

8-1-1999

Facilitators and barriers to practice of nurse practitioners in the emergency department

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FACILITATORS AND BARRIERS TO PRACTICE
OF NURSE PRACTITIONERS IN THE
EMERGENCY DEPARTMENT

by

TERESA STANFORD

A Thesis
Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science in Nursing
in the Division of Nursing
Mississippi University for Women

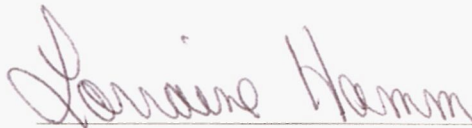
COLUMBUS, MISSISSIPPI

August 1999

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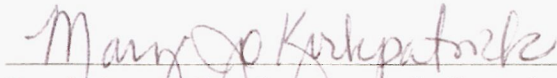
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Abstract

Nurse practitioners (NPs) are being introduced in emergency departments (EDs) as primary care providers due to the increased numbers of patients. As this role evolves, NPs are faced with a variety of barriers ranging from lack of prescriptive privileges to physician/staff opposition to the role. NPs must be cognizant of barriers as well as factors that may facilitate practice as they become forerunners in ED practice. Thus, the focus of this descriptive study was to identify facilitators and barriers to practice of NPs in the ED. The research questions which guided this study were what are the facilitators to practice of nurse practitioners in the emergency department and what are the barriers to practice of nurse practitioners in the emergency department? King's Theory of Goal Attainment was used as the theoretical framework for the study. A convenience sample (N = 50) of NPs from the state of Mississippi who had worked in EDs was used for this study. Instrumentation included use of the Stanford Survey and a demographic survey. Data

obtained were analyzed using descriptive statistics. Results of data analysis revealed that 90% of NPs identified patient satisfaction as the biggest facilitator to practice in the ED. One key barrier to practice identified by NPs in the survey was a lack of community knowledge of the NP role. It is notable to mention that only 17% of respondents identified barriers to practice while 47% identified issues that positively affect practice. This study reflects NPs as viable alternatives for the increasing utilization of EDs. Findings from this study further identified that though barriers exist initially, they may resolve over time. Replication of this study with a larger sample is recommended to validate findings of this study.

Acknowledgments

There are many people to whom I owe a tremendous debt of gratitude. To my advisor and chair, Lorraine Hamm, I say thank you. You have been my instructor, advisor, mentor, and friend. I know that I could not have completed my thesis or this past year without you.

I would like to express my sincere appreciation to my research committee, Dr. Lynn Chilton and Mary Jo Kirkpatrick, for their advice and assistance.

To the other graduate faculty who allowed me to work in their clinics, helped me with assignments and massaged, pampered, and offered other support, I convey my deepest thanks to you.

To my assistant, Nancy Stanford, who helped me through each project that I endured, I say thank you.

I would like to offer my most heartfelt thanks to those who made an even greater commitment this past year than myself. To my husband, Ed, I say thank you for your love and support. You gave me encouragement when I was ready to give up, assistance when I needed help, a

shoulder when I couldn't take anymore, and a warm embrace when I needed love.

To my children, Paige and Jake, I give you thanks for the understanding you have shown me. You understood when I didn't have time to play and chipped in when I needed your help. I couldn't have done this without your love.

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Chapter I

The Research Problem

Rapidly increasing proportions of Americans are seeking care for minor and nonurgent medical problems in the emergency departments (EDs) of rural and urban hospitals. Dowling and Dudley (1995) reported that from 1980 to 1990, there was a 106% increase in the number of persons seen in EDs in the United States. Therefore, the EDs have quickly become primary care settings for a substantial portion of the population. National emergency department census data reflect that 60% to 80% of patients seen in EDs presented with nonurgent or minor medical problems which have traditionally been handled in primary care clinics (Dowling & Dudley, 1995).

People present to EDs for diverse reasons although most appear to stem from patient's inability to access sources from which to obtain primary health care. Among reasons cited for seeking care in the ED are financial problems, loss of or decreased health care insurance, local resource shortage, no desire for a regular source of

primary care, temporary loss of regular primary care providers, and inability to leave work to seek health care during regular clinic hours (Aldridge, 1996; Hayward, Bernard, Freeman, & Corey, 1991; Middleton & Whitney, 1993).

Access barriers to primary care were reported by Grumbach, Keane, and Bindman (1993) as the reason 45% of respondents cited for their seeking treatment in the ED. Many patients who present to the ED have conditions that they know are nonurgent. These patients simply found themselves unwilling or too uncomfortable to wait for an appointment. This finding indicates that even if accessibility issues are addressed, EDs are likely to be seen by the public as a "quick fix" source of health care in today's rapid paced society. The demand for primary care providers in the EDs of America's hospitals is likely to remain constant or increase (Grumbach, Keane, & Bindman, 1993).

Increased numbers of patients have precipitated the introduction of nurse practitioners (NPs) as providers of care within the ED setting. Although the ED is still a nontraditional practice site for NPs, patient acceptance and utilization of NPs are forcing some hospital

administrators to look at the NPs' role as a vital provider of ED services (Buchanan & Powers, 1996; Dowling and Dudley, 1995; Middleton & Whitney, 1993; Rhee & Dermyer, 1995). In order to enhance and advance the role of the NP in the ED, nurse researchers must become aware of factors that propel forward and inhibit NP practice in this nontraditional setting. The purpose of this study was to identify facilitators and barriers to practice of NPs in the ED.

Establishment of the Problem

Results of a study addressing the problem of overcrowded conditions and fragmented patient care in ED settings were presented to the United States Senate by the General Accounting Office (GAO) of the United States Government. The report concluded that out of 100 million visits to local hospital EDs, 43 million were for nonurgent conditions (GAO, 1993). The reasons patients sought health care at EDs were varied. The poor and uninsured were the two groups most likely to use the ED for nonurgent conditions. There had been increased utilization of the ED by people who had poor understanding of when and where to obtain health care (Dowling & Dudley,

1995). Because of traditional daytime work and school hours, a great number of patients have continued to use the ED for primary care after-hours. As downsizing of the workforce continues and economic constraints increase, people are more likely to seek health care at times that do not require a loss of work and at sites where they are least likely to be turned away. Hospital EDs, by nature, meet both these criteria. The result has been an increasing influx of patients to the EDs. Now hospital administrators are finding ED waiting rooms crowded and their ED staffs overworked.

The problems of overcrowding in the ED have been compounded by the fact that many patients tend to wait far too long before seeking care, thus presenting to the ED with complex medical needs that require in-depth assessment, intervention, patient education, and follow-up. Unfortunately, most EDs are not designed or staffed to offer comprehensive primary and preventive care to a population with complex health problems. Yet, the ED has been and remains the only source of primary and after-hours care for many of these patients (Middleton & Whitney, 1993).

Another factor causing overutilization of the ED has been enactment of the 1986 Consolidated Omnibus Budget Reconciliation Act (COBRA). This Act, intended to stop the "dumping" of patients, guarantees care to anyone presenting to the ED regardless of ability to pay or the complaint given. Since the passage of COBRA, EDs have been inundated with an almost overwhelming number of patients (Dowling & Dudley, 1995).

One solution to the problem of overcrowding in EDs has been the increased utilization of NPs. Research has shown that patients are satisfied with the care they receive from NPs, NPs' interpersonal skills are better than physicians, NPs' technical skills are equal to physicians, patient outcomes are equal to or superior, and access to care is improved with the utilization of NPs (Dowling & Dudley, 1995; Hupcey, 1993; Koch, Pazaki, & Campbell, 1992; Middleton & Whitney, 1993; Rhee & Dermeyer, 1995). In a variety of different settings, outcome differences were not found for patients treated by NPs or physicians. The researchers further reported that there was increased patient compliance and satisfaction for those treated by NPs (Buchanan & Powers, 1996; Read & George, 1994; Rhee & Dermeyer, 1995). However,

historically, there have been issues that negatively impact the practice of NPs in primary care settings. Three of the most often cited issues include physician/staff resistance, prescriptive authority, and third-party reimbursement (Cooper, Henderson, & Dietrich, 1998; Hupcey, 1993; Weinstein, McCormack, Brown, & Rosenthal, 1998).

The American Nurses Association (1995) identified advanced practice nurses as one innovative answer to the cost and accessibility barriers facing the health care industry. Their role has slowly expanded from primary care into more nontraditional settings such as the ED. Although sometimes misunderstood, advanced practice nurses have the knowledge and capability to deliver timely, cost-effective, quality healthcare. However, many healthcare providers, hospital administrators, and even patients are uncomfortable, even skeptical, of the NP role. There is concern among physicians, as well as professional nursing organizations, that NPs are functioning as "mini doctors" and practicing outside their scope of practice (Koch et al., 1992; Mezey & McGivern, 1993).

Because of the current trend of patients seeking primary and nonurgent care in the emergency room, serious

consideration is being given to the continued utilization and expansion of the role for NPs the ED. NPs, physicians, hospital administrations, consumers, and legislators are becoming aware that the NPs' role varies within the EDs of each organization and within each state. Constraining factors and facilitating factors affecting practice of NPs need to be identified (Early, 1994). For NPs to be considered a credible and vital ED health care provider, the issues that promote and impede their practice must be identified, addressed, and ameliorated.

Significance to Nursing

Previous researchers have determined that an increased percentage of patients utilize the ED for nonurgent and primary care needs. Information gained from the current research study could be beneficial in expanding the role of NPs not only as primary care providers but also as a vital part of the ED health care team.

Data from this study are needed to support and substantiate that NPs are an important link in the delivery of cost-effective, competent care. Also, data obtained from this study can be adopted to encourage

hospital administrators to develop fast-track units utilizing NPs to treat nonurgent and primary care health problems presenting to the ED.

This research could further provide information needed to educate student NPs to expand advanced practice into a growing health care setting. Data collected from this research could aid in the development of curricula specific to the ED for NP students. By adding this dimension to nursing education, the movement of NPs into a nontraditional area of service may be facilitated. The ultimate outcome would be adequate provision of NPs providing primary and nonurgent care for an increasing number of patients.

This study could serve to advance the establishment of King's Theory of Goal Attainment as an appropriate tool for assessing interactions of NPs within the ED setting. With an increasing number of people utilizing the ED for primary and urgent health care, the testing of conceptual models on which to base future practice guidelines is needed. Using King's concept, the ED system was considered the "client" and NPs served as King's "nurse" for this study which assessed interaction involved in mutual goal setting and attainment.

A limited amount of empirical data exists in regard to facilitators and barriers to practice of NPs in the ED. Findings from this study will contribute to the limited body of knowledge concerning the expanding role of the NP in the ED in particular.

Statement of the Problem

More and more patients are relying on care received in hospital EDs for a wide variety of problems that have traditionally been managed in primary care clinics. These increased numbers have precipitated the introduction of NPs as providers of primary health care in the ED setting. As the role has evolved, NPs in the ED have been faced with a variety of barriers from lack of prescriptive privileges to physician opposition of the role. NPs seeking ED practice need to be cognizant of these barriers as well as factors which have facilitated the practice for forerunners in this area of practice. Therefore, the problem addressed in this study was the assessment of facilitators and barriers to practice of NPs in the ED.

Theoretical Framework

King's Theory of Goal Attainment served as the theoretical framework for this study. King's theory

consists of three interacting systems: personal, interpersonal, and social. The personal system consists entirely of the individual and includes perception, self, growth and development, body image, space, and time. The interpersonal system, which is formed by individuals socializing with one another, includes interaction, perception, communication, transaction, role, stress, and coping. The third system is the social system. The social system is formed as interpersonal systems come together to form larger systems which include families, religious groups, schools, workplaces, and peer groups (Wesley, 1992).

According to King (1981), individuals interact through verbal and nonverbal behaviors that are goal directed. Interactions lead to transactions which result in successful performance of role and achievement of present and future goals. Interaction is defined by King (1981) as "a process of perception and communication between person and environment and between person and person" (p. 145). Once information is communicated and goals are established, action must be taken to attain goals. According to King (1981), each individual brings to the interaction a different set of values, ideas,

attitudes, and perceptions. The interaction is purposeful and one in which each individual makes judgments, takes mental or physical action, and reacts to other individuals and the situation.

From the Theory of Goal Attainment, King (1981) developed eight predictive propositions. They are as follows:

1. Perceptual accuracy must be present in all interactions if nurse-client transactions are to occur.
2. Goal attainment occurs as nurse and client make transactions.
3. Goal attainment will precipitate satisfaction.
4. As goals are met, effective nursing care will result.
5. Transactions will enhance growth and development.
6. Corresponding perceptions of nurse and client regarding role performance and role expectations are necessary for transactions to occur.
7. Stressful interactions result if role conflict is experienced.
8. Nurses with special skills must communicate information to clients for mutual goal setting and attainment to occur.

In the utilization of King's theory to guide this investigation of facilitators and barriers to practice of NPs in the ED, attention was directed toward the concept of interaction (King, 1981). For the purpose of this study, King's "client" was considered the ED system, and her "nurse" was considered the NPs. With this in mind, role expectations and role performance must be congruent for transactions to occur with the nurse (NPs) and client (emergency department systems). Conversely, if conflicts arise, stressful situations occur. Ultimately, if mutual goal setting and attainment are to occur, information must be communicated between nurse and client.

Research Questions

Two research questions were used to guide this study. Those questions were as follows:

1. What are the facilitators to practice of nurse practitioners in the emergency department?
2. What are the barriers to practice of nurse practitioners in the emergency department?

Definition of Terms

For the purposes of this study, the following terms were defined:

Facilitators: Theoretical: positive factors that assist in utilization of an event. Operational: responses to items on the Stanford Survey that NPs in the ED indicated as a positive factors.

Barriers: Theoretical: negative factors that hinder or restrict the utilization of an event. Operational: responses to items on the Stanford Survey which NPs in the ED indicated as negative factors.

Nurse Practitioners: Theoretical: a licensed registered nurse with advanced preparation for practice including 9 to 24 months of supervised clinical experience in the diagnosis and treatment of illness. Most NPs are prepared at the master's level (Thomas, 1997).

Operational: advanced practice nurses who currently practice or who have practiced in EDs and whose names appear on the State Board of Nursing's list of certified NPs in the state of Mississippi.

Emergency department: Theoretical: the portion of the hospital designed and staffed to handle acute and/or

chronic conditions 24 hours a day (Thomas, 1997).

Operational: practice sites of NPs surveyed for the study.

Assumptions

The researcher made the following assumptions for this study:

1. Participants will respond honestly to items on the Stanford Survey.

2. Facilitators to practice of NPs in the ED exist and can be empirically identified.

3. Barriers to practice of NPs in the ED exist and can be empirically identified.

4. NPs are prepared to offer primary and nonurgent care to clients in the ED.

5. Perceptions of NPs regarding role performance and/or role expectations occur in the ED.

Chapter II

Review of Literature

Many studies have been conducted regarding factors affecting nurse practitioner practice; however, few studies have targeted nurse practitioners (NPs) in the emergency department (ED). The review of the literature focused on factors that affect the practice of NPs. The development of practice guidelines and its affect on collaboration between NPs and physicians also were addressed. Through the conduction of this review of literature, facilitators and barriers that potentially affect NP practice in the ED were evaluated.

A study was conducted by Hupcey (1993) to determine if work settings affected NP practice and, if so, exactly which factors promoted or impeded the role of the NP in specific settings. The information from the study was projected to provide valuable information for (a) NPs' job market, (b) the future of the NP profession, (c) educators teaching students about job markets, and (d) politicians concerned with the cost-effectiveness of NPs.

One of the specific goals of Hupcey's (1993) study was to determine if NPs could identify any particular work settings that provided environments more conducive to their performance. The second major goal of the study was to identify factors that help or hinder NP role performance as they practiced in a variety of work settings.

Hupcey (1993) used a descriptive research design to examine the population of 1,200 NPs certified in Pennsylvania. Inclusion criteria were that the NP must be actively, or by past experience, involved in providing direct patient care as an NP. Areas of practice included in the study were adult, family, pediatrics, neonatal, gerontology, and obstetrics and gynecology. A random sample included 200 NPs who met the inclusion criteria. Data were obtained using questionnaires developed to compare the roles of master's and non-master's prepared NPs. Demographic information addressed age, sex, education, experience, NP specialty, and certification (Hupcey, 1993).

One of the most important interpretations by response number was the impact of support upon role performance of NPs (n = 70). Support from the physician was the number

one positive factor influencing practice (n = 31) followed closely by support from coworkers (n = 20), other NPs (n = 29), and administration (n = 16). Other factors conducive to role performance of NPs were independence in the work setting (n = 18), continuing education (n = 12), past experience (n = 11), past education (n = 9), and appreciation of patients (n = 9) (Hupcey, 1993).

The main barrier to NP role performance identified by Hupcey (1993) was lack of support from administration (n = 16). This finding was followed closely by lack of support by physicians (n = 13), coworkers (n = 10), and staff nurses (n = 10). Hupcey stated "after almost 30 years, NPs should be well accepted by other members of their own profession" (Hupcey, 1993, p. 184), although lack of support for the role yielded 49 responses. Other barriers included lack of time (n = 10), role not being understood (n = 7), lack of prescriptive authority (n = 7), lack of funds (n = 6), poor backup supervision (n = 5), job not including all aspects of the role (n = 5), and NP role not being understood by the physician (n = 5).

Hupcey (1993) then analyzed the responses of the 50 (62%) NPs who had practiced in two or more settings. The researcher concluded that there was no clear setting

identified in this study that had a major negative influence on NP practice. However, there was some indication that while some non-primary care settings may promote NP practice, the settings most conducive to NP practice are primary care. The researcher's second major conclusion was that NPs need to focus their attention toward support systems.

Findings from the Hupcey (1993) study serve to underscore the need for a study such as the current study. While ED practice is considered to be a primary care site, problems tend to be more acute than in traditional clinic settings. The Hupcey (1993) findings indicate that NPs in an area of somewhat higher acuity may face different barriers to practice than those in more traditional sites.

In a more recent study related to practice issues, Cooper et al. (1998) used a descriptive study to examine the practice privileges of non-physician clinicians (NPCs) in 10 disciplines. The purpose of their study was to assess the practice privileges of NPCs and to assess how their roles in clinical practice are shaped by laws and regulations.

Independent variables addressed were training and credentialing, licensure, autonomy, scope of practice,

prescriptive authority, and reimbursement. The dependent variables were the 10 categories of nonphysician clinicians. These included NPs, physician assistants, nurse midwives, chiropractors, acupuncturists, naturopaths, optometrists, podiatrists, nurse anesthetists, and clinical nurse specialists.

Cooper et al. (1998) obtained data from several sources including published reports from professional organizations, analyses by independent organizations and individuals, the Health Policy Tracking Service at the National Conference of State Legislators, and the Internet Web sites of the individual states. Telephone contact was used to collect data from professional organizations.

Cooper et al. (1998) found the number of practitioners in each state was in direct correlation with the practitioner prerogatives granted by that state. Correlation coefficients for all disciplines except naturopathy, $r = 0.27$, varied from 0.43 to 0.60 and were statistically significant. The greatest practice prerogatives were found to be states that regulated NPCs through boards specific to the NPC discipline and least in states in which regulation was through the boards of medicine.

Five trends were identified during data analysis. The researchers concluded that substantial differences in privileges granted by the states to practitioners existed in each of the 10 NPC disciplines. In those states that have granted the most extensive privileges, NPCs had more authority and autonomy. Next, the practice privileges of NPCs overlap services that physicians generally have provided. Additionally, Cooper et al. (1998) concluded that the participation of NPCs in providing traditional physician services is increasing partially due to tasks being better defined and changes in health care delivery as defined by reimbursement standards. Finally, increasing numbers of practitioners are being educated in most of the NPC disciplines (Cooper et al., 1998).

The study of Cooper et al. and this researcher's study validated the increasing use of NPs in traditional and nontraditional settings. Cooper et al. looked at practice issues of all NPCs while this researcher looked at practice issues of NPs only. However, both studies had the same implication: NPs can provide primary and nonurgent care in the ED.

In another study considering the facilitation of NP practice, Weinstein et al. (1998) sought to determine the

effectiveness of established practice guidelines in enhancing collaboration between advanced practice nurses and physicians. The purpose of their study was "to determine if practice guidelines improved collaboration and standards of care" (Weinstein et al., 1998, p. 48).

Weinstein et al. (1998) identified four challenges to developing guidelines for collaborative practices of physicians and NPs. The first challenge was acceptance by local clinicians and/or appropriateness to local situations of guidelines developed on a national level. The second obstacle to overcome was to decide which recommendations to follow. A third challenge was that consideration must be given to local conditions. These included items such as physician and patient preferences, drug formularies, pricing structures and issues that are unique to particular facilities. A final identified hurdle was that clinicians must have input due to the fact that they were much less likely to accept guidelines they had no part in developing.

The Weinstein et al. (1998) sample was generated using a convenience sample of physicians and NPs on staff at Harvard University Health Services. Independent variables were practice guidelines, and dependent

variables were consensus and collaboration between advanced practice nurses and physicians. The researchers utilized a survey to obtain results for their descriptive study.

Weinstein et al. (1998) specifically defined methods utilized in the development and review process of the guidelines. The process was initiated by the selection of development teams. These teams consisted of at least one NP and one physician who were responsible for producing the guidelines' first draft. The continued progression of the guidelines was the responsibility of the guideline coordinator who collected them from the development teams. Further suggestions to the guidelines were made after being reviewed by the Medical Practice Committee (MPC), a 12-member group consisting of primary care physicians, nurses, a pharmacist, a psychiatrist, and a nutritionist. Each guideline was then reviewed in detail by a pharmacist and clinical specialist. Final approval was then made by senior administrators and clinical service department heads. Guidelines were to be approved for a 2-year period after which they would travel through the entire process again.

Of the 29 clinicians surveyed, 22 (75%) responded. Weinstein et al. (1998) found that physicians and NPs felt the guidelines not only improved standards of care but significantly improved collaborative practice. The researchers concluded that utilization of this collaborative practice program increased job satisfaction of physicians and NPs.

Weinstein et al. (1998) further concluded that the guidelines were well worth the time and money invested. The guidelines promoted a minimum standard of care which created an atmosphere for improving the quality of patient care. In addition, the guidelines improved communication between clinicians. The biggest impact was an increased productivity of advanced practice nurses. The advanced practice nurses also felt a renewed sense of independence. This independence along with the increased productivity led to an overall improvement in job satisfaction.

The study was crucial to the current research in that it provided valuable information regarding factors which may facilitate the collaboration of NPs and physicians. These data may be applicable to facilitators and barriers affecting practice of NPs in the ED.

Another study regarding collaborative practice was conducted by Koch, Pazaki, and Campbell (1992) who examined the evolution of joint practice issues. The purpose of the study was to scrutinize the influence of joint practice versus private practice on hierarchical versus non-hierarchical relations among NPs and physicians. Historical trends of the NP and joint practice movement were evaluated deriving two competing concepts. The first described the NP as an extension of the physician, and the second defined the NP as an autonomous health care professional functioning in a collaborative role with a physician.

Manual searches of bibliographies of NP and joint practice publications and by computer searches of five national social science and health databases were completed to collect data. After data were compiled, all relevant publications were integrated into a sampling frame consisting of 2,059 documents. Trend studies were utilized to analyze the random sample. Koch et al. (1992) found that certain trends occurred historically in 5-year intervals: 1965 to 1969, 1970 to 1974, 1975 to 1979, and 1980 to the end of the study.

In research findings from 1965 to 1969, NPs were portrayed as physician extenders in health care teams. NPs were depicted as professionals with autonomous but collaborative roles during the interval from 1970 to 1974. From 1975 to 1979, the term joint practice emerged defining the NP role. From 1980, the researchers found evidence supporting the need for the establishment of autonomous roles in independent practice.

Koch et al. (1992) concluded that the future of NPs depends on nursing leadership. For this reason, NPs must organize and impact legislation giving NPs access to economic and health care resources including hospital privileges and prescriptive authority. Curricula must be designed by nursing academia to educate NPs to perform in private as well as in a collaborative practice. Nurse researchers must continue to assess facilitators and barriers to NP autonomy. Most importantly, the professional behavior of NPs must be assertive.

The Koch et al. (1992) study and the current study converged in that both studies focused on the evolution of the role of the NP. However, differences in the two studies are evident. Koch et al. (1992) incorporated trend analysis to investigate historical trends of the NP role

as delineated in 136 NP publications. From the trends identified, Koch et al. (1992) found that NPs must be aware of facilitators and barriers to their role and unite in their efforts for autonomy. The current study utilized a descriptive research design to examine facilitators and barriers to the practice of NPs in the ED.

As the role of NPs is actualized, it is becoming more evident that NPs should be considered as a viable option for utilization in EDs. Dowling and Dudley (1995) conducted a descriptive analysis as a basis for utilization of NPs in the ED. Nonurgent client census levels and NP staffing implications were evaluated. The sample for the study included 3,157 patient charts drawn from the records of insured, underinsured (Medicaid and Medicare), and uninsured patients in the ED. The study was set in an ED in the southeastern part of the United States. The instrument was census data.

Chart analysis by the researchers revealed that 63.4% of the clients presenting to the ED during the study were classified as nonurgent. Twenty-nine percent of the nonurgent clients were fully insured, and 29% had Medicaid or Medicare (underinsured). Thirty-one percent of the nonurgent clients were completely uninsured. Through

analysis of census trends, Dowling and Dudley (1995) discovered that more nonurgent clients were insured than urgent or emergent clients. This finding supported previous findings that nonurgent census trends were generating income. Dowling and Dudley (1995) discovered that, due to these census trends, an NP was a cost-effective staffing solution.

Analysis of payment methods revealed older adults and children were most likely to be underinsured, and young adult clients (ages 18 to 30) were the largest group of nonurgent, uninsured patients. The largest group of nonurgent patients who had insurance were school-aged children. Analysis of demographic data revealed that the majority of nonurgent clients were adults less than 40 years of age and children. Considering these findings, Dowling and Dudley (1995) suggested that the most appropriate provider for the nonurgent patient in the ED was the family nurse practitioner.

In conclusion, Dowling and Dudley (1995) found that NPs are prepared to provide minor and nonurgent care to the majority of clients (60 to 80%) who present to EDs. Based on these utilization findings, the need for further studies regarding NP practice in the ED is warranted.

Further, Dowling and Dudley (1995) determined that the benefits of NP staffing in the ED include quality, cost-effective care as well as increased patient satisfaction due to improved patient flow. The current study looked at not only those practice issues but facilitators and barriers affecting the initiation and continued utilization of NPs in the ED.

Outcomes in patient care continue to fuel the need for studies researching facilitators and barriers to practice for NPs. In a study by Brown and Grimes (1995) meta-analytic methods were used to research NPs and nurse midwives. The specific purpose of the study was to determine the impact that NPs in primary care roles have on health outcomes and on the health care system. A secondary purpose was to identify gaps in the research to provide direction for future studies.

Data were collected from both published and unpublished sources. The researchers made attempts to identify complete data and avoid redundancy. Of the 900 documents screened by the researchers, 210 contained data on NP or nurse midwife care. To meet acceptability criteria, all interventions must have been provided by an NP or nurse midwife and/or a physician practicing in the

United States or Canada. A further component of acceptability was that all research must have been conducted utilizing experimental, quasi-experimental, or ex post facto design and must have measured outcomes in terms of process of care or clinical outcomes. All control group data were derived from care rendered by a physician and all experimental data from the nurse providers. Brown and Grimes (1995) found that 38 of the 142 NP studies (27%) and 15 of the 68 (22%) nurse midwife studies met all criteria for relevance and acceptability.

Studies were coded for descriptive data, method, research quality, substantive features, and outcome variables. Code sheets designed for the meta-analysis were modified twice to improve reliability. A consultant on meta-analysis reviewed the coding instrument, code book, and coding process as well as the data analysis and interpretation.

Brown and Grimes (1995) reported results in weighted effect-size estimates (standardized mean difference between experimental and control group). Each estimate was corrected for sample size and weighted by the inverse of its variance. Effect sizes for each variable that was pertinent to the research were calculated. If the same

outcome was measured in at least three studies, the effect sizes were combined.

Only one variable, patient compliance, was measured in at least three of the experimental studies. Included in this variable was compliance in taking medications, keeping appointments, and following recommended behavioral changes. The effect size in this variable was small and statistically insignificant ($p = .01$), indicating that patients of NPs scored higher (Brown & Grimes, 1995).

Brown and Grimes (1995) further found that NPs ordered slightly more laboratory tests than physicians. NPs scored higher than physicians in resolution of pathological conditions including improvement in diastolic blood pressure and blood sugar levels, symptom relief, and resolution of otitis media. NPs also received higher patient satisfaction scores. NPs and physicians were equal in quality of care, prescription of medications, functional status, number of visits per patient, and use of the emergency room.

Results of Brown and Grimes' (1995) study represent the existing research on NP care compared with physician care. The researchers reported that trends in these data are more important than any individual statistical finding

and suggest that NP care is equivalent to, and sometimes better than, physician care. However, these data are applicable to patient situations for which these nurses were prepared and include, for the most part, health assessment and promotion as well as the treatment of minor acute and stable chronic conditions. Findings can be generalized to these types of patient situations.

Brown and Grimes (1995) concluded that many questions remain to be answered so that nurses must not continue arguing their value on moral principle, right to practice, or naked power. They recommended that primary care processes performed by NPs must be modeled and studied with outcomes being sensitive indicators of the primary care process, not just measures of diagnosis and treatment.

Patient compliance and symptom resolution were shown by Brown and Grimes (1995) to be equivalent, or in some cases greater, for NP patients when compared to patients treated by physicians. However, outcome analysis should not be the only factor addressed. The entire primary care process needs evaluation and resolution. In the study by the current researcher, issues relating to the process of patients seeking primary care through the ED were

identified. Through identification of facilitators and barriers to practice of NPs in the ED, one component of the process was addressed.

Research into factors that facilitate and/or hinder the success of nursing centers as experienced by nurse executives was undertaken by Early (1994) using a descriptive, exploratory research design. Due to difficulty of people in rural areas gaining access to adequate quality health care, their symptoms were merely treated instead of having the cause of the symptoms alleviated. The researcher's answer to this health care problem was the increased utilization of nursing centers.

Findings of Early's (1994) study identified the reputation of the nursing center as the major facilitative factor (80% response rate). The major response rate identifying barriers was an unresponsive reimbursement system (63% response rate). Based on these findings, Early determined through data analysis that the ability to receive money for services rendered and being in good standing with the nursing center's targeted population and/or community are the strongest factors of a nursing center's success. Lack of third party reimbursement or lack of monies from other sources was identified as the

most important factor that hinders the success of a nursing center.

Other facilitators identified by Early (1994) included nursing expertise (77%), patient satisfaction (77%), adequate referral patterns (71%), providing services where gaps occur (71%), recognition from other providers (71%), cost effectiveness (69%), variety of service (60%), future oriented health perceptions (54%), adequate space (43%), marketing (37%), adequate funding (29%), and networking (20%). Among other barriers identified by Early (1994) were limited perceptions of those in political positions (51%), limited space/facilities (34%), inadequate staffing (34%), lack of profitability (29%), physician resistance (26%), small patient pools (14%), incompatibility of goals within organization (14%), patient/community resistance (9%), faculty providing care to other faculty/students (9%), lack of MD backup (5%), and poor location (5%).

Early (1994) found that although barriers existed in all nursing centers, 74% of the nurse executives plan to continue their nursing centers. Of the remainder of the respondents, 20% plan to make modifications, and only 5% plan to close their nursing center. To conclude, despite

the viability of nursing centers being threatened, the study indicated nursing centers are succeeding.

Although Early's (1994) study focused on nursing centers, the results can be amended to other areas of nursing practice. The facilitators and barriers identified by Early's (1994) research were closely related to issues facing advanced practice nurses in other areas. Similarities between this study and the current researcher's study include the identification of facilitators and barriers to practice.

In conclusion, the researchers of the studies represented in this review of literature investigated the role of NPs in primary care. The researchers identified numerous facilitators and barriers to practice. However, there were no studies identified in which the role of NPs in the ED or issues that may have either a positive or negative impact on NP practice.

Chapter III

The Method

The purpose of the current study was to identify facilitators and barriers to practice for nurse practitioners (NPs) in the emergency department (ED). The study was designed in an effort to increase understanding about the role of the NP in the ED. In this chapter, the design of the study will be described in detail, along with the procedures for data collection and analysis.

Design of the Study

The researcher utilized a nonexperimental, descriptive research design. Descriptive research identifies and enumerates the frequency of occurrence of certain phenomena (Polit & Hungler, 1991). This researcher identified facilitators and barriers to practice of NPs in the ED. Data were collected from NPs with experience in the ED; therefore, no researcher intervention occurred (Polit & Hungler, 1991).

Setting, Population and Sample

The setting selected for this study was the state of Mississippi. Mississippi has a wide variety of populations and cultures built mostly around quiet towns in rural areas. Despite recent improvements in the state's economic base, the average income of Mississippians is lower than any other state. The poverty rate for Mississippi families in the year 1990 was 20.2%, compared with a national poverty rate of 10.0%. The number one cause of death in Mississippi in 1995 was heart disease, followed by cancer and cerebrovascular disease (Mississippi Department of Health, 1994).

The infant mortality rate in Mississippi during 1992 was one of the highest in the nation. Unwed mothers delivered 42.9% of the total live births in Mississippi. Teen pregnancy rate for 1992 was 21.4%. The average per capita income in Mississippi in the year 1991 was \$13,318 per year, compared to \$19,169 nationally (Mississippi Department of Health, 1994).

Mississippi also fell below national statistics in regard to the availability of medical care. Mississippi recorded 1.3 physicians per 1,000 residents, while the national average was 2.4 physicians per 1,000 residents.

The average number of nurses per 1,000 residents in Mississippi was 10.2, while the national average was 13.8 (Mississippi Department of Health, 1994).

Since no data are available from the Mississippi Board of Nursing or any other source regarding how many NPs have practiced as NPs in the ED, the target population for this study was all certified NPs (N = 512) based on the fact that any of these NPs could potentially practice in the ED setting. No randomization was made. To be included in this study, NPs must have current or past experience in the NP role in the ED. The sample was one of convenience taken from the population who met inclusion criteria and agreed to participate in the study by returning completed questionnaires.

Instrumentation

This study was conducted using data collected from two researcher-devised instruments. The first was the Demographic Survey (see Appendix A) which addressed such information as age, sex, race, highest degree completed, type of NP, primary area of practice, primary area of practice, length of experience, size of ED, and number of patients treated annually.

The second was the Stanford Survey (see Appendix B) which consisted of 14 statements designed to elicit information about whether specific practice issues were perceived as facilitators, barriers, or not an issue to ED NPs' practice. Participants were asked to place a check mark in the appropriate column based on the instructions provided. No total score was derived as each item was surmised to be independent and data were nominal in nature. The last item was an open-ended question asking participants to address any other issues affecting their practice in the ED and identify them as facilitators or barriers. The Stanford Survey took approximately 15 to 20 minutes for participants to complete.

The instrument had not been used previously, but was piloted using a convenience sample of NP peers. Changes were made in the instrument based on feedback and were mostly editorial in nature. Additionally, the instrument was determined to have face validity based on a review panel of expert NP researchers.

Procedure

Permission to conduct the study was obtained from the Mississippi University for Women's Committee on Use of

Human Subjects in Experimentation (IRB) (see Appendix C). Additionally, the researcher obtained a listing of NPs from the Mississippi Board of Nursing. Questionnaires containing the Demographic Survey, the Stanford Survey, a cover letter (see Appendix D), and a self-addressed, stamped envelope were mailed to all NPs listed as practicing in the state. The return of the questionnaire implied consent to participate in the study. Any response which indicated the respondent did not have ED experience as an NP was invalidated and was not calculated in data analysis.

Data Analysis

Data analysis was conducted using descriptive statistics including percentages and measures of central tendency. Each response was assessed using item-by-item analysis regarding whether the respondent considered the statement to be a facilitator, barrier, or nonissue. The open-ended question was analyzed using content analysis.

Chapter IV

The Findings

This researcher sought to discover facilitators and barriers to the role of nurse practitioners (NPs) in the delivery of primary care in the emergency department (ED) setting. No literature was identified in which NPs had been queried on factors perceived as facilitators and/or barriers to their practice in the ED. Therefore, the purpose of this descriptive, nonexperimental study was to identify facilitators and barriers to practice for NPs in the ED.

Description of the Sample

Five hundred twelve questionnaires were mailed to NPs in the state of Mississippi. A total of 92 (18%) were returned. Of the 92, 36 (39%) indicated they had no ED experience and were, therefore, ineligible. Six (6%) of the questionnaires were incomplete and could not be used. The resulting sample utilized for data analysis was 50.

Forty-four (88%) of the NPs responding were females while the remaining 6 (12%) were males. Forty-six (92%) of the respondents were Caucasian with the remaining 4 (8%) being African American. Eighty percent (n = 40) of those responding had master's degrees in nursing while 20% (n = 10) had post-master's certificates.

Ages ranged from 28 to 62 years with a mean age of 40.78 and a median age of 45. The respondents had been certified as NPs between 9 months and 21 years with a mean of 5.12 years and a median of 10.9 years. The length of time these NPs worked in the ED ranged from 6 months to 6 years with a mean of 1.9 years and a median of 3.25 years. Primary areas of practice among the sample were diverse. This information is depicted in Table 1. Findings related to age, length of time as an NP, and length of time worked as an NP in the ED are presented in Table 2.

The majority of the EDs (74%) were located in rural areas while the remaining 26% were urban. Annual patient census ranged from 3,000 to greater than 100,000 (see Table 3).

Table 1

Primary Areas of Practice by Frequency and Percentage

Area of practice	f ^a	%
Family Clinic	23	46.0
ED	19	38.0
Pediatrics	3	6.0
Occupational Health	2	4.0
Adult Clinic	1	2.0
Oncology	1	2.0
Women's Health	1	2.0

^aN = 50.

Table 2

Age Ranges, Length of Time as a Nurse Practitioner, and Length of Time as a Nurse Practitioner in the Emergency Department of Participating Nurse Practitioners by Frequency and Percentage

Variable	f ^a	%
Age (years)		
25 to 29	5	10.0
30 to 34	6	12.0
35 to 39	10	20.0
40 to 44	18	36.0
45 to 49	3	6.0
50 to 54	5	10.0
55 to 59	2	4.0
60 years or more	1	2.0
Length of time as a nurse practitioner (years)		
0 to 4	28	56.0
5 to 9	16	32.0
10 to 14	3	6.0
15 to 19	1	2.0
20 years or more	2	4.0
Length of time as a nurse practitioner in the emergency department (years)		
< 1	14	28.0
1 to 2.5	25	50.0
2.5 to 5	9	18.0
> 5	2	4.0

^aN = 50.

Table 3

Annual Patient Census of Emergency Departments by
Frequency and Percentage

Census	f ^a	%
0 to 10,000	6	12.0
10,001 to 20,000	11	22.0
20,001 to 30,000	6	12.0
30,001 to 40,000	5	10.0
40,001 to 50,000	0	0.0
50,001 to 100,000	7	14.0
> 100,000	1	2.0
Unknown	14	28.0

^aN = 50.

Based on the findings from this study, most EDs were staffed by physicians, NPs, or, in some instances, both. However, the number of days per week and hours per day staffed by these disciplines varied (see Table 4).

Table 4

Nurse Practitioner Versus Physician Staffing in the
Emergency Department by Frequency and Percentage

Staffing	f ^a	%
Medical Doctors		
No. of days per week		
7	45	90.0
6	2	4.0
5	2	4.0
4	0	0.0
3	0	0.0
2	0	0.0
1	0	0.0
Varies	1	2.0

Hours per day		
24	45	90.0
12	4	8.0
24 and 12 ^a	3	6.0
24 on weekends only	1	2.0

Nurse Practitioners

No. of days per week		
7	22	44.0
6	3	6.0
5	8	16.0
4	6	12.0
3	5	10.0
2	4	8.0
1	1	2.0
Weekdays only	3	6.0
Weekends only	3	6.0
Varies	1	2.0

(table continues)

Table 4 (Continued)

Staffing	f ^a	%
Hours per day		
24	1	2.0
20	1	2.0
18	1	2.0
16	3	6.0
12	29	58.0
10	3	6.0
8	5	10.0
4	2	4.0
Varies	1	2.0
Weekends only	3	6.0
24 and 12 ^b	1	2.0

^aN = 50.

^b24 hours on weekends and 12-hour days during week.

The number of other urgent care and primary care facilities in the areas ranged from zero to greater than 10. This information can be found in Table 5.

Table 5

Other Health Care Facilities in the Area of the Emergency Department by Frequency and Percentage

Health care facility	f ^a	%
Primary care clinics		
0	1	2.0
1	9	18.0
2	4	8.0
3	6	12.0
4	7	14.0
5	3	6.0
6	1	2.0
7	0	0.0
8	1	2.0
9	1	2.0
10	3	6.0
> 10	11	22.0
Unknown	3	6.0
Emergency departments		
0	13	26.0
1	19	38.0
2	4	8.0
3	2	4.0
4	3	6.0
5	3	6.0
6	1	2.0
7	0	0.0
8	1	2.0
9	0	0.0
10	0	0.0
> 10	3	6.0
Unknown	1	2.0

^aN = 50.

Other nursing staff in the ED consisted mostly of RNs, although some EDs continue to utilize LPNs.

Information concerning ED staffing is depicted in Table 6.

Table 6

Ancillary Staff in the Emergency Department by Frequency and Percentage

Staff	f ^a	%
RNs		
1 to 4	15	30.0
5 to 9	20	40.0
10 to 14	5	10.0
15 to 19	3	6.0
20 to 24	1	2.0
25 to 29	0	0.0
30 to 34	0	0.0
35 to 39	1	2.0
40 or greater	1	2.0
Unknown	4	8.0
LPNs		
0	25	50.0
1	9	18.0
2	7	14.0
3	3	6.0
4	1	2.0
5	0	0.0
6	1	2.0
Unknown	4	8.0

^aN = 50.

Results of Data Analysis

The researcher pursued answers to two questions:

1. What are the facilitators to practice of NPs in the ED?

2. What are the barriers to practice of NPs in the ED?

Items on the survey were identified by respondents as facilitators, barriers, or not an issue. Facilitative factors were identified by NPs in the ED setting. These data are listed in order with frequency of responses and percentages listed in Table 7.

Table 8 lists the factors that serve as barriers to practice of NPs in the ED in rank order. In addition, each item has the frequency and percentage of responses listed.

NPs were also given the option to identify factors as not being an issue. These results are listed in Table 9.

Table 7

Facilitators to Practice of Nurse Practitioners in the
Emergency Department by Frequency and Percentage

Rank	Type	n	%
1	Patient satisfaction	45	90.00
2	Prescriptive rights	31	62.00
3	No. of patients seen in ED	30	60.00
3	Educational experience to function in the role	30	60.00
4	Administration's working relationship with NPs	29	58.00
5	Ancillary staff's working relationship with NPs	28	56.00
6	Nurse colleague's working relationship with NPs	27	54.00
7	Community knowledge of NP role	23	46.00
8	Patient length of stay in the ED	22	44.00
8	Physician's past experience with NPs	22	44.00
9	Medicare/Medicaid reimbursement	21	42.00
10	Admitting privileges	10	20.00
11	Patient's ability to pay	6	12.00
12	Private insurance reimbursement	4	8.00

Table 8

Barriers to Practice of Nurse Practitioners in the
Emergency Department by Frequency and Percentage

Rank	Type	n	%
1	Community knowledge of NP role	16	32.00
2	Private insurance reimbursement	15	30.00
3	Admitting privileges	14	28.00
4	Patient's ability to pay	13	26.00
5	Physicians past experience with NPs	12	24.00
6	Nurse colleagues working relationships with NPs	11	22.00
7	Patient's length of stay in the ED	9	18.00
8	Educational experience to function in role	7	14.00
8	Administration's working relationship with NPs	7	14.00
9	Prescriptive rights	6	12.00
9	No. of patients seen in the ED	6	12.00
10	Medicare/Medicaid reimbursement	3	6.00
10	Ancillary staff's working relationship with NPs	3	6.00
11	Patient's satisfaction	0	0.00

Table 9

Issues Identified as Neither Facilitators Nor Barriers of
Nurse Practitioners in the Emergency Department by
Frequency and Percentage

Rank	Type	n	%
1	Patient's ability to pay	31	62.00
1	Private insurance reimbursement	31	62.00
2	Admitting privileges	26	52.00
2	Medicare/Medicaid reimbursement	26	52.00
3	Patient length of stay in the ED	19	38.00
3	Ancillary staff's working relationship with NPs	19	38.00
4	Physician's past experience with NPs	16	32.00
5	Administration's working relationship with NPs	14	28.00
5	No. of patients seen in the ED	14	28.00
6	Prescriptive rights	13	26.00
6	Educational experience to function in the role	13	26.00
7	Nurse colleague's working relationship with NPs	12	24.00
8	Community knowledge of NPs	11	22.00
9	Patient satisfaction	5	10.00

Other Findings

This research was conducted in an attempt to obtain findings on factors that encourage and/or prevent utilization of NPs in the ED. Comment sections were included on the Demographic Data Survey and the Stanford Survey to further identify perceived facilitators and/or barriers to practice in the ED. These comments were subjected to content analysis for detection of common themes.

During content analysis, four themes emerged. The first theme was resolution of barriers over time. The following are examples of this theme:

A few issues were barriers in the beginning, but because we've had NPs in the ED for 4 years, they have resolved.

. . .

I have been really well received since the initial barriers were broken.

. . .

Colleagues working relationships were barriers in the beginning. It takes hard work to move through the problems. RNs especially are often resentful--they want NPs to function as they are used to in their own role. This is much better after 2 years.

. . .

The nurses (RNs) in the ED were absolutely awful initially. I got more resistance from the nurses in the beginning than the docs. Fortunately, with time, this improved.

The second theme dealt with the experience level of the NP. The following are responses that were categorized into this theme:

NPs must have specialized training in the ED.

. . . .

Experience, and lots of it, is a must.

. . . .

Experienced nurses who have become NPs are good for the ED situation. Inexperienced nurses may miss key assessment issues. For example, a patient with chest pain is assessed incorrectly and collapses soon after release.

. . . .

At least one year's experience is needed in the ED as a nurse prior to functioning as a nurse practitioner.

The third theme to emerge was proving one's worth to physicians. Responses that follow are examples of this theme:

Physicians are territorial especially at first. They are eager to find mistakes by the NP.

. . . .

There was hesitation and avoidance by some physicians.

. . . .
Many of the physicians that I work with have no past experience with NPs. They are often skeptical and reserved for a few months.

. . . .
Physicians with past experience with NPs are facilitators to practice. We must prove ourselves to those who have never worked with NPs.

. . . .
I had to prove my worth to physicians but after this was accomplished things went well.

. . . .
Most physicians are supportive but others who don't understand our role are resentful.

The fourth theme reflected was separating fast track from the ED:

I'm not restricted to fast track patients--I can treat all types of patients.

. . . .
Our NPs only staff the minor care/fast track areas. In my current role, I work the fast track area within the ED. There is no physician coverage here. The main ED is staffed exclusively with physicians.

Summary of the Findings

Data gained from this study indicated that a number of factors were perceived by NPs as being both

facilitators and barriers to practice. The most frequently cited facilitator to emerge from this study was the high level of patient satisfaction when treated by NPs, followed by the fact that NPs in Mississippi have prescriptive privileges.

The most commonly identified barrier to practice emerging from this study was the lack of community knowledge about the role of the NP in the ED. However, the majority of NPs surveyed identified by far more facilitators (47%) than barriers (17%). Four common themes emerged from the open-ended section asking for comments on facilitators and barriers. All four themes concerned issues of resistance or acceptance of the role or preparedness to function in the role.

Chapter V

The Outcomes

The Consolidated Omnibus Budget Reconciliation Act of 1986 mandated that emergency departments provide care to all patients presenting for treatment regardless of the complaint or ability to pay. The emergency department (ED) has become a primary care setting for a substantial portion of the population although not designed or adequately staffed for this function. One solution to the increased number and faster pace of the emergency environment has been the implementation of nurse practitioners (NPs) providing comprehensive and follow-up care for nonurgent ED patients.

This new role prompted a substantial need to perform research regarding NPs in the ED and items they perceive as factors which facilitate or hinder practice. The research questions answered in this study were as follows:

1. What are the facilitators to practice of nurse practitioners in the emergency department?

2. What are the barriers to practice of nurse practitioners in the emergency department?

The conceptual framework which guided this descriptive study was King's Theory of Goal Attainment.

A convenience sample of 512 NPs was surveyed to identify facilitators and barriers to NPs in the ED. Of the 92 questionnaires returned, 50 met criteria for inclusion in the study.

This chapter is focused on the outcomes of this study. An exploration of the possible meaning behind the findings in comparison to previous literature on NPs will be presented. Implications for nursing in regard to practice, education, research, administration, and theory are explored. Limitations of the study and recommendations for future studies will be suggested.

Discussion and Summary of the Findings

Findings from this study lend hope to the situation of the overwhelming number of patients presenting to the EDs with urgent and nonurgent needs. Utilization of NPs was a solution that demonstrated a high level of patient satisfaction. Of the NPs surveyed, 90% identified patient satisfaction as the biggest facilitator to practice. The major factor identified as a barrier was lack of community

knowledge of the NP role with a 32% response rate. Based on these findings, along with other facilitative factors identified, public perception is perceived as a key element in the success of NPs in the ED.

Facilitators. An overwhelming majority of NPs (90%) perceived patient satisfaction as the primary factor facilitating practice in the ED. Research has shown that patients highly rate the level of satisfaction in the areas of interpersonal skills, care received from NPs, technical skills, patient outcomes, and access to care (Dowling & Dudley, 1995; Hupcey, 1993; Koch et al., 1992; Middleton & Whitney, 1993; Rhee & Dermeyer, 1995). Also documented in the literature was an increased tendency for patient compliance (Brown & Grimes, 1995; Buchanan & Powers, 1996; Read & George, 1994). In addition, Early (1994) found patient satisfaction played an integral part of the success or failure of nursing centers. To further substantiate patient satisfaction as a facilitator, it should be noted that none of the NPs surveyed (0%) identified patient satisfaction as a barrier.

Identified in the survey as the second facilitator to the practice of NPs in the ED was prescriptive abilities. NPs in Mississippi identified prescriptive rights as a

distinctive privilege although they do not currently have the ability to prescribe narcotics. This finding was in direct contrast to the literature in that nationally the issue of prescriptive privileges has been considered a barrier to practice primarily because prescriptive privileges were severely limited or nonexistent in many states (Brown & Grimes, 1995; Cooper et al., 1998; Hupcey, 1993; Koch et al., 1992; Weinstein et al., 1998). It may be that since the group of NPs surveyed had prescriptive privileges they considered this a facilitator; whereas, if they had not had these privileges the NPs may well have considered this a barrier.

The number of patients treated in the ED was also perceived as a facilitator by 60% of the NPs. This finding is in direct correlation with current literature in which an increase of 106% has been seen in patient numbers in the ED. This increase was made by patients with primary and/or nonurgent complaints which were traditionally handled in primary care clinics (Dowling & Dudley, 1995; Grumbach et al., 1993; Middleton & Whitney, 1993). This finding is parallel to the findings in a study by Dowling and Dudley (1995). The researchers concluded that patients are more likely to seek health care at times that do not

require a loss of work and at sites where they are least likely to be turned away. As a result, there has been a 60 to 80% increase in the number of patients presenting to the ED with complaints they know to be nonurgent (Dowling & Dudley, 1995). Therefore, the NPs surveyed in the study viewed the large number of patients seeking care in the ED as a facilitator to practice.

Although sometimes misunderstood and more often looked at skeptically, nurse practitioners have the knowledge and capability to deliver timely, cost-effective, quality healthcare. Sixty percent of the NPs in this study identified educational level as being a positive factor to practice. Experience in the ED was perceived as a facilitator supported by comments such as "experience and lots of it is a must." However, in contrast, many healthcare providers, hospital administrators, and even patients are uncomfortable with the role (Cooper et al., 1998; Koch et al., 1992). In similar studies, researchers found that nurse practitioners and physicians were equal in quality of care rendered, appropriate prescription of medications, functional status, number of visits per patient, and

effective use of the ED (Brown & Grimes, 1995; Dowling & Dudley, 1995).

As the role of the NP in the ED is actualized, factors once perceived as barriers are now being realized as facilitators. One example of this is the perception of the NP's relationship with nursing staff. Past researchers identified lack of support by members of their own profession as one of the most common barriers facing NPs today; however, little specific research has been conducted which focuses on this population. One concern cited in the literature is that NPs were functioning as "mini doctors" (Dowling & Dudley, 1995; Hupcey, 1993; Koch et al., 1992).

This researcher found that the majority of NPs perceived their relationship with other staff members as a facilitator to practice. Comments cited in the Stanford Survey indicated that initially resentment from staff members was a barrier. Examples of these comments included statements, such as

Working relationship with colleagues was a barrier in the beginning. It takes hard work to move through the problems. RN's are often resentful--They want NP's to function in the role they are used to.

Another comment was

The nurses (RN's) in the ED were absolutely awful when I first started. I got more resentment from them than from the docs.

Barriers. The greatest barrier to the practice of NPs in the ED was found by this researcher to be lack of community knowledge of the NP role (32%). Although patient acceptance of the NP (90%) and educational experience to function in the role (60%) ranked high as facilitators, the role of the NP in the ED is an entity either not understood or even misunderstood by most lay persons and some physicians. This lack of understanding was evidenced by participants' comments which included, "Most physicians are supportive . . ." and "we must prove ourselves." Research has shown increased patient satisfaction, good interpersonal skills, and equal or superior outcomes as facilitators to NP practice (Dowling & Dudley, 1995; Hupcey, 1993; Middleton & Whitney, 1993; Rhee & Dermeyer, 1995). Conversely, Hupcey (1993), Koch et al. (1992), and Mezey and McGivern (1993) also reported that patients are often skeptical of NPs' role and that NPs are still frequently regarded with doubt and suspicion. This apparent contradiction in both the literature and current research findings is probably a product of poor marketing

of the role by NPs, inappropriate media coverage about nurses and NPs, and consumers' lack of exposure to NPs.

Among other issues identified that negatively impacted the practice of NPs was third party reimbursement (30%). NPs have proven to be more cost-effective in the treatment of primary and nonurgent problems, yet reimbursement continues to be an issue and in most cases a benefit reserved for physicians only. In addition, NPs have been more agreeable to practice in rural areas which have traditionally had difficulty attracting physicians (Buchanan & Powers, 1996; Dowling & Dudley, 1995; Grumbach et al., 1993; Middleton et al., 1995). In an effort to continue having these patients in the system for receiving primary and nonurgent care, legislators must be cognizant of the impact from the lack of third-party reimbursement.

Speculation by this researcher was that reimbursement issues would have encompassed a higher response rate. However, most NPs practicing in the ED setting are paid hourly wages or salaried and are, therefore, unaware of patient billing and payment received. NPs must continue to lobby for more third-party reimbursement regardless of the job situation due to the overall impact on other NPs. As

NPs provide quality care to patients, they may lobby the worth of NPs to legislators.

Limitations of the Study

A number of limitations were encountered in the empiricalization and implementation of this study. First, obtaining a sample of NPs with ED experience was both difficult and expensive. The current list of NPs in the state of Mississippi identified practitioners only by specialty, not by work site. Therefore, a large number of surveys (n = 512) had to be issued to reveal a sample size sufficient to support data analysis. This sampling method, therefore, did not allow for randomization or for the assurance that all eligible NPs were surveyed.

The instrument used for data collection was developed by the researcher and had no established validity or reliability. The Demographic Data Survey did not differentiate those who worked in a true ED from those who worked in a primary care clinic affiliated with the ED (fast track). This may have influenced what factors NPs perceived as facilitators or barriers.

Finally, the study was conducted in one relatively rural state in the Southeastern United States. It may be

inappropriate to generalize these findings to other states or settings.

Implications for Nursing

Findings from this study have powerful implications for nursing in a variety of settings and specialities. Implications are presented in the areas of practice, education, research, administration, and theory.

Practice. Findings from this study indicated that NPs in EDs in Mississippi perceived an encouraging number of facilitators to practice while experiencing relatively few barriers. In order to promote a positive image for NPs, those in ED practice must continue to provide quality and cost-efficient care. NPs could also facilitate practice in the ED and other areas of practice by demonstrating acceptance and respect for nurse colleagues with more or less formal education than themselves. Nurses in every area of health care must serve as role models and mentors of young nurses in the field rather than projecting an attitude that, in itself, acts as a barrier to practice. Additionally, NPs in the nontraditional ED role are in a prime position to foster collegial relationships with physicians, administrators, and leaders in other healthcare disciplines.

One of the major barriers to practice identified by this researcher was the lack of reimbursement by private insurance companies. This finding underscores the need for NPs to continue lobbying for payment by all third-party payers and to conduct their practice in a way that will encourage clients to insist that their insurance carrier reimburse the NPs whom they have chosen as health care providers.

Education. As NP practice moves into nontraditional settings, faculties and students in NP programs of education need to be kept abreast of the pros and cons of practicing in these settings. Findings from this study could be incorporated into curricula of schools of nursing, especially in classes pertaining to professional role development. Awareness of specific facilitators and barriers to practice will help fledgling NPs be better prepared to meet the challenges of today's rapidly changing health care system. Among these challenges, to this study, is the barrier of staff resistance to NPs filling what has traditionally been a physician role. The fostering of an environment of support for colleagues who choose to seek higher education, and of respect for those who do not, should begin in undergraduate programs in

nursing. In such an environment, nursing as a profession can strive to excel, rather than strive to maintain the status quo.

Research. Findings from this study were often substantially different from those in similar studies conducted in the past. This contrast implies a need for replication of the current study as well as studies in other parts of the United States. Data from this research indicate that, in general, NP practice in the ED is easier to establish and less difficult to maintain in Mississippi than in areas where these issues have been examined. If these data hold true through replication, then more studies are needed to determine whether facilitators and barriers change or remain stable over time. Additionally, the findings may indicate that the role of the NP in the ED is changing and new studies need to be conducted. Research also is needed to determine what differences exist between ED practice in Mississippi and in other parts of the country where more barriers appear to exist. In addition, the facilitators and barriers to practice identified in the current study may be used as a baseline from which to develop valid and reliable instrumentation for empirically measuring these variables in the future.

Administration. Nursing and business administrators could use findings from this study to anticipate facilitators and barriers to practice as they seek to place NPs in new roles in the ever-evolving health care system. Facilitators identified in this study may be presented as empirical evidence to advocate the utilization of NPs in the ED setting. Heightened awareness of barriers to practice may enable nurse managers, as well as NPs moving into an ED role, to circumvent problem issues encountered by the participants in this study.

Theory. The foundation of nursing is research which is guided by theory. For nursing to be as efficacious and efficient as possible, it must be validated by theory. King's (1981) Theory of Goal Attainment was utilized as the theoretical framework for this study. According to King (1981), as patients present to the ED with a need, health care providers must be able to effectively communicate to determine patients' needs in order for goals to be established. Similarly, NPs, physicians, staff, and administrations must be able to communicate effectively to determine needs and set goals congruently. More research is needed to further test the applicability

of King's (1981) theory to the role and practice of the NP in the ED.

Conclusions

Based on the findings from this research, the following conclusions are drawn:

1. The number one facilitator to practice of NPs in the ED is patient satisfaction.
2. The number one barrier to practice of NPs in the ED is community knowledge of the NP role.
3. NPs perceive more factors as being facilitators than barriers to practice in the ED.
4. Factors initially perceived as barriers by NPs in the ED may resolve over time to actually facilitate practice.

Recommendations for Further Study

Based on the outcomes of this study, the following recommendations for future research are suggested:

1. Replication of the study with a larger and more diverse sample size utilizing a broader demographic area.
2. Publication of this study to encourage utilization of NPs in the ED.

3. Replication of this study differentiating the ED from "fast track."

4. Conduction of a qualitative study which seeks narrative answers from NPs regarding their perception of facilitators and barriers to practice for NPs in the ED.

5. Implementation of a longitudinal study which focuses on evolution of the NP role in the ED.

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APPENDIX A
DEMOGRAPHIC SURVEY

Demographic Survey

Instructions: Please answer each question with a (✓) or a shot answer if you have worked or are currently working as a nurse practitioner in the emergency department.

1. Age: _____
2. Sex: _____ Male _____ Female
3. Race: _____
4. Highest degree completed in nursing
 - _____ Diploma
 - _____ Associate Degree in Nursing
 - _____ Bachelor of Science in Nursing
 - _____ Master of Science in Nursing
 - _____ Other
5. Type of nurse practitioner: _____
6. Primary area of practice: _____
7. Length of time as a nurse practitioner: _____
8. Length of time worked as NP in ED: _____
9. ED located in a rural or urban setting: _____
10. Number of primary care facilities in area: _____
11. Number of other EDs or walk-in clinics for emergent care in your area: _____
12. Number of days per week ED staffed with MD: _____
13. Number of hours per day ED staffed with MD: _____
14. Number of days per week ED staffed with NP: _____
15. Number hours per day ED staffed with NP: _____
16. Number of RNs staffed in the ED: _____ LPNs: _____
17. Number of patients seen in the ED annually: _____
18. Comments: _____

APPENDIX B
STANFORD SURVEY

Stanford Survey

Please use this legend to indicate your response to the following items:

- [1] This is a facilitator to my practice.
- [2] This is a barrier to my practice.
- [3] This is not an issue in my practice.

	[1]	[2]	[3]
1. Patient length of stay in the ED.	_____	_____	_____
2. Private insurance reimbursement.	_____	_____	_____
3. Medicare/Medicaid reimbursement.	_____	_____	_____
4. Patients' ability to pay.	_____	_____	_____
5. Physicians' past experience with NPs.	_____	_____	_____
6. Nurse colleague's working relationship with NPs.	_____	_____	_____
7. Patient satisfaction.	_____	_____	_____
8. Number of patients seen in the ED.	_____	_____	_____
9. Ancillary staff's working relationship with NPs.	_____	_____	_____
10. Prescriptive rights.	_____	_____	_____
11. Educational experience to function in role.	_____	_____	_____
12. Administration's working relationship with NPs.	_____	_____	_____
13. Admitting privileges.	_____	_____	_____
14. Community knowledge of NP role.	_____	_____	_____

Additional comments: (Please address these or any other issues affecting practice and indicate whether facilitators or barriers to your practice.)

APPENDIX C

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



MISSISSIPPI
UNIVERSITY
FOR WOMEN

Office of the Vice President for Academic Affairs
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W-Box 1603
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Admitting Men Since 1982

March 22, 1999

Ms. Teresa P. Stanford
c/o Graduate Program in Nursing
Campus

Dear Ms. Stanford:

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,

A handwritten signature in cursive script that reads "Susan Kupisch".

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

SK:wr

cc: Mr. Jim Davidson
Dr. Mary Pat Curtis
Ms. Lorraine Hamm

APPENDIX D

LETTER REQUESTING PERMISSION
TO PARTICIPATE IN RESEARCH

50003 Robinson West Circle
Amory, MS 38821
(601) 256-8419

Dear Nurse Practitioner,

My name is Teresa Stanford, and I am a graduate student in the Family Nurse Practitioner Program at the Mississippi University for Women in Columbus, Mississippi. I am conducting a study on the facilitators and barriers to practice of nurse practitioners who work in the emergency department.

If you are currently working as a nurse practitioner in the emergency department or have in the past, I would appreciate your help in my study. Nurse practitioners practicing in the emergency department represent a very small percentage of the total number of practicing nurse practitioners. Since very few studies have been done in this area, the information you provide is crucial.

I am requesting your participation by completing the questionnaire and returning it by mail in the enclosed stamped, self-addressed envelope. Participation is voluntary, and your responses will remain anonymous. To further assure confidentiality, there will be no coding system used. Completion and return of the questionnaire imply consent for participation in the study.

Since the completion of this information must be completed within time constraints, your prompt attention will be appreciated. If you have any questions about the study, you may contact me by telephone at (601) 256-8419.

Thank you,

Teresa Stanford, RNC, BSN