Nurse Practitioners' Attitudes Toward Substance Abuse

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NURSE PRACTITIONERS' ATTITUDES
TOWARD SUBSTANCE ABUSE

by

ANABEL P. PEREDA

A Thesis
Submitted in Partial Fulfillment of the Requirements
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Nurse Practitioners' Attitudes

Toward Substance Abuse

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Abstract

Substance abuse is a major health problem in the United States today. The prevalence of the problem in primary health care settings mandates examination of the nurse practitioner’s attitudes toward substance abuse. Research has demonstrated that the attitude of the health care provider toward the substance abuser can affect the level and quality of care rendered. This descriptive study was designed to examine the attitudes of nurse practitioners certified and practicing in Mississippi. Pender’s revised Health Promotion Model was utilized as the theoretical framework for the study. The research question asked in this study was: What are the attitudes of nurse practitioners toward substance abuse? A sample of 98 Family, Adult, Gerontological, Pediatric, and Obstetric/Gynecology nurse practitioners registered with the Mississippi Board of Nursing was surveyed using the Brief Substance Abuse Attitude Survey. A demographic and clinical practice questionnaire was also utilized. Descriptive statistics were generated to describe the
nurse practitioners' attitudes toward substance abuse. Responses to the instrument and questionnaire were analyzed using frequency distributions and percentages. Varying attitudes toward substance abuse were revealed in this study. A recommendation for practice drawn from the study was, as the incidence of substance abuse continues to escalate, nurse practitioners should evaluate self attitudes and beliefs to determine what factors might have been of influence in shaping their own attitudes. Further research is recommended to determine the effect of a substance abuse educational program on attitudes. A qualitative study examining the practitioners' attitudes through face-to-face interviews and journals is also recommended.
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Chapter I

The Research Problem

The incidence of substance abuse is a major health and social problem in today’s world. The addiction that can result from the use of any psychoactive substance (or polysubstance) does not make a distinction between race and age, ethnicity and social class, or educational level and occupation. Any person is at risk for substance abuse or dependency. At least 25% of patients seen in ambulatory care settings and 20% to 50% of patients admitted to the hospital exhibit problems associated with substance use (Talashek, Gerace, Miller, & Lindsey, 1995). Therefore, the likelihood that a nurse practitioner (NP) will be in the position of providing care for a substance abuser is enormous. The NP must be aware that substance abuse may be the most ignored or under-diagnosed disease. The effect of substance abuse on the physical and mental well-being of the individual and family members is immeasurable (Sullivan, 1995).
Most providers tend to focus on the complication of the disease rather than the disease itself. Focusing on health complications of substance abuse, such as cirrhosis, pancreatitis, cardiovascular disease, and trauma, can be easier and more profitable to treat, especially since the problem of addiction is very time-consuming and not adequately reimbursed (Caulker-Burnett, 1994). The primary health care provider will often fail to ask in-depth and pertinent questions about substance abuse, therefore, missing the problem. When the problem is recognized, the addicted client is often referred to social services, Alcoholics Anonymous, or Narcotics Anonymous, and no attempt is made by the provider to investigate the problem. The problem can be perpetuated by the client's denial and rationalization of substance use. Therefore, attempts must be made by the primary care provider to become more skilled at recognizing the addicted client and encouraging him or her to seek treatment (Caulker-Burnett, 1994). However, the primary care provider's perception of substance abuse can have an effect on the quality of care provided to the patient with this problem. Previous personal and professional experiences as well as the knowledge, or lack of
knowledge, about substance abuse are the primary contributors to the shaping of the attitude (Bradley, 1994). The focus of this research was to examine what attitudes NPs have toward substance abuse.

Establishment of the Problem

The attitude of the practitioner plays a vital role in the recognition and diagnosing of substance abuse. Attitudes may have been shaped in either positive or negative ways by societal and personal experiences that providers have encountered during their lives. Negative attitudes will lead to delay or avoidance in making a diagnosis, affect initiation of treatment, and interfere with making effective or appropriate referrals (Chappel & Veach, 1987). Society's long-standing relationship with substance abuse has led to the tendency of approaching the problem in one of three ways. These views are as follows: avoidance and denial of the problem, seeing the problem as a moral defect that requires punishments, or seeing the problem as an illness that requires therapeutic attention (Sullivan, 1995). Support of the latter view can help prevent, or minimize, the severe health and social problems that are associated with addiction.
Personal experiences with addictions, such as having family members and/or friends afflicted with substance abuse, can greatly influence the practitioner's attitude. This influence depends on the magnitude of the problem and the degree to which the problem has been resolved. The practitioner who is recovering from substance abuse may be in the unique position to provide empathetic care and advice (Sullivan, Handley, & Connors, 1994). Regardless of his or her own beliefs, a practitioner can be most effective when unbiased and must be aware that substance abuse is a chronic disease requiring long-term care and continuous support.

Studies have indicated that attitudes toward substance abuse can be greatly improved through educational interventions. Implementation of a course about substance abuse has been utilized to improve the attitudes of nursing and medical students (Chappel & Veach, 1987; Talashek et al., 1995). Therefore, in order to improve the attitude of health care providers toward substance abuse and the addicted client, more education on the subject is needed in both nursing and medical programs.
The purpose of this study was to examine the attitudes of NPs toward substance abuse. The researcher specifically identified the attitudes of a group of randomly selected NPs who are currently practicing and certified in the state of Mississippi.

**Significance to Nursing**

The alarming prevalence of substance abuse in primary care settings dictates the need for examination of attitudes of the health care providers who are responsible for identifying the problem. Several studies have indicated that these attitudes can be significantly improved through educational interventions (Chappel & Veach, 1987; Sullivan & Hale, 1987; Talashek et al., 1995). Additionally, there is evidence that incorporating substance use content into a family nurse practitioner (FNP) curriculum may increase students' clinical competence in dealing with patients who have a substance abuse problem (Talashek et al, 1995). As the NP assumes a vital role in primary care, having the knowledge and skill to identify clients with a substance abuse problem is imperative in order to intervene appropriately and prevent further complications from developing.
The NP is in a position to offer care based on some of the unique aspects of nursing, such as the holistic approach, individualized patient care, collaborative patient care, family involvement, health education, and interpersonal skills (Bradley, 1994). Giving equal importance to the physiological, psychological, and sociocultural aspects of the client affords the NP a more complete picture than one based solely on the immediate medical problem or complaint. The NP should be able to create a strong partnership with the client and, in collaboration, develop a plan of care tailored to fit that client's needs. Involving the family in all aspects of care and having an understanding of the family dynamics are also important skills needed to provide unique care to the client. The care can be augmented by placing emphasis on teaching clients and their families about all facets of drug and alcohol abuse. The above interventions can only be achieved through the NP's strong interpersonal and interviewing skills. Establishing a working relationship with the client and the family should be the NP's primary goal.

Appropriate knowledge is necessary in order to prepare NPs to deal with the complex issues of substance
abuse. The practitioner must be able to deal with the client's denial and must be able to set realistic goals for the patient. Therefore, an effort must be made to expand primary care education about substance abuse and related problems in nursing curricula (Sullivan et al., 1994). Furthermore, nursing organizations should emphasize the need for faculty development and implementation of workshops. Having the knowledge about addiction and related problems may be significant to achieve improvement of care to the clients and their families.

Theoretical Framework

The researcher will utilize Pender's (1996) revised Health Promotion Model as the theoretical framework. The model was originally offered as a guide for determining the complex biophysical processes that drive individuals to engage in behaviors that would ultimately enhance their health (Pender, 1996). The Health Promotion Model identifies cognitive-perceptual factors in the individual that are modified by situational, personal, and interpersonal characteristics which result in the participation of health-promoting behaviors in the presence of a cue to action. Pender's Health Promotion Model defines major concepts concerning cognitive-
perceptual factors as primary motivational mechanisms for activities related to health promotion. Pender also recognized factors, such as age, gender, education, income, body weight, and family patterns, as having indirect influence on behavior. The conceptual factors bear directly on behaviors (Pender, 1996).

In the revised Health Promotion Model, three variables were deleted from the model. These variables were as follows: importance of health, perceived control of health, and cues to action. The latter one was difficult to identify and measure reliably. The three new variables added to the model were as follows: activity-related affect, commitment to a plan of action, and immediate competing demands and preferences.

Pender proposed in the revised model that the factors of a personal nature (biological, psychological, or sociocultural) and prior related behavior bear both directly and indirectly on the likelihood that the individual would engage in health-promoting behaviors. Variables that have a major motivational significance are those under the behavior-specific cognition and affect categories. Behavior specific variables include perceived benefits of action, perceived barriers to action,
perceived self-efficacy, activity-related affect, interpersonal influences and situational influences, all of which are subject to manipulation through nursing actions. Lastly, Pender described the behavioral outcome category as having three variables which included commitment to a plan of action, immediate competing demands and preferences, and health-promoting behavior. The commitment initiates the plan of action and will take the individual into and through the behavior. This would be the outcome unless a competing demand (unavoidable) or a competing preference (irresistible) intervenes (Pender, 1996).

The individual with the illness of substance abuse who is on the road to recovery would go through the process described in the Pender's (1996) revised Health Promotion Model. The practitioner must be aware of the personal characteristics and experiences that can trigger the individual to seek help and treatment. The behavior-specific cognition and affect must be understood by both the practitioner and the addicted person in order for the client to commit to a plan of action that will ultimately lead to the health-promoting behavior. If the individual "gives in" to competing preferences (relapse) or
experiences a competing demand over which he or she has no control, then the entire process must be repeated. The revised Health Promotion Model helps the practitioner map the road that will lead to the health-promoting behavior which will reduce the risk of the illness and enhance wellness of the individual with a substance abuse problem.

Statement of the Problem

The prevalence of substance abuse among clients who present to primary health care settings mandates close attention to the problem. Some health care providers tend to project a negative attitude toward substance abuse which could lead to misdiagnosing or ignoring the problem. As front-liners of primary health care, NPs need to be aware of their own beliefs and ideas, as well as those of their peers, about the many aspects of substance abuse, so that they are able to provide care that is unbiased and supportive.

Research Question

The following research question was examined in this study: What are the attitudes of nurse practitioners toward substance abuse?
Definition of Terms

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

Attitudes

Theoretical: a mental position or feeling.

Operational: the responses of NPs on the attitude portion of the Brief Substance Abuse Attitude Survey.

Nurse Practitioners

Theoretical:

. . . a registered nurse prepared through a formal, organized educational program that meets guidelines established by the profession. Practitioners engage in independent decision making about health care needs, and provide health care to individuals, families, and groups across the life span. (American Nurses Association, 1995, p. 3)

Operational: the NP who is the health care provider currently certified and practicing in Mississippi whose attitudes toward substance abuse will be examined by the researcher.

Substance Abuse

Theoretical: "a maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of substances" (American Psychiatry Association, 1994, p. 182).

Operational: perceptions toward substance abuse.
Assumptions

For the purpose of this study, the assumptions were as follows:

1. NPs have a developed attitude toward substance abuse.

2. The attitude of NPs toward substance abuse can be measured.

3. Psychological and sociocultural factors impact the attitude of NPs.

Summary

NPs in primary care are at the first level of contact with the client in the health care system (Bradley, 1994). Being the first point of contact should be viewed as a major advantage and utilized to maximize health promotion. In the case of the substance abuse client, the NP can help prevent major health problems and complications by identifying, assessing, counseling, and ultimately monitoring these patients. Perceptions and beliefs of substance abuse can sometimes have an effect on the quality of care provided by the practitioner. Therefore, this study was designed to examine the attitudes of NPs toward substance abuse.
A review of the literature revealed several studies related to attitudes of health care professionals toward substance abuse. One study that examined the perceived attitude of the health care provider by alcohol dependent patients will also be presented in this chapter. Many of the studies reviewed focused on implementing educational interventions designed to improve the knowledge, and subsequently attitude, of students and practitioners in the health care field regarding the problem of addiction. This chapter provides a background for the current study pertaining to the attitudes of nurse practitioners toward substance abuse.

The impact of a course about addiction on nursing students was evaluated by Jack (1989). The researcher sought to determine what effect a nursing course with addiction content would have on nursing students’ attitudes toward addictive substances and on their personal lifestyle behaviors. The author identified that
the addiction content in nursing education had primarily focused on increasing the students' knowledge about addictive substances and the specific health problems associated with them. In addition, the author found in the review on the literature an alarmingly increasing number of reports on the growing addiction rate among members of the nursing profession. Therefore, Jack (1989) sought to evaluate the impact of a nontraditional nursing course on addiction. Emphasis was placed on evaluation of outcomes related to changes in nursing students' own attitudes toward substances and in their own lifestyle behaviors.

Jack (1989) utilized two conceptual frameworks to guide the study. The first was a multidimensional view of the causes of addiction which included influences in the biological, intrapersonal, and sociocultural domains. The second framework used was Caplan's primary prevention which emphasized the use of educational programs as one part of intervention for addiction problems.

Utilizing a quasi-experimental research design, Jack (1989) chose a sample consisting of 82 junior and senior nursing students from the University of Pittsburgh. Forty-six of those voluntarily enrolled in the addiction course (treatment group). The other 36 students volunteered to be
in the control group. All subjects were female and in the 18- to 22-year-old age range. The subjects were tested at the beginning and at the end of the term using Goodstadt’s Drug Attitudes Scale (DAS) and an adapted version of the U.S. Public Health Service’s Healthstyle Self-Test. In addition, both groups provided demographic information at the beginning of the term. The addiction course was a 3-credit course taught in a 3-hour block of time once a week for 15 weeks.

At the end of the term, the treatment group responded to a Course Evaluation Survey which included multiple-choice and open-ended questions. Data were collected by a research assistant not linked to the School of Nursing. For the purpose of anonymity, the pretest and posttest responses were matched using a four-letter code composed by each student. The questionnaires were held, in sealed envelopes, by the research assistant until one week following submission of the course grades.

The mean scores on each subscale of the two instruments were analyzed comparing the two groups at the beginning and at the end of the term. These were used to compute a $2 \times 2$ analysis of variance with repeated measures in order to determine whether there were
significant changes in attitudes or behaviors and whether the treatment group changed significantly more than the control group.

The data from the DAS yielded mean scores for each group on each of the 10 subscales. The range of these scores was from 6 to 30, with 6 equated to strongly held anti-drug attitude and 30 equated to strongly held pro-drug attitude. The researcher found no significant differences between the pretest data of the two groups, but at the end of the term the treatment group had achieved significantly greater changes on the tobacco and opiates subscale. The changes made were in the direction of more strongly held anti-drug attitudes.

The researcher hypothesized that failure to see changes in several of the subscales could be attributed to the fact that the groups were already at the desirable end of the range at the pretest point. Therefore, the subjects' attitude could not change substantially, except to increase the intensity of their anti-drug attitudes.

Analysis of the data from the Healthstyle Self-Test indicated that the treatment group did not make significantly greater changes in lifestyle behaviors. Jack (1989) found that the students' ability to manage stress
at the end of the term was significantly decreased for both groups.

The researcher found some important trends when comparing a subgroup of 13 students who indicated a family history of drug or alcohol problems with a subgroup of 13 students who had a family history of no drug or alcohol problems. Jack (1989) discovered that students with a positive family history for drug and alcohol reported more ambivalent attitudes toward alcohol (M = 18.92) than the students who did not have a family history of these problems (M = 15.62). Attitudes were determined with the alcohol subscale of the DAS.

On the Healthstyle Self-Test, the researcher found that the subgroup with a family history of drug and alcohol problems reported considerably fewer healthy behaviors. The significant differences found between groups on the drugs and alcohol subscale, nutrition subscale, and stress subscale were maintained from pretest to posttest.

Jack (1989) concluded that the course was effective in influencing students to maintain or strengthen anti-drug attitudes. The researcher also found that family
background was a variable influencing the attitudes and behaviors of the subjects.

A recommendation by Jack (1989) was the implementation of a longitudinal study to see if changes in attitudes toward addictive substances persist over time following the completion of a course about addiction. The researcher also recommended the use of a survey to determine, nationally, the number of nursing students with a family background of substance abuse and whether this influences their attitudes and lifestyle behaviors. Another important suggestion was the need to examine the relationship between perceived stress, use of stress management techniques, and addictive behaviors in both nursing students and professional nurses.

The current study’s research question was what are the attitudes of nurse practitioners toward substance abuse, whereas the Jack (1989) study looked at attitudes of students. Additionally, the two studies differed in that Jack utilized a quasi-experimental design, while the current study was descriptive. The current study sought to determine the attitudes of nurse practitioners who have already been in practice for some length of time and might have had different variables influencing their attitudes.
Sullivan and Hale (1987) conducted a study to evaluate the beliefs of registered nurses about the alcohol abuser. The researchers also sought to determine the characteristics of the nurses who have either negative or positive beliefs. The research questions to be answered in the study were what are the beliefs of registered nurses about alcoholism and alcoholics and what are the nurses' beliefs related to their biographic and professional characteristics?

The design for the study was descriptive. The researchers selected the population of registered nurses in the United States who were members of the American Nurses Association (ANA). Of these, 3,000 were randomly chosen to participate (the number chosen from each state depended on how many were members of ANA). Sullivan and Hale (1987) used a two-part questionnaire as the instrument for data collection. The first part was the Attitudes Toward Alcoholism Instrument which measured etiology of alcoholism and the treatment of the alcoholic. The three possibilities related to the etiology were the psychological dimension (person turned to alcohol from inability to deal with personal, social, and emotional problems), the physical-genetic dimension (person with
inherent physical or genetic tendency to become an abuser), and the moral weakness dimension (person is weak-willed, immoral, and irresponsible). The three possibilities related to the treatment were the medical illness dimension (person physically ill and should receive medical treatment), the humanitarian treatment dimension (person should be treated with dignity), and the social rejection dimension (person is unreliable, causes embarrassment, and should be avoided).

The second part of the questionnaire was designed to obtain educational background, clinical experience, clinical specialty area, type of position held, and characteristics of employing institution, sex, and age. The researchers also obtained geographical information to determine if regional differences existed. The surveys were mailed to the 3,000 ANA members. Reminder postcards were sent twice, 2 weeks apart. Of the surveys, 1,026 were returned (34% response rate).

Sullivan and Hale’s (1987) analysis of demographic data determined that the age range of the respondents was 26 to 45 years with 94% women. Sixty-six percent of the subjects started their career with a diploma or an associate degree. Of the group, 90% were currently
employed. The number of years in nursing ranged from 1 to more than 20 years (M = 14.5). Approximately 53% were employed in acute care hospitals; of these, 51% worked in urban institutions while 13% worked in rural areas.

The researchers found that most nurses held the belief that alcoholism has a psychological basis. A close second was the belief that alcoholism has a physical or genetic basis. The nurses also felt that alcoholics should be treated as human beings, and medical treatment should be provided. There was a significant correlation (p = .051) between the beliefs about etiology and the appropriate treatment of alcoholism.

To compare the beliefs with the nurses’ characteristics, data were further analyzed using multivariate one-way analysis of variance (ANOVA). This was sometimes followed by univariate one-way ANOVA to determine possible differences between the groups. Lastly, the Tukey test was used to identify which groups differed from the others.

When comparing level of basic education, Sullivan and Hale (1987) determined that diploma nurses scored higher on belief of physical basis for alcoholism than baccalaureate prepared nurses. Associate degree nurses
scored higher on advocating medical illness treatments. When the beliefs were compared with highest degree earned, the researchers found that diploma nurses scored highest on advocating medical illness treatment, masters prepared nurses in a discipline other than nursing scored highest on the physical basis for alcoholism, and doctorally prepared nurses scored highest on designating moral weakness as the etiology for alcoholism. Gender also was compared. The results yielded a higher mean score for women on beliefs that alcoholism has a physical cause and should be medically treated (Sullivan & Hale, 1987).

The researchers also found that the subjects' belief about alcoholism did not vary significantly with their clinical specialty, position, or state/region of the country. However, rural nurses had a higher mean score than urban nurses on the advocacy of medical treatment for alcoholism.

Sullivan and Hale (1987) concluded that nurses have strong beliefs that alcoholism has psychological or physical-genetic causes, that alcoholics should be treated as if they had a medical illness, and that they should be treated with therapeutic, supportive care. The researchers also concluded that only education, gender, and locale
(urban or rural) had an impact on beliefs. However, further studies were recommended to determine the relationship between the nurses’ beliefs and their actual behavior toward the alcoholic client.

The Sullivan and Hale (1987) research is germane to the current researcher’s study in which attitudes of nurse practitioners toward substance abuse were examined. Sullivan and Hale were able to evaluate the attitudes or beliefs of registered nurses toward the alcohol abuser without an intervention as in the current study since both studies were descriptive. The population was somewhat different as the current study used only nurse practitioners who practice and are certified in the state of Mississippi while Sullivan and Hale included registered nurses from across the United States.

The identification and management of substance abuse in primary care were addressed by Talashek et al. (1995). The researchers tested the effect of incorporating content of substance use into an FNP curriculum. The need for this intervention arose from the fact that at least 25% of patients seen in ambulatory care settings and 20% to 50% of patients admitted to the hospital exhibited problems that were associated with substance use. These problems
usually presented as gastritis, sleep disturbances, hypertension, depression, and headache. From the review of the literature, the researchers concluded that nurse practitioners need the necessary knowledge and skill to identify a substance use problem and intervene in order to prevent the development of further problems. Recent studies also indicated that screening and minimal intervention can motivate the addicted person to seek treatment.

Talashek et al. (1995) hypothesized that the nurse practitioners’ ability to identify and manage substance use problems in their clinical practice would be significantly improved by introduction of a substance use course in the FNP curriculum. In order to test this hypothesis, the researchers conducted a quasi-experimental study.

The researchers registered 16 students in the FNP clinical courses to participate in the study. In addition, arrangements were made for 8 practicing NPs to participate during the final clinical course. Talashek et al. (1995) utilized two different instruments in the study. The Substance Abuse Knowledge Survey (SAKS) was developed specifically for the study and was designed to measure
knowledge in the area of substance misuse and dependence. The second instrument used was the Student Clinical Performance Scale (SCPS) which had been developed by the faculty to evaluate the clinical performance of the student through direct observation.

The SAKS 35-item, multiple-choice tool was completed by the students along with the mid-term exam in the first clinical course. They were assured by the researchers that the scores would not be part of the final grade and that anonymity would be maintained.

The student scores on SAKS prior to the educational intervention ranged from 18 to 27 (M = 23.1), and after the educational intervention the scores ranged from 18 to 31 (M = 25.7). These scores showed improvement and approached significance for an alpha level set at .05 (p = .059). The nurse practitioners' scores on the SAKS ranged from 23 to 28 (M = 25.63). Talashek et al. (1995) compared the nurse practitioners' scores with the students' post-educational intervention scores and found that the difference was not significant (p < .200).

During the pre-educational intervention case, the researchers presented the 16 students with a standardized portrayal of a 45-year-old who was a recently divorced
salesman presenting for an employment physical. The patient was instructed to truthfully answer all questions pertaining to drug and alcohol use but not to volunteer any information. The students were allowed ample time to review the chart, obtain history, and complete physical examination, and write up the encounter.

During the post-educational intervention case, the 16 students and 8 nurse practitioners were presented with another standardized patient. This patient was a 39-year-old, married salesman, who was suffering from chronic stomach pain. The results of a previous employment physical (6 months prior) were provided to the participants. The patient had admitted at that time to taking antacids for occasional heartburn and acetaminophen for occasional headaches. The physical findings during the previous physical had been normal, and laboratory work had also been normal except for elevated gammaglutamyl transpeptides and uric acid. Once again, the patient had been instructed to answer all questions on alcohol and drug abuse, but not to offer extra information unless requested by the participants. A sufficient amount of time was again allowed to obtain and record all pertinent information.
Not one of the 16 FNP students assessed substance use with the first standardized patient. Subsequently, they missed that alcohol was used for stress reduction, so the client was not managed through counseling to decrease his alcohol consumption. The students assessed for substance use with the second standardized patient; therefore, they were able to identify alcohol misuse as a problem.

A comparison of the students' total mean scores with the standardized patient during the first clinical FNP course (2.57) and the mean scores with the second standardized patient (2.88) was done. The comparison revealed that there was a significant difference (.009) between the two mean scores. Using paired t test, Talashek et al. (1995) also found that areas of assessment, management, evaluation, record keeping, and role development had significantly improved in the final clinical course.

The students' mean score with the second standardized patient was also higher than that of the 8 nurse practitioners (M = 2.47). The difference between the means of the students and the nurse practitioners also approached significance (p = .068). Talashek et al. (1995) found that in the skills of evaluation and record keeping,
the students scored significantly higher than practicing nurse practitioners. Significance was approached in the areas of data gathering and management.

The evaluation of the intervention was limited by the small sample size and variability in the pretest/posttest standardized cases. The findings also reflected a deficiency of nurse practitioner educational programs to adequately training the areas of diagnosis and management of substance use, according to the researchers. The researchers' findings supported the need for the teaching of clinical skills relating to the substance-using patient. The researchers recommended that teaching related to substance abuse be incorporated as a primary topic rather than as integrated content in the curriculum (Talashek et al., 1995).

The Talashek et al. (1995) study differed from the current research in that the current research examined the attitudes of practicing nurse practitioners toward substance abuse, while the Talashek et al. study examined management of substance abuse in primary care by nurse practitioner students. The Talashek research used a quasi-experimental design, while the current study used a descriptive design. The lower scores of the practicing
nurse practitioners in the Talshek et al. study underscored the need for more studies about practicing nurse practitioners.

Another effort to improve the knowledge of practicing nurses about substance abuse and associated problems was made by Gerace, Hughes, and Spunt (1995). These researchers examined the effect of a 3-year program which was designed to improve the ability of practicing nurses to recognize and respond to patients with substance abuse related problems. Following a survey of the literature, the authors determined that practitioners in primary care settings often failed to identify and intervene with chemically dependent clients. Gerace et al. (1995) also surmised that early identification, treatment, and referral were hindered by the practitioners' counterproductive attitudes, lack of knowledge, and poor clinical skills. Therefore, the purpose of the study was to (a) increase the level of practicing nurses' knowledge and clinical skills in polysubstance abuse, (b) obtain information on current care offered to substance-abusing patients, and (c) evaluate the effect of the program through assessment of changes in knowledge, attitudes, and clinical skills.
The researchers utilized a longitudinal evaluation design which incorporated both qualitative and quantitative methods. This design allowed Gerace et al. (1995) to address the areas of conceptualization and design, program implementation, and program outcomes.

The sample for this project consisted of 32 nurses who held advanced clinical positions. All of the participants were volunteers who were interested in and willing to commit to the program. The nurses were recruited through small group meetings, administrative meetings, flyers, and direct efforts by supervisors. A comparison group of nurses with similar characteristics as the sample group was recruited by the researcher (Gerace et al., 1995).

Gerace et al. (1995) utilized an intervention training program which consisted of 2 full-day workshops, spaced one week apart, annually for 3 years. The program had been developed to improve knowledge and skills in identification, brief counseling, and referral of substance-abusing patients by practicing nurses. The nature of substance abuse and addiction problems found by nurses in their work settings was determined through focus group interviews. Interviews also were utilized by the
researchers to assess the learning needs of the practicing nurses. Implementation of the program was monitored by an external evaluator who provided description and feedback regarding program participation, consistency, and quality. In addition, the participants were asked to evaluate the objectives, teaching methods, and presenters of each program. Outcomes of the program were evaluated through pretest/posttest comparison group measures of knowledge, attitudes, and clinical skills confidence of the nurses. The project’s location was a large urban university hospital.

The researchers used three different instruments to evaluate the outcome of the program. First, the Substance Abuse Knowledge Survey (SAKS) was used. The SAKS is a 30-item, multiple-choice instrument which measures general knowledge in the area of substance abuse and dependence. Secondly, the researchers used the Substance Abuse Experience Survey (SAES) which consisted of questions about previous educational training in substance abuse and past experiences with patients suspected of substance abuse problems. This survey also included a clinical confidence scale consisting of questions about alcohol and drug related clinical skills. Lastly, Gerace et al. (1995)
utilized the Substance Abuse Attitude Scale (SAAS) which measured five areas: permissiveness, stereotype, treatment intervention, treatment options, and moralism.

The part of the program that dealt with knowledge intervention consisted of lecture discussions aided with audiovisual materials. Intervention for attitudes included presentations by addiction treatment experts. These experts emphasized constructive attitudes toward patient care and addiction as a treatable disease. Clinical skills interventions consisted of interactive videos, expert demonstrations, and role playing.

Gerace et al. (1995) administered all the posttests after the fifth workshop at the beginning of the third year. The SAKS was administered to the participating nurses and not the comparison group. Knowledge was found to improve significantly ($t = 3.18, p = .006$).

Another area of significant improvement was that of clinical confidence in relation to both alcohol and drug related clinical skills ($t = 3.26, p = .004$; $t = 3.56, p = .002$). The researchers found that nurses with higher levels of formal education were more likely to participate in activities to improve their knowledge of substance abuse. The level of participation in alcohol and drug
related activities (in-service programs, continuing education, etc.) correlated with clinical skills confidence in both alcohol (< .05) and drug (.01) related skills. The level of confidence in turn correlated with the willingness to discuss substance abuse problems with patients (p = .30, < .05).

The researchers only found attitude changes in the treatment optimism scales of the SAAS. Posttest scores on the subscale improved significantly (t = 2.92, p = .05). This also was the only subscale where the experimental group scored significantly higher (t = 2.09, p = .005) than the comparison group.

The results revealed that educational interventions were significantly helpful in improving nurses' confidence in caring for the substance abuse patient. Although attitude improvement was only achieved on treatment optimism, it was a change that carries important implications for clinical care. The program was also successful in creating greater awareness and acceptance and sensitivity to substance abusing clients (Gerace et al., 1995).

The authors recommended that further research, including qualitative methods, was needed to better assess
attitude changes. Qualitative data would also provide much needed information that could be utilized for further program development. Finally, Gerace et al. (1995) emphasized the need of impacting nurses’ responses to substance abusing patients on a much larger scale. Suggestions were made for inclusion of addiction content in formal educational programs, promotion of students’ clinical experiences with preceptors experienced in treatment and intervention, and encouragement of participation in periodic inservice and continuing education courses. Furthermore, the authors called for licensing and accrediting entities to maintain the trend of increasing attention placed on addiction in both academic and practice settings.

There were several differences between the Gerace et al. (1995) study and the current research. Gerace et al. utilized a triangulated design that incorporated both qualitative and quantitative methods, while the current study utilized a descriptive design. Additionally, the sample for the Gerace et al. research consisted of registered nurses, while the current research’s sample consisted of nurse practitioners. The current research met
the Gerace et al. recommendation by examining attitudes using quantitative data.

In a study conducted in the Western New York area by Ludwig, Marecki, Wooldridge, and Sherman (1996), knowledge and attitudes of neonatal nurses who cared for cocaine-exposed infants and their mothers were examined. The researchers sought to measure and describe those aspects of the knowledge and attitudes which were believed to be of particular importance for nurses in that setting. The authors also explored the relationship of these variables to certain demographic, occupational, and educational variables that might have an effect on the nurse’s knowledge and/or attitudes.

The care of cocaine-exposed infants and their mothers presents a major challenge to many nurses, one that may bring forth strong feelings in the nurse. Consequently, the following research question guided the study: What are the neonatal nurses’ knowledge of and attitudes toward caring for cocaine-exposed infants and their mothers (Ludwig et al., 1996)?

Utilizing a descriptive design, the researchers sampled 600 neonatal nurses from six hospitals in the Western New York state area. Ludwig et al. (1996) utilized
a modified version of a previously developed questionnaire
designed to obtain information about the personal and
professional characteristics of the participants, their
knowledge of AIDS, and their attitudes toward caring for
AIDS clients, gays, and the terminally ill. The authors
adopted the personal and professional characteristics
section without making any alterations, then proceeded to
develop the knowledge and attitude scales in a way similar
to those of the original. The same format was used in the
modified scales.

Ludwig et al. (1996) obtained a list of all hospitals
having perinatal facilities which operated in the Health
System Agency (HSA) I and II. The list was obtained from
the New York State Health Department. The researchers
numbered all Levels I and II perinatal facilities within
each region. Of these, one Level I and one Level II
facility from each region were randomly selected. All
Level III facilities were automatically included since
there was only one in each HSA. Ultimately, six hospitals
were included in the study.

The directors of nursing from each hospital were
contacted by the researchers via telephone, and a meeting
was arranged to explain the study. The research proposal
had been reviewed by the Institutional Review Board of the State University of New York at Buffalo and by the hospitals involved. Ludwig et al. (1996) delivered packets containing a cover letter and the correct number of questionnaires to the nurse managers. The nursery nurses' participation was voluntarily, and no names were used. The hospitals were identified by the researchers by perinatal region and level only. Of the 600 surveys delivered, 215 (35.8%) were returned.

The knowledge section of the survey contained 18 true/false statements which focused on physiologic, pharmacologic, and psychosocial aspects of cocaine abuse. The researchers calculated a total knowledge score and subscale scores for each aspect as percentages. A score of 0% was given to nurses who answered all items incorrectly, and a score of 100% to those who answered all items correctly) (Ludwig et al., 1996).

The attitudes section contained 19 positive/negative statements. A 5-point Likert scale ranging from strongly agree to strongly disagree was used for the participants to express their degree of agreement or disagreement with the attitude statements. The two areas addressed by the tool were the attitudes toward cocaine-addicted infants
and the attitudes toward their mothers. Ludwig et al. (1996) scored each item from 1 to 4, depending on the amount of agreement or disagreement expressed and on whether the participants expressed a positive or a negative attitude.

The participants’ age ranged from 20 to 59 years, with 49% falling between the 30- and 39-year-old group. Most of the participants (96.7%) were women. The majority of the respondents were white (99%), had a bachelor’s degree (41%), and held Master of Science degrees (40%). Approximately half (53%) received their education during the 1980s (Ludwig et al., 1996).

The percentage of respondents who were staff nurses was 79. Sixty-one percent worked full-time in a neonatal intensive care unit with only a majority of the participants (28%) nationally certified. Only a small number of respondents had actually cared for cocaine-addicted infants (7%) or had worked with a known drug-addicted mother (10%) (Ludwig et al., 1996).

Ludwig et al. (1996) found that knowledge about psychologic issues tended to be higher (M = 64) and knowledge about pharmacologic issues lower (M = 48) than knowledge about physiologic issues (M = 59). However,
these differences were not statistically significant at the .05 level using dependent sample t tests. The nurses almost unanimously believed the misconception that research studies indicate that the abnormalities resulting from the use of cocaine during pregnancy will affect long-term developmental outcomes in the child and that, as the intoxication from cocaine increases, the user experiences a heightened awareness of auditory stimuli. Some findings of clinical importance included the following: only 18% of the nurses were aware that some cocaine-exposed infants, in response to any sort of stimulation, will pull themselves down into a deep sleep; only 25% knew that cocaine blocks the reuptake of endogenous dopamine in the central nervous system; and only 37% knew that cocaine and its metabolites persist for 4 to 6 days in the urine of neonates who were exposed to the drug 2 to 3 days prior to delivery. Most of the participants (88% to 96%) knew that cocaine crosses the placenta, can greatly impair neonatal neurobehavioral capacities, and that cocaine can reduce the mother’s capacity to provide an environment that will promote the development of the infant (Ludwig et al., 1996).
The researchers found a wide range of scores for positive attitudes toward nursing cocaine-addicted mothers (from 15% to 96%, M = 53, SD = 15). The responses to individual items also varied widely, but the majority expressed negative attitudes by agreeing with certain negative statements on the scale (Ludwig et al., 1996).

The scores for positiveness of attitudes toward nursing cocaine-exposed infants also varied greatly (47% to 100%; M = 73, SD = 10). The higher scores on this scale indicated a more positive attitude toward nursing the cocaine-exposed infant than was found for their mothers (Ludwig et al., 1996).

Pearson's correlations between the knowledge and attitude scales indicated that the pharmacologic knowledge and physiologic knowledge correlated with each other (r = 0.47, p < .01). Psychologic knowledge, however, did not correlate with either pharmacologic or physiologic knowledge (r = 0.05 and 0.12, not significant). Ludwig et al. (1996) surmised that because of the low correlation, the internal consistency reliability for the total knowledge scale was low (Cronbach's $\alpha = 0.47$).

A positive but weak correlation was found between the attitude toward cocaine-exposed infants and the attitude
toward cocaine-abusing mothers ($r = 0.27, p < .01$). Regardless, the researchers found a reasonably higher internal consistency reliability for the total attitude scale (Cronbach’s $\alpha = 0 < .79$) (Ludwig et al., 1996).

The authors of the study found a significant correlation ($r = 0.14, p < .05$) between total knowledge and total attitude. However, the correlation between knowledge and attitudes was weak. This finding suggested that knowing the facts about cocaine addiction and its consequences do not always lead to more positive attitudes toward cocaine-addicted infants and their mothers (Ludwig et al., 1996).

Pearson’s correlations of the knowledge and attitude scales with the occupational and professional variables yielded the following results: Knowledge was significantly related to the nurse’s educational experiences but not to the other occupational and professional variables; knowledge was positively related to level of formal education ($r = 0.16, p < .05$) and to the nurse’s self-educational efforts concerning cocaine ($r = 0.21, p < .01$). Lastly, knowledge correlated negatively with years since graduation ($r = -0.16, p < .05$ and $r = 0.18, p < .01$), national certification ($r = 0.25, p < .01$), cocaine
experience as a nurse \((r = 0.14, p < .05)\), and employer education and/or self-education \((r = 0.19, p < .01)\). These findings suggested that the higher the level of clinical and/or administrative position, the more positive the attitude will be (Ludwig et al., 1996).

Ludwig et al. (1996) concluded that the nurses’ knowledge levels regarding cocaine abuse and its implications for caring for the cocaine-addicted infants and their mothers were, for the most part, low. A very important conclusion was that nurses’ attitudes toward the mothers were generally negative and/or judgmental. This was not the case toward the infants. As suggested by the findings, the researchers recommended the need for improved education for perinatal nurses practicing anywhere in the country regarding cocaine abuse. Improvements in education curricula of nursing schools, inservice educational programs, or self-educational activities on the nurses’ part are all possible solutions to improve cocaine education. Nurses must be made aware of the fact that negative and/or judgmental attitudes will interfere not just with providing help to the mothers but with meeting the infant’s long-term health needs as well.
The study conducted by Ludwig et al. (1996) parallels the current research in which the attitude of nurse practitioners toward substance abuse was examined. The studies differ on the population targeted (neonatal registered nurses vs. nurse practitioners) and on the use of knowledge as a variable. Both studies were descriptive.

Attitudes toward substance abuse have also been examined in the medical arena. Following a 5-year study, Chappel and Veach (1987) concluded that objectives to change students' attitudes toward substance abuse could be set and achieved in medical education. The study took place from 1978 through 1982. The researchers' attempted to determine whether or not a positive attitude change could be attained during a substance abuse course. Chappel and Veach (1987) found in the review of the literature that attitudes have cognitive, affective, experimental, and physiological aspects that the individual does not realize. In addition, the authors found that previous researchers have reported negative changes in attitudes toward substance abuse through the 4 years of medical school.

Chappel and Veach’s focus on attitudes toward substance abuse emerged from the increased incidence of
substance abuse and the social cost that emanates from this disorder. These conditions made the disorder both medically and psychiatrically important. Physicians must be aware of their own attitudes so that professional knowledge and skill are applied equally to all patients. Therefore, Chappel and Veach (1987) sought to determine if a positive attitude toward substance abuse and its treatment could be achieved in second-year medical students during a substance abuse course.

The study's design was quasi-experimental. The sample consisted of sophomore medical students from the University of Nevada School of Medicine. The total number of students who participated in the study during the 5-year period was 221 (n = 43 in 1978, n = 40 in 1979, n = 45 in 1980, n = 44 in 1981, and n = 49 in 1982). Chappel and Veach (1987) utilized the Substance Abuse Attitude Survey (SAAS) to assess the attitude change. The survey had been developed in 1977 by the Career Teachers in Alcohol and Drug Abuse (subsequently known as the Association of Medical Educators and Researchers in Substance Abuse) in response to a lack of instruments available to measure students' attitudes toward substance abuse. The survey consisted of 50 attitude statements and
used a Likert scale for indicating degrees of agreement or disagreement. The survey was designed to measure five attitude factors: permissiveness, treatment intervention, non-stereotypes, treatment optimism, and non-moralism.

The sophomore medical students were enrolled in the substance abuse course, and the SAAS was administered prior to the course (pretest) and following completion of the course (posttest). The course emphasized active student participation through small group discussions, audiovisual aids, clinical problems, and field trips to treatment programs and Alcoholic Anonymous (AA) meetings. Lectures and reading assignments also were part of the course. In addition, the course had been designed to raise the students' level of agreement with the attitude statements in the survey (treatment intervention and treatment optimism factors). An unforeseen change in the curriculum took place in 1979-80. As a result, the substance abuse course was taught along with more demanding courses such as pharmacology and pathology (Chappel & Veach, 1987).

During the first 3 years of the study, the students' total mean scores for the five factors in the SAAS changed significantly in a positive direction. However, in the
final 2 years, when the course competed for the students' time and energy, there was an abrupt change. Although the pretest scores remained similar to those in the first 3 years, the posttest scores were lower on every factor of the SAAS. The most significant difference ($p < .001$) between the first 3 years and the last 2 years of the study was in the treatment intervention factor. This also was the only factor that changed significantly in a positive direction for the last 2 years of the study (Chappel & Veach, 1987).

The results reported in the study indicated that a more positive attitude toward substance abuse can be achieved in students in medical education. Chappel and Veach (1987) encouraged the use of the SAAS with the addition of items designed to measure curiosity, openness, and willingness to persist when problems develop.

The difference found by the authors between the pretest and posttest on the treatment intervention factor and the treatment optimism factor indicated that the cognitive aspect of attitude was more easily influenced than the emotional aspect. Attitude scores in the last 2 years of the study indicated that the students' participation and the results of the course were adversely
affected by more demanding courses which competed for the participants' time. The group of students during the last 2 years was more irritable with faculty members, and they objected to trips to treatment programs, AA meetings, interviews with patients, and doing more than one patient management problem. Classroom attendance also was lower.

Chappel and Veach (1987) concluded that positive attitude changes can be attained with a relatively brief educational experience. However, these changes will not persist without reinforcement. In addition, the data presented suggested that the curricular organization had a significant influence on attitudinal learning. One of the recommendations offered by the authors was to consider the potentially adverse effect of concurrent difficult science courses when planning courses with attitudinal objectives. The researchers also recommended that further studies be conducted to measure the students' attitudes by direct observation in clinical settings.

The studies thus far reviewed have concentrated on the attitudes among health care professionals toward substance abuse (alcohol included). Riley (1996) sought to examine attitudes from a different perspective, that of the consumer. The study's purpose was to identify the
attitudes encountered by a group of patients during inpatient treatment for alcohol dependency.

Riley (1996) utilized a nonexperimental design with a sample consisting of 26 patients who had recently received inpatient care for alcohol-related problems. The subjects had been approached for participation through the local alcohol advisory service and through specialist community alcohol workers.

The researcher opted for the administration of a 37-item closed-ended questionnaire which contained items that were a balance of both positive and negative statements. The true nature of the study was not indicated on the questionnaire. Clear and decisive responses were elicited by eliminating ambiguity from all statements (Riley, 1996).

Of the 26 patients surveyed, the majority (65%) had been admitted more than once for an alcohol-related problem. Female patients were underreported, and there were also a higher proportion of patients over the age of 50 years.

Most of the patients included in the study did not consider that the health care workers they had been in contact with during treatment displayed negative attitudes
toward them. As a test of behavior, Riley (1996) had included questions about the nonverbal behavior of the staff.

Pessimism was assessed with the following statement: “Staff felt that when I left the hospital a relapse in my drinking would occur” (p. 42). The majority of patients (54%) either agreed (50%) or strongly agreed (4%) with this statement. Thirty-one percent were unsure of the staff’s expectations, and only 15% disagreed or strongly disagreed with the statement (Riley, 1996).

Riley (1996) found that most of the patients surveyed felt that the staff was not very optimistic about their interventions or the success of treatment outcomes. The pessimistic attitude about treatment was perceived by the patients as a barrier to effective treatment.

The participants’ anticipated treatment outcome was explored with the following statement: “Alcohol dependence can be successfully treated” (p. 42). Riley (1996) found that the majority of patients (84%) felt optimistic that their alcohol dependence could be overcome, while 16% felt uncertain of a positive treatment outcome. These results demonstrated that the expectations of patients differ from the expectations of the health care worker.
Twenty-three of the participants (88%) reported that the desired treatment outcome of the health care worker was that of total abstinence. This finding indicated to Riley (1996) that there exists a stereotyped attitude among the health care workers with lifelong abstinence being the only desired outcome of inpatient treatment for alcohol abuse.

The researcher relied on the self-reporting of individuals who had received inpatient care for alcohol-related problems for the collection of data. Riley (1996) made two basic assumptions. First, that the same statement have the same meaning for all the subjects, and secondly, when attitudes were expressed verbally they could be quantified.

Many of the findings were both consistent with and contradictory to findings in other studies reviewed by Riley (1996). Many of the negative attitudes widely reported were not found to be perceived by the patients in the study, while prognostic pessimism was found to have been perceived by many of the patients during treatment.

There were, however, favorable responses to the statements designed to identify staff hostility in either a verbal or a nonverbal form. A small number of patients
agreed that the staff were abrupt and unfriendly, as well as unhelpful and dismissive on occasions. Furthermore, Riley (1996) found that the patients' need for security had been met and that the basis of a trusting and therapeutic relationship was perceived to exist.

Several implications for practice were derived from the study. The implications addressed the need to ask patients about the successfulness of treatment as well as the barriers that perceive to exist. Secondly, the importance of establishing a partnership in care that would enhance the treatment of others was addressed. A third and very important implication was the fact that patients perceive health care providers as being pessimistic about the success of their treatment. The fourth implication dealt with the existing treatment option of abstinence which may not be necessary for all patients with alcohol-related problems. The last implication emphasized the need for greater flexibility and creativity in the care of the alcohol dependent patient (Riley, 1996).

The study conducted by Riley (1996) differed from the current study. The difference was based on the fact that the current research examined the attitude of the
health care provider while Riley (1996) examined the attitude of the client or consumer. However, both studies were descriptive and utilized attitude scales for the gathering of data.

Summary

The review of the literature indicated the need for further research in the area of attitudes and/or benefits of health care professionals toward substance abuse. Additionally, recommendations included client feedback regarding his or her perception of the provider's attitude should also be examined further. The current study sought to examine the attitudes held by a group of nurse practitioners currently practicing in the State of Mississippi toward substance abuse.
Chapter III

The Method

The purpose of this descriptive study was to examine the attitudes of nurse practitioners toward substance abuse. The empiricalization of the study will be discussed in this chapter.

Design of the Study

A survey design was selected for this study. Among other things, a survey design allows for examination of knowledge, opinions, attitudes, and values of a group of people. The data collection may be implemented in a number of ways which include personal interviews, telephone interviews, and questionnaires (Polit & Hungler, 1995). The current researcher utilized a written, self-administered questionnaire to obtain the data from the nurse practitioners regarding their attitudes toward substance abuse. Therefore, the study can be classified as descriptive survey research.

Variables. For this study, the variable of interest was the attitude of the nurse practitioners toward
substance abuse. Intervening variables were the amounts of knowledge on substance abuse the nurse practitioners had and previous personal and professional experiences with substance abuse. In order to control the study, the same questionnaires were mailed to a group of nurse practitioners who are currently practicing and certified in the state of Mississippi.

Setting, Population, and Sample

The study was conducted in the state of Mississippi which is located in the Southeastern United States. The target population was the 361 nurse practitioners who are currently certified in the state of Mississippi. The nurse practitioner list was obtained from the Mississippi State Board of Nursing. From the nurse practitioners’ population (Family, Pediatric, Adult, Gerontological, Family Planning, School, and Neonatal), the researcher selected every second individual and invited him or her to participate in the study. The final sample consisted of 98 nurse practitioners. Some of the practice settings of the participants included rural health clinics, school clinics, hospital-based ambulatory care clinics, nursing homes, community health clinics, health departments, and
physicians’ offices in direct collaboration with the physician.

Methods of Data Collection

Instrumentation. The Brief Substance Abuse Attitude Survey (BSAAS) (see Appendix A) was utilized along with a demographic questionnaire (see Appendix B). The BSAAS is a scaled down version of the Substance Abuse Attitude Survey (SAAS). The SAAS was developed by Chappel, Veach, and Krug (1985) to assist in assessing the role of attitudes in the area of substance abuse. The BSAAS still represents the five original factors of permissiveness, nonsteretotype, treatment intervention, treatment optimism, and non-moralism. Selection of the BSAAS was guided by this version’s better representation of addiction in women, nursing, and self-help attitudes. Additionally, the BSAAS more accurately addresses the current problem of addiction in today’s society. Studies are currently underway to establish the validity and reliability of the BSAAS. Permission was secured from the author to use the BSAAS in this study (see Appendix C). The BSAAS consists of 25 substance abuse related attitude questions in Likert scale format. The respondents were asked to mark with an “X” their degree of agreement or disagreement with the
statement. An open-ended question was added at the end of the BSAAS.

The demographic questionnaire was developed by the current researcher. Face validity for the questionnaire was established by submitting it to a panel of experts for review. The questionnaire consisted of 13 questions which ranged from age and gender to degree of satisfaction treating patients with alcohol/drug problems. Two optional questions on recovery from abuse and dependency were added to this questionnaire. The respondents were assured of anonymity.

**Procedures.** Following institutional approval by Mississippi University for Women's Committee on Use of Human Subjects in Experimentation (see Appendix D), the questionnaires were mailed to the selected nurse practitioners. A cover letter (see Appendix E) explaining the purpose of the study and ensuring anonymity was sent along with the surveys. The package also included a self-addressed, stamped envelope for return of the completed surveys. Return of the completed surveys indicated consent to participate in the study. A follow-up postcard (see Appendix F) was mailed 10 days later to augment response.
Methods of Data Analysis

The researcher used descriptive statistics to analyze the data which included measures of a central tendency. The data from the BSAAS were analyzed using frequency distributions and percentages. The open-ended question at the end of the BSAAS was analyzed using content analysis.

Summary

The purpose of this study was to examine the attitudes of nurse practitioners toward substance abuse. Chapter III described the empiricalization of the study. Chapters IV and V will include a discussion of the results of data analysis and the findings of the study. An interpretation of the data analysis will also be discussed along with the researcher’s recommendations.
Chapter IV
The Findings

The purpose of this study was to examine the attitudes toward substance abuse of nurse practitioners who are certified and practicing in Mississippi. A survey design was implemented for this descriptive study. Two questionnaires were utilized to gather data from the nurse practitioners regarding their attitudes toward substance abuse and to compile demographic and clinical information. The data were analyzed using frequency distributions and percentages as well as content analysis. The findings from the study are presented in this chapter.

Description of the Sample

The sample consisted of certified practicing nurse practitioners in Mississippi. The total number of questionnaires mailed to Family, Adult, Gerontological, Pediatric, and Obstetric/Gynecology (OB/GYN) nurse practitioners in Mississippi was 182. One hundred nine nurse practitioners responded to the questionnaires. However, 11 of the surveys were discarded because the
questionnaires were not fully completed. This resulted in a final sample of 98 nurse practitioners for the study. The breakdown of the respondents (N = 98) represented 54% of the nurse practitioners surveyed. The composition of the final sample was 74 (75.5%) Family, 8 (8.2%) Adult, 6 (6.1%) Gerontological, 5 (5.1%) Pediatric, and 5 (5.1%) OB/GYN.

The age of the subjects ranged from 26 to over 60 years. The two highest age ranges were the 36-40 with 22.4% (n = 22) and the 41-45 with 18.4% (n = 8). Distribution of the sample by age can be seen in Table 1.

Table 1
Age Distribution of the Sample by Frequency and Percentage

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-30</td>
<td>8</td>
<td>8.2</td>
</tr>
<tr>
<td>31-35</td>
<td>15</td>
<td>15.3</td>
</tr>
<tr>
<td>36-40</td>
<td>22</td>
<td>22.4</td>
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<tr>
<td>41-45</td>
<td>18</td>
<td>18.4</td>
</tr>
<tr>
<td>46-50</td>
<td>13</td>
<td>13.3</td>
</tr>
<tr>
<td>51-55</td>
<td>11</td>
<td>11.2</td>
</tr>
<tr>
<td>56-60</td>
<td>8</td>
<td>8.2</td>
</tr>
<tr>
<td>&gt; 60</td>
<td>3</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Note. N = 98.
The preparation of the nurse practitioners consisted of master's degree (69.4%), certificate (13.3%), and post-master's certificate (17.3%). The number of years of experience prior to becoming a nurse practitioner ranged from 2 to 33 years with a mean of 14.35 years, a standard deviation of 7.2 years, and a median of 14 years. The number of years in the nurse practitioner role ranged from 1 to 33 years with a mean of 5.32 years. Forty-nine percent of the sample had 2 or less years of experience in advanced practice.

The total years of experience as a nurse ranged from 5 to 44 years. These numbers were used to group the nurse practitioners into four different categories according to total years of experience. A distribution of the nurse practitioners into the four different categories is presented in Table 2.
Table 2

Distribution of Nurse Practitioners According to Total Years of Experience by Frequency and Percentage

<table>
<thead>
<tr>
<th>Experience (years)</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>6-15</td>
<td>34</td>
<td>35.4</td>
</tr>
<tr>
<td>16-25</td>
<td>39</td>
<td>40.6</td>
</tr>
<tr>
<td>&gt; 25</td>
<td>22</td>
<td>22.9</td>
</tr>
</tbody>
</table>

Note. N = 98.

The ethnic distribution of the participants also was determined. All participants, with the exception of 2 (2%) who did not specify were either Caucasian (92%) or African American (6%). Additionally, the gender of the participants was ascertained, and the sample was found to be composed of 4 (4.1%) males and 94 (95.9%) females.

The participants were asked to indicate all of the practice settings that applied from the nine listed on the survey. Forty-two of the subjects checked more than one location. Of the nine who marked "Other" for a choice, 5 worked at nursing homes. Distribution of the practice site locations can be seen in Table 3.
Table 3

Distribution of Practice Site Locations for Nurse Practitioners by Frequency and Percentage

<table>
<thead>
<tr>
<th>Practice site</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>College</td>
<td>4</td>
<td>4.1</td>
</tr>
<tr>
<td>Private NP clinic</td>
<td>7</td>
<td>7.1</td>
</tr>
<tr>
<td>With physician</td>
<td>43</td>
<td>43.9</td>
</tr>
<tr>
<td>Health department</td>
<td>6</td>
<td>6.1</td>
</tr>
<tr>
<td>Industry</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Rural health clinic</td>
<td>49</td>
<td>50.0</td>
</tr>
<tr>
<td>School-based clinic</td>
<td>3</td>
<td>3.1</td>
</tr>
<tr>
<td>Community health clinic</td>
<td>11</td>
<td>11.2</td>
</tr>
<tr>
<td>Hospital</td>
<td>17</td>
<td>17.3</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>9.2</td>
</tr>
</tbody>
</table>

Note. N = 98. Respondents were instructed to select as many practice sites as applied.

The participants were asked to estimate the percentage of patients seen in practice with alcohol/drug related problems. Eighty-five nurse practitioners responded to this item. The mean of the reported percentages was 13.05% with a standard deviation of 13.3%
and a median of 10.0%. The mean of the reported length of time treating chemically dependent patients was 7.5 years with a standard deviation of 8.8 years and a median of 3 years.

Of the 51 participants who reported a professional satisfaction level experienced when treating patients with alcohol/drug problems, 1 (2%) reported no satisfaction at all, 16 (31.4%) reported very little satisfaction, 13 (25.5%) reported some satisfaction, 13 (25.5%) reported moderate satisfaction, and 8 (15.7%) indicated a great deal of satisfaction. Forty-seven subjects did not respond to this item.

The nurse practitioners also were asked whether attitudes toward drug/alcohol abuse had changed through the years, and, if so, had the attitude become more positive or more negative. Of 81 subjects who answered this item, 12 (14.8%) had become more negative toward the abuse of drug and/or alcohol, 20 (24.7%) had not had an attitude change, and 49 (60.5%) reported a more positive attitude.

The demographic survey contained optional questions on recovery. These questions related to abuse or dependency problems of the nurse practitioner or of anyone
close to the subject (friend and/or family) with respect to tobacco, alcohol, prescribed medications, and unprescribed drugs. Of the 80 who responded to having had a problem with tobacco, 80% stated none, 7.5% stated slight, 10% stated moderate, and 2.5% stated severe. Of the 77 responding to the alcohol problem item, 94.8% indicated none, 2.6% indicated slight, and 2.6% indicated moderate. Seventy-seven responded to the problem with prescribed medications, and, of these, 98.7% indicated none and 1.3% indicated severe. The last item concerned unprescribed drug problems, and again 77 participants responded. Of the 77, 100% indicated no problem.

When responding to whether a close friend/family member had experienced a problem with tobacco, 23.3% of the 73 who answered indicated none, 11% indicated slight, 41.1% indicated moderate, and 24.7% indicated a severe problem. Seventy-nine nurse practitioners responded to the next item concerning friend/family members' problem with alcohol; of these, 38% said none, 6.3% said slight, 27.8% said moderate, and 26.6% said severe. Prescribed medication problems for friends and family was the next item with 70 participants responding. Of the nurse practitioners who responded, 20% indicated that no one
close to them had a problem, 2.9% indicated a slight problem, 5.7% indicated a moderate problem, and 21.4% indicated a severe problem. Lastly, 71 nurse practitioners responded to the item regarding a problem of friend/family member with unprescribed drugs; 70.4% said none, 1.4% said slight, 7.0% said moderate, and 21.1% said severe.

Seventy-eight participants responded to the item regarding inclusion of alcohol and drug abuse content into courses taken during their preparation as a nurse practitioner. Of these, 51.3% reported that substance abuse content had been part of the nurse practitioner curriculum; whereas, 48.7% reported that substance abuse content had been absent from the nurse practitioner curriculum.

Results of Data Analysis

Utilizing the Brief Substance Abuse Attitude Survey (BSAAS), data were collected to determine the nurse practitioners' attitudes toward substance abuse. The raw scores of each subscale (Permissiveness, Non-Stereotyping, Treatment Intervention, Treatment Optimism, and Nonmoralism) were calculated. At the present time, the BSAAS is still under development and there are no group norms available; therefore, the subscales have yet to be
standardized. A distribution of the mean and standard deviation for each subscale can be seen in Table 4.

Table 4

Mean Scores of Nurse Practitioners Certified and Practicing in Mississippi on Five Factors in a Brief Substance Abuse Attitude Survey

<table>
<thead>
<tr>
<th>Attitude factors*</th>
<th>M</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissiveness</td>
<td>9.7</td>
<td>6-16</td>
<td>2.3</td>
</tr>
<tr>
<td>Non-stereotyping</td>
<td>11.1</td>
<td>8-14</td>
<td>1.5</td>
</tr>
<tr>
<td>Treatment Intervention</td>
<td>21.9</td>
<td>16-27</td>
<td>2.2</td>
</tr>
<tr>
<td>Treatment Optimism</td>
<td>19.7</td>
<td>12-25</td>
<td>2.2</td>
</tr>
<tr>
<td>Nonmoralism</td>
<td>17.6</td>
<td>11-24</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Note. N = 98.

Additional Findings

Additional findings included comparisons of groups of nurse practitioners by selected demographic variables of age, race, education, and total years of experience as a nurse to each of the five subscales on the BSAAS. Data were analyzed using a t test at the .05 level of significance.
The age of the participants showed no statistical significance when compared with Permissiveness, Non-stereotyping, Treatment Intervention, Treatment Optimism, and Nonmoralism. When examining race with the five different factors, there did not, again, appear to be a significant difference. However, the nurse practitioners' education showed a significant difference with the scores of non-stereotyping (certificate, 10.0; master’s, 11.1; and post-masters, 11.9) and Treatment Optimism scores (18.4, 19.9, and 20.0, respectively). In both instances, there was an increasing trend toward higher scores on the cited subscales with higher levels of nurse practitioner preparation. When examining the total years of experience, the only factor showing a significant difference was that of Permissiveness (6-15 years, 9.5; 16-25 years, 9.6; and > 25 years, 10.1). The comparison of demographic variables with the subscales on the BSAAS can be seen in Table 5.
Table 5

Comparison of Demographic Variables with Subscales on the BSAAS

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP Education and Non-stereotyping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>27.75</td>
<td>2</td>
<td>13.88</td>
<td>6.75</td>
<td>.0018*</td>
</tr>
<tr>
<td>Within groups</td>
<td>195.22</td>
<td>95</td>
<td>2.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>222.97</td>
<td>97</td>
<td></td>
<td>4.76</td>
<td></td>
</tr>
</tbody>
</table>

| NP Education and Treatment Optimism         |        |     |      |       |        |
| Between groups                              | 25.37  | 2   | 12.69| 2.67  | .0750**|
| Within groups                               | 451.83 | 95  | 4.76 |       |        |
| Total                                       | 477.20 | 97  |      | 4.76  |        |

| Years of Nursing Experience and Permissiveness |        |     |      |       |        |
| Between groups                               | 16.46  | 2   | 5.49 | 0.99  | .40*** |
| Within groups                                | 510.50 | 92  | 5.55 |       |        |
| Total                                        | 526.96 | 95  |      | 5.55  |        |

*p ≤ .01. **p ≤ .10. ***p ≤ .50.
A comparison was made to determine if there was any significant difference between recovery groups on any of the five subscales on the BSAAS. When investigating the optional question of self-recovery, two different groups emerged. The self-abuse groups consisted of those participants who had experienced an abuse/dependency problem of moderate or severe degree with any one or more of the four areas of tobacco, alcohol, prescribed medications, and unprescribed drugs (Category 1) and those who had not experienced a problem (Category 0). Likewise, for the second optional question on friend/family abuse, two groups emerged. The groups were set up in the same manner as the self-abuse group. The groups consisted of those participants who marked having a moderate or severe experience with a friend/family member who had a problem with tobacco, alcohol, prescribed medications, and unprescribed drugs (Category 1) and those who expressed no experience with such a problem (Category 0). Distribution of the mean scores for the self-abuse group and friend/family abuse group with respect to the five factors of the BSAAS can be seen in Tables 6 and 7, respectively.
Table 6

**Distribution of the Mean Scores for the Self-Abuse Group with Respect to the Five Factors of the BSAAS**

<table>
<thead>
<tr>
<th>Attitude factors</th>
<th>Category 1 (n = 3)</th>
<th>Category 0 (n = 95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissiveness</td>
<td>12.0</td>
<td>9.65</td>
</tr>
<tr>
<td>Non-stereotyping</td>
<td>12.33</td>
<td>11.06</td>
</tr>
<tr>
<td>Treatment Intervention</td>
<td>22.00</td>
<td>21.89</td>
</tr>
<tr>
<td>Treatment Optimism</td>
<td>20.33</td>
<td>19.66</td>
</tr>
<tr>
<td>Nonmoralism</td>
<td>20.33</td>
<td>17.55</td>
</tr>
</tbody>
</table>

**Note.** N = 98.
Table 7

**Distribution of the Mean Scores for the Friend/Family Abuse Group with Respect to the Five Factors of the BSAAS**

<table>
<thead>
<tr>
<th>Attitude factors</th>
<th>Category 1 (n = 46)</th>
<th>Category 0 (n = 52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissiveness</td>
<td>9.45</td>
<td>9.96</td>
</tr>
<tr>
<td>Non-Stereotyping</td>
<td>11.20</td>
<td>11.02</td>
</tr>
<tr>
<td>Treatment Intervention</td>
<td>22.33</td>
<td>21.52</td>
</tr>
<tr>
<td>Treatment Optimism</td>
<td>19.84</td>
<td>19.53</td>
</tr>
<tr>
<td>Nonmoralism</td>
<td>18.13</td>
<td>17.19</td>
</tr>
</tbody>
</table>

**Note.** N = 98.

Of the 98 participants, 14 opted to share their comments about the subject of substance abuse (Question 26 of the Attitude Survey). Content analysis was used to derive findings from the data. Several themes emerged from their responses which were as follows: support, illness view, management, denial, friend/family role, family impact, and optimistic view.

**Support.** The theme of support emerged as one of the primary factors needed in order to successfully overcome
the substance abuse. Some of the responses that reflected the theme of support were as follows:

Intensive support therapy through a particular hospital or behavioral health center, or simply faithful attendance at AA with a great sponsor is needed. Without this kind of support, it is tremendously difficult for anyone to stay clean/sober.

... With proper care, in an environment that works for them, they return to productive and happy lives. I agree that the 12 step program provides a strong backbone to recovery.

... Participation in AA is often very helpful/important; however, I have seen individuals who recovered without it.

**Illness.** The theme of illness emerged from those respondents who view substance abuse as a treatable illness. Responses that supported the view of substance abuse as an illness were as follows:

The older I get and the longer I practice, the more I realize that addiction is an illness and can be treated. We should be very careful before we condemn someone for an addiction. They deserve help.

... Chemical dependent and addicted people recover from their illness regardless of the severity.

**Management.** Some of the respondents who took the time to answer the open-ended question about the subject of
substance abuse shared views on how substance abuse should be managed. Opinions included under how substance abuse should be managed were as follows:

Each alcohol/drug dependent person must be assessed individually, and the practitioner must have a specific plan to meet the patient's needs. What works for one won't work for another.

... do not actually treat the abuse. I counsel and make referrals.

Should demonstrate drug-free period of time (6 months to 1 year) and be subject to random drug screens for up to 5 years post recovery.

... I have a negative attitude with the use of drugs. However, I have a positive attitude in helping those with substance abuse to stop using.

Denial. Some of the responses focused on the denial experienced by most substance abusers. Comments that reflected the theme of denial were as follows:

... I usually don't see the alcoholic until they become physically ill, have an MA, or pass out somewhere. The alcoholic usually thinks, "I don't have a problem," and he/she remains in their state of denial.

...
Patients with substance abuse problems present to my clinic for medical problems, i.e., HT, DM, STDs.

Role. The role that family and friends assume when substance abuse is present emerged as a very strong theme. Some of the comments that reflected this theme were as follows:

So many well-meaning relatives and friends "enable" users and never realize what they've done until it is too late.

... I am trying right now to assist in the legal and personal battle with my sister-in-law and brother who are addicted to crack and alcohol. It is expensive and very exhausting, and terribly frustrating. It's horrible.

... My father is an alcoholic. It nearly ruined my life and cost me my true self.

Impact. Comments on the impact substance has on the family concentrated on the effect on children. Some of the responses included comments like:

I see many children in foster care because of alcohol/drug addicted mothers. ...

... the effects on children who are exposed in utero; they may develop hyperactivity and no-fear types of personality.
Optimism. The last theme determined to emerge from the responses was the optimistic views on the treatment of substance abuse. Responses that related to the theme of optimism included:

I have worked for a board of nursing as an overseer for drug dependent nurses, and I have seen much success.

...  

... There always is hope--every person can be helped in some way to control their demons. ...

...  

Patients who are alcoholic or drug dependent are usually pleasant to work with.

Summary

This chapter presented the results of data analysis using descriptive statistics and content analysis. Results of the data collection were described in narrative and table format. The following chapter contains a summary and discussion of the data described in this chapter.
Chapter V
The Outcomes

Substance abuse is a major health problem affecting millions of people, and the prevalence of the problem among patients presenting to primary health care settings mandates evaluation of the attitudes of nurse practitioners toward substance abuse. This descriptive study examined attitudes of nurse practitioners in Mississippi toward substance abuse. Pender's (1996) revised Health Promotion Model provided the theoretical framework for the study. The research question asked in this study was as follows: What are the attitudes of nurse practitioners toward substance abuse?

A sample of 98 nurse practitioners (Family, Adult, Gerontological, Pediatric, and OB/GYN) who are certified and practicing in Mississippi were surveyed using the Brief Substance Abuse Attitude Survey (BSAAS). A questionnaire designed to gather demographic and clinical data was sent to each potential subject along with the BSAAS. Descriptive statistics were generated to describe
current attitudes of nurse practitioners toward substance abuse. Responses to the instrument were analyzed using frequency distributions and percentages as well as content analysis.

The sample for this study consisted of nurse practitioners who responded to the BSAAS which was mailed to 182 Family, Adult, Gerontological, Pediatric, and OB/GYN nurse practitioners in Mississippi. The final sample (N = 98) represented 54% of the nurse practitioners surveyed.

**Summary and Discussion of Findings**

Findings related to demographics of the sample that were notable included the fact that the vast majority of the sample (75.5%) were family nurse practitioners; the most commonly reported level of preparation was that of a master's degree (69.4%) and that the average number of years in advanced practice was 5.32 years. A revealing finding was that 49% of the sample had 2 or less years of experience as a nurse practitioner. Only 14% of the nurse practitioners who responded to the survey had 10 or more years of experience in advanced practice.

The reported average percentage of patients with alcohol/drug related problems seen in practice was 13.05%,
and the average length of time treating chemically dependent patients was 7.5 years. Nurse practitioners also were surveyed concerning satisfaction experienced when treating patients with alcohol/drug related problems. Of the 51 who reported a level of satisfaction, 66.7% indicated experiencing "some" to a "great deal" of satisfaction when treating patients with a substance abuse problem. A factor which cannot be ignored is that 47 subjects did not respond to this question; this under-reporting might have been an indication of dissatisfaction or of no experience with treating substance abuse as a nurse practitioner. Talashek et al. (1995) found that students were significantly more adept at evaluating and managing an alcoholic client model than NPs in practice. Perhaps, NP program curricula are improving in the areas of assessment and management of the substance abusing client.

Most of the participants (75.3%) reported experiencing attitude changes regarding substance abuse through the years. Of these, 49 (60.5%) indicated a more positive attitude, and 12 (14.8%) indicated a more negative attitude. However, there was no determination as
to which factors may have precipitated this change of attitude through the years.

Information was requested on self and friend/family abuse or dependency problem. The number of nurse practitioners reporting a moderate or severe problem with tobacco, alcohol, prescribed medications, and unprescribed drugs was 3. One hundred percent reported having had no problem with unprescribed drugs which might have been due to nurse practitioners viewing this as an incriminating question or viewing unprescribed drugs as over-the-counter with little potential for abuse. The number of nurse practitioners reporting a moderate or severe problem with the above mentioned items with respect to friend/family was 46.

The attitudes of the nurse practitioners toward substance abuse were reflected in their responses to the five subscales of the BSAAS. The range of the responses to the five subscales were as follows: Permissiveness subscale was from 6 to 16 (M = 9.72, SD = 2.3), Non-Stereotyping was from 8 to 14 (M = 11.10, SD = 1.5), Treatment Intervention was 16 to 27 (M = 21.9, SD = 2.2), Treatment Optimism was 12 to 25 (M = 19.7, SD = 2.2), and Nonmoralism was 11 to 24 (M = 17.6, SD = 2.8). Except for
the Non-Stereotyping factor, most of the subscales demonstrated a mean that fell under the median, indicating scores tended to fall toward the lower end of the range. The mean score on Permissiveness (9.72) indicated a reluctance of the nurse practitioners to allow a margin of freedom with respect to the use of drug/alcohol. Attitudes of Permissiveness among the surveyed nurse practitioners might have been a reflection of more widely held attitudes within the community from which the subjects came. In this case, most of the nurse practitioner population was from a rural area in Mississippi with conservative values. This is an area where a majority of the people would tend to be less permissive toward alcohol and drugs. No studies were found in the literature relating to nurse practitioners' attitudes of permissiveness toward alcohol and drug abusers. Jack (1989) did report strong anti-drug attitudes among nursing students before and after an addiction course. Jack’s findings, in addition to the current researcher’s, lend credence to the notion that persons in the nursing profession overall have strong anti-drug abuse convictions.

The Non-Stereotyping measure was represented in the BSAAS on three items. The first item stated how heroin
addiction prevents recovery, the second item affirmed how smoking can eventually lead to "hard drugs," and the last item on Non-Stereotyping stated how the hospital is the best place for drug/alcohol treatment. The mean score (11.1) for this subscale was the only area that indicated a progression toward the higher end of the range. This tendency might have been a direct consequence of availability of professional information on stereotyping alcoholic and drug abusing individuals. It might also have been a result of concepts taught in nursing schools or nurse practitioner programs. A review of the literature revealed no specific studies related to Non-Stereotyping attitudes of nurse practitioners towards individuals who abuse drugs and alcohol. However, Riley (1996) discovered the existence of some stereotypical attitudes about substance abusers, particularly among health care workers. Riley found that lifelong abstinence was the only appropriate outcome for alcoholics according to the health care workers.

The mean score (21.9) for Treatment Intervention fell very close to the middle of the range (median = 22.0). Items which reflected this measure focused on early assessment and diagnosis of substance abuse and the
different modalities (urine screening, AA support, and group therapy) available to the practitioner. This might have been an indication of the willingness of nurse practitioners to manage and follow up substance abuse in their practice settings. No specific studies were found in the literature to support or refute these findings.

Treatment Optimism measures beliefs about drug and alcohol addictions as a treatable disease, the effectiveness of treatment in the early stages of addiction, relapse as part of the disease process, and the characteristics of substance misusing patients. The mean score (19.7) for this measure fell under the median (20.0); however, some of the comments shared by the nurse practitioners such as "... People recover from their illness regardless of severity" and "... Alcohol and drug dependent persons are usually pleasant to work with" indicate a tendency toward viewing the problem with some optimism. The findings from this study received some contradiction and some support from research in the literature. Riley (1996) reported that 54% of patients surveyed in an inpatient facility perceived pessimism among the health care staff. However, Chappel and Veach (1987) showed that the Treatment Intervention and
Treatment Optimism factors are easily influenced with educational interventions. Significant improvements on Treatment Optimism were also obtained by Gerace et al. (1996) through an educational program. These are the two factors of attitudes that have been used to develop attitudinal objectives in teaching about substance abuse (Chappel et al., 1985).

Nonmoralism items in the BSAAS focused on willpower, laws, religion, and punitive notions related to alcohol and drug abuse. This subscale yielded a mean score of 17.6 which was the furthest from the median (18.0) among all the subscales. Nonmoralism is another measure of attitude which may be a reflection of more widely held attitudes within the community. The South is one of the most moralistic and conservative regions of the United States, and nurse practitioners living in this area may share community values. Here again, a review of the literature revealed no research related to moralism and nurse practitioners. However, Ludwig et al. (1996) was able to demonstrate that nurses have a very negative and judgmental attitude toward cocaine abusing mothers. Conversely, Riley (1996) reported that few clients
perceived hostile attitudes in health care workers in an inpatient facility.

Additional analysis revealed that there was no statistical significance when comparing age and race with the five factors of the BSAAS (Permissiveness, Non-Stereotyping, Treatment Intervention, Treatment Optimism, and Nonmoralism). However, the nurse practitioners' level of preparation showed a meaningful difference with the measures of Non-Stereotyping and Treatment Optimism. The difference was observed as an increasing trend with the level of preparation. This might have been due to further and more in-depth exposure of the nurse practitioner to facts about substance abuse and to knowledge concerning different treatment modalities available to the substance abuser. The findings were supported by a study conducted by Ludwig et al. (1996) where knowledge and attitude were found to be positively related to the level of formal nursing education attained.

The measure of Permissiveness was also found to manifest an increasing trend with respect to total years of experience as a nurse. The Permissiveness factor was characterized by agreement with "Daily use of one marijuana cigarette is not necessarily harmful,"
"Marijuana use among teenagers can be healthy experimentation," and by disagreement with "Lifelong abstinence is a necessary goal in the treatment of alcoholism." Emotional aspects of attitudes such as permissiveness are much harder to predict or understand. However, permissiveness in this group of providers might have been directly related to what the nurse practitioner is exposed to in the rural setting. Seeing this face of the community day after day may have desensitized them to the harm of drug use. Research involving educational interventions (Chappel & Veach, 1987; Ludwig et al., 1996) indicated improvement on cognitive aspects of attitudes such as Treatment Intervention and Treatment Optimism but not on emotional aspects such as permissiveness.

An interesting finding was the trend toward higher scores on Permissiveness, Non-Stereotyping, Treatment Intervention, Treatment Optimism, and Nonmoralism of the self-abuse group (Category 1). The same trend, but to a lesser degree, was observed for the friend/family abuse group (Category 1). Conclusions from the findings on the self-abuse group must be made cautiously due to the small sample size (n = 3). Similar findings were made by Jack (1989) in which family background of drug or alcohol
problems influenced responses to items on the drug attitudes scale toward higher scores.

Additional findings also included comments that were shared by the subjects regarding substance abuse. From these comments, several themes emerged: support, illness view, management, denial, friend/family role, family impact, and optimistic view.

The themes of support, management, and optimistic view which emerged from the comments shared by the nurse practitioners compared to findings in the Treatment Intervention factor of the BSAAS. Responses under these two themes included comments such as "... Attendance at AA with a great sponsor is needed," "... 12 step program provides a strong backbone . . .," and "... should be subject to random drug screens for up to 5 years. . . ." This supports findings by Sullivan and Hale (1987) where registered nurses were found to have strong beliefs that alcoholism has either a psychological or physical-genetic cause (or both), and the alcoholic should be treated with therapeutic supportive care.

Some of the respondents viewed substance abuse as a treatable illness. This theme was reflected in comments, such as "... Addiction is an illness and can be treated"
Dependent and addicted people recover from their illness. . . ." This theme also supports the research of Sullivan and Hale (1987) who found that registered nurses believed that alcoholics should be treated for a medical illness. In the Sullivan and Hale study, rural nurses had a higher mean score than urban nurses on the variable of medical treatment for alcoholism. Findings from the current study also bore out the rural issue as the NPs surveyed largely practiced in rural areas.

The theme of family/friend role in the presence of substance abuse may perpetuate the theme of denial. By "enabling" the abuser, the "well-meaning relative" may be preserving the denial, "I don't have a problem," experienced by most abusers. Studies related to issues of family and/or friends as enabling the drug abuser were not found in the review of the literature.

Many health care providers might have shared the last theme of impact of substance abuse on the family. Most responses representing this theme focused on the effect of substance abuse on children such as "... see many children in foster care. . . " and "... effects on children exposed in utero. . . ." Again, this supports the
findings of Ludwig et al. (1996) where neonatal nurses' attitudes toward the mothers of cocaine-exposed infants were found to be generally negative and/or judgmental.

Limitations

The following limitations were identified in the study.

1. The validity and reliability of the BSAAS had not yet been established; however, studies are underway.

2. The sample was confined to a specific geographical/regional area which limited generalization of the findings.

Conclusions

The results of this study led the researcher to conclude that varying attitudes exist among nurse practitioners toward substance abuse. Additionally, comments related to substance abuse revealed seven common themes: support, illness view, management, denial, friend/family role, family impact, and optimistic view. Finally, Pender's (1996) revised Health Promotion Model was appropriate as a framework for this study since the model focused on factors of a personal nature and prior related behaviors as bearing both directly and indirectly
Implications for Nursing

Several implications for nursing were derived from this study. Implications related to practice, education, and research are described.

Practice. NPs could incorporate the findings from this study into practice. In order to identify the client with a substance abuse problem and objectively intervene, the NP needs to evaluate his or her own attitudes toward substance abuse. This is the first step in helping to prevent severe complications from arising for substance abusing patients. Additionally, NPs should teach clients regarding prevention of alcohol and drug abuse. By incorporating Pender's revised Health Promotion Model into their practice, the nurse practitioners can achieve higher levels of wellness among his or her client population.

Education. The lack of substance abuse training during nurse practitioner preparation was evident in this study by the responses of the subjects. This lack of training might have been a factor influencing present attitudes toward substance abuse. Content on addiction should be included in formal educational programs for
nurses at all levels. This is especially important in nurse practitioner preparation since the NP may have a significant role on the diagnosis and treatment of the problem of substance abuse.

Research. This study clearly demonstrated the need for further research on the subject. The difficulty of successfully assessing individuals' attitudes should be an incentive for the development of more effective instrumentation.

Recommendations

Based on the findings from this study, the following recommendations are made by the researcher:

Nursing practice

1. Utilize Pender's (1996) revised Health Promotion Model as a framework for care by the nurse practitioner in primary care of individuals with drug and alcohol abuse problems.

2. Incorporate evaluation of self-attitudes and beliefs to determine what factors might have influenced attitudes toward substance abusers.
Nursing education

1. Incorporate substance abuse content as a primary topic rather than integrating the information into the curriculum.

2. Teach nurse practitioner students to evaluate their own attitudes related to addiction and substance abuse.

Nursing research

1. Replicate this study with different samples representative of the nurse practitioner population throughout the country to augment ethnic diversity.

2. Conduct qualitative studies where data are collected from face-to-face interviews, journals, and other similar methods.

3. Conduct a study where an educational program and intervention on substance abuse is introduced and pretests and posttests are administered to evaluate attitude changes.
REFERENCES
References


Ludwig, M. A., Marecki, M., Wooldridge, P. J., & Sherman, L. M. (1996). Neonatal nurses' knowledge of and attitudes toward caring for cocaine-exposed infants and


APPENDIX A

BRIEF SUBSTANCE ABUSE
ATTITUDE SURVEY
Brief Substance Abuse Attitude Survey

This survey has been designed for the purpose of assessing attitudes of nurse practitioners toward substance abuse. Please indicate your degree of agreement or disagreement by marking "X" on the appropriate line. There are no right or wrong answers.

SD = Strongly disagree
D = Disagree
U = Uncertain
A = Agree
SA = Strongly agree

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alcoholism is associated with a weak will.</td>
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<td></td>
<td></td>
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<td>2. An alcohol or drug dependent person cannot be helped until he or she has hit &quot;rock bottom.&quot;</td>
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<td>3. Heroin is so addicting that no one can really recover once he or she becomes an addict.</td>
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<td>4. Alcohol and drug abusers should only be treated by specialists in that field.</td>
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<td>5. Smoking leads to marijuana use which in turn leads to &quot;hard drugs.&quot;</td>
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<td>7. Daily use of one marijuana cigarette is not necessarily harmful.</td>
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<td><strong>8.</strong></td>
<td>Urine drug screening can be an important part of drug abuse treatment.</td>
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<td><strong>9.</strong></td>
<td>A nurse who has been addicted to narcotics should not be allowed to practice again.</td>
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<td><strong>10.</strong></td>
<td>Marijuana use among teenagers can be healthy experimentation.</td>
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<td><strong>11.</strong></td>
<td>An alcoholic or drug dependent person who has relapsed several times probably cannot be treated.</td>
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<td><strong>12.</strong></td>
<td>Long-term outpatient treatment is necessary for the treatment of drug addiction.</td>
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<td><strong>13.</strong></td>
<td>Paraprofessional counselors can provide effective treatment for drug and alcohol abusers.</td>
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<td><strong>14.</strong></td>
<td>Lifelong abstinence is a necessary goal in the treatment of alcoholism.</td>
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<td><strong>15.</strong></td>
<td>Once a person becomes drug-free through treatment, he or she can never become a social user.</td>
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<td><strong>16.</strong></td>
<td>Drug addiction is a treatable illness.</td>
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<td><strong>17.</strong></td>
<td>Group therapy is very important in the treatment of alcoholism or drug addiction.</td>
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<td><strong>18.</strong></td>
<td>A hospital is the best place to treat an alcoholic or drug addict.</td>
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<td><strong>19.</strong></td>
<td>Alcoholism is a treatable illness.</td>
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<td><strong>20.</strong></td>
<td>Most alcohol and drug dependent persons are unpleasant to work with as patients.</td>
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21. Pregnant women who use alcohol or other drugs should be punished.

22. Coercive pressure, such as a threat of punishment, is useful in getting resistant patients to accept treatment.

23. A recovering person who is active in Alcoholics Anonymous does not respond well to psychotherapy.

24. A nurse who has been drug dependent should not be allowed to give medications to patients.

25. Active participation in a program such as AA is essential for a patient to recover from alcohol or drug dependence.

26. Comment on anything else you would like to share about the subject of substance abuse.
APPENDIX B

DEMOGRAPHICS AND CLINIC PRACTICE
Demographics and Clinic Practice

Please check the appropriate response(s) to the following questions:

1. Age (years)
   ___ 20-25 _____ 46-50
   ___ 26-30 _____ 51-55
   ___ 31-35 _____ 56-60
   ___ 36-40 _____ > 60
   ___ 41-45

2. Sex: ___ Male ___ Female

3. Race/Ethnicity
   ___ White ___ Hispanics
   ___ African American ___ Asian
       ___ Other

4. Nurse practitioner preparation:
   ___ Master’s degree
   ___ Post-master’s certificate
   ___ Certificate program

5. Area of certification?

6. Length of nursing experience prior to becoming an NP.
   Number of years:_________

7. Length of time in NP role: ___ Number of years

8. Practice site location (indicate all that apply)
   ___ College ___ Rural health clinic
   ___ Private NP clinic ___ School-based clinic
   ___ With physician ___ Community health clinic
   ___ Health department ___ Hospital
   ___ Industry ___ Other (please specify)

9. Estimate of percentage of patients with alcohol/drug related problems that you see. _____%
10. Length of time treating chemically dependent patients: ______ Number of years

11. Estimate the professional satisfaction you experience treating patients with alcohol/drug problems?
   ___ None at all          ___ Moderate
   ___ Very little         ___ A great deal
   ___ Some               ___ Not applicable

12. Has your attitude toward drug/alcohol abuse changed through the years?  ___ Yes  ___ No

   Has your attitude become more positive or more negative?  ___ Positive  ___ Negative

Thank you for your time and cooperation. The next section on treatment and dependency is optional. These data will be useful in helping to understand this difficult problem. Confidentiality is still maintained.

Optional Questions on Recovery

1. Have you ever had an abuse or dependency problem with the following?

   Tobacco  | None | Slight | Moderate | Severe |
   -------- |------|--------|----------|--------|
   Alcohol  | _____| _____  | _____    | _____  |
   Prescribed Medications | _____| _____  | _____    | _____  |
   Unprescribed Medications  | _____| _____  | _____    | _____  |

2. Has anyone close to you ever had a problem with?

   Tobacco  | None | Slight | Moderate | Severe |
   -------- |------|--------|----------|--------|
   Alcohol  | _____| _____  | _____    | _____  |
   Prescribed Medications | _____| _____  | _____    | _____  |
   Unprescribed Medications  | _____| _____  | _____    | _____  |

3. Did your preparation as a nurse practitioner include content regarding alcoholism and drug abuse?
   ___ Yes   ___ No
APPENDIX C

PERMISSION TO USE TOOL
December 3, 1996

Ms. Anabel P. Perda
125 Florida Ave.
Columbus AFB, MS 39701

Dear Ms. Perda:

This letter is to inform you that Dr. Veach has agreed to give you permission to use the BSAAS instrument at no cost to you for use in your thesis.

You are receiving limited permission (for thesis research only) and are responsible for the duplication of the SAAS forms and will be responsible for statistical analysis of your data.

As per your fax request, I have enclosed a copy of the Instructions for the Self Scoring Worksheet for the BSAAS.

Thank you for using the BSAAS instrument and good luck with your research.

Sincerely,

Maureen Lyons-Weiler (maureenl@scs.unr.edu)
Research Assistant

Enclosure
APPENDIX D

APPROVAL OF MISSISSIPPI UNIVERSITY FOR
WOMEN COMMITTEE ON USE OF HUMAN
SUBJECTS IN EXPERIMENTATION
April 1, 1997

Ms. Anabel P. Pereda  
c/o Graduate Program in Nursing  
Campus  

Dear Ms. Pereda:  

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,  

Susan Kupisch, Ph.D.  
Vice President for Academic Affairs  

SK:wr  

cc: Mr. Jim Davidson  
Dr. Mary Pat Curtis
APPENDIX E

COVER LETTER TO PARTICIPANTS
May 12, 1997

Dear Nurse Practitioner:

I am a registered nurse presently pursuing a Master of Science in Nursing at Mississippi University for Women in Columbus, MS. I am conducting a study that will enhance nurse practitioners' attitudes toward substance abuse. Your opinions and experience are very important and needed to provide an accurate portrayal of the nurse practitioner role in substance abuse treatment. Please assist me in this study by completing the enclosed questionnaires.

Your name was selected from an official list of nurse practitioners obtained from the Mississippi State Board of Nursing. Strict confidentiality will be maintained. Only group scores will be recorded. Return of the questionnaire will indicate consent to participate in the study. A self-addressed, stamped envelope has been provided for your convenience. I hope that you will take a few minutes to complete and return the questionnaires. Thank you very much for your cooperation and assistance in the study.

Sincerely,

Anabel P. Pereda, RN, BSN
APPENDIX F

FOLLOW-UP POSTCARD
May 22, 1997

Dear Nurse Practitioner,

Thank you for your participation in my research study on nurse practitioners' attitudes toward substance abuse. If you have been unable to complete and return the questionnaire, I urge you to do so promptly. If you have already mailed the completed survey, then I thank you.

Thank you.

Anabel P. Pereda, RN
125 Florida Avenue
Columbus AFB, MS 39701