if women receive one preventive service, it is not an indication that they are taking advantage of all services available.

The Bergman-Evans and Walker (1996) study was germane to the present research since both studies examined health care practices of women. While Bergman-Evans and Walker (1996) focused on health care providers, history, diagnostic tests and physical examinations, and the patient outcomes related to prevention, the current study addressed personal screening practices of female nurse practitioners.

There have been multiple studies showing the benefits of mammography screening in reducing the breast cancer mortality rate in women age 40 to 69 years. However, women over the age of 70 years account for 38% of new breast cancer cases each year and 60% of all breast cancer deaths. Women over the age of 70 years have seemingly been under-represented in the randomized screening trials. Of

the 500,000 women participating in eight randomized clinical screening trials, women 70 years and older account for only 3.5% of the participants. Hwang and Cody (1998) sought to determine the role mammography plays in breast cancer patients over the age of 70 years.

In this retrospective chart review, 1,096 charts of breast cancer patients from 1979 to 1993 were examined. Each had a diagnosis of primary lesions of either invasive or intraductal carcinoma. After exclusions, the charts of 786 women age 40 years to 69 years were compared to 215 patients age 70 and older. The researchers considered multiple variables including previous mammogram (done before current cancer episode), how the patient was diagnosed (self-breast exam, clinical breast exam, or mammogram), tumor size (grossly largest diameter), and nodal involvement (based on dissection). The statistical analysis was performed using t tests for comparison of means and Pearson's chi-square for correlations of the multiple variables.

The researchers found the incidence of previous mammograms increased among the younger patients over time whereas of the most recently treated older women, only 50% had ever had a mammogram. Both age groups showed a

dramatic increase in mammograms. Both age groups showed a dramatic increase in mammogram diagnosed cancer over time. Data revealed that over time the incidence of finding the smallest tumors increased in both age groups.

Hwang and Cody (1998) noted that over time there was a significant trend toward earlier nodal stage ($p = .0008$), and among the older group there was no significant trend. Further noted was the striking increase in ductal concerns among the younger women. The cancers diagnosed with mammography were consistently smaller than those found on self or clinical breast exams.

The researchers concluded that mammography continues to be an important tool in the fight against breast cancer. Cited by the researchers as potential reasons for the small number of older women receiving mammograms were cost, access, education, and underestimating life expectancy by physicians. It was recommended that further research is needed to further determine why elderly women are not receiving mammograms.

Nurse practitioners see many elderly women as patients and need to follow the guidelines established for mammograms and not be influenced by age-related barriers. Therefore, this research was germane to the current study

which sought to determine whether or not nurse practitioners were themselves in compliance with the recommendations.

As a rule, patients trust physicians to make sound recommendations concerning health care. The United States Preventive Services Task Force, as well as the American College of Physicians, have made comprehensive, evidence-based guidelines regarding when screening procedures are appropriate. The importance of preventive practices has long been established, and, with the increased presence of quality assurance and performance assessment, it is imperative that appropriate screening procedures and preventive interventions be taught to residents (Keim, Gomez, & Wolf, 1998).

Office-based preventive services are growing in importance; however, despite this, a relatively small amount of time is spent educating residents on preventive medical care. Keim et al. sought to determine how many internal medicine residents in their university-based clinic were providing preventive health services.

The sample population (N = 225) of patients of the residents were randomly selected from 3,848 patients who had made at least two non-acute visits to the clinic

between January 1, 1994, and December 31, 1995. These included men, women, and children. A retrospective chart review by a single researcher extracted data from the charts. The researcher used the 1999 American College of Physicians guidelines for screening tests and preventive services, which included cholesterol every 5 years after age 18 years, breast exam yearly after age 40 years, mammogram yearly after age 50 years, pap smear every 1 to 3 years for females age 20 to 65 years, estrogen replacement therapy for all women unless family history of breast cancer, fecal occult blood test yearly after age 50 years, flexible sigmoidoscopy every 3 to 5 years after age 50, influenza vaccination yearly after age 65, pneumococcal vaccination after age 65, and tetanus booster every 10 years. These guidelines also recommend an increase in frequency in testing if risk factors of a family history exist.

In addition to the provision on preventive services, Keim et al. (1998) gathered covariate data including patient's age, sex, race, presence of comorbidity, and resident sex and year of training. Analysis was performed using chi-square to assess statistical differences in the patient's age, race (black or white), resident sex, and

year of postgraduate training for each of the preventive services.

Keim et al. (1998) found the overall level of provision for preventive health services in the clinic was 39%. The highest preventive service was mammograms (69%) and the lowest preventive service was tetanus immunizations (9%). Keim et al. determined a pap smear was appropriate for 99 women; only 53% of the women received a pap smear. Fecal occult blood tests were done 30% of the time when indicated. The covariate data analyzed showed significant differences in high-risk patients who were more likely to receive cholesterol screening ($p < .05$) and flexible sigmoidoscopy ($p < .001$). Data also revealed that women at high risk for breast cancer were less likely to receive mammograms ($p < .05$). Screening rates for flexible sigmoidoscopy and cholesterol were influenced by patient sex with men more likely to receive screening than women ($p < .01$). For immunizations, white patients received the pneumococcal vaccine more often than black patients ($p < .05$). For comorbidity, the only significant screening exam was for cholesterol ($p < .01$).

Resident data analysis revealed no significant difference in physician sex and the number of times pap

smears and breast examinations were performed. However, patients were more likely to receive mammograms ($p < .001$) and receive estrogen replacement therapy ($p < .05$) if their physician was female. If the resident was in the first year, the patients were more likely to receive the pneumococcal vaccine.

Of the possible explanations for the low level of services provided, Keim et al. (1998) noted the low socioeconomic status of the patients, the high level of comorbidity (61%), and the residents' insufficient familiarity with the guidelines. Keim et al. also noted the possibility that the residents do not agree with the current guidelines. However, these well-established guidelines are considered the standard of care, and residents should have a documented discussion in the patient's chart for legal reasons.

Recommendations for future studies by Keim et al. (1998) included exploring how educational efforts for patient and resident help to improve provision of care and help attain an acceptable level of care. Nurse practitioners, as primary care providers, have a curriculum emphasizing health promotion and preventive services; therefore, this research is germane to the

current study seeking to ascertain whether nurse practitioners themselves are in compliance with current recommendations.

Research has established that regular pap smears do indeed decrease the mortality risk of cervical cancer as shown by the recent decline in deaths from invasive cervical cancer. However, in the past year fewer than 50% of women in the United States have actually had a pap smear. Possible explanations include economics, failure of provider to encourage, access to health care, and knowledge levels. Hasenyager (1999) sought to determine the knowledge level among women attending a university health center.

Women presenting to the health center for gynecological exams during the 1996-1997 academic year were given a 43-item questionnaire (N = 163). The questionnaire was designed to assess knowledge levels about pap smears. After exclusion for incomplete surveys the total participants were N = 154 for analysis.

The women ranged in age from 18 to 57 years with a mean age of 23.5 years. Participants included 53% undergraduate students and 47% graduate students. The results indicated that 90% of the women knew that pap

smears screened cervical cancerous and precancerous lesions; however, 56% also believed pap smears screened for ovarian cancer. Others thought it screened for chlamydia (30%), gonorrhea (29%), syphilis (27%), HIV (6%), and uterine cancer (5%).

Data showed that even though 96% of the women indicated that pap smears should be performed yearly, 42% felt that a women with an abnormal pap smear indicating precancerous cells would also have pain, unusual bleeding or discharge (50%, undergraduate; 32% graduate) ($p < .025$). As to when pap smears should not be obtained, 94% indicated that pap smears should not be obtained during menstruation, and 42% indicated that sexual intercourse, along with spermicidal creams or jellies, should be avoided for 24 to 48 hours prior to pap smear.

The questionnaire also sought to determine the knowledge of risk factors to cervical disease. The responses indicated that approximately 50% of the undergraduates were aware of the risk factors, whereas more than 50% of the graduate students were aware of the same risk factors.

The study indicated that the majority of the students were aware of who should receive a pap smear; however,

many believed they were being screened for sexually transmitted diseases as well, which could lead them to a false sense of security. Nurse practitioners, as primary health providers, need to be aware of these findings and continue to educate patients.

The rates of women dying from cervical cancer fell in 1997 by 7% with a 25% decline since 1992. Sasieni (1999) sought to determine the effects of screening for cervical cancer on the mortality rate among women in England and Wales.

Death certificates, in 5-year age bands, were used to obtain the mortality data in England and Wales. An upwards adjustment by 4% was used because of the cause of death classification changes. Data revealed that as date of birth year increased the cervical cancer as a cause of death also increased. Women born after 1935 coincided with the sexual revolution of the 1960s and the use of oral contraceptives of the 1970s.

There was no significant decline in mortality during the years prior to 1980. However, the mortality rate fell significantly and progressively after the mid-1980s. Using the cohort effects of age and birth, the prediction of the death rate without screening can be made. Therefore, it is

estimated that screening has saved 8,250 lives between 1988 and 1997.

The study further emphasizes the need to continue to encourage patients to have the recommended screenings. The researchers estimated that 1,300 lives were saved in 1997, and 2,300 cancers were prevented.

Sasieni's (1999) research was applicable to the current research in that both studies examined incidence of pap smears as a preventive screening. While the Sasieni study investigated pap smears as recommended screening for patients, the present study examined incidence of pap smears among female nurse practitioners. Statistics from the Sasieni study could be of benefit to nurse practitioners in the encouragement of patients to have a yearly pap smear and as an impetus to have pap smears themselves.

Haughey, Kuhn, Dittmar, and Wu (1992) conducted a descriptive study on the health practices among critical care nurses for the purpose of identifying those practices in need of modification for two reasons: (a) the nurses' own personal health and (b) to increase their effectiveness as professional role models in promoting health in the community. The convenience sample (N = 499)

consisted of critical care nurses attending a continuing education program. The questionnaire consisted of items about background (personal and professional), health practices (smoking, oral hygiene, dietary habits, seatbelt use, alcohol consumption, and rest, and health surveillance behaviors.

Analysis of the data was completed using descriptive statistics. The sample consisted of 94% women (n = 469) and 6% men (n = 30). In response to the oral hygiene questions, the participants reported that 99.4% brushed their teeth at least once daily, 32.9% flossed daily, and 70.6% reported having yearly dental checkups.

Survey responses regarding dietary habits indicated that 41.9% stated they ate breakfast everyday, and 42.2% reported eating between meals. The participants indicated that 54.1% do not drink coffee or limit consumption to two cups per day. Over half (57%) of the participants indicated eating a variety of foods, but only 39.6% limited fat, 47.9% limited salt, and 40.5% limited the use of sugar.

The results indicated that the majority (83.8%) slept 6 to 8 hours per day. Responses also indicate that less than half (43.5%) engaged in physical activity at least

one to two times per week with 13.5% reporting that they were inactive.

The health behaviors of seatbelt usage and alcoholic beverage consumption were also examined. Seatbelt usage was split almost in half with 51.8% indicating they always used seatbelts, while 48.2% stated they used seatbelts once in a while or hardly ever. Among those surveyed, 26.4% indicated they did not drink alcohol, whereas 42% stated they drank once or twice a week, 8% drank more than twice, and 24% drank alcohol less than once a week.

The health surveillance category was examined last. Items included annual physical examinations, breast self-examination, and pap smears. The survey revealed that 43.3% have a checkup at least once a year, while 23.4% indicated they have a checkup every 2 years and 33.2% said they have a checkup less than every 2 years.

Monthly self-breast exams were reported by only 25.9% while 61.8% stated they did so occasionally and 12.3% stated they never did self-breast exams. Of sample participants, 79.6% receive a pap smear yearly or at least every 2 years.

The results of this study indicate that nurses fall short of fulfilling their role as health care role models.

The Haughey et al. (1992) study was applicable to the current study which examined nurse practitioners as health care role models in the areas of selected recommended screening. Nurse practitioners, as advanced practice nurses, have the opportunity to influence family, friends, and patients and should be conscience of their own health behavior as a potential determining factor.

A review of the literature revealed several studies focused on compliance with recommended health care screening for women. Additionally, one study was found concerning the health care practices of critical care nurses. No studies were identified in which personal screening practices of female nurse practitioners were examined. Since there was a lack of studies in this area, there was an impetus for conducting the current study.

Chapter III

The Method

The purpose of this study was to determine if female nurse practitioners who serve as role models to patients for prevention in health care follow recommended screenings for their personal health care. Nurse practitioners as primary health care providers make recommendations to patients on a daily basis and are aware of the benefits of early detection through screening. However, no research was found on the compliance of nurse practitioners with recommended screenings for their own personal health care.

Design of the Study

The study utilized a descriptive survey design to identify the personal health screening practices among female nurse practitioners. According to Polit and Hungler (1999), the main objective of descriptive research is to accurately portray characteristics and frequency with which they occur. Since the current study sought to

describe the rate of compliance among female nurse practitioners, a descriptive quantitative design was deemed appropriate.

Research Question

The research question posed for this study was as follows: What are the selected personal health screening practices among female nurse practitioners?

Limitations

The limitations of this study were as follows:

1. The use of a random sample of 100 nurse practitioners prevented generalization to the entire population of female nurse practitioners.

2. The use of selected screenings of mammograms, pap smears, and breast exams prevented the determination of compliance with other recommended tests.

3. The time span for data collection eliminated those nurse practitioners who did not return their survey in a timely manner.

4. The use of mammograms, breast exams, and pap smears eliminated the use of male subjects.

Setting, Population, and Sample

The setting for this study was a southeastern state. The population group was comprised of all nurse practitioners within that state. A random sample of 100 was chosen via the fishbowl method from the list of all nurse practitioners within the state. The sample included all nurse practitioners who met the criteria, were female, and returned the survey and consent form. The final sample consisted of 54 nurse practitioners.

Instrumentation

Two instruments were used to collect data for the study. The first instrument consisted of a researcher-designed demographic survey which was used to assess the characteristics of the sample (see Appendix A). The Demographic Survey consisted of questions concerning age, sex, race, area of practice, years as nurse practitioner, and personal and family history of breast and cervical cancer. The second tool, a researcher-designed instrument gleaned from recommendations from the United States Preventive Services Task Force, consisted of nine questions with multiple-choice answers (see Appendix B). The topics included questions about mammograms, pap smear, and breast exam practices. The survey took no more than 20

minutes to complete. There was no established validity of reliability for the tools. However, face validity was assumed as items on the instruments were gleaned from current research and the tools were submitted to a panel of experts.

Data Collection Procedure

The researcher first obtained permission from Mississippi University for Women's Committee on Use of Human Subjects in Experimentation (see Appendix C) to conduct the study. Then, a list of all nurse practitioners within the southeastern state was obtained from the Mississippi State Board of Nursing (1999).

A list of 100 names of nurse practitioners were chosen by random using the fishbowl method. Those 100 nurse practitioners were sent the consent form (see Appendix D), the Demographic Survey, and the Health Screening Survey along with a self-addressed, stamped envelope. Participation was voluntary and subjects were informed that no names would be used. The returned questionnaires, surveys, and consent forms were kept in a locked box with the researcher until data analysis.

Method of Data Analysis

Analysis of the data included descriptive statistics. Frequency and percentage were determined for each individual question on the Demographic Survey as well as the Health Screening Survey. Additionally, rank order was ascertained for items on the survey.

Summary

This descriptive research study surveyed 100 female nurse practitioners in a southeastern state to ascertain the personal compliance rates with recommended health care screenings. The study used the researcher-designed Demographic Survey and the Health Screening Survey to measure the compliance with recommended guidelines for pap smears, breast self-examinations, clinical breast exams, and mammography. The Health Promotion Model (Pender, 1997) was used to guide the study. Data were analyzed using descriptive statistics.

Chapter IV

The Findings

The purpose of this study was to determine the compliance rate among female nurse practitioners with the recommended guidelines for selected personal health screenings. The Health Screening Survey was used to identify occurrence rates among the female nurse practitioners. A descriptive, quantitative research design was utilized to determine which health screenings practices were being followed. The selected screenings on the Health Screening Survey included mammogram, clinical breast exam, breast self-exam, Pap smears, and yearly routine physical exams. In addition, demographic information including age, race, area of practice, years of practice as a registered nurse, years in practice as nurse practitioner, and the usual number of hours worked in a week were collected. This chapter includes a complete description of the sample as well as the results of the data analysis.

Description of the Sample

The sample (N = 54) consisted of nurse practitioners licensed in the state of Mississippi who completed and returned surveys. One hundred nurse practitioners were randomly chosen and were sent surveys. Two surveys were returned due to undeliverability. Two surveys were returned and disqualified due to the subject being male. The subjects ranged in age from 27 to 64 years. The median age of the sample was 44.98. Distribution of age ranges is presented in Table 1.

Table 1

Age of Participants by Frequency and Percentage

Age (years)	f[a]	%
25 to 29	5	9.25
30 to 34	3	5.55
35 to 39	11	20.35
40 to 44	8	14.80
45 to 49	9	16.65
50 to 54	5	9.25
55 to 59	10	18.50
60 to 64	3	5.55

[a]N = 54.

The demographic surveys indicated that 94.45% of the respondents were Caucasian and 5.55% were African American. The majority (81.5%) of the nurse practitioners indicated family as their specialty area. The average number of hours worked in a usual week by the respondents ranged from less than 20 (5.55%) to greater than 50 (12.97%), with the majority (50%) working 31 to 40 hours per week. The demographics of race, specialty area, and number of hours worked weekly are depicted in Table 2.

Table 2

Demographics of Race, Specialty Area, and Hours Worked Weekly by Frequency and Percentage

Demographics	f[a]	%
Race		
African American	3	5.55
Caucasian	51	94.45
Specialty		
Family	44	81.50
Pediatrics	5	9.25
Adult	3	5.55
Other	2	3.70
Number of hours		
< 20	3	5.55
20 to 30	3	5.55
31 to 40	27	50.00
41 to 50	14	25.93
> 50	7	12.97

[a]N = 54.

The demographic survey also sought information about the number of years in nursing as a nurse practitioner and the number of years in nursing as a registered nurse prior to becoming a nurse practitioner. The response indicated that nursing experience ranged from 0 year (1.85%) to 40 years (1.85%) with a mean of 13.42 years experience as a registered nurse prior to becoming a nurse practitioner. The number of years in practice as a nurse practitioner ranged from 1 year (3.70%) to 26 years (1.85%) with a mean of 7 years experience as a nurse practitioner. See Table 3 for frequency and percentage of experience.

Table 3

Results Related to Years of Experience as Registered Nurse Prior to Becoming Nurse Practitioner by Frequency and Percentage

Experience (years)	f[a]	%
0 to 4	10	18.52
5 to 9	8	14.80
10 to 14	18	33.32
15 to 19	5	9.30
20 to 24	6	11.11

(table continues)

Table 3 (continued)

Experience (years)	f[a]	%
25 to 29	3	5.55
30 to 34	2	3.70
35 to 40	2	3.70

[a]N = 54.

Results of Data Analysis

The research question for the study was as follows: What are the selected personal health screening practices among female nurse practitioners? Data were subjected to descriptive statistical analysis to determine frequency of health screening practices in relation to the selected areas of Pap smears, breast exams, mammograms, and routine physical exams.

When respondents were asked about how long ago they had their last Pap smear, 64.15% (n = 34) indicated they had received a Pap smear 6 to 12 months ago. Seven participants indicated it had been longer than 24 months since their last Pap smear. One participant failed to answer the question.

Results for the survey question regarding how often participants had a routine Pap smear ranged from every 6 to 12 months to never. The majority of nurse practitioners (55.56%, n = 30) indicated they had routine Pap smears every 6 to 12 months. The results related to frequency and percentage of pap smear exams are presented in Table 4.

Table 4

Results Related to Pap Smears by Frequency and Percentage

Pap smear	f	%
When was your last Pap smear?[a]		
Never had one	0	0.00
6 to 12 months ago	34	64.15
13 to 18 months ago	10	18.87
19 to 24 months ago	2	3.78
> 24 months ago	7	13.20
How often do you have routine pap smears?[b]		
Every 6 to 12 months	30	55.56
Every 13 to 18 months	12	22.22
Every 19 to 24 months	12	22.22
Never	0	0.00

[a]n = 53. [b]n = 54.

The data from the surveys indicated that the majority (92.59%, n = 50) of nurse practitioners indicate they do self-breast exams whereas 7.41% (n = 4) indicated they did not. Of the nurse practitioners conducting self-breast exams, 66.66% (n = 36) indicated they did self-breast exam monthly while 62.26% (n = 33) had conducted the self-breast exam within the last month. The results related to self-breast exams are shown in Table 5.

Table 5

Data Results from Health Screening Survey Self-Breast Examination Questions by Frequency and Percentage

Self-breast examination	f	%
Do you do self-breast exams?[a]		
Yes	50	92.59
No	4	7.41
When was the last time you did self-breast examination?[b]		
Within last week	6	11.32
Within last month	33	62.26
Within last year	14	26.42
Other	0	0.00
How often do you do self-breast exam?[c]		
Never	1	1.86
Weekly	2	3.70
Monthly	36	66.66
Other	15	27.78

[a]n = 54. [b]n = 53. [c]n= 54.

Frequency of clinical breast exams were reported by nurse practitioners in the study. Clinical breast exams were conducted on 43.40% (n = 23) of the participants 6 to 12 months ago, 35.85% (n = 9) of the nurse practitioners reported 13 to 18 months ago, and 15.09% (n = 8) indicated it had been greater than 24 months since last clinical breast exam.

Responses to the Health Survey question regarding when last mammogram occurred indicated that 46.30% (n = 25) had mammograms 6 to 12 months ago. Additionally, 7 (12.96%) indicated they had never had a mammogram. The results for frequency of mammograms are shown in Table 6.

Table 6

Results Related to Clinical Breast Examination and Mammogram by Frequency and Percentage

Clinical breast examination	f	%
When was your last clinical breast exam?[a]		
Never had one	0	0.0
6 to 12 months ago	23	43.40
13 to 18 months ago	19	35.85
19 to 24 months ago	3	5.66
> 24 months ago	8	15.09

(table continues)

Table 6 (continued)

Clinical breast examination	f	%
When was your last mammogram?[b]		
Never had one	7	12.96
6 to 12 months ago	25	46.30
13 to 18 months ago	9	16.67
19 to 24 months ago	6	11.11
> 24 months ago	7	12.96

[a]n = 53. [b]N = 54.

The Health Screening Survey results indicated that 51.86% (n = 28) of the nurse practitioners had annual physical exams and 48.14% (n = 26) did not. Of the participants who indicated they had annual routine physical exams, 47.16% (n = 25) responded they had an exam 6 to 12 months ago. Six participants (11.32%) indicated they had never had a physical exam, and one participant failed to answer the question. See data results in Table 7.

Table 7

Results Related to Annual Physical Exams by Frequency and Percentage

Physical exam	f	%
Do you have yearly routine physical exams?[a]		
Yes	28	51.86
No	26	48.14
When was your last complete physical exam?[b]		
Never had one	6	11.33
6 to 12 months ago	25	47.16
13 to 18 months ago	4	7.54
19 to 24 months ago	6	11.33
> 24 months ago	12	22.64

[a]n = 53. [b]N = 54.

Summary

Results of the Health Screening Survey related to selected personal health screening practices of female nurse practitioners were presented in Chapter 4. The results indicated that overall nurse practitioners do participate in personal health practices to varying degrees. Further discussion will be presented in Chapter V.

Chapter V

The Outcomes

Nurse practitioners, as primary health care providers, are in the position to influence many people and are often looked upon by the public as exemplars of health care (Haughey et al., 1992). Nurse practitioners are knowledgeable about the importance of early detection and are aware of the benefits of screening including Pap smears and mammograms. However, minimal data are available about whether or not nurse practitioners follow the recommended guidelines for their own personal health care.

A descriptive qualitative study was implemented to determine whether or not female nurse practitioners are in compliance with recommended guidelines for Pap smears, self-breast exams, clinical breast exams, and mammography. Data were collected from a sample of female nurse practitioners (N = 54) in Mississippi using mailed questionnaires. Selected health screening practices were measured using the researcher-designed Health Screening Survey. Demographic data were collected to describe the

sample. Data were analyzed using frequency and percentage. Pender's (1997) Health Promotion Model served as the theoretical framework for the study.

Included in this chapter is a discussion of the findings of the study in relation to the research question. Also included in this chapter are the conclusions, implications for nursing, and recommendations.

Summary of the Findings

The sample consisted of 54 female nurse practitioners licensed to practice in the state of Mississippi. The participants ranged in age from 27 to 64 years with a mean age of 45 years. The majority of the sample were Caucasian (94.45%), family certified (81.50%), and worked 40 hours or less per week (61.00%). Additionally, a majority (66.68%) of the individuals in the sample indicated they had 10 years or more experience in nursing prior to becoming a nurse practitioner, and 53.7% had 5 years or more experience practicing as a nurse practitioner.

The Health Screening Survey included questions regarding number of and frequency of Pap smears. The respondents indicated that a majority, 64.15% had received

a Pap smear within the last 12 months, and 55.55% indicated they routinely had Pap smears.

Questions regarding breast exams (self and clinical) and mammograms were included in the survey. Over 92% of the participants conducted self-breast exams while 7.41% did not. Less than half (43.40%) had received a clinical breast exam within the last year; however, over half (83.91%) had received a clinical breast exam within the last 2 years.

Data indicated that 87.04% of the participants had received a mammogram, and close to half (46.30%) received a mammogram within the last 12 months. Over 12% of the nurse practitioners surveyed had never received a mammogram.

Also included in the Health Screening Survey were questions about routine physical exams. Data indicated that 51.86% had yearly physical exams and 48.14% did not. Of the participants who received physical exams, 77.36% had received a physical exam within the last 2 years.

Discussion

This research study was guided by one research question: What are the selected personal health screening practices among female nurse practitioners? The

descriptive analysis of the data indicated that, overall, a majority of the female nurse practitioners did participate in the selected personal health screening practices of Pap smears, breast exams (clinical and self-breast), and mammograms. However, the time frame in which these practices occurred was less than desirable.

There are several possible explanations for the overall results of this study. The sample consisted of 54 female nurse practitioners who were licensed in the state of Mississippi and were predominantly Caucasian and family certified. These nurse practitioners were in a profession that teaches and values health screenings. This may have accounted for a majority of the participants following recommended guidelines for health screening. Also, since the sample was employed in health care facilities it could be surmised that these individuals had access to clinical exams from primary health care provider colleagues.

One of the findings from the study that caused concern was that although 92.59% of nurse practitioners did self-breast exams, 29.64% indicated they only rarely or never did self-breast exams. This could possibly have been due to the fact that the participants are busy working women, many employed full-time. Additionally, over

one third of the nurse practitioners in the study were under the age of 40 years and may have felt they were not at risk for breast cancer.

The Health Screening Survey also included questions regarding mammograms which are not recommended annually for women over the age of 40 and women over the age of 35 with a family history of breast cancer. The surveys indicated 46.39% of the participants had received a mammogram within the last 12 months, 62.97% had received a mammogram within the last 18 months, and 74.08% had received a mammogram within the last 2 years. The setting, which was a poor, rural, southeastern state could have contributed to the infrequency of mammograms for these nurse practitioners. Rural settings typically have less high-tech equipment, such as mammogram machines available in clinics in contrast to urban settings where mammograms are often offered on a walk-in basis in many areas.

Also, the results of the frequency of the mammograms were not compared to age of the participants. Recommendations for young females do not include yearly mammograms. It may have been that the 38.88% of the nurse practitioners under the age of 40 years were the

individuals who reported none or infrequent mammograms, which would have been within the recommended guidelines.

The survey indicated that 100% of nurse practitioners had received a Pap smear within the last 2 years. This is in contrast to the result of a study by Haughey et al. (1992) where only 79.6% of the sample had received a Pap smear. Pap smears are available and accessible even in rural areas, and the nurse practitioners are taking advantage of this important screening. Nurse practitioners in the sample appeared to demonstrate the value of this important screening tool by 100% of them getting an annual Pap smear. One hundred percent of the participants indicated that these nurse practitioners had incorporated the importance of this health screening into their personal health practices.

The majority of nurse practitioners (54.70%) in the present survey had received a physical exam within the last 18 months which is in sharp contrast to a study by Birchard (1999) that indicated only 1% of physicians had regular physical exams. Nurse practitioners traditionally focus on health promotion and disease prevention in contrast to the medical model which is more focused on cure of a disease that has already occurred. This focus

could account for the large disparity of annual physical exams between the two types of health care providers in these studies. The 11.32% of the respondents who had not had a physical could possibly be due to the ages of the participants. The demographic of age was no correlated to health screenings in this study.

Conclusions

The researcher determined that the majority of female nurse practitioners were in compliance with the recommended guidelines for Pap smears, clinical breast exams, self-breast exams, mammograms, and yearly physical exams. The relatively low percentage of nurse practitioners not in compliance was a good indication that nurse practitioners practice what they preach.

Pender's Health Promotion Model was an appropriate choice for the framework to investigate the health behavior of female nurse practitioners. As shown by the results, a majority of female nurse practitioners in Mississippi do value health and participate in behaviors known to promote health which supports the Pender Health Promotion Model.

Implications for Nursing

The results of this study were significant to nursing in several areas. The areas of research, education, and practice had particular significance.

Research. The current study adds to the body of nursing knowledge. This study might serve as a basis for future studies on health screening practices among health care providers. This study could provide an impetus to further studies utilizing the Pender Health Promotion Model as a foundation for health screening.

Education. The results of this study should be incorporated into nursing curriculum for both undergraduates and advanced practice nurses. Nursing students should be taught the recommended guidelines for health screenings. They should be taught the importance of teaching these guidelines to patients as well as incorporating these screenings into their personal practices when teaching recommended screenings.

Practice. Nurse practitioners should utilize health screening flow charts to indicate when recommended screenings are due for patients. Primary health care providers should utilize each visit as an opportunity to teach patients the importance of health screenings.

Advanced practice nurses, particularly nurse practitioners, need to be aware of how their own personal health behavior influences others. As primary health care providers, nurse practitioners are often the only health professionals patients come in contact with and need to set a good example to follow.

Recommendations

Based on the findings of this study, the following recommendations have been made:

1. Replication of this study utilizing a larger, more diverse sample.

2. Conduction of a descriptive study that includes additional recommended health screening practices, such as eye exams and dental exams.

3. Conduction of a comparative study to survey male nurse practitioners for compliance with recommended guidelines as compared to female nurse practitioners.

4. Conduction of a correctional study that relates demographic variables of health care providers with performance of recommended health screenings.

5. Conduction of a descriptive study that investigates barriers of health care providers for compliance with recommended health screening practices.

REFERENCES

References

American Nurses' Association. (1985). The scope of practice of the primary healthcare nurse practitioner. Kansas City, MO: Author.

Balducci, L., & Phillips, D. (1998). Breast cancer in older women. American Family Physician, 58(5), 1163-1172.

Bergman-Evans, B., & Walker, S. (1996). The prevalence of clinical preventive services utilized by older women. Nurse Practitioner: The American Journal of Primary Health, 21(4), 88-106.

Birchard, K. (1999). Doctors should take better care of themselves. Lancet, 353(9148), 219.

DiGuiseppi, C. (Ed.). (1996). U.S. Preventive Task Force: Guide to clinical preventive services (2nd ed.). Baltimore, MD: Williams & Wilkins.

Hasenyager, C. (1999). Knowledge of cervical cancer screening among women attending a university health center. Journal of American College Health, 47(5), 221.

Haughey, B., Kuhn, M., Dittmar, S., & Wu, Y. (1992). Health practices of critical care nurses. Heart and Lung, 21, 203-208.

Hwang, E., & Cody, H. (1998). Does the proven benefit of mammography extend to breast cancer patients over age 70? Southern Medical Journal, 91(6), 522-526.

Keim, D., Gomez, C., & Wolf, A. (1998). The level of preventive health care in an internal medicine residency clinic: Still only an ounce of prevention? Southern Medical Journal, 91(6), 550-554.

Marriner-Tomey, A. (1994). Nursing theorists and their work (3rd ed.). St. Louis, MO: C. V. Mosby.

Mississippi Board of Nursing. (1999). List of nurse practitioners. Jackson, MS: Author.

Nelson, D., Giovino, G., Emont, E., Brackbill, R., Cameron, L., Peddicord, J., & Mowery, P. (1994). Trends in cigarette smoking among U.S. physicians and nurses. Journal of the American Medical Association, 16(271), 1273-1275.

Pender, N. J. (1997). Health promotion in nursing practice. Norwalk, CT: Appleton & Lange.

Polit, D., & Hungler, B. (1999). Nursing research: Principles and methods (6th ed.). Philadelphia, PA: Lippincott.

Sasieni, P. (1999). Effect of screening on cervical cancer mortality in England and Wales: Analysis of trends with age period cohort model. British Medical Journal, 7193, 1244.

APPENDIX A

DEMOGRAPHIC SURVEY

Demographic Survey

Please fill in the blank or check (✓) the appropriate answer, one answer per question.

1. Age: _____

2. Gender
   - ❒ a. Female
   - ❒ b. Male

3. Race
   - ❒ a. African American
   - ❒ b. Caucasian
   - ❒ c. Other (please specify): _____

4. Nurse practitioner specialty
   - ❒ a. Adult care
   - ❒ b. Pediatrics
   - ❒ c. Geriatrics
   - ❒ d. Other (please specify): _____

5. Years of practice as nurse practitioner: _____

6. Years in practice as RN prior to becoming an NP: _____

7. Average number of hours worked weekly
   - ❒ a. < 20
   - ❒ b. 20 to 30
   - ❒ c. 31 to 40
   - ❒ d. 41 to 50
   - ❒ e. > 50

APPENDIX B

HEALTH SCREENING SURVEY

Health Screening Survey

1. When was your last pap smear?
   - ❒ a. Never had one
   - ❒ b. 6 to 12 months ago
   - ❒ c. 13 to 18 months ago
   - ❒ d. 19 to 24 months ago
   - ❒ e. > 24 months ago

2. How often do you have routine pap smears?
   - ❒ a. Never had one
   - ❒ b. Every 6 to 12 months
   - ❒ c. Every 13 to 18 months
   - ❒ d. Every 19 to 24 months

3. Do you do self-breast exams (SBE)?
   - ❒ a. Yes
   - ❒ b. No

4. When was the last time you did SBE?
   - ❒ a. Within last week
   - ❒ b. Within last month
   - ❒ c. Within last year
   - ❒ d. Other (Specify): _____

5. How often do you do SBE?
   - ❒ a. Never
   - ❒ b. Weekly
   - ❒ c. Monthly
   - ❒ d. Other (Specify): _____

6. When was your last clinical breast exam?
   - ❒ a. Never had one
   - ❒ b. 6 to 12 months ago
   - ❒ c. 13 to 18 months ago
   - ❒ d. 19 to 24 months ago
   - ❒ e. > 24 months ago

7. When was your last mammogram?
   - ❒ a. Never had one
   - ❒ b. 6 to 12 months ago
   - ❒ c. 13 to 18 months ago
   - ❒ d. 19 to 24 months ago
   - ❒ e. > 24 months ago

8. Do you have yearly routine complete exams?
   - ❒ a. Yes
   - ❒ b. No

9. When was your last complete physical exam?
   - ❒ a. Never had one
   - ❒ b. 6 to 12 months ago
   - ❒ c. 13 to 18 months ago
   - ❒ d. 19 to 24 months ago
   - ❒ e. > 24 months ago

APPENDIX C

APPROVAL OF MISSISSIPPI UNIVERSITY FOR WOMEN'S COMMITTEE ON USE OF HUMAN SUBJECTS IN EXPERIMENTATION

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April 26, 2000

Ms. Lisa A. Dement
P. O. Box W-910
Campus

Dear Ms. Dement:

I am pleased to inform you that the members of the Committee on Human Subjects in Experimentation have approved your proposed research as submitted.

I wish you much success in your research.

Sincerely,

Sheila V. Adams

Sheila V. Adams, Ed.D.
Interim Vice President
for Academic Affairs

SA:wr

cc: Mr. Jim Davidson
Dr. Lynn Chilton

APPENDIX D

CONSENT TO PARTICIPATE

Dear Nurse Practitioner,

I am a graduate nursing student at Mississippi University for Women in the Family Nurse Practitioner program. I am doing my research thesis on health practices among female nurse practitioners. The intent of this study is to determine the extent to which nurse practitioners are able to care for themselves. I am writing to request your help in this research by answering the attached survey and returning it in the envelope provided.

Please understand that your participation is voluntary and that there are no risks in answering the survey. Also, understand that your name will not be used in any way and that data will be reported in groups.

If interested in obtaining the findings of my study, please enclose a self-addressed, stamped envelope. Let me thank you in advance for your time and participation.

Sincerely,

Lisa A. Dement, RN

I, _____, agree to participate in this survey and understand the consent.

_____
Signature of Participant

Date: _____