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An Analysis Of Providers' Practices Regarding Smoking Cessation

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Running head: AN ANALYSIS OF PROVIDERS' PRACTICES

An Analysis of Providers' Practices Regarding Smoking Cessation

By

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Submitted in partial fulfillment of the requirements for the
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GRADUATE COMMITTEE APPROVAL

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ABSTRACT

Clinical guidelines are the basis of any primary care setting. They were developed in order to give the healthcare provider access to information regarding screening, assistance, and management of certain ailments. Smoking cessation education is among the many clinical guidelines. Smoking is also among the modifiable risk factors for many diseases, including heart disease and cancer.

A nonexperimental, ex post facto chart review was used to evaluate if healthcare professionals provided and documented smoking cessation education. A random sample of (N=200) patients' charts were selected at a clinic site in Northeast Mississippi. The purpose of the study was to examine tobacco dependent patients' charts to evaluate if healthcare providers implemented smoking cessation education and documented the health promoting behavior in accordance with the standards of care. The researchers discovered a large number of tobacco dependent patients' charts that received little documentation of smoking cessation education. Eight seven percent of the patients were assessed regarding smoking cessation; however, only 16% were advised to avoid smoke through the course of their illness. Pender's Health Promotion Model provides framework for the study.

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CHAPTER I

Dimensions of the Problem

Smoking has long been a topic of debate. There is extensive data suggesting that active smoking and passive second hand smoke causes chronic obstructive pulmonary disease, which is the fourth leading cause of death in the United States (McCance & Huether, 2006). The Center for Disease Control and Prevention (CDC) estimated that "440,000 deaths or about 1 of every 5 deaths" is a direct result of cigarette smoking (National Center for Chronic Disease Prevention and Health Promotion [NCCDPHP], 2004, p. 1). Smokers are estimated to loose 13-14 years of their lifespan when compared to counterparts who do not smoke (NCCDPHP, 2004). In 2004, the CDC estimated that 124,000 deaths related to lung cancer were caused by smoking. In 1998, an estimated 561 million dollars was spent on smoking related diseases in Mississippi alone. Smoking cessation could have dramatically reduced the number of deaths and money expenditures.

Cigarette smoking is an addictive behavior that can have detrimental effects on a person's health. Not only are smokers at an increased risk of dying from cancer, they are also two to four times more likely to develop coronary heart disease (JAMA, 2000).

Problem Statement

It is unknown whether promotion of smoking cessation is implemented or documented during routine, illness, or wellness checkups in Mississippi clinics. Smoking is a modifiable risk factor for many disease processes including lung cancer, bladder cancer, and heart disease. These clients are first seen in the primary care setting and where primary prevention of such disease processes begins.

Purpose of the Study

The intent of this study is to examine charts of tobacco dependent patients, evaluate if health care providers implemented smoking cessation education, and document the health promoting behavior in accordance with the standards of care. This study addressed whether client smoking status is addressed at each clinic visit and determined if appropriate support and follow-up were provided for patients attempting smoking cessation. Further, it examined the use of prescription drugs, nicotine replacement therapy, and provider follow-up to assist clients in smoking cessation.

Significance of the Study

The state legislature defines primary health care as "the health care that clients received at the first point of contact with the health care system and is continuous and comprehensive including health promotion, prevention of disease and disability, health maintenance, rehabilitation, and identification of health problems" (Buppert, 2004, p. 8). Health care professionals are at the forefront of educating adults who smoke and promoting cessation. Patients seek healthcare, and at every visit, tobacco use should be addressed. The patient's smoking status should be assessed as well as their desire to quit smoking. Healthcare providers are equipped with adequate resources and means to assist a patient with smoking cessation.

Theoretical Foundation

Nola J. Pender's Health Promotion Model poses as a structure for promoting healthy lifestyles. Major concepts of this model include reoccurrence of the same behavior such as habitual smoking, personal variables that influence the behavior, persuasions that sway for or against the behavior, and promotion of health. The

guidelines for smoking cessation recommendations closely adhere to Pender's health promoting behavior.

Several researchers have applied Pender's Health Promotion Model to their studies. The following research studies applied Pender's Health Promotion Model to physical activity but also demonstrate how Pender's Model can relate to all aspects of health promotion including smoking cessation education.

Wu and Pender conducted a study entitled "A Panel Study of Physical Activity in Taiwanese Youth: Testing the Revised Health-Promotion Model" (2005). The study "used a 2-wave panel data to test a structural model of how individual characteristics, cognitions, and interpersonal influences predicted physical activity of Taiwanese adolescents" (Wu & Pender, 2005, 113). The first round of data collected focused on demographic and personal factors that influenced physical activity. The data also observed "individual characteristics and prior behavior, physical activity-specific cognitions, and interpersonal influences" (Wu & Pender, p. 114). The second round of data observed the effect of time on the influences of the participants. The researchers found that self worth was the most significant indicator of physical activity, which is an assumption in Pender's Health Promotion Model. The study found that males were more active than females and further research revealed that the females had less self worth than the males. The findings of this study support Pender's idea of personal barriers including "gender, social support, modeling, self-efficacy, and perceived benefits and barriers to performing physical activity both directly and indirectly influence the behavior of Taiwanese adolescents" (Wu & Pender, p. 122). Just as personal barriers influence a

person's physical activity, they may also influence other health care decisions, including smoking cessation.

Cuaderes, Parker, and Burgin (2004) applied Pender's model to their study on physical activity. They found that self-motivation, physical self-efficacy, and perceived barriers play key roles in exercising behavior in their study group. The Health Promotion Model has also been applied to study the role of the health care provider in providing education for asthma triggers (Barrett, Dunkin, Shelton, 2001). This study recognized the importance of the relationship between the provider, patient and family when trying to achieve optimal wellness. Pender's model asserts that the health provider serves as an interpersonal influence that enables the client to commit to a plan of action. The health care provider and interpersonal influences, such as family and peers, can assist the patient to realize their perceived benefits and barriers to action to increase their perceived self-efficacy and advance them toward a commitment to a plan of action for smoking cessation resulting in a health-promoting behavior.

Pender's model accounts for how a patient perceives their behavior, identifies benefits of change, and implements a plan for ceasing the behavior. Assisting and arranging for follow-up are major divisions of the recommended guidelines for smoking cessation (The National Guideline Clearinghouse, 2001). The Health Promotion Model is a foundation for healthcare providers to understand their patients' behaviors and implement a plan to promote healthy living.

Research Questions

Questions for this research include:

1. Are health care providers discussing smoking cessation with their patients at routine or illness visits following the CDC guidelines' standards of care?
2. Are health care providers documenting smoking cessation suggestions and or interventions?

Definition of Terms

1. Smoking Cessation Education- (theoretical) information according to the national guidelines given to tobacco-dependent patients to assist with smoking cessation. For this study, smoking cessation education (operational) is the use of the 5 A's method (assess, ask, advice, assist, and arrange) as defined by the National Guideline Clearinghouse (The National Guideline Clearinghouse, 2001).
2. Documentation- (theoretical and operational) recording in a medical record in Southeastern state (Buppert, 2004).
3. Health care professionals- (theoretical) any person who is related to the care of patients. For this study, health care professionals (operational) are defined as any nurse, physician, or nurse practitioner that practice in a North Mississippi clinic.
4. Standards of Care- (theoretical) "systemic framework for care providers to assist patients" (The National Guideline Clearinghouse, 2001, p. 1). For this study, standards of care (operational) is defined as the 5 A's method, assess, ask, advice, assist, and arrange, of smoking cessation

education as means by the Winler tool (The National Guideline Clearinghouse, 2001).

Assumptions

During this study it was assumed that providers were documenting questions and interventions addressed during client visits. It was also assumed that clients were being honest when answering questions about past or current tobacco use. The researchers assumed that the charts were accurate depictions of the care provided to the patients, and the charts accurately identified tobacco dependent patients.

Summary

Health promotion and education is the first step in preventing disease. Reviewing documentation from health care providers will show if smoking cessation is addressed. The review will also show if patients desiring smoking cessation are being offered adequate assistance by their health care provider. Assessing a patients smoking status and desire to quit is the first step and can be completed in a matter of seconds. Providing education is a major part of the health care providers' role and should begin at the first office visit.

CHAPTER II

Introduction

There is extensive research regarding the use of clinical guidelines in practice settings. For the purpose of this study, areas reviewed included: a) Clinical practice physicians' and nurses' intent to use and execute clinical guidelines, b) Attitudes of healthcare providers who smoke and their intent to provide smoking cessation education and promotion, and c) Interventions and treatment for tobacco-dependent patients.

Review of Literature

Clinical Practice Physicians' and Nurses' Intent to Use and Execute Clinical Guidelines

Jordan, Dake, & Price (2006) conducted a "quantitative study to assess obstetricians' and gynecologists' perceptions and use of the five A's method of smoking cessation with pregnant patients who smoke" (p. 400). A random sample of 300 obstetricians' and gynecologists' was provided by the Ohio Department of Administrative Services and a questionnaire was sent to the 300 obstetricians' and gynecologists' in the sample. A self report provided the data for the researchers. The survey questioned the participants regarding "the use of the five A's method, perceived barriers in using the five A's method, outcomes expected when the five A's method was implemented, beliefs regarding the effects of maternal smoking, the value of spending time regarding smoking cessation, and demographic and background information" (Jordan, p.403).

Using descriptive statistics, t-tests, and ANOVA, the researchers concluded that (98 %) assessed their patients about smoking, but only (66 %) advised patients regarding smoking cessation. Only 62 % reported documenting pregnant patients smoking status.

Forty two percent of responders reported assessing patients' readiness to quit smoking, (29 %) reported assisting their patients to quit smoking, and only (6 %) of respondents reported arranging for follow-up visits regarding smoking cessation. Half of the respondents reported that they believed using the clinical guidelines of smoking cessation would not result in patients successfully quitting smoking. Some even reported that they believed that maternal smoking would not cause health problems for the child at all (Jordan, et al., 2006).

Another study supporting that health professionals in different settings do not sufficiently address the clinical guidelines of smoking cessation was conducted by Hawk and Evans (2005). The purpose of this study was to "assess the prevalence of obtaining information about patients tobacco use and providing advice on cessation in participating chiropractic college teaching clinics" (Hawk & Evans, 2005, p. 7). Data were collected by reviewing intake forms of patients and surveying the clinics' patients before or after their clinical visit. All of the chiropractic colleges in the United States were asked to participate, but only 8 colleges of the 17 provided their intake forms. Among these 8 colleges, surveys of the patients were performed for 1 day at each college. The researchers found that 7 of the 8 clinics assessed smoking status, and one clinic even had a section that prompted the doctor to counsel about smoking cessation. The survey that the patients completed concluded that (14.2 %) reported that their doctors assessed their tobacco use. For the 131 patients who were current tobacco users, (39.7 %) reported that a doctor from that clinic had advised them to quit smoking, (30.5 %) reported that a doctor at that clinic asked them if they had ever wanted to quit smoking, but only (18.3 %) reported that the doctor had given them information on how to quit smoking. Tobacco

users' also reported that tobacco cessation had only been discussed one time. From these findings, the researchers concluded that the chiropractic clinicians do not address smoking cessation sufficiently although information on tobacco cessation is readily available (Hawk & Evans, 2005). This study supports the current research in questioning if healthcare providers provide smoking cessation education.

Puffer and Rashidian (2004) researched the intentions of practice nurses' to use clinical guidelines. Members of a practice nurse group were sent questionnaires to measure the intents of offering smoking cessation advice as well as self-reported past behaviors regarding the use of clinical guidelines, beliefs, and desires to comply with the use of clinical guidelines. Cronbach alpha coefficients and multiple regression analysis revealed that 28 of the 48 participants reported they had provided smoking cessation advice to all relevant patients over the last three months, and (35 %) reported that they intend to provide smoking cessation education within the next three months. The researchers concluded that perceived barrier controls determined the participants' intention of providing smoking cessation advice and the main barriers included lack of time and insufficient training in providing tobacco cessation education. The research analyzes attitudes and intents to use clinical guidelines. This study is important in understanding practices of healthcare providers in regard to smoking cessation guidelines.

Pbert, Fletcher, Flint, Young, Druker and DiFranza (2006) provided clinicians with training and reminders to deliver smoking prevention and cessation interventions to their clients in a pediatric setting. In this experimental study, four clinics were assigned to a category of special intervention where providers received training on smoking

prevention and cessation. Intervention was based on the 5A model recommended by the U.S. Public Health Service clinical practice guideline and the American Academy of Pediatrics. Four other clinics were assigned as usual care and received no training. Participants were interviewed upon clinic exit to evaluate the degree to which providers delivered smoking prevention and treatment interventions. Using linear regression, their study found that clinicians who received training engaged their clients in smoking interventions at a higher rate than those who did not receive training. They found that providers in routine pediatric primary care could implement a brief smoking prevention and cessation intervention feasibly. This study had a high rate of feedback and provided thorough training for clinicians in the intervention group. However, it was weakened by reliability of adolescent recall, potential bias for social desirability demand in the special intervention groups and the small number of clinics used. Although this study was conducted in a pediatric setting, the results may be easily applied to other clinical sites.

Attitudes of Healthcare Providers who Smoke and their Intent to Provide Smoking Cessation Education and Promotion

Heath, Andrews, Kelley, & Sorrell (2004) conducted a qualitative study that explored tobacco dependent nurse practitioners' experiences with tobacco dependence and the affects of tobacco dependence on the implementation of providing smoking cessation education. The researchers interviewed 12 nurse practitioners either face-to-face or through on line chat rooms and validated the accuracy of the interviews by distributing summaries of the interviews to the participants. The researchers found that a majority of the participants did not provide smoking cessation education to their patients because it would be hypocritical since the providers themselves smoke. The other themes

revealed included: "living as an insider in the world of tobacco addiction as sub themes, having the outside-in view of living with a tobacco addiction with the image and nagging as sub themes, and being caught in the middle of the tobacco addiction with professional and personal tugs-of-war as sub themes" (Heath et al., 2004, p. 396). The research suggests that healthcare providers may not provide health cessation education if they smoke themselves. This is important in understanding the reasons that some healthcare providers do not provide smoking cessation education.

Another study that addresses the attitudes and practices of nurse practitioners was conducted by Reeve, Byrd, & Quill (2004). The purpose of the study was to "describe characteristics of Texas nurse practitioners health care practices, personal and professional characteristics, the frequency with which Texas nurse practitioners include health promotion, to determine to what extent the nurse practitioners believe activities related to health promotion and screenings were part of their role, and to identify barriers to integrating health promotion services in to nurse practitioner practice" (Reeve, Byrd, & Quill, 2004, p. 126). A random sample of 727 nurse practitioners in Texas were mailed a survey that contained information regarding demographics, attitudes, intentions, and the incidence rate of health promotions. Four hundred and forty two completed surveys were returned and nearly (100 %) of the participants agreed that health promotion is very important. Ninety seven percent of respondents believed that a smoking history should always be assessed, and (99.5 %) agreed that health promotion is very crucial in the nurse practitioner role. Fifty eight percent of the respondents reported that they encouraged patients regarding physical activity, (69 %) reported advising patients regarding tobacco use, and (56 %) counseled their patients regarding alcohol abuse. The authors indicated

that the nurse practitioners surveyed were compliant with providing health promotion and believe that health promotion is very important when providing health care. The research is important in understanding if nurse practitioners provided health promotion advice.

Interventions and Treatment for Tobacco-Dependent Patients

Buchanan, El-Banna, White, Moses, Siedlik, & Wood (2004) conducted a study composed of two interventions to help smokers quit smoking. Forty two patients from 6 clinics in large health care systems were divided into two groups. Group 1 received on site contact with certified counselors who counseled them using the 5 A's method, 6 weeks of nicotine replacement therapy, a pamphlet, and a CD with information about using the nicotine replacement therapy. Group 2 received a multicomponent intervention which consisted of two additional hours of on site contact than Group 1, four hours of phone calls, more education regarding nicotine replacement therapy, reinforcement, and were also required to have a support partner. Of the 18 participants in group 2, all reported that after 12 weeks they were not using nicotine replacement therapy, where as 11 of the 15 in group 1 reported still using nicotine replacement therapy. From this, it can be concluded that the more time spent with tobacco dependent patients and the more interventions helps to lessen the time spent using nicotine replacements. Also, 9 of the 18 participants in group 1 dropped out of the study for reasons such as changing their mind, starting back smoking, weight gain, and stress where as only 9 of the 24 dropped out of group 2. This demonstrates that strong support and multicomponent interventions increase success rates. From the study, the researchers concluded that nicotine replacement therapy is needed to quit smoking and that positive support affects long term smoking cessation (Buchanan, El-Banna, White, Moses, Siedlik, & Wood, 2004). This

study further demonstrates that a multicomponent approach is necessary for success in smoking cessation which requires time that many health care providers complain that they do not have.

Current literature suggests that counseling and follow-up, in conjunction with pharmacotherapy, may increase a person's chance of success at smoking cessation. Hall, Humfleet, Reus, Muñoz, and Cullen (2004) conducted a study to look at abstinence rates in patients receiving a combination of extended Nortriptyline and psychological treatment for smoking cessation. Key concepts in their study included: a) extended Nortriptyline would be more likely to produce 7-day point-prevalence abstinence at study weeks 24, 36, and 52 than their remaining three treatment conditions; b) an active drug would be more efficacious than placebo, and c) extended treatment would be more efficacious than brief treatment. In this longitudinal/prospective study all subjects received eight weeks of a transdermal nicotine patch, five group counseling sessions, and active or placebo treatment. Brief treatment ended at this point; subjects in extended treatment continued active drug or placebo to week 52 and received an additional nine monthly counseling sessions with checkup telephone calls midway through each session. Through ANOVA and Chi-square statistical testing, the researchers concluded that comprehensive extended treatments that combine drug and psychological interventions could produce consistent abstinence rates that are substantially higher than those in literature. Their study was strengthened by them providing references and comparisons to other studies and by using measurable outcomes to determine smoking status (carbon monoxide levels) of the clients. However, the study was not easily generalized due to a small sample size of 160.

It also noted that side effects to cessation medications might pose a barrier to some clients.

Physicians will often provide patients with a prescription for medication and encourage them to quit smoking. Beyond this, Solberg et al. (2005) found that physicians frequently fail to give optimal smoking cessation assistance. In an experimental, random study they identified subjects who had filled a prescription for cessation medication. These subjects were then surveyed three months after filling their order to learn about the physician encounter that produced the prescriptions and the role of the physician in selecting the medication, supporting cessation and achieving desirable outcomes. They found that approximately (36 %) of patients were asked to set a specific quit date, (25 %) reported being asked to use cessation counseling and around (23 %) denied any type of follow up. Although they had a high survey completion rate at (78 %), the study only assessed 1,360 members of a plan that covers over 700,000 clients. The study may have been inaccurate since it relied solely on client recall. Also, since the survey was given within three months, there was no assessment for long-term support or cessation success. The study did show that physicians often fail to provide optimal assistance to their clients who are attempting smoking cessation. To offer clients better support it is suggested that some parts of the 5A's (ask, assist, and arrange) be delegated to other office staff.

The research reviewed contains one consistent theme; health care providers believe that health promotion is important. However, it also illustrates that health care providers do not always assess and advise patients according to the recommended clinical guidelines. This could be due to time constraints or lack of confidence regarding their ability to educate the patients. The research also consistently shows that it takes more

than one visit for a patient to successfully quit smoking. It takes nicotine replacement therapy, support groups, and follow-ups. Without accurate documentation, there is no way to confirm that health care providers offer education and assistance with smoking cessation.

Thus, literature has shown the importance of addressing smoking status and assisting with cessation at each clinic visit. Unfortunately, many clinicians are failing to do this. By simply providing brief counseling and adequately implementing the use of pharmacotherapy and nicotine replacement, providers can increase the chances that their clients will be able to overcome their barriers to smoking cessation. Although literature suggests that physician support is beneficial to clients attempting cessation, there are few studies which analyze long-term cessation results.

CHAPTER III

Introduction

This study was conducted as a retrospective chart review. Charts were randomly selected and evaluated according to the Winler chart review tool (Appendix A). The population available to be potentially included in the sample consisted of clients who visited the clinic for care within the last year. Clients who presented in an emergent state and were referred to the emergency room were excluded.

Design and Methodology

To perform this study a nonexperimental, ex post facto chart review was used to evaluate if healthcare professionals provided and documented smoking cessation education. A total of 200 patient charts were chosen at random at a clinic site in Northeast Mississippi. The clinic used for this study serves approximately 7500 clients per year. Clients consist of all genders, ethnic groups and ages. For this study, 200 charts of clients over 13 years of age were randomly selected for audit. The patients' identity as well as the clinic's identity remained anonymous to all except the researchers. The data collected were grouped according to numbers and kept in a locked box to which only the researchers had access. The appropriate clinic personnel were asked to sign an agreement stating that they understood that their identity as well as the patients' identity would be kept confidential and that the researchers could use patients' charts. Further permission was obtained through the internal review board at Mississippi University for Women.

The researchers used a tool that consisted of a checklist including the 5 A's. Demographics of the sample were recorded including age and gender. Using the tool, charts were evaluated for whether or not the smoking status of the patient was addressed

at each visit. For client's who smoke, further chart review determined if the provider: implemented the 5A's, helped the client set a quit date, prescribed a cessation medication, ordered a NRT, made follow-up phone call, and documented the client's current smoking status. A check mark was placed in either the yes or no column according to the documentation on the chart. The data obtained was divided into 3 categories for each of the 9 questions: the information was provided, the information was not provided, or there was no documentation regarding the questions asked. The data was put into percentages and placed on a contingency table.

CHAPTER IV

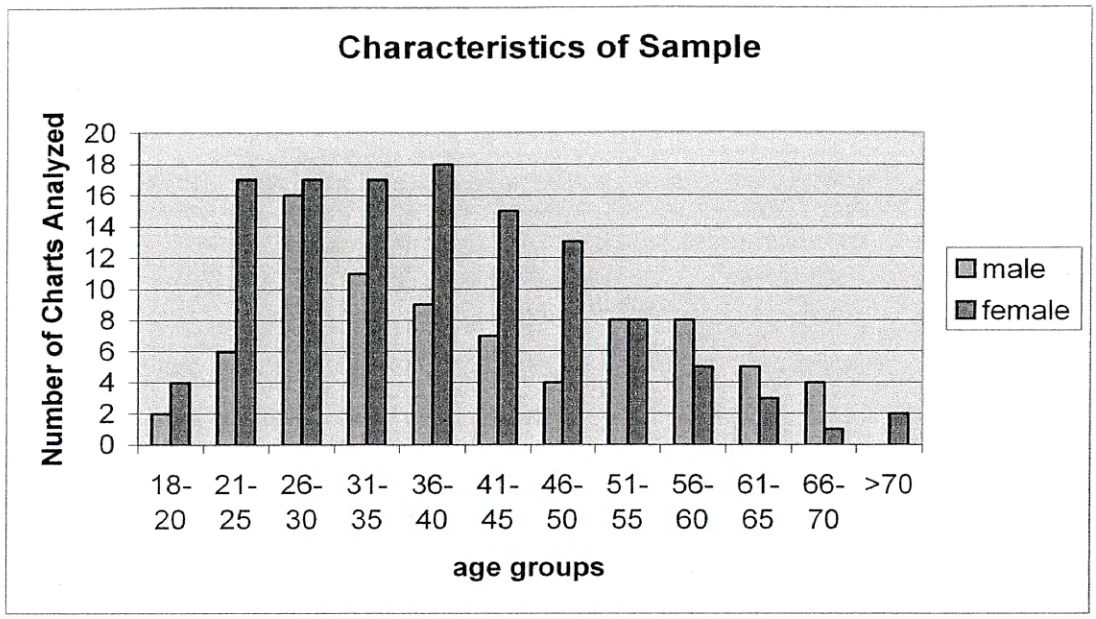
Analysis of Data

The purpose of this study was to analyze provider's practices regarding smoking cessation. An ex post facto chart review was conducted at a clinic in Northeast Mississippi. The research sample consisted of 200 randomly selected charts of clients over the age of 18 years. Data was obtained using the Winler chart review tool. This chapter presents the data collected in the study, as well as participant characteristics. Results of the data analysis and how it related to the research questions will also be presented.

The following areas were analyzed: assessment of smoking status by the healthcare provider, smoking status of the patient, the implementation of the 5 A's by the healthcare provider, setting a quit date by the healthcare provider and patient, prescriptions written for smoking cessation medication and NRTs, and documentation by the healthcare provider of patients' smoking status. The Winler tool developed by the researchers was used to gather the aforementioned data.

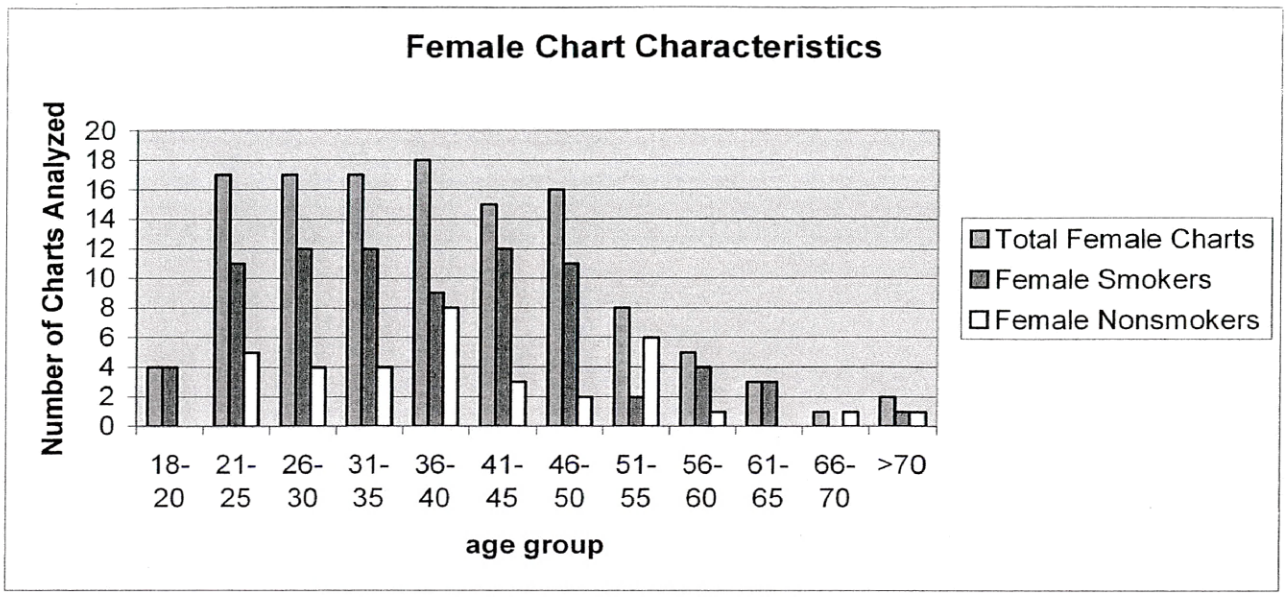
The sample consisted of 200 randomly selected charts. The patients were seeking healthcare from the clinic site. The ratio of female to male charts chosen at random was 120:80. Chart I provides demographic characteristics of the sample.

Chart I



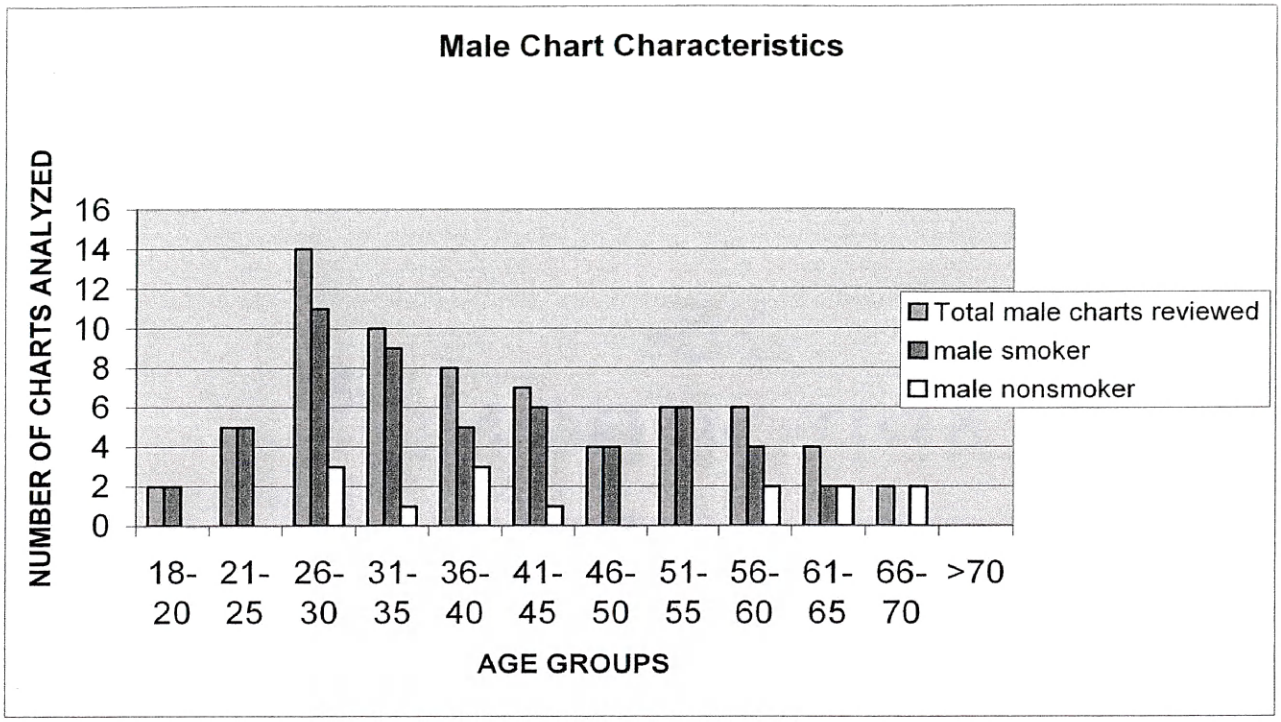
It is important for healthcare providers in the Northeast Mississippi area to be aware of the percentage of the population that are smokers. The smoking status of each female patient was assessed and compared to the total number of female patients assessed in each age group. Nonsmoking patients were also assessed and compared with the number of smoking patients. The following chart compares the total number of female patients' charts reviewed with the total amount of smoking vs. nonsmoking female patients. Smoking status of four of the female charts was not available.

Chart II



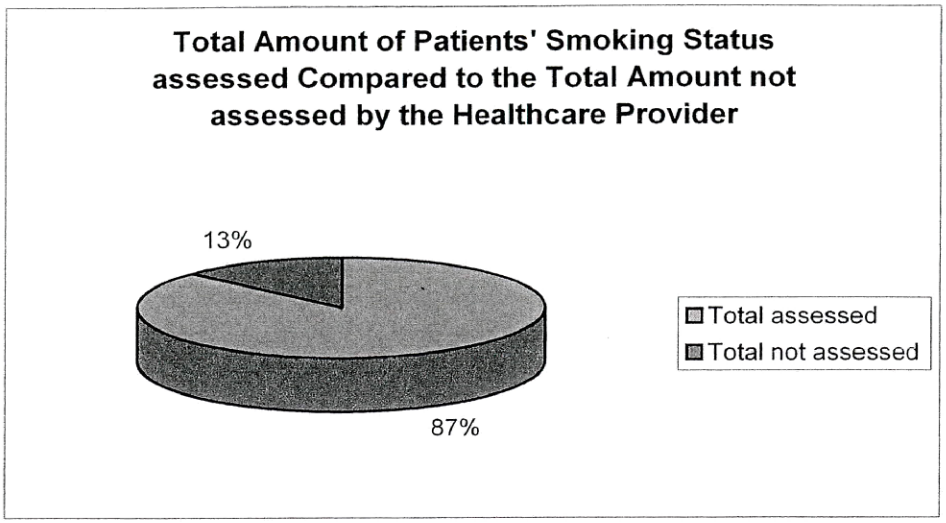
The male charts reviewed were also classified into the percentage of smokers and percentage of nonsmokers compared to the total amount of charts reviewed per age group. The following chart demonstrates the number of smoking and nonsmoking patients compared with the total amount of charts reviewed per age group. The smoking status of 12 of the male charts was unavailable.

Chart III



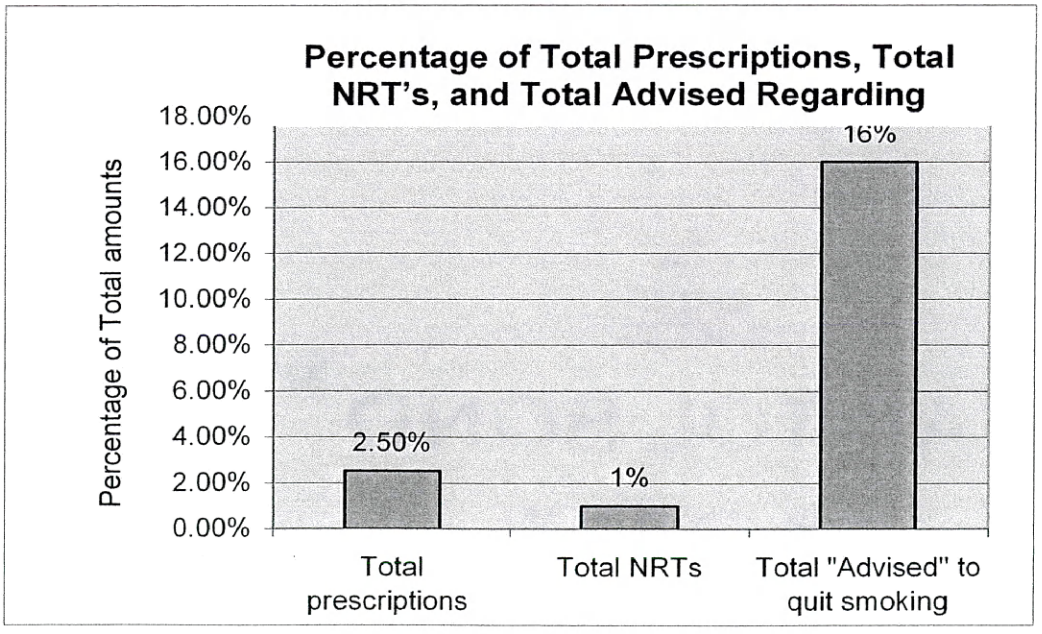
The researchers also reviewed the documentation by the health care provider. The data gathered consisted of assessment of smoking status by the healthcare provider, as well as documentation of smoking status by the healthcare provider at the healthcare visit. There was a self questionnaire filled out by each patient at their very first visit at the clinic that assessed smoking status, this was not used because most of the subjects were not first time patients. The following pie graph demonstrates the amount of patients who were assessed regarding smoking status compared to those who were not assessed. Eighty seven percent of the total charts reviewed had documented assessments by the healthcare provider regarding smoking status compared to 13 % who did not have documented smoking status assessment.

Chart IV



Of the 200 charts reviewed, the data revealed that 1 % was prescribed a NRT, 2.5 % were given prescriptions for smoking cessation medication, and 16 % were "advised" to avoid smoke during their illness visit.

Chart V



Findings related to the Research Questions

For this study the research questions were as follows: are health care providers discussing smoking cessation with their patients at routine or illness visits following the CDC guidelines' standards of care, and are health care providers documenting smoking cessation suggestions and or interventions? The data collected revealed that healthcare providers are not discussing smoking cessation at healthcare visits or the documentation does not show that smoking cessation education was provided. Only 16 % of the sample was advised to quit smoking.

Summary

The data collected and analyzed for this study have been presented in chapter IV. Data analysis revealed that the sample consisted of more female patients with a ratio of 120:80. The healthcare providers assessed smoking status 87 % of the time and only 3.5 % were prescribed NRTs or other medications. One and a half times as many patients were prescribed medications rather than NRTs. Sixteen percent of the sample were advised to quit smoking during an acute illness.

CHAPTER V

The Outcomes

The purpose of this study was to analyze provider practices in regard to smoking cessation. Since smoking is an ongoing problem in society, it was believed that providers might have the potential to have a greater impact on their patients' health choices. Current literature recommends that providers use the 5 A's Method when addressing smoking cessation with patients. The research questions for this study were as follows: are health care providers discussing smoking cessation with their patients at routine or illness visits following the CDC guidelines' standards of care and are health care providers documenting smoking cessation suggestions and or interventions? The theoretical framework for this study was based on Nola J. Pender's Health Promotion Model.

The sample for this ex post facto review consisted of 200 charts from a clinic in rural Northeast Mississippi. Data was obtained using the Winler Chart Review Tool. In Chapter V, the outcomes of the study are discussed. Conclusions and implications for nursing practice are presented as well as recommendations for future research that evolved from this study.

Interpretation of Findings

The findings of the research indicate that there are a large number of smokers in the Northeast Mississippi area. Research study findings also indicated that providers are not following the 5A recommendations presented by The National Clearinghouse. The research study found that in 87% of charts reviewed, the provider did assess smoking status. However, implementation of the remaining 5A's was low. The remaining 13%

may have been nonsmokers whose status was overlooked or may have been documented by the patient on the questionnaire given at the first visit. Smoking status of these patients, however, was not addressed or documented by the healthcare provider at the patient's most recent visit.

Of the charts sampled, only 3.5% of patients were given a prescription for medication or nicotine replacement therapy. Sixteen percent were "advised" to avoid smoke during an acute illness.

Limitations of the Study

The study may have been limited by incomplete charts that did not identify if the patient was tobacco dependent. Charts were also not analyzed to determine if prescriptions or assistance was avoided due to lack of health coverage, and documentation by the healthcare provider may have been incomplete. Other limitations were the time frame of less than one year, which did not allow for assessment of long-term smoking cessation. It was also limited to one practice and the providers working there and may not be conclusive to the entire area.

Implications for Nursing

This study was conducted to analyze provider's practice regarding smoking cessation. Knowledge of current practice and standards of practice may aid the nurse practitioner in developing their own approach to patient care. Findings from this study have implication in the areas of theory, education, nursing practice and nursing research.

Pender's Health Promotion Model asserts that the patient should have an active role in maintaining a positive health status. Prevention of smoking and smoking cessation are interventions that can help a client reach optimal wellness. The health care provider

has the opportunity to provide clients with the knowledge and tools to assist them in achieving this goal. By addressing smoking cessation at every visit for clients who smoke, providers can enhance the client's feelings of self-efficacy and offer assistance to overcome perceived barriers.

Prevention is important to healthcare providers as demonstrated by Reeve, Byrd, and Quill (2004). One hundred percent of the participants agreed that health promotion is very important and 69 % reported advising patients regarding tobacco use. Smoking cessation is a primary form of prevention. This study is important for the current research in that prevention is a priority of healthcare providers and smoking cessation is a form of prevention.

Findings from this study indicate that nurse practitioners are not addressing smoking cessation at each healthcare visit. Findings demonstrate that nurse practitioners may benefit from additional education on addressing and managing smoking cessation. Pbert, Fletcher, Flint, Young, Druker and DiFranza (2006) conducted a study demonstrating that healthcare providers who received a training session on providing smoking cessation strategies to patients provided advice to their patients more consistently. These findings indicate that healthcare providers should engage in training sessions to provide the adequate information to their patients.

Recommendations for Further Study

The findings of this study indicate several recommendations for further study. Those recommendations include:

1. Conduction of a study in which the financial impact of smoking cessation is addressed.

2. Conduction of a study in which patients are followed over a longer period of time.
3. Conduction of a study that follows patients' success with smoking cessation aids.
4. Replication of the study with a larger sample from a variety of clinics.

REFERENCES

Barrett, J., Dunkin, J., Shelton, M. (2001). Examination of the NHANES Data Set: Pets, Wheezing, and Allergy Symptoms. Southern Online Journal of Nursing Research, Issue 1, Vol. 2. Retrieved November 24, 2006 from www.snrs.org

Buchanan, L. M., El-Banna, M., White, A., Moses, S., Siedlik, C., & Wood, M. (2004). An Exploratory Study of Multicomponent Treatment Intervention for Tobacco Dependency. *Journal of Nursing Scholarship, 36*(4), 324-330.

Buppert, C. (2004). *Nurse Practitioner's Business Practice and Legal Guide* (2nd ed.). Sudbury, MA: Jones and Bartlett.

Hall, S., Humfleet, G., Reus, V., Muñoz, R., Cullen, J., (2004). American Journal of Psychiatry, 161, 2100-2107.

Hawk, C., & Evans, M. W. (2005, April). Does Chiropractic Clinical Training Address Tobacco Use. *Journal of the American Chiropractic Association, 42*(3), 6-13.

Heath, J., Andrews, J., Kelley, F. J., & Sorrell, J. (2004, September). Caught in the Middle: Experiences of Tobacco-Dependent Nurse Practitioners. *Journal of the American Academy of Nurse Practitioners,* (9), 396-401.

JAMA (2000). Journal of the American Medical Association. A Clinical Practice Guideline for Treating Tobacco Use and Dependence, 283, 3244-3254.

Jordan, T. R., Dake, J. A., & Price, J. H. (2006, May). Best Practices for Smoking Cessation in Pregnancy: Do Obstetrician/Gynecologists Use Them in Practice. *Journal of Women's Health, 15*(4), 400-411.

National Center for Chronic Disease Prevention and Health Promotion (2004, February). *Tobacco-Related Mortality.* Retrieved November 8, 2006, from http://www.cdc.gov/tobacco/factsheets/Tobacco_Related_Mortality_factsheet.htm

Pbert, L., Fletcher, K., Flint, A., Young, M., Druker, S., DiFranza, J., (2006). Smoking Prevention and Cessation Intervention Delivery by Pediatric Providers, as Assessed With Patient Exit Interviews. Pediatrics, Vol. 18, No. 3, e810-e824.

Puffer, S., & Rashidian, A. (2004, January). Practice Nurses' Intentions to use Clinical Guidelines. *Journal of Advanced Nursing, 47*(5), 500-509.

Reeve, K., Byrd, T., & Quill, B. E. (2004, March). Health Promotion Attitudes and Practices of Texas Nurse Practitioners. *Journal of the American Academy of Nurse Practitioners, 16*(3), 125-133.

Solberg, L., Asche, S., Boyle, R., Boucher, J., Pronk, N. (2005). Frequency of Physician-Directed Assistance for Smoking Cessation in Patients Receiving Cessation Medications. Archives of Internal Medicine, 165, 656-660.

The National Guideline Clearinghouse (2001, February 9). *Smoking Cessation.* Retrieved October 17, 2006, from http://guideline.gov/summary

Tilson, E. C., McBride, C. M., Albright, J. B., & Sargent, J. D. (2001, December). Attitudes Toward Smoking and Family-Based Health Promotion Among Rural Mothers and Other Primary Caregivers who Smoke. *Journal of School Health, 71*(10), 489-494.

Wu, T., & Pender, N. (2005, April-June). A Panel Study of Physical Activity of in Taiwanese Youth: Testing the Revised Health Promotion Model. *Family Community Health, 28*(2), 113-124.

APPENDIX A

WINLER CHART REVIEW TOOL

Winler Chart Review Tool

	1		2		3		4		5	
Pt. ID	Gender (0)____F (1)____M age____		Gender (0)____F (1)____M age____		Gender (0)____F (1)____M age____		Gender (0)____F (1)____M age____		Gender (0)____F (1)____M age____	
Audit Questions	Y	N	Y	N	Y	N	Y	N	Y	N
Was smoking status assessed?										
Does pt. smoke?										
If, no, was prevention addressed?										
If yes, proceed...										
Were the 5 A's implemented?										
Was a quit date set?										
Was a prescription for smoking cessation medication given?										
Was a NRT given?										
Was a follow-up phone call made?										
Is current smoking status documented?										