

ATTITUDES OF HEALTH PROFESSIONALS TOWARD
THE PEDIATRIC CLINICAL NURSE SPECIALIST

A THESIS
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

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DENTON, TEXAS

MAY 1978

The Graduate School

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Denton, Texas

April 5 1978

We hereby recommend that the Thesis prepared under
our supervision by Janet Frances Williams
entitled "Attitudes of Health Professionals
Toward the Pediatric Clinical Nurse Specialist"

be accepted as fulfilling this part of the requirements for the Degree of
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ACKNOWLEDGEMENTS

The investigator wishes to express her sincere appreciation and gratitude to the following persons whose support and guidance made this study possible:

Dawn Bruce, M.S., Tommie Wallace, M.S., and Donna Kem, M.S., members of the writer's committee, for their encouragement, interest, and editorial contributions during the preparation of the thesis;

To my friends, for their moral support and help throughout all phases of the writing;

And to my parents who have continued to be a source of strength, comfort, and encouragement in all that I have undertaken.

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CHAPTER I

INTRODUCTION

Currently the effects of the health care crisis cannot be more earnestly expressed in terms of human suffering and need than among our nation's children. Today, the United States ranks fifteenth in the world in infant mortality (McTaggart and McTaggart, 1976). Our national infant mortality rate remains at an embarrassing 16.9 percent. The high percentage of our nation's children who have received inadequate immunizations against communicable diseases, who have entered school without having had a previous developmental evaluation, and whose parents have never had the opportunity for counseling from a health professional concerning their children's health needs bears further testimony that our present health care system is inadequate (King 1976).

The health care crisis is not fictive; it is indeed factual. Inadequacies in the delivery of health care, the increasing incidences of certain disease conditions, and greater demands for comprehensive health care by the public are identified as the major problems contributing to the health care crisis (Leininger and Buck 1974). Our nation's

ailing health care system must now find a remedy for this crisis.

Today, the nursing and medical professions acknowledge that in order to increase the quality, availability, and accessibility of child health care, collaborative efforts between the two are imperative. Both professions recognize, too, that utilization of each profession's skills is essential. To meet the objective of providing comprehensive health care delivery for children, the nursing profession advocates the utilization of the pediatric clinical nurse specialist, the registered nurse prepared at the master's level.

The utilization of nurses in the expanded role, however, is still a controversial issue. Nursing research regarding this controversial subject is of utmost importance. It is imperative that investigations be conducted to identify significant factors affecting physicians' and registered nurses' attitudes toward the new child health provider, the pediatric clinical nurse specialist. Research endeavors need to be directed toward the identification of obstacles or barriers relative to the pediatric clinical nurse specialist functioning in an expanded nursing role. Subsequent investigation should then focus upon possible solutions to those identified problems. However, only

through the utilization of the pediatric clinical nurse specialist is the actual potential of this role to be realized in meeting the health needs of our nation's children. Therefore, this nursing investigation focuses upon the attitudes of health professionals toward the pediatric clinical nurse specialist performing specific tasks and functions consistent with the expanded nursing role as identified in the literature.

This study provides a scientific viewpoint of the current health professionals' attitudes toward the pediatric clinical nurse specialist performing particular tasks and functions in the delivery of health care to children. The results of this investigation are concerned with making recommendations for the advancement of the expanded nursing role.

Statement of Problem

The problem of this study was to investigate the current attitudes of health professionals toward the pediatric clinical nurse specialist performing specific tasks and functions consistent with the expanded nursing role as identified in the literature in the provision of health care to children.

Purposes

The purposes of this study were to

1. Determine if a difference existed between the attitudes of registered nurses and pediatricians in the identification of tasks and functions the pediatric clinical nurse specialist should perform

2. Determine if a difference existed between the attitudes of registered nurses and family practitioners in the identification of tasks and functions the pediatric clinical nurse specialist should perform

3. Determine if a difference existed between the attitudes of family practitioners and pediatricians in the identification of tasks and functions the pediatric clinical nurse specialist should perform

Background and Significance

A multiplicity of factors has contributed to the health care crisis in America. One particular factor has been the change from secondary and tertiary care to emphasis on primary health care. In the past, the health care system's major emphasis was placed on the diagnosis and treatment of acute and chronic diseases. The "traditional" nurse, assisting the physician toward the goal of treatment and cure, concentrated her efforts on

task-oriented procedures. Although the "traditional" nurse was praised for her unquestioning rendering of care to the hospitalized patient, her full potential in the realms of counseling, teaching, and guidance was largely unrecognized (Bates 1970).

Today, stimulated by the recognition that the traditional mode of health care delivery has become inadequate, leaders of the nursing and medical professions have been seeking resolutions to the nation's health problems by developing new roles and innovative approaches to health care delivery. Currently, one new role of particular interest among the health professions has been the "clinical nurse specialist," the professional nurse prepared at the master's level (Bates 1970).

The concept of the "clinical nurse specialist" is not new. The term clinical nurse specialist was originally used in 1938 (Riehl and McVay 1973). Later, Reiter (1966) further alluded to the role of the clinical nurse specialist in her description of the nurse clinician. Reiter distinguished the nurse clinician or the clinical nurse specialist as a superior kind of nurse possessing a greater depth of clinical knowledge, having increased ability to identify the full spectrum of patient needs, and being able to form collegial relationships with other health

professionals. Thus, the concept of the "clinical nurse specialist" provided substance to the hitherto shadowy nursing role (Reiter 1966, Bates 1970, and Porter 1973).

Many factors have been identified as contributing to the emerging role of the clinical nurse specialist.

Initially, this position evolved primarily out of the need for an expert clinician to provide guidance and planning of patient care in the hospital setting. It is significant to recognize that the development of the clinical nurse specialist role occurred at a time when many nurses were already experiencing role conflict. More specifically, professional nurses' role expectations were not being satisfied by the reality of nursing practice. This concept reflected the desire on the part of many nurses to assume more responsibility and accountability, to strive for greater depth of knowledge, to practice at a more sophisticated scientific level, and ultimately to achieve greater role satisfaction (King 1976). In addition, numerous other variables have spurred the need for nursing role expansion, including the shortage of primary care physicians created by the maldistribution and over-specialization of medical practitioners, the growing consumer demand for adequate health care, the spiraling costs of health care, and the rapidly increasing number of

technological advances (Bullough 1976, Cohen 1969, and Hepner and Hepner 1973).

The effectiveness of nurses functioning in an expanded role in a variety of primary care settings has been demonstrated in studies conducted by numerous investigators (Duncan and associates 1971, Spitzer and associates 1974, Lewis and Resnick 1967, Flynn 1974, and Runyan 1975). Of particular interest was the investigation conducted by Spitzer and associates (1974). In their investigation, an experimental model was used with patients randomly assigned to either a nurse functioning in an expanded role or a family practitioner. Spitzer and associates (1974) found that the nurse in the expanded role could provide clinical care as safely and effectively as the family practitioner.

Studies have demonstrated the acceptance of the nurse functioning in the expanded role by patients and their families. Lewis and Resnick (1967) demonstrated patients' preference of the expanded role nurse directing their care over the traditional medical model of care. The patients receiving health care directed by the nurse in the expanded role demonstrated increased adherence to appointment schedules, increased satisfaction with care, and decreased use of other health facilities (Lewis and

Resnick 1967). Conant and associates (1971) demonstrated in their study greater acceptance of both the nurse functioning in an expanded role and the physician's assistant among the upper-middle-class as compared to the lower-middle-class and working-class community.

Many physicians have been enthusiastic about the expanded role of the nurse and its potential in providing health care (Connelly and associates 1966, Silver 1968, and Yankauer and associates 1970). Silver, Ford, and Stearly (1967) have been some of the strongest proponents for the expanded role of the nurse in the care of children. The authors stated that because children's needs for health care have become so great, the nursing and medical professions must designate what their functions and roles should be in order to effectively deliver optimal health care. Encouragement was also offered to nurses and physicians to work together in determining which of them could best assume the responsibility of the patient's care at a given point in time. Silver, Ford, and Stearly (1967) concluded that nothing was unethical about realignment of nursing and medical functions to deliver quality patient care.

Attitudes toward the expanded role of the nurse of a sample of California pediatricians were surveyed by

Schoen and associates (1973). The survey confirmed the findings of previous studies (Yankauer and associates 1968 and Yankauer and associates 1970) which demonstrated that physicians generally have favorable attitudes toward the increased use of allied health personnel, but revealed that pediatricians were hesitant to allow the nurse in the expanded role to function with much independence in direct patient care. Many pediatricians complained that the utilization of the nurse in an expanded role might lead to the delivery of two levels of health care. Many physicians voiced concerns that the expanded nursing role might in reality develop a second-class physician. Therefore, if this occurred, physicians envisioned themselves rendering first-class health care and the nurse in the expanded role providing second-class health care (Schoen and associates 1973).

Another important aspect of the investigation of the expanded role of the nurse was to determine how nurses feel about the role. McCormack and Crawford (1969) surveyed the receptivity of baccalaureate graduates functioning in an ambulatory setting as a primary health care provider. The majority of the graduates regarded the role to be highly desirable and stated that it would enhance the profession's image. Later, in an editorial

written by Lewis (1972), the question was raised as to whether nursing was really expanding its role in providing care or merely accepting more of the delegated medical responsibilities. Theiss (1976) utilized a descriptive research approach to survey the role perceptions and attitudes of professional nurses in San Diego towards the nurse in an expanded role. This investigation revealed that the concept of the expanded role of the nurse was generally accepted, but that there was disagreement among the nurses as to which functions were acceptable role behaviors for the nurse in an expanded role (Theiss 1976).

The Secretary's Committee to Study Extended Roles for Nurses reported to the Department of Health, Education, and Welfare in 1972, that the expanded role would only become a reality as nurses and physicians collaborate concerning all aspects of the expanded nursing role and its implications for the delivery of primary, secondary, and tertiary health care. Utilization of the nurse in an expanded role would require major adjustments in the orientation and practice of both the nursing and medical professions. The committee advocated that attitudinal surveys of health care providers should be conducted to identify and assess factors affecting the acceptance of

nursing practice in an expanded capacity (Secretary's Committee to Study Extended Roles for Nurses 1972).

Abdellah (1970) stated that studies on the impact of the clinical nurse specialist on health care delivery were just beginning to emerge and needed further investigation. Particularly lacking were descriptive studies concerning nurses' and physicians' behaviors, the effect of their behaviors on the delivery of health care, and the effect of their behaviors on the acceptance of the clinical nurse specialist. Concluding, Abdellah (1970) emphasized the need of nursing research to be undertaken to look directly at the acceptance of the clinical nurse specialist by other health care providers.

The utilization of the clinical nurse specialist is still a controversial issue. From the review of the literature, this lack of acceptance of the expanded nursing role is attributed especially to two factors: lack of collaboration among health professionals concerning this advanced role and inadequate elucidation of tasks and functions that the nurse in the expanded role is prepared to perform by the nursing profession. Thus, the acceptance and thereby successful implementation specifically of the pediatric clinical nurse specialist role will depend upon further nursing research concerning health professionals'

attitudes toward tasks and functions that the clinical specialist is prepared and expected to perform, and upon identifying any significant factors which may hinder the utilization of the nurse in this advanced role. Only after possible barriers to the ultimate role of the clinical nurse specialist have been identified can nursing work toward the resolutions of those problems and direct its efforts toward providing comprehensive health care. These efforts may finally help eliminate the gaps in health care delivery and the fragmentation in the provision of health services.

Hypotheses

The hypotheses tested in this study were

1. No significant differences will be identified between registered nurses' and pediatrician's attitudes in the identification of tasks and functions which the pediatric clinical nurse specialist should perform
2. No significant difference will be identified between registered nurses' and family practitioners' attitudes in the identification of the tasks and functions which the pediatric clinical nurse specialist should perform

3. No significant difference will be identified between pediatricians' and family practitioners' attitudes in the identification of the tasks and functions which the pediatric clinical nurse specialist should perform

Definition of Terms

For the purpose of this study, the following terms were defined.

1. Registered nurse--an individual legally licensed to practice professional nursing in the state in which she is employed
2. Nurse practitioner--a registered nurse who has advanced skills and academic preparation which qualifies her to assume greater responsibility for health maintenance and the management of acute and chronic diseases in collaboration with a physician. The nurse practitioner having an associate degree, diploma degree, or baccalaureate of science degree is prepared through a formal continuing educational program available at a university or college, including additional preparation usually provided in a clinical setting. The nurse practitioner does not hold a master's degree
3. Clinical nurse specialist--a registered nurse who has advanced graduate preparation in a collegial and

clinical setting resulting in a higher degree of knowledge, skill, and competence in a specialized area of nursing. The clinical nurse specialist's services are made available to the public directly through the provision of care and indirectly through guidance and planning with other health personnel. The clinical nurse specialist has a degree of Master of Science or Master of Science in Nursing with an emphasis in clinical nursing

4. Pediatric clinical nurse specialist--a registered nurse who has advanced graduate preparation in a collegial and clinical setting with a greater depth of knowledge, skill, and competence in the specialized area of nursing care of children. The pediatric clinical nurse specialist's services are directly available to children through the provision of care and indirectly available through guidance and planning of care with other health professionals. The pediatric clinical nurse specialist holds a degree of Master of Science or Master of Science in Nursing with an emphasis in clinical nursing of children. The course of study for the pediatric nurse specialist emphasizes content in the areas of growth and development, physical assessment, interviewing and counseling, health teaching, child health maintenance, child health problems, and family dynamics

5. Pediatrician--a licensed physician (MD) who specializes and limits his/her professional practice of medicine to the care of children

6. Family practitioner--a licensed physician (MD) who practices general medical care for adults and children

7. Health care providers--registered nurses and licensed physicians who provide direct and indirect health care for children

8. Attitude--a set of affective reactions varying in direction and intensity toward the attitude object, derived from the concepts or beliefs that an individual has concerning the object, and predisposing the individual to behave in a certain manner toward the object (Shaw and Wright 1967)

9. Role--culturally or organizationally ascribed patterns of behavior, including duties, expected or required of persons behaving in a specific social situation (Biddle and Thomas 1966)

10. Primary care--(a) a person's first contact in any given episode of illness or potential health problem with the health care system that leads to a decision of what must be done to help resolve or prevent a health problem; and (b) the responsibility for the continuum of care of an individual or family--maintenance of health,

evaluation of health status, the management of symptoms, and appropriate referral to health resources (Secretary's Committee to Study Extended Roles for Nurses 1972).

11. Comprehensive care--a health system providing a wide variety of health care services with the implication that these will be coordinated under the overall direction of a responsible physician, nurse, or "team" of professionals, and with appropriate attention directed to preventative and rehabilitative services and socioeconomic factors

12. Function--a special duty, performance, or rendition required of an individual in the course of work as determined by his rank, position, or profession

13. Task--a specific prescribed piece of work allotted, assigned, or demanded of an individual as determined by his rank, position, or profession

Limitations

The following limitations for this study were identified.

1. The investigation of health professional's attitudes towards the pediatric clinical nurse specialist was confined to one geographical area, and, therefore, would limit the generalization of the results to other areas

2. The investigation did not study the motives for the professional's attitude toward the pediatric clinical nurse specialist

3. The sample size was relatively small because of the limitation of the investigation to one geographical area

4. The investigation was limited to only registered nurses, pediatricians, and family practitioners

5. Previous experience with other allied health professionals and nurse practitioners was not investigated

6. Educational preparation may have contributed to attitudes of health professionals towards the pediatric clinical nurse specialist

7. Willingness to participate by the health professional may have had a positive or negative bias on the results of the investigation

8. Previous experience with pediatric clinical nurse specialists was surveyed, but did not serve as a control for this study

Delimitations

The delimitations for this study were as follows.

1. Family practitioners providing health care to adults and children were the only licensed medical

professionals practicing general medical care to be included in the sample

2. Pediatricians providing health care to children were the only licensed medical professionals practicing specialized medical care to be included in the sample

3. Registered nurses employed in the selected health care facilities were the only licensed professional nurses included in the sample

Assumptions

The assumptions for this study were as follows.

1. If a new role is to be incorporated into a system and promote performance and organizational effectiveness, the role must be implanted in a manner that takes into account prevailing organizational realities and constraints (Georgopoulos and Christman 1970)

2. The position of a new role in a system must be appropriate to the demands that will be made on it by the organization as a whole and by members in related roles (Georgopoulos and Christman 1970)

3. Whenever there is a change in any part of a system, it will affect all the parts of the system, therefore, reciprocal change must be experienced in the other parts of the system (O'Dell 1974)

Summary

The principal sections incorporated in Chapter I include the statement of the problem, purposes, conceptual framework, hypotheses, definition of terms, limitations, delimitations, and assumptions for this nursing investigation. Chapter II, the Review of the Literature, presents an overview of the expanded nursing role. The principal topics incorporated in this chapter include the attitudes of consumers, physicians, and registered nurses toward the expanded nursing role. The methodology utilized in this investigation is discussed in Chapter III. Chapter IV, the Analysis of the Data, presents the findings of this attitudinal survey. In Chapter V, the Summary, Conclusions, Implications, and Recommendations are derived and presented based on the findings of this study.

CHAPTER II

REVIEW OF THE LITERATURE

Society's mounting concern over the quality and quantity of health care has been well documented in the literature (Theiss 1976). Presently, the United States' health needs have far outreached the nation's available health resources to provide comprehensive care (King 1976). Inadequacies in the delivery of health care, the increasing incidences of certain disease conditions, and greater demands for comprehensive health care by the public have been identified as major problems contributing to the nation's health care crisis (Leininger and Buck 1974). Yet, the effects of the health care crisis cannot be more aptly expressed in terms of human suffering and need than among our nation's children (Riehl and McVay 1973).

Presently, a large percentage of our nation's children receive grossly inadequate health care. Between 20 and 40 percent of our nation's children suffer from one or more chronic health problems. However, approximately 30 percent of these chronic health problems could have been prevented or corrected if a comprehensive health care program was available to children during the first five

years of life. Even more significant, 60 percent of these chronic health problems could have been prevented or alleviated if a comprehensive approach to health care was available to children during their first eighteen years of life (Silver 1968). Further evidence of deficits in the nation's current health care system has been supported by the large number of children who have never received developmental evaluations or immunizations prior to entry into the public school system (King 1976). Therefore, meeting the health needs of our nation's children has never been more challenging for health professionals (King 1976 and Ford and Silver 1967).

Recognizing that the traditional mode of health care delivery is outdated and inadequate for an increasing population of children, both nursing and medical leaders realize that current and future child health problems can only be resolved by drastically altering and improving the pattern of furnishing health care. Therefore, to improve the quality, availability, and accessibility of child health care, the nursing and medical professions acknowledge that better utilization of each profession's skills is essential (Silver, Ford, and Day 1968). To accomplish the goal of providing optimal health care to children, the nursing and medical professions are currently recommending the

development of expanding nursing roles and innovative approaches to health care. Presently the role of the pediatric clinical nurse specialist is of particular interest to health professionals as a means of improving child health care in America (Bates 1970 and King 1976). Through appropriate utilization of the pediatric clinical nurse specialist adequate health manpower resources would be available to provide comprehensive health care services to children (Silver, Ford, and Day 1968).

Health Manpower

The shortage and maldistribution of health professionals has been identified as a significant factor contributing to the health care crisis in America. At one time, the health care crisis was thought to be solvable simply by increasing the number of physicians, but in reality this has not been the case. The major problem in relation to physician manpower has not been merely the scarcity numberwise of physicians, but the geographic maldistribution with sparsity of physicians practicing in rural and intercity areas; and the over-production of physicians in certain specialty areas. Data have been made available that confirms that the United States' medical system is training more physician

specialists than society needs and not nearly enough general physicians to provide primary care. Petersdorf (1975), Chairman of the Department of Medicine, University of Washington School of Medicine, stated that medicine should strive to make the practice of primary care medicine involving family practitioners, general internists, and pediatricians as attractive, prestigious, and rewarding as any subspecialty medical practice.

In relation to the health manpower shortage and maldistribution of medical professionals, Coye and Hansen stated

It is clear that even in the medically sophisticated United States there are large unmet health needs. It is primarily to the quantity and distribution of health services, however, that we must look in correcting major existing deficits. The predictable increase in population and removal of social and economic "barriers" to health care will cause rising demands for health services, that will surpass any foreseeable gain in physician manpower. For example, to maintain the current doctor-patient ratio for the increasing population of children, roughly one half of the graduates of all existing medical schools would need to enter pediatrics or general practice during the next decade to keep pace. This will certainly not occur. Even with the development of new medical schools and the enlargement of existing schools, it does not seem possible that physician manpower will be able to meet the demands to service and at the same time maintain or raise the standards of quality (1969, p. 529).

With the recent proliferation of various types of allied health workers, the situation necessitates a continuing interdisciplinary review of the qualifications and functions of these workers in order to prevent gaps or overlaps in their services and functions. To avoid such situations, the Joint Practice Commission, composed of physicians and nurses, was established by the Department of Health, Education, and Welfare to provide opportunities for discussion of roles and responsibilities of various health professionals and for initiating changes in these roles. Because of the seeming impossibility for medical schools to expand sufficiently in the near future to supply the 50,000 needed physicians, the Commission suggested that an innovative approach to providing comprehensive health care demanded by society would be to further educate registered nurses for an expanded scope of practice. Through the implementation of this approach to health care, the Commission stated that the health services in America could be vastly improved. However, in an endeavor to plan health care, the Commission emphasized that it was essential that the expanded role concept be delineated as clearly as possible (Leininger and Buck 1974).

Leininger and Buck (1974) emphasized that the health care crisis was factual, but could be resolved. The

resolution of the crisis necessitates the selfless, whole-hearted involvement of every citizen and the reduction of personal and professional ambitions which jeopardize essential health programs needed by the American public (Leininger and Buck 1974).

Effectiveness of the Nurse in Expanded Practice

Current practices in the delivery of health care in the United States have been evaluated and reorganized to allow a variety of allied health workers to provide elements of health care previously performed only by the physicians. As formal educational programs have evolved preparing new health professionals to assume added responsibilities in health care, consideration must be given to the evaluation of the effectiveness of the health professional's performance. This consideration applies particularly to the expanded practice of nursing. If the expanded nursing role is to be permanently integrated into the health care system, the nursing profession must provide documentation of the effectiveness of the nurse in expanded practice to deliver comprehensive health care (Flynn 1974).

To evaluate the effectiveness of the expanded nursing practice in an ambulatory setting, Lewis and Resnick (1967) initiated an experiment to assess the ability

of nurses to serve as the primary source of care to adults with chronic illnesses. For the purpose of this evaluative investigation, Lewis and Resnick (1967) selected the sample group, patients in a stable phase of their chronic illness, from a general medical out-patient clinic. The sample group was initially interviewed utilizing a structured questionnaire to solicit information regarding socioeconomic background, illness behavior patterns, propensity to seek medical attention, medical care resources utilized in the past, family history, and attitudes towards physicians and nurses. After the initial testing period, the sample group was randomly divided into the experimental and control groups. Patients assigned to the control group continued to receive care from physicians in the general medical clinic. Patients assigned to the experimental group received health services from nurses practicing in an expanded role in an experimental nurse clinic.

The initial assessment of the sample group (lower socioeconomic women greater than fifty years of age) revealed that patients had numerous health complaints and negative attitudes towards the health settings. In addition, a significant number of the sample group expressed a preference of the physician to provide most of the functions associated with health care delivery. One year

after initiation of the experiment, the groups were re-evaluated. In the control group no changes were demonstrated in attitudes toward the clinic or their general health status. However, in the experimental group, significant changes were noted. The most significant changes included the following: marked adherence to scheduled appointments, better utilization of time in the clinic, lower overall cost of health care, greater patient satisfaction, and marked shift in the preference of patients for nurses to perform certain procedures formally reserved for the physicians, such as physical assessments and explanation of pathology and laboratory tests (Lewis and Resnick 1967).

Schulman and Wood (1972) evaluated the ability of nurses functioning in an expanded role to provide health care to chronically-ill patients. To prepare nurses to assume the expanded role as defined by this study, registered nurses were given one year of additional preparation under the direction of Schulman. Although the details of the curriculum were not specified, the nurses had three months in didactic study of medicine and pharmacology, received several months of individualized instruction in physical diagnosis, and attended regular medical school courses in physical examination and

history-taking. For the purposes of the study by Schulman and Wood (1972), these nurses served as the primary care-takers for patients chosen from the general clinic population. Most of the patients had major social and psychological problems in conjunction with their medical problems. In fact, the researchers transferred only sick and complex patients to the nurses' service in order to test their ability to identify and solve problems. The results of this study demonstrated that nurses in expanded practice could provide excellent long-range medical care for patients having complex medical problems with appropriate physician support (Schulman and Wood 1972).

In the delivery of primary health care to patients, Flynn (1974) compared the effectiveness of nurses in expanded roles to physicians. From the review of the literature, Flynn identified three research areas (patient's health status, the quantity of health services, and the efficiency with which services were delivered) as relevant to evaluating the effectiveness of health professionals in the delivery of health services. For the investigation, the sample consisted of sixty patients referred from a medicine clinic who were randomly assigned either to the experimental or control group. The experimental group was designated to receive care from nurses

functioning in an expanded role in the clinic setting. The control group was returned to the physicians for additional health care (Flynn 1974).

A variety of measurement techniques were employed to obtain data for the study. Through patient interviews, Flynn (1974) noted the experimental group to be more knowledgeable of their health status and to have a greater depth of understanding about the complications associated with their health problems. The experimental group also displayed greater compliance in taking prescribed medications, performing special exercises, and following therapeutic diets than the control group. Flynn (1974) attributed these findings to the nurses having spent more time with patients in teaching and counseling sessions related to individual health problems. The time and motion studies indicated that the experimental group had more contact with the health provider, yet spent less time in the ambulatory setting. These findings suggested that care administered to the experimental group was more economical for the patients, thus demonstrating efficiency in health care delivery. A review of health records revealed a greater utilization of other speciality out-patient services by the experimental group. Thus, the greater utilization of other out-patient health services by the

experimental group increased the costs of health care to this group, thus implying a decreased efficiency of health service delivery. However, the conclusion was drawn by the researcher that the nurses provided their patients with a greater quantity of health services than physicians caring for the patients in the control group (Flynn 1974).

Duncan, Smith, and Silver (1968) conducted a comparative study to evaluate the ability of nurses practicing in an expanded role to perform accurate and comprehensive physical assessments of children. In the study, pediatric nurse practitioners (nurses with baccalaureate degrees in nursing who had completed an additional course of study in a nurse practitioner program) were evaluated on their physical assessment skills. The practitioner program consisted of a four-month course of intensive theory and practice in pediatrics focusing on data collection and performing physical assessments. The performance of physical assessments included not only the utilization of such basic skills as inspection, palpation, percussion, and auscultation, but also the use of such tools as the otoscope, stethoscope, and ophthalmoscope. The findings of the study supported the hypothesis that nurses could be educated to perform competent physical assessments of children (Duncan, Smith, and Silver 1968).

In the mid-seventies, Hoekelman (1975) questioned the recommendation of the American Academy of Pediatrics that monthly well-baby visits during the first six months of life and bi-monthly visits during the second six months were necessary for promoting the highest level of well-being. Hoekelman (1975) recognized that if infants currently under private pediatricians' care were seen as frequently as recommended by the American Academy of Pediatrics, that pediatricians would devote as much as 60 percent of their office time to well-child visits. In addition, if some form of national health insurance were to be enacted which would allow equal access to the health care system for all infants, the entire medical profession could be completely occupied rendering well-child care. Therefore, Hoekelman (1975) conducted a study to reappraise what constitutes adequate well-baby care.

In the study to reappraise adequate well-baby care, Hoekelman (1975) identified two research purposes. The first purpose was to determine whether it was necessary to examine babies and counsel mothers as frequently as recommended by the American Academy of Pediatrics. The second purpose was to explore whether or not well-baby care could be provided by health professionals other than physicians without sacrificing quality of care. The study

was designed to test the hypotheses that well-baby care delivered on an abbreviated schedule of six or three visits during the first year of life conducted by nurses in expanded roles or physicians was as adequate as the well-baby care delivered by physicians following the advocated nine well-baby visit schedule. Two hundred forty-six full-term, first-born, well infants were randomly assigned to receive well-baby care during the first year of life either primarily under the supervision of physicians or nurses in an expanded role. In addition, the infants in each of the study groups were further randomly assigned to receive well-baby care on an abbreviated six-visit or three-visit schedule. The adequacy of care rendered was assessed by measurement of gain in maternal knowledge, level of maternal satisfaction, degree of maternal compliance, and attainment of the health supervision planned. The results indicated that well-baby care during the first year of life delivered by nurses in an expanded role was as adequate as that delivered by physicians; and that the use of an abbreviated visit schedule does not compromise the adequacy of care delivered by either group of professionals (Hoekelman 1975).

Foye, Chamberlin, and Charney (1977) conducted a study to determine if differences existed in the content of

well-child visits conducted by experienced pediatric nurse practitioners compared with those conducted by pediatricians. The study was initiated because of widespread acceptance of the expanded nursing role in a variety of settings. The authors queried what nurses discuss with their patients, if pediatricians served as the nurses' role model, and if the relatively brief pediatrician's visit had simply been replaced with a longer, but less effective, nurse visit. Visits conducted by nine randomly selected pediatricians were compared to those of five experienced pediatric nurse practitioners. In this study twenty-one nurse visits and forty-three pediatrician visits with one- and two-year-old well children were monitored. Comparison of the health professionals' visits revealed that nurses discussed developmental and behavioral topics in significantly greater depth than pediatricians. The nurses interviewed parents asking more open-ended questions, making more specific recommendations concerning child care, offering more maternal support, and allowing the parents to speak a greater proportion of the time during the visit. The investigators' findings supported the hypothesis that nurses experienced in the delivery of health care to children were in no way less competent in child health supervision of one- and two-year-old children than a

representative sample of pediatricians. In fact, the nurses in the study demonstrated a considerably more comprehensive approach to well-child care than the average pediatrician (Foye, Chamberlin, and Charney 1977).

Attitudes of Consumers Toward
Expanded Nursing Practice

With health care now being viewed as a basic human right rather than a privilege, the American public as well as the health professions, has become increasingly aware of the need for additional manpower to provide equitable health services to the rich and poor alike. With our present population growth rate, rising patient expectations for medical care, and the relative number of primary care physicians diminishing, a tremendous need exists for additional professional manpower to provide comprehensive health care to children (Schiff, Fraser and Walters 1969). In fact, since 1950, the number of child health physicians has dropped from 242 per 100,000 to 106 per 100,000 children (Conant and associates 1971). Therefore, to help resolve some of the deficiencies of our present health care system, a number of programs have been initiated to educate and train many new kinds of health professionals to provide comprehensive health care (Schiff, Fraser, and Walters 1969).

Of these new health professionals, the expanded nursing role concept has received much recognition and is gaining prominence as a possible solution to the manpower shortage. Yet, the acceptance of the nurse in expanded practice has been as variable among patients as among health professionals (Day, Egli, and Silver 1970).

Investigations conducted by Ford, Secant, and Silver (1966); Schiff, Fraser, and Walters (1969); and Day, Egli, and Silver (1970) surveyed the opinions of consumers toward the expanded scope of nursing practice in the delivery of comprehensive health care services. The results of these independently conducted surveys revealed a high degree of consumer satisfaction with nurses delivering primary health care to children. In these studies, parents expressed a definite preference for nurses delivering, as well as supplementing, some of the child's care in conjunction with the physicians. The parents stated this joint approach to health care was more comprehensive than traditional care they had received from the physicians alone. Patterson and associates (1969) also reported that in assessing the attitudes of patients in private, group, and clinic facilities, 76 percent of the parents approved of nurses in expanded roles providing care to their children.

Likewise, Scott (1975) surveyed fifty randomly selected college students using a university health center concerning their receptivity of nurses functioning in the expanded role in this facility. Scott noted that essentially all the students conveyed that they were well received, courteously treated, and had adequate explanation of their health problems. In conclusion, Scott stated "it would appear that a young intelligent population does accept an expanded role of the nurse in primary care" (1975, p. 364).

Kubala and Clever (1974), Conant and associates (1971), and Shively (1975) stated that the expanded scope of nursing practice appeared to be the most successful method of providing comprehensive health care to the American public. However, the authors recognized that not all patients accepted the nurse in the expanded role as a primary caretaker.

In their investigation, Kubala and Clever (1974) found that although 75 percent of the patients accepted the nurse as a primary caretaker, 25 percent of the patients did not. In the study, the patients' concern centered on the title of the person providing care, the continuity of care, the changes in established medical therapies, and the competence of the nurse. However, Kubala and Clever (1974) further stated that nonacceptance of the expanded role can

be overcome. In summarizing, the authors reiterated that through the education of all who come in contact with the nurse functioning in this new role, most dissatisfaction can be alleviated (Kubala and Clever 1974).

Conant and associates (1971) undertook a study to explore the nature and degree of anticipated consumer acceptance from various social classes toward nurses in the performance of tasks traditionally rendered by the physician. The findings indicated a considerable difference in acceptability between an upper-middle-class and the lower-middle- and working-class community. The findings of the study emphasized the significance of possible differences in outcomes when a new health professional is introduced into a variety of health settings.

Similarly, Shively (1975) found that patients receiving care in a middle-class private urban medical practice to be highly receptive of nurses functioning in expanded roles. In this survey which was conducted in an obstetric and gynecologic health setting, patients revealed that they were able to communicate their personal, psychological, and sexual problems with the nurse in a manner which could never have been accomplished with their physician. However, Shively (1975) emphasized that successful implementation of expanded nursing role is

highly dependent upon patient education regarding the expanded scope of nursing practice.

Therefore, from a social perspective, the introduction of a new kind of health professional to the health services of any nation is an innovation of great consequence. Thus, any practical and lasting innovation in changing the method of health delivery must be considered from a consumers' perspective (Spitzer 1978).

Attitudes of Physicians Toward the Expanded Nursing Practice

The increasing demands for health care services in the United States in the face of decreasing professional resources to meet these needs, have been well documented in the literature. The simple solution, to increase manpower among all the health disciplines, is an unrealistic approach. With the present organization of the educational system, existing programs cannot be expanded nor replicated quickly enough to meet the demands for health care services. To increase the comprehensiveness of services available, considerable thought has been given to the delegation of certain aspects of health care previously reserved for the physician to newly created types of health professionals. Another consideration has been to define the roles of existing disciplines more adequately, based on the premise

that professionals might work together more effectively in providing interprofessional care for larger number of patients (Lewis and Resnick 1967).

Admittedly, a large portion of the physician's daily activities does not require his highly specialized training. In addition, the technical feasibility of educating the nurse to assume additional responsibilities has been acknowledged, so that the expansion of the professional nursing role seems to be the obvious and logical solution to providing additional manpower to offer comprehensive health care (Reed and Roghmann 1971). Thus, there has recently been a growing recognition of the importance of the physician-nurse relationship to patient care. The American Medical Association and the American Nurses Association have sponsored three national conferences assessing the subject of interprofessional relationships. However, with the pressures engendered by the rapidly increasing number of technological advances and shortage of professional manpower, problems and strains in interprofessional relationships have become even more obvious. Although many physicians have responded to these stresses by fostering role changes and innovations in health delivery, others have attempted to maintain the traditional pattern of health care delivery (Bates 1970).

With the pressing needs existing for health services, many physicians have been enthusiastic about the expanded nursing role. Silver, Ford, and Day (1968) stated that the nation's health needs can only be met by altering and improving the pattern of offering health care and better utilization of health professionals, particularly the expanded nursing role. In another publication, Silver, Ford, and Stearly (1967) stated the following in support of the expanded scope of nursing practice.

It is necessary for medical and nursing leadership to come together to integrate their work in order to solve the problems of current and future needs for adequate health services and to elucidate the new roles they each have to fill. Physicians and nurses can and should work together to determine which of them can best assume responsibility for a particular aspect of a patient's therapeutic regime at any point in time. There is nothing in the code of ethics of either the medical or nursing profession which would prelude realignment of functions carried out by physicians and nurses. Ways must be found to deliver improved health services to children and their families (1967, p. 759).

The expanded role concept has been advocated by Andrews, Yankauer, and Connelly (1970). The authors stated it was illogical to produce another group of health professionals as primary providers when nursing, the largest segment of the manpower force, has never fulfilled the role potential it has defined for itself. The authors heartily supported the nurse performing physical assessments.

The authors stated that the technical skills encompassing the use of the stethoscope and otoscope are just a step beyond the use of the thermometer and sphygmometer. The authors related that physical assessment skills were not utilized by nurses for the purpose of medical diagnosis, but to distinguish between the normal and abnormal. Further, the authors commented that the addition of these skills or tools to the armamentarium of the nurse enhances the quality of his/her patient assessments, health teaching and counseling sessions, decision-making abilities, and interpersonal relationships with patients (Andrews, Yankauer, and Connelly 1970).

Field surveys conducted by Yankauer and associates (1968, 1970) indicated that the majority of responding pediatricians throughout the nation supported the delegation of specific patient care tasks to allied health personnel, from registered nurses to receptionists. Among the tasks pediatricians expressed the most favorable opinions of delegation included data collection, health teaching, and counseling. However, in both surveys, physicians expressed reservations about the delegation of the physical examination of the child to allied health personnel (Yankauer and associates 1968 and Yankauer and associates 1970).

Reed and Roghmann (1971) conducted a survey to address the problem of acceptability of the expanded nursing role to physicians. The authors reported that the acceptance of the nurse in an expanded role by physicians was not clear-cut. The study indicated that female physicians showed higher acceptability of expanded nursing roles than their male colleagues. Other findings indicated that, although physicians, who in general had spent more time in their career roles were more critical about role changes, the chief residents accepted the expanded nursing role more readily than other residents or interns. Thus, the data suggested that a curvilinear relationship existed between rank in the hospital hierarchy and the acceptance of an expanded nursing role (Reed and Roghmann 1971).

Since the acceptance by the physician is important to any role on the health care team, Schoen and associates (1973) conducted a study of California pediatricians' attitudes toward the pediatric nurse practitioner. In the study, the investigators attempted to "elicit a definition of the pediatricians' concepts of an appropriate role for the nurse practitioner in private practice" (Schoen 1973, p. 63). The findings indicated that some disparities existed between the pediatricians' theoretical acceptance of the nurse in an expanded role and the idea that the

pediatric nurse practitioner-physician team approach would enrich the utilization and professional standing of both professions. More specifically, the findings denoted that pediatricians have favorable attitudes toward delegating certain aspects of their work, but revealed that pediatricians were hesitant to allow the nurse to function with much autonomy in direct patient care. Sixty-eight percent of the respondents believed that the nurse practitioner should be under the constant supervision of the pediatrician. The most favorable attitudes toward the nurse to practice in an expanded role were expressed by young pediatricians in a large group practice; and the least, by older practitioners in solo practice (Schoen and associates 1973).

Although Schoen and associates (1973) did not solicit individual comments, many physicians expressed strong sentiments about the expanded nursing role. Strong agreement with the expanded role came from pediatricians who had previously worked with or were interested in working with pediatric nurse practitioners. Strong disagreement about the expanded role concept was manifested by physicians who questioned the reality of the manpower shortage, feared that utilization of the nurse in expanded roles would lead to the deterioration of the

physician-patient relationship, and had concerns about the development of a second-class physician. A number of physicians cautioned that use of nurses in expanded practice would actually lead to an increase in the pediatrician's workload. Physicians commented that if nurses assume the major responsibility for routine pediatric care that the pediatrician would then spend the majority of his/her patient care time administering only to sick children. As a recourse, the pediatrician would then work longer hours and be subjected to even greater stress (Schoen and associates 1973).

In a study regarding physicians' perceptions of an expanded role for the nurse, O'Dell (1974) reported that physicians were willing to delegate functions of a technical nature, but somewhat reluctant to delegate tasks and functions that required more decision-making and evaluating on the part of the nurse. Although the physicians, in general, agreed upon nurses eliciting health histories, a majority of the physicians disapproved of nurses performing complete physical examinations and interpreting diagnostic findings to patients (O'Dell 1974).

Recently, an editorial concerning the need for physician extenders was published. In the editorial, Watts (1976) regarded the nurse in expanded practice as perhaps

the most important health care provider for the delivery of comprehensive health care to the population of underserved areas. However, Watts (1976) presented the nurse in expanded practice as a dependent practitioner functioning only under the auspices of the physician rather than as an independent autonomously functioning health professional.

The publication of the "American Academy of Pediatrics' Policy in Relation to the Pediatric Nurse Associate," further supported the statements made by Watts regarding the need of the medical profession to control the expanded practice of nursing. The Board made the following major recommendation.

The American Academy of Pediatrics reaffirms its support of the role of the Pediatric Nurse Associate functioning under the supervision and direction of the pediatrician as one of several modes or models of delivery of primary health care to children recognizing that this will enhance, not diminish, the role of the pediatrician who chooses to use the team approach. The American Academy of Pediatrics opposes free-standing, independent practice by the Pediatric Nurse Associate (Executive Board of the American Academy of Pediatrics 1976, p. 467).

A critical issue in defining the expanded practice of nursing tends not to be dependent on the nurse's ability to function at a high technical level, but rather on the attitudes of physicians towards allowing the nurse independence in the power of clinical decision-making. Heiman and Dempsey (1976) conducted a study to clarify the

attitudes of physicians toward independent behavior under varying clinical conditions for the nurse in expanded practice. The clinical conditions consisted of assessing patients whose health status varied on the health-illness continuum from healthy to severely ill. In each situation, the nurse in the expanded role was described as performing four tasks--history-taking, performing a physical examination, ordering laboratory studies, and deciding treatment programs. The physicians were asked to decide whether the nurse should act independently, act independently while consulting the physician on her own initiative, routinely consult the physician, or whether this particular task was inappropriate for the nurse. In the analysis of data, respondents were consistently more favorable toward independent behavior of the nurses in less severely-ill patients. However, the striking finding was the similarity of patterns of responses which were most favorable toward the task of history-taking under all circumstances regardless of seriousness of the illness and the least favorable toward treatment planning even in the case of a basically healthy patient (Heiman and Dempsey 1976).

Attitudes of Nurses Toward
Expanded Nursing Practice

Phrases "extended practice," "expanded scope," "advanced role," "nurse clinician," "clinical nurse specialist," and "nurse practitioner" have been fraught with many intense feelings for health professionals, such as pride, disgust, disbelief, fright, and rejection. There have been health professionals who believed that the expanded role concept would be just another passing fad that would soon fade away. Other health professionals, particularly nurses, believed that the concept hailed the emancipation of the nurse from the physician. Still some health professionals denied the existence of the expanded role concept or treated the expanded scope of nursing practice as an experimental failure. However, Hinsvark (1974) stated that the mere intensity of the feelings evoked concerning the expanded scope of nursing practice attested to the success of the concept rather than to its failure.

The concept of the expanded practice of nursing has been formulated on the assumptions that this practice includes the customary domains of the nursing role, that the practice melds many of the traditional responsibilities and skills of the nursing and medical disciplines, and that the practice reorders priorities for nursing care services

(Lambertsen 1976). Thus, the actualization of this concept has brought about a revival of what the organization of nursing has been all about since its conception (Hinsvark 1974).

The expanded role concept has been supported by many nurses. Lambertsen, Dean of the School of Nursing, Cornell University, stated

It is my premise that until and unless nurses willingly face the issues associated with extension of their scope of practice, nurses will become obsolete in terms of today's and tomorrow's needs for health care services. If the services of nurses are to keep pace with the ever changing health care needs, it would appear to indicate that responsiveness to these changing needs must be a characteristic of the profession. Continuing to declare that nursing is what nursing was is to negate progress. The concept implicit to an extended role is that of "out reach" The concept there implies a responsiveness to an ever changing social order (1976, p. 11).

McCormack and Crawford (1969) surveyed the receptivity of baccalaureate graduates from a southeastern university toward an expanded role in primary patient care. A majority of the respondents considered the expanded role highly desirable and felt that it would enhance the profession's image. The respondents also stated that the creation of such a role would increase the recruitment of individuals into the nursing profession. Many of the

respondents stated that they would seriously consider assuming a position in this role (McCormack and Crawford 1969).

Reed and Roghmann (1971) reported on the receptivity of registered nurses employed in a large eastern hospital regarding the expanded role concept. In this study, nurses who held higher positions in the hospital hierarchy expressed the lowest acceptance of an expanded professional nursing role. Nurses in the surgical areas reported a somewhat higher acceptance of the expanded role than those in the medical areas. Acceptance of the expanded role concept increased proportionately in relation to additional formal education of the respondents. On the other hand, as the amount of hospital work experience increased, the nurses' acceptance of the expanded nursing role decreased. Thus, in correlation with the latter finding, recent graduates exhibited a much stronger acceptance of an expanded professional role than those nurses who graduated in the past (Reed and Roghmann 1971).

In an editorial written by Lewis (1972), the question was raised as to whether nursing was really expanding its scope of practice or merely accepting more delegated medical responsibilities. Lewis stated

If the purpose of an enlarged nursing role is simply to extent the physician's primarily

therapeutic and illness-oriented services, then we haven't changed anything; we've simply distributed the same old system. But, if the nurse is identified and used as a person with a different orientation than the physician--one who provides a different kind of health care service--then we have the potential for a new pattern of health manpower deployment and some overdue restructuring of our health care delivery system (1972, p. 21).

Hocking and associates (1976) conducted an investigation in an attempt to identify characteristics of psychiatric nurses who were willing to assume increased professional responsibility. Forty-nine psychiatric staff nurses, who ranged in age from twenty to sixty-five years of age, were questioned about their current duties and their willingness to expand their roles. Young recent graduates expressed more willingness to change themselves professionally than older more experienced graduates. This study further supported the findings of McCormack and Crawford (1969) and Reed and Roghmann (1971) that younger and more recent graduates were more receptive to the expanded nursing role and expressed more willingness to assume the role.

Heiman and Dempsey (1976) also attempted to clarify the attitudes of nurses toward independent behavior of the nurse in an expanded role in varying clinical situations. Even though Heiman and Dempsey (1976) surveyed opinions of physicians and nurses, one consistent finding prevailed.

This finding was that the difference in response of both physicians and nurses varied more according to the task to be performed than the seriousness of the patient's illness. The study revealed that both physicians and nurses perceived history-taking as a more favorable task for the nurse in an expanded role to perform under all circumstances regardless of the seriousness of the patient's condition. The study also revealed that physicians and nurses perceived the nurse in an expanded role performing physical examinations, ordering laboratory tests, and treatment planning as least acceptable behaviors, respectively, even in the case of basically healthy individuals. However, the researchers acknowledged that the rationale behind the respondents' opinion was not explored. The researchers suggested that nurses often view themselves as specialist in the psychosocial aspects of patient care, and, therefore, realized the significance of data collection and assigned the task to themselves (Heiman and Dempsey 1976).

In the development of a graduate curriculum to prepare nurses to assume an expanded role as a family nurse clinician, Wright (1976) acknowledged that it was essential to explore how health professionals might respond to possible changes created by the development of this expanded nursing role. Therefore, Wright surveyed the opinions of

registered nurses regarding their opinions of the family nurse clinician. The survey revealed that registered nurses proposed that the greatest implication for the expanded nursing role was to facilitate communication among physicians, nurses, other health personnel, patients, and families. The participants envisioned the nurse in this role assuming increased responsibility for informing the patient and the family of the patient's condition. Overall, the findings indicated that registered nurses regarded the expanded role as having positive implications for nursing in terms of greater professionalization and better provision of comprehensive health care to society (Wright 1976).

In many nursing circles, the concept of the pediatric nurse practitioner program has been highly controversial. Nursing leaders have charged that the pediatric nurse practitioner has abandoned her identity as a professional nurse to become a physician's assistant. Nursing leaders have become concerned over the variety of inservice and continuing educational programs conducted outside of the formal nursing graduate curriculum which claim to prepare the nurse for expanded practice. Many nursing educators differ on the length of training and the legitimacy of including medical faculty in the teaching

and supervision of the clinical practice of nursing. Although some nursing educators have believed that the baccalaureate program prepares a nurse to assume the nurse practitioner role, many have professed that only a master's degree program is sufficient to prepare the nurse for the role (Andrews and Yankauer 1971).

Therefore, nursing has focused on the preparation of the nurse for an expanded role at the master's level rather than in nurse practitioner programs. Houpt (1974) stated that a four-month practitioner program cannot provide both the framework with which the nurse builds physical assessments skills and a milieu in which the nurse assimilates the concepts and responsibilities of a change agent role. Houpt (1974) emphasized that a nurse practitioner program was so limited in time and scope that such a program cannot provide the nurse with the theoretical frameworks and conceptual tools necessary for the nurse to have an impact on the health care system.

Abdellah (1976) stated that many innovative changes in the nursing educational system are required to fully implement the concept of the expanded nursing role. Abdellah (1976) further related that the emphasis of clinical nursing in graduate education which is based on an essential core of scientific knowledge and conceptual

frameworks of nursing is definitely a step in the right direction.

Hellman (1974) stated that the expanded role in clinical nursing (the clinical nurse specialist) must be prepared through graduate education at the master's level. Hellman (1974) emphasized that the clinical nurse specialist must not only display expertise in the clinical practice of nursing but must also serve as a teacher, researcher, consultant, role model, and a change agent.

King (1976) addressed the issue of the pediatric clinical nurse specialist. King advocated the need for graduate programs that prepared nurses to assume greater responsibility and accountability in clinical nursing of children. King stated that our society needs the pediatric clinical nurse specialist--the nurse who can provide primary, comprehensive, responsible health care to children, and who can form a collegial relationship with the physician, utilizing him/her appropriately for consultation while allowing him/her to concentrate his/her efforts on more serious child health problems.

Although many articles have been published concerning expanded nursing role responsibilities, researchers have not specifically limited their investigations to studying appropriate role behaviors (tasks and

functions) for the pediatric clinical nurse specialist. A precise definition of this expanded role and its responsibilities must be effectively communicated to health professionals. If nursing does not deal immediately with the problems encompassing the expanded nursing role in a constructive and collaborative manner with other health professionals, nursing's future clinical practice will always be a step behind the times. And even more formidable, nursing will not have "fulfilled its commitment to the public to improve the delivery and quality of personal health services" (Moore 1974, p. 127).

CHAPTER III

METHODOLOGY

Type of Study

Although the expanded nursing role has been well defined in the literature, attitudes among health professionals still seem to differ regarding the clinical nurse specialist performing certain tasks and functions. In a review of the literature, few investigations were found which were relative to the role behaviors of the clinical nurse specialist. Therefore, a definite need existed for a study to be conducted to provide current data concerning attitudes of health professionals toward expanded role behaviors. Through investigations of this nature a more scientific point of view can be provided of the obstacles that are perhaps preventing the clinical nurse specialist from being utilized appropriately for the competencies and abilities she/he has to offer the patient, his family, and other health professionals.

Therefore, an explanatory study, non-experimental in design, was undertaken to determine and compare the significant tasks and functions that the clinical nurse specialist was expected to perform as identified by health

professionals as being acceptable or unacceptable role behaviors. In this investigation a questionnaire was utilized to survey attitudes of health professionals concerning tasks and functions specifically cited in the literature that the clinical nurse specialist has been educationally prepared to perform in the expanded nursing role to provide comprehensive health care.

Setting of Study

This study was conducted in a large metropolitan area in Northeast Texas. The metroplex area has a population greater than one million inhabitants with a wide variety of national origins, racial heritages, cultural backgrounds, and religious convictions.

Within the metroplex area, many institutions are embodied such as colleges and universities offering guidance and educational opportunities, churches and synagogues providing religious and spiritual support, and health care facilities rendering a wide range of medical-dental-nursing services. Economically, the area provides many employment opportunities in commercial and industrial settings in large and small businesses, and in nearby agricultural centers.

For this study the investigator sought permission for the distribution of questionnaires to registered nurses

employed in the care of children in three metroplex area hospitals (a private children's hospital, a large community hospital, and a small community hospital). Three hospitals of various sizes and locations in the metroplex area were selected to obtain a sample group as representative of the total population as possible. This measure was taken to eliminate a positive or negative bias of registered nurses employed in one health care facility toward expanded nursing roles. Physicians practicing in the community and providing health care to children were approached by the investigator seeking their cooperation to participate in this nursing research study.

Sample for Study

Convenience sampling was employed by the investigator to obtain the sample from the total population of health professionals. The sample included licensed family practitioners practicing in the metroplex area, licensed pediatricians practicing in the metroplex area, and registered nurses employed in the care of children in the designated agencies. This specified group of health professionals was selected as the sample because of their intimate contact with the pediatric population's health care needs and health care services.

A sampling of family practitioners and pediatricians practicing in the metroplex area was contacted by the investigator seeking their cooperation for participation in this nursing investigation. All the family practitioners approached by the investigator to participate in this study were in private practice. Although a few family practitioners were approached by the investigator in the hospital setting seeking their participation in this investigation, a majority of the family practitioners were contacted by the investigator in the physician's private office setting. The investigator gave an oral explanation and an introductory letter (appendix A) to each of the family practitioners describing the nature of this study. The family practitioners had the opportunity to refuse to participate in the project at this time. Family practitioners voicing a willingness to participate in the study were given a consent form (appendix B) to sign granting the investigator the right to collect data. After the written consent form had been signed by the family practitioner, the participant was given a questionnaire (appendix C) to read and complete. The questionnaire was then picked up from the family practitioner at a later scheduled date.

The majority of the pediatricians solicited by the investigator to participate in this study were in private

practice in the metroplex area, although a few of the pediatricians held staff-teaching positions in a large children's medical-teaching hospital. The investigator contacted the pediatricians participating in this study either in their private offices or in a children's out-patient clinic setting. In particular, many of the pediatricians were contacted in the out-patient clinics in a large children's hospital in which the physicians served a dual role as a teacher and a physician in the delivery of health care to children. The investigator gave an oral explanation and an introductory letter (appendix A) to each physician describing the nature of the nursing study. The pediatricians had the opportunity to refuse to participate in the investigation at this time. Pediatricians expressing a willingness to participate in the project were given a consent form (appendix B) to sign granting the investigator the right to collect data. After the written consent form had been signed by the pediatrician, the participant was given a questionnaire (appendix C) to read and complete. The questionnaire was picked up from the pediatrician at a later designated time.

Three hospitals (a private children's hospital, a large general hospital, and a small community hospital) were approached by the investigator seeking permission for

the utilization of the health facilities for this nursing study. An explanation was given to the appropriate administrative person in each facility concerning the nature of this project and the sample sought. Written permission (appendix D) was obtained from each agency prior to approaching this sample group.

After permission had been granted for the utilization of the agencies, registered nurses employed in the designated hospitals were approached by the investigator seeking their cooperation for participating in this nursing study. The investigator presented an oral explanation and an introductory letter (appendix A) to each nurse describing the nature of this study. Registered nurses had the opportunity to refuse to participate at this time. Nurses verbalizing a willingness to participate were given a written consent form (appendix B) to sign granting the investigator the right to collect data. After the completion of the written consent form, each nurse was given an opportunity to read and complete the research questionnaire (appendix C). The completed questionnaires were picked up at a later designated time.

Tool for Study

The tool for this study was developed by the investigator after reviewing the literature published from

1966 through 1977, concerning the clinical nurse specialist and expanded nursing roles. The tool was structured to investigate the attitudes of family practitioners, pediatricians, and registered nurses toward the tasks and functions the pediatric clinical nurse specialist was expected to perform in the delivery of health care. The usage of a questionnaire (appendix C) was elected by the investigator as the most effective and efficient form of research inquiry to obtain as much data as quickly as possible from the sample (Abdellah and Levine 1965).

In construction of this tool, the investigator utilized suggestions made by Wright (1976) and O'Dell (1974), who investigated the opinions of registered nurses and physicians, respectively, toward expanded nursing roles and behaviors. In addition, the investigator developed an original section (appendix C) concerning individual components of a physical examination.

Four sections were incorporated in the design of the questionnaire. The first section contained a number of demographic items (type of health professional, type of health facility in which the participant primarily practices, age, and sex) to elicit descriptive information for group comparison.

Items in the second section dealt with general functions that the pediatric clinical nurse specialist was expected to assume in the delivery of direct and indirect health care to children as perceived by the health professional. The third section concerned the major responsibilities (tasks and functions) to be assumed by the pediatric clinical nurse specialist in providing direct health care to the child as perceived by the health professional.

In the fourth section, components of the physical examination were presented as designated specific behaviors to be executed by the pediatric clinical nurse specialist performing a physical assessment of the child. This section was included in order to ascertain whether or not certain components of the physical examination were perceived as less acceptable than others by health professionals.

The validity or the relevance of the questions incorporated into the design of the research tool was supported by a recent article published in Nursing '77 by White (1977). In this article, White delineated the tasks and functions expected of nurses in expanded roles to perform in the delivery of comprehensive health care. The same tasks and functions were selected by this investigator

in the design of the questionnaire for this study. To add to the reliability of the findings, the Likert-type scale answer series chosen for subjects to evaluate performance levels of the pediatric clinical nurse specialist was based on the recommendations of the study conducted by Wallace (1975). The findings of Wallace's study supported the usage of this answer series for the evaluation of levels of performance on an evaluation form.

The tool for this study was prefaced by an introductory letter (appendix A) explaining the nature of the study and a consent form (appendix B) granting the investigator permission to collect data. The tool took approximately fifteen minutes to be completed by each subject. The subject received written instructions to respond to each item in sections II through IV by selecting the answer which best expressed his/her attitude based on the Likert-type scale at the right of the statement.

Prior to the data collection period, permission from the Human Rights Committee for Texas Woman's University was obtained (appendix E). After permission from the Human Rights Committee had been granted, permission from each of the health care facilities (appendix D) to be utilized during the data collection period and from each of the individual participants was obtained prior to the distribution of questionnaires.

A pilot study was conducted on December 22, 1977, by the investigator to critique the tool developed for this study. Specifically, the purpose of the pilot study was to denote any statements that were ambiguous or identify any particular or recurring problem with the questionnaire. The sample consisted of five registered nurses and one physician who volunteered to participate during this phase of the study. The five registered nurses were employed by a large community hospital in the metroplex area on a general medical and surgical pediatric unit. One of the nurses held a supervisory position, while the remaining four nurses were employed in staff nurse positions. The nurses' ages ranged from twenty-three to twenty-nine years of age. The nurses had one and one-half to three and one-half years of previous nursing experience. The physician was a family practitioner, forty years of age, with twelve years of private practice experience. This sample group was selected on the basis that it was representative of nurses and physicians to whom the questionnaire would be distributed for completion during the data collection period.

The investigator gave an oral explanation describing the nature of the pilot phase of the nursing investigation and an introductory letter (appendix A) to

each subject. After each of the subjects had given consent to participate in this portion of the investigational period, the subjects were asked to complete the questionnaire. The subjects were instructed to refrain from asking any questions and/or making any comments until all the subjects had completed answering the questionnaire. During this phase of the study each of the subjects was seated at a desk in an office-type setting.

The sample group for the pilot study did not denote any statement as being ambiguous or identify any particular problem in answering items on the questionnaire. However, the sample group made the following recommendations for changes in the form of the questionnaire. First, the subjects suggested the writing out of pediatric clinical nurse specialist instead of abbreviating the title PCNS in the stem of the question beginning each section of the questionnaire. Secondly, the nurses recommended the addition of a "None" answer selection to the question of additional educational preparation beyond basic educational preparation. The subjects did not make any recommendations for other changes in the questionnaire. The following changes were made in the questionnaire as recommended by the sample group participating in the pilot study prior to the data collection period.

Method of Data Analysis

In the analysis of data, the following techniques were employed to present and interpret the findings of this study. First, a frequency distribution was utilized to present the number of responses occurring in each category answered by the three sample groups, the percentage of responses occurring in each category answered by the three sample groups, and the average scores of each item surveyed for the three sample groups. Secondly, to compare the overall differences of the three sample groups, the Kruskal-Wallis one-way analysis of variance by ranks was applied to the data. If the results of the Kruskal-Wallis one-way analysis of variance by ranks were significant at the .05 level of significance, the method of pair-wise multiple comparisons was utilized to denote which groups differed at the .05 level of significance. In addition, the sample group's individual average scores were used to denote further differences among the sample groups (Siegel 1956 and Noether 1976). The analysis of data appears in chapter IV of this study.

CHAPTER IV

ANALYSIS OF DATA

This study was concerned with investigating current attitudes of health professionals toward the pediatric clinical nurse specialist performing specific tasks and functions in the delivery of comprehensive health care to children. Attitudes of eighty-four health professionals were surveyed toward the pediatric clinical nurse specialist in this nursing investigation. The results of this investigation are presented in this chapter.

Description of the Sample

The sample consisted of eighty-four health professionals (thirty-three registered nurses, twenty-six pediatricians, and twenty-five family practitioners) who provide child health care. The data collection period involving these various groups of health professionals extended from December 27, 1977, through February 10, 1978. The demographic data collected from each of the sample groups (registered nurses, pediatricians, and family practitioners) included in this investigation are presented in appendix F.

Demographic data collected from each registered nurse including age, basic nursing program from which the subject graduated, the number of years in nursing practice, and the type of hospital facility in which the subject primarily practices is presented in appendix F. The registered nurses' ages ranged from 22 to 59 years with a mean age of 33.75 years. The subjects' average length of professional practice was 11.06 years, with the range extending from 1 to 36 years of nursing experience. Six nurses (18.2 percent) were graduates from associate degree programs, sixteen nurses (48.5 percent) were graduates from diploma programs, and eleven nurses (33.3 percent) were graduates of baccalaureate programs holding a bachelor of science degree. Sixteen (48.5 percent) of the nurses practiced in a large medical center, six (18.2 percent) of the nurses practiced in a large community hospital, and eleven (33.3 percent) practiced in a small community hospital. Although only twenty-three (69.7 percent) of the registered nurses indicated they had never worked with a pediatric clinical nurse specialist, thirty-three (100 percent) of the registered nurses indicated that there was a need for this expanded nursing role in child health care. All of the registered nurses indicated that they would refer

patients and their families to nurses in expanded practice for health care services.

Demographic data obtained regarding each pediatrician's age, length of years in practice, sex, and type of hospital in which the subject primarily practices are presented in appendix F. The pediatrician's ages ranged from 29 to 70 years with a mean age of 41.65 years. The subjects had practiced from 1 to 40 years with the mean length of practice 10.96 years. Four (15.4 percent) of the pediatricians were females and twenty-two (84.6 percent) were males. Seventeen (65.4 percent) pediatricians practiced primarily in a large medical center hospital, five (19.2 percent) practiced primarily in a community hospital, and four (15.2 percent) practiced in both types of hospitals. In addition, sixteen pediatricians (16.5 percent) indicated that they had never worked with a pediatric clinical nurse specialist. Although twenty-four (92.3 percent) of the sample group expressed a need for an expanded nursing role and two (7.7 percent) of the sample group suggested that "maybe" there was a need for such a role, only nineteen (73.0 percent) of the pediatricians indicated that they would refer patients and their families to the pediatric clinical nurse specialist for health care services.

Demographic data collected pertaining to each family practitioner's age, length of years in practice, sex, and type of hospital in which the subject primarily practices is included in appendix F. The mean age of the family practitioners was 46.04 years, with the range being 29 to 60 years of age. The length of practice varied from 2 to 33 years with a mean of 16.88 years of private medical practice. Only one of the participating family practitioners was female. Fifteen family practitioners (60.0 percent) practiced primarily in a community hospital, while the remaining ten family practitioners (40.0 percent) practiced primarily in a medical center hospital. Only three family practitioners (12.0 percent) indicated that they had worked with a pediatric clinical nurse specialist. Eighty percent (twenty-two) of the family practitioners indicated a need for the expanded nursing role, 4 percent (one) of the family practitioners suggested "maybe" there was a need for this role, and 8 percent (two) of the family practitioners expressed there was not a need for such a role in the delivery of health care to children. In regards to referring patients and their families to the pediatric clinical nurse specialist for health care services, 60 percent (fifteen) of the family practitioners

indicated that they would utilize this health professional, 8 percent (two) of the family practitioners suggested "maybe" they would utilize the clinical specialist, and 32 percent (eight) stated that they would not refer clients to this health professional for health care services.

Presentation and Analysis of Data

In the analysis of data several techniques were employed to present and interpret the findings of this nursing investigation. First, a frequency distribution (table 1) was employed for an overall presentation of the data. The findings presented in the frequency distribution included the number of responses occurring in each category answered by the three sample groups, the percentage of responses of occurrence in each category answered by the three sample groups, and the average scores of each item surveyed for the three sample groups.

Secondly, the Kruskal-Wallis one-way analysis of variance by ranks, a nonparametric statistical test, was utilized to test whether the three sample groups were from the same population. Therefore, the important question of this nursing investigation was whether the differences in responses among the three sample groups of

TABLE 1
NUMBER, PERCENTAGE, AND AVERAGE SCORE OF SAMPLE RESPONSES BY GROUPS

Items of Section II	Registered Nurses					Pediatricians					Family Practitioners				
	Never	Rarely	Often	Almost Always	Average Scores	Never	Rarely	Often	Almost Always	Average Scores	Never	Rarely	Often	Almost Always	Average Scores
1	0 0.0%	1 9.0%	18 54.5%	14 42.5%	3.39	2 7.6%	5 19.2%	14 54.0%	5 19.2%	2.85	1 4.0%	7 28.0%	11 44.0%	6 24.0%	2.88
2	0 0.0%	0 0.0%	15 45.5%	18 54.5%	3.55	2 7.6%	3 11.5%	13 50.0%	8 30.9%	3.04	1 4.0%	4 16.0%	14 56.0%	6 24.0%	3.00
3	1 3.0%	1 3.0%	14 42.5%	17 51.5%	3.39	2 7.6%	8 30.8%	12 46.2%	4 15.4%	2.69	2 8.0%	5 20.0%	13 52.0%	5 20.0%	2.84
4	0 0.0%	1 3.0%	12 36.4%	20 60.6%	3.59	2 7.6%	6 23.1%	10 38.5%	8 30.8%	2.92	3 12.0%	2 8.0%	14 56.0%	6 24.0%	2.92
5	0 0.0%	0 0.0%	3 9.0%	30 91.0%	3.91	2 7.6%	2 7.6%	9 34.8%	13 50.0%	3.27	0 0.0%	1 4.0%	16 64.0%	8 32.0%	3.28
6	1 3.0%	7 21.2%	10 30.3%	15 45.5%	3.24	5 19.2%	6 23.1%	10 38.5%	5 19.2%	2.54	5 20.0%	5 20.0%	7 28.0%	8 32.0%	2.72
7	0 0.0%	0 0.0%	17 51.5%	16 48.5%	3.45	2 7.6%	2 7.6%	16 61.7%	6 23.1%	3.04	2 8.0%	3 12.0%	12 48.0%	8 32.0%	3.00
8	0 0.0%	3 9.0%	14 42.5%	16 48.5%	3.42	5 19.2%	7 27.0%	9 34.6%	5 19.2%	2.54	1 4.0%	10 40.0%	9 36.0%	5 20.0%	2.72
9	0 0.0%	4 12.0%	14 42.5%	15 45.5%	3.33	5 19.2%	8 30.8%	9 34.6%	4 15.4%	2.46	1 4.0%	12 48.0%	9 36.0%	3 12.0%	2.56
10	0 0.0%	0 0.0%	8 24.2%	25 78.8%	3.70	2 7.6%	1 3.8%	13 50.0%	10 38.6%	3.19	1 4.0%	3 12.0%	14 56.0%	7 28.0%	3.08
11	0 0.0%	1 3.1%	10 30.3%	22 66.6%	3.64	2 7.6%	2 7.6%	13 50.0%	9 34.8%	3.12	2 8.0%	3 12.0%	14 56.0%	6 24.0%	2.96
12	0 0.0%	1 3.1%	11 33.3%	21 63.6%	3.61	2 7.6%	6 23.1%	12 46.2%	6 23.1%	2.85	4 16.0%	2 8.0%	14 56.0%	5 20.0%	2.80
13	1 3.0%	0 0.0%	13 39.5%	19 57.5%	3.48	2 7.6%	5 19.2%	14 54.0%	5 19.2%	2.85	1 4.0%	4 16.0%	14 56.0%	6 24.0%	3.00
14	0 0.0%	0 0.0%	17 51.5%	16 48.5%	3.48	2 7.6%	7 27.0%	13 50.0%	4 15.4%	2.77	2 8.0%	5 20.0%	12 48.0%	6 24.0%	2.85

TABLE 1--Continued

Items of Section III	Registered Nurses					Pediatricians					Family Practitioners				
	Never	Rarely	Often	Almost Always	Average Scores	Never	Rarely	Often	Almost Always	Average Scores	Never	Rarely	Often	Almost Always	Average Scores
1	0 0.0%	1 3.0%	9 27.0%	23 70.0%	3.67	3 11.5%	1 3.8%	17 65.5%	5 19.2%	2.92	1 4.0%	4 16.0%	14 56.0%	6 24.0%	3.00
2	0 0.0%	7 21.2%	15 45.5%	11 33.3%	3.12	6 23.1%	7 26.9%	10 34.5%	3 11.5%	2.38	7 28.0%	9 36.0%	8 32.0%	1 4.0%	2.08
3	0 0.0%	4 12.1%	19 57.6%	10 30.3%	3.18	5 19.2%	11 42.3%	6 23.1%	4 15.4%	2.35	9 36.0%	9 36.0%	7 28.0%	0 0.0%	1.88
4	0 0.0%	1 3.0%	13 39.4%	19 57.6%	3.55	2 7.6%	7 27.0%	13 50.0%	4 15.4%	2.73	3 12.0%	6 24.0%	15 60.0%	1 4.0%	2.56
5	0 0.0%	6 18.2%	17 51.5%	10 30.3%	3.16	5 19.2%	13 50.0%	6 23.2%	2 7.6%	2.19	6 24.0%	9 36.0%	10 40.0%	0 0.0%	2.16
6	0 0.0%	2 6.0%	18 54.5%	13 39.5%	3.33	4 15.5%	5 19.2%	14 53.8%	3 11.5%	2.62	5 20.0%	5 20.0%	14 56.0%	1 4.0%	2.44
7	0 0.0%	1 3.0%	6 18.2%	26 78.8%	3.76	3 11.5%	0 0.0%	17 65.4%	6 23.1%	3.04	0 0.0%	2 8.0%	16 64.0%	7 28.0%	3.20
8	0 0.0%	1 3.0%	6 18.2%	26 78.8%	3.76	2 7.6%	1 3.8%	16 61.7%	7 26.9%	3.08	3 12.0%	2 8.0%	12 48.0%	8 32.0%	3.00
9	0 0.0%	5 15.2%	10 30.3%	18 54.5%	3.45	3 11.5%	12 46.2%	9 34.7%	2 7.6%	2.38	2 8.0%	10 40.0%	10 40.0%	3 12.0%	2.56
10	3 9.0%	10 30.3%	13 39.4%	7 21.3%	2.73	14 53.9%	7 26.9%	4 15.4%	1 3.8%	1.69	11 44.0%	12 48.0%	1 4.0%	1 4.0%	1.68
11	0 0.0%	5 15.2%	11 33.3%	17 51.5%	3.30	5 19.2%	12 46.2%	4 15.4%	5 19.2%	2.35	1 4.0%	5 20.0%	8 32.0%	11 44.0%	3.00
12	0 0.0%	0 0.0%	10 30.3%	23 69.7%	3.70	4 15.4%	7 27.0%	13 50.0%	2 7.6%	2.42	4 16.0%	7 28.0%	8 32.0%	6 24.0%	2.64
13	0 0.0%	0 0.0%	6 18.1%	27 81.9%	3.79	3 11.5%	6 23.1%	12 46.1%	5 19.2%	2.65	2 8.0%	3 12.0%	13 52.0%	7 28.0%	3.00

TABLE 1--Continued

Items of Section IV	Registered Nurses					Pediatricians					Family Practitioners				
	Never	Rarely	Often	Almost Always	Average Scores	Never	Rarely	Often	Almost Always	Average Scores	Never	Rarely	Often	Almost Always	Average Scores
1	0 0.0%	0 0.0%	6 18.1%	27 81.9%	3.82	3 11.5%	5 19.2%	12 46.2%	6 23.1%	2.69	3 12.0%	6 24.0%	14 56.0%	2 8.0%	2.68
2	0 0.0%	0 0.0%	9 27.2%	24 72.8%	3.73	3 11.5%	7 27.5%	11 42.3%	5 19.2%	2.58	3 12.0%	7 28.0%	13 52.0%	2 8.0%	2.64
3	1 3.0%	0 0.0%	7 21.2%	25 75.8%	3.70	3 11.6%	5 19.2%	13 50.0%	5 19.2%	2.65	3 12.0%	6 24.0%	14 56.0%	2 8.0%	2.68
4	2 6.0%	2 6.0%	9 27.2%	20 60.8%	3.42	3 11.6%	5 19.2%	13 50.0%	5 19.2%	2.77	4 16.0%	12 48.0%	8 32.0%	1 4.0%	2.32
5	2 6.0%	3 9.0%	7 21.2%	21 63.8%	3.92	6 23.1%	10 38.5%	6 23.1%	4 15.3%	2.31	8 32.0%	9 36.0%	7 28.0%	1 4.0%	2.00
6	1 3.0%	1 3.0%	6 18.1%	25 75.9%	3.67	5 19.2%	10 38.5%	7 27.0%	4 15.3%	2.38	4 16.0%	6 24.0%	13 52.0%	2 8.0%	2.48
7	1 3.0%	1 3.0%	6 18.1%	25 75.9%	3.67	5 19.2%	10 38.5%	7 27.0%	4 15.3%	2.38	4 16.0%	6 24.0%	13 52.0%	2 8.0%	2.48
8	1 3.0%	1 3.0%	6 18.1%	25 75.9%	3.67	4 15.3%	9 34.7%	8 30.8%	5 19.2%	2.58	4 16.0%	6 24.0%	13 52.0%	2 8.0%	2.48
9	0 0.0%	1 3.0%	7 21.1%	25 75.9%	3.73	3 11.5%	8 30.8%	9 34.7%	6 23.0%	2.69	4 16.0%	6 24.0%	13 52.0%	2 8.0%	2.48
10	0 0.0%	0 0.0%	9 27.3%	24 72.7%	3.73	3 11.5%	4 15.4%	13 50.0%	6 23.1%	2.85	4 16.0%	5 20.0%	14 56.0%	2 8.0%	2.52
11	0 0.0%	1 3.0%	8 24.3%	24 72.7%	3.70	3 11.5%	6 23.1%	13 50.0%	4 15.4%	2.69	4 16.0%	7 28.0%	12 48.0%	2 8.0%	2.44
12	0 0.0%	1 3.0%	9 27.3%	24 72.7%	3.67	3 11.5%	5 19.2%	12 46.2%	6 23.1%	2.81	3 12.0%	7 28.0%	13 52.0%	2 8.0%	2.52
13	1 3.0%	5 15.1%	15 45.5%	12 36.5%	3.15	4 15.4%	15 57.8%	5 19.2%	2 7.6%	2.19	8 32.0%	5 20.0%	12 48.0%	0 0.0%	2.16
14	1 3.0%	0 0.0%	6 18.2%	26 78.8%	3.73	3 11.5%	1 3.8%	12 46.2%	10 38.5%	3.12	1 4.0%	0 0.0%	15 60.0%	9 36.0%	3.28
15	1 3.0%	5 15.1%	10 30.3%	17 51.6%	3.33	3 11.5%	7 27.0%	12 46.2%	4 15.3%	2.65	5 30.0%	8 32.0%	10 40.0%	2 8.0%	2.36
16	1 3.0%	3 9.0%	11 33.3%	18 54.7%	3.42	3 11.5%	11 42.4%	9 34.6%	3 11.5%	2.46	4 16.0%	10 40.0%	8 32.0%	3 12.0%	2.40
17	1 3.0%	4 12.3%	10 30.3%	18 54.4%	3.39	3 11.5%	13 50.0%	7 27.0%	3 11.5%	2.38	5 20.0%	10 40.0%	8 32.0%	2 8.0%	2.28
18	1 3.0%	1 3.0%	12 36.5%	19 57.5%	3.52	3 11.5%	12 46.3%	9 34.6%	2 7.6%	2.38	4 16.0%	9 36.0%	9 36.0%	3 12.0%	2.44

health professionals signified a genuine population difference at the .05 level of significance or merely represented chance variations as expected among several sample groups from the same population. The results of the Kruskal-Wallis one-way analysis of variance by ranks signified that a significant difference existed among the three sample groups at the .05 level of significance for each item surveyed. Then, by application of the method of pair-wise multiple comparisons to each of the items investigated, interpretation of the data was possible to denote which groups differed at the .05 level of significance. This revealed that at least one difference occurred among the attitudes of the three sample groups of health professionals towards identifying appropriate role behaviors for the pediatric clinical nurse specialist to perform in the delivery of health care to children. Thus, the null hypotheses for this nursing investigation that no significant differences would be identified among the attitudes of health professionals were rejected (Siegel 1956 and Noether 1976).

In addition to noting that statistical differences occurred among the responses selected by the three sample groups towards the pediatric clinical nurse specialist,

the sample groups' individual average scores for each item investigated were compared and contrasted. Utilization of these scores provided additional information regarding the relative frequency or extent to which the nurse in the expanded role was expected or identified to assume responsibility for performing specific tasks and functions. Average scores were calculated in such a manner as to correspond with the four possible answers. Therefore, an average score of 1.00 corresponds with the answer "never;" an average score of 2.00, "rarely;" an average score of 3.00; "often;" and an average score of 4.00, "almost always."

Further interpretation of the data utilizing the method of pair-wise multiple comparisons and average scores for each group revealed that registered nurses expressed a more positive attitude toward tasks and functions that the nurse in the expanded role should perform than did pediatricians and family practitioners. In fact, registered nurses had the highest average scores for every item surveyed in this nursing investigation. Pediatricians' and family practitioners' responses statistically differed in relationship to only one item. This item concerned the appropriate actions to be taken by the pediatric clinical nurse specialist in emergency

situations. In regards to this item, family practitioners and registered nurses expressed a more positive attitude toward the nurse in the expanded role assuming greater responsibility in initiating emergency treatments in cardiac arrests, anaphylactic shock, and respiratory distress than did pediatricians.

In section II of the questionnaire concerning general functions for the pediatric clinical nurse specialist to assume in health care delivery, all three sample groups positively responded that the nurse in the expanded role functioned at such a level of professional expertise as to increase the physician's time to devote to seriously-ill children, to provide for increased health teaching, to facilitate effective utilization of other health care services, and to contribute to the continuity of patient care. The average scores of the three sample groups for these above items ranged from 3.00 to 3.91 with an overall sample average score of 3.39. Thus, with an average score of 3.00 corresponding with the answer response "often," an overall average score of 3.39 reflected that health professionals expected the nurse in the expanded role to assume these functions with greater propensity than merely just "often." However, family practitioners and pediatricians expressed a negative

attitude toward the pediatric clinical nurse specialist making home visits to assess the child's health status, making follow-up house calls after initiation of therapy by the physician to assess the child's well-being, and producing a reduction in cost of health care. The average scores for the three groups ranged from 2.46 to 3.42, with the overall average scores for registered nurses, pediatricians, and family practitioners being 3.35, 2.51, and 2.66, respectively. Therefore, the average scores for physicians signified that the nurses in the expanded role should function at this professional level only with greater propensity than just "rarely" in health care delivery; whereas, registered nurses perceived the pediatric clinical nurse specialist functioning greater than "often" in this capacity.

In the remaining items investigated in section II of the questionnaire (enabling the physician to practice more preventative medicine, enabling the physician to see more patients, facilitating communication among health professionals, planning with the consumer and health team concerning community health needs, acting as a primary resource person for nursing care, and providing an effective resource for the evaluation of nursing care), registered nurses were significantly more

positive toward the expanded role than physicians. The average scores for these items ranged from 2.69 to 3.64 with an overall average score of 3.11. The overall average scores for the above mentioned items for the three individual sample groups were calculated as follows: registered nurses 3.49, family practitioners 2.85, and pediatricians 2.85.

In regards to the items investigated in section III of the questionnaire concerning responsibilities the pediatric clinical nurse specialist should assume in the delivery of health care to children, the three sample groups all responded positively toward the nurse in the expanded role assuming responsibility for eliciting and recording a child's health history, providing well-child care, and counseling with parents and children about identified and anticipated health care problems. The average scores of the health professionals regarding these items ranged from 2.65 to 3.19. However, the physicians responded very negatively toward the pediatric clinical nurse specialist assuming responsibilities in the areas of physical assessment, diagnosis and management of commonly occurring pediatric illnesses, and the ordering of laboratory procedures. The pediatricians' and family practitioners' average scores ranged from 1.88 to 2.38,

with the overall average value being 2.17. Thus, the value 2.17 reflected that physicians "rarely" envisioned nurses in expanded roles assuming these responsibilities in the delivery of comprehensive health care to children. However, the registered nurses' average scores for the same above mentioned items ranged from 3.12 to 3.18 with an overall average score of 3.15.

Also physicians expressed relatively negative attitudes toward nurses in expanded roles triaging patients for treatment and referral, ordering treatments or medications, keeping patients and families informed of the child's condition, and managing and planning long-range patient care. The physicians' average scores for these items ranged from 2.38 to 2.73 with an overall average score of 2.54. The average scores pertaining to the same above items for nurses ranged from 3.33 to 3.70 with an overall average score of 3.50.

None of the three sample groups identified the performing of minor surgical procedures as within the expanded nurse's usual realm of health care. The average scores for registered nurses, family practitioners, and pediatricians were 2.73, 1.68, and 1.69, respectively.

In section IV of the questionnaire concerning physical examinations, registered nurses were very positive

toward the nurse in the expanded role performing physical assessments of the child to plan and provide health care. The registered nurses' average scores ranged from 3.33 to 3.92, with the average mean score being 3.60. However, pediatricians and family practitioners were relatively negative toward the pediatric clinical nurse specialist executing any aspect of the physical examination, with the exception of assessing visual acuity using the standard eye chart. The pediatricians' and family practitioners' average scores ranged from 2.00 to 2.85, with the overall average score being 2.49 (excluding the item of visual acuity). Physicians were particularly negative toward the pediatric clinical nurse specialist using the ophthalmoscope for funduscopic examination and evaluation of the eye; and the usage of transillumination for physical assessment of the skull. The physicians' average scores for these items ranged from 2.00 to 2.31.

Summary

In reviewing the results of the data analysis obtained from registered nurses, family practitioners, and pediatricians; registered nurses expressed the most positive attitude toward the pediatric clinical nurse specialist. The results revealed that pediatricians and

family practitioners expressed the same attitude toward the pediatric clinical nurse specialist, in general, with neither sample group of physicians emerging as significantly more positive toward the expanded nursing role.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

This study was conducted to survey current attitudes of health professionals toward the expanded nursing role, the pediatric clinical nurse specialist. Specifically, the purpose of this study was to determine if differences existed among the attitudes of registered nurses, pediatricians, and family practitioners in the identification of specific tasks and functions that the pediatric clinical nurse specialist should perform in the delivery of comprehensive health care to children. Therefore, an explanatory study, non-experimental in design was undertaken to test the null hypotheses of this study that no differences would be denoted in the attitudes of the three specified groups of health professionals in the identification of tasks and functions that the pediatric clinical nurse specialist should perform in the delivery of child health care.

This study was conducted in a large metropolitan area in Northeast Texas. Convenience sampling was employed

by the investigator to obtain the sample. The sample consisted of twenty-six licensed pediatricians, twenty-five licensed family practitioners, and thirty-three registered nurses employed in the care of children in a hospital setting.

The sample of physicians was individually contacted by the investigator seeking their cooperation for participation in this nursing investigation. Each physician was given an oral explanation and an introductory letter (appendix A) describing the nature of this study. The physicians had an opportunity to refuse to participate in the study at this time. Physicians expressing a willingness to participate in the study were given a consent form (appendix B) to sign which granted the investigator permission to collect data. After signing the consent form, the subject was given a questionnaire (appendix C) to read and complete. The questionnaire was picked up from each physician at a later scheduled date.

The sample of registered nurses was obtained from the three hospitals (a private children's hospital, a large community hospital, and a small community hospital). Written permission (appendix D) for the utilization of each hospital facility during the data collection phase was obtained from the appropriate administrative person prior

to approaching this sample group employed in the perspective agency. An oral explanation and an introductory letter (appendix A) were presented to each registered nurse describing the nature of this study. Registered nurses vocalizing a willingness to participate were given a consent form (appendix B) to sign granting the investigator the right to collect data. After signing the consent form, each nurse was presented with a questionnaire (appendix C) to read and complete. The completed questionnaires were picked up at a later designated time.

The research tool developed by the investigator was structured to investigate attitudes of the specified groups of health professionals toward the tasks and functions that the pediatric clinical nurse specialist was expected to perform in the delivery of health care to children. Four sections were incorporated into the design of the questionnaire. The first section contained a number of demographic items to elicit descriptive information concerning each subject. The second and third sections presented general functions and major responsibilities to be assumed by the pediatric clinical nurse specialist in providing child health care, respectively. In the fourth section, components of the physical examination were delineated as specific behaviors to be executed by the pediatric clinical

nurse specialist in the performance of a physical assessment of the child. The data collection phase of the study extended from December 27, 1977, to February 10, 1978.

Data were analyzed in an attempt to accept or reject the null hypotheses. The analysis was conducted by applying the Kruskal-Wallis one-way analysis of variance by ranks and the method of pair-wise multiple comparisons to the data. The results of the Kruskal-Wallis one-way analysis of variance by ranks signified that a statistical difference occurred among the three sample groups at the .05 level of significance for each item. Application of the method of pair-wise multiple comparisons revealed that at least one statistical difference occurred among the attitudes of the three sample groups at the .05 level of significance toward identifying appropriate role behaviors. Thus, the null hypotheses for this study were rejected.

The average scores of each sample group were used to provide additional information. The average scores indicated the extent to which the pediatric clinical nurse specialist was identified by the sample to perform specific tasks and functions. The average score values supported that registered nurses expressed a more positive attitude toward the pediatric clinical nurse specialist performing specific tasks and functions identified in the literature

as consistent with the expanded nursing role than did physicians. The average score values of the physician sample groups reflected particularly negative attitudes toward the pediatric clinical nurse specialist performing any tasks or functions associated with physical assessment, diagnosis of commonly occurring pediatric illnesses, initiation of any treatment or medication for minor symptoms, and providing the patient and family with information concerning the patient's status.

This study further supported the findings of White (1977), O'Dell (1974), Wright (1976), and Heiman and Dempsey (1976) concerning appropriate role behaviors for the nurse in the expanded nursing role. The findings of this study were quite similar to the results reported by White (1977) regarding tasks and functions that the nurse in expanded practice should perform in the delivery of health care. As indicated in this study, White (1977), likewise, found that nurses expressed a much more positive attitude toward the expanded role and practice of nursing than did physicians. In addition, any role behaviors related to the diagnosis of commonly occurring health problems, selection and initiation of treatments or medications for selected minor health problems according to protocol, and the ordering of laboratory studies were

identified by a significant number of physicians in both studies as unacceptable tasks and functions for the nurse in the expanded role to assume in the delivery of health care. Yet, a significant number of nurses participating in both studies identified these same tasks and functions as acceptable role behaviors for the nurse in expanded practice.

Yet, differences were denoted in the findings presented by White (1977) and the results of this nursing investigation. White (1977) reported that the sample of physicians participating in the study approved of the nurse in the expanded role assuming greater responsibilities in the areas of initiating treatment in emergency situations, keeping patients and their families informed of the patient's health status and prognosis, assessing and planning for community health needs, and performing physical examinations. Yet, the sample groups of physicians, pediatricians, and family practitioners, included in this study expressed a more negative attitude toward the nurse in the expanded role assuming greater responsibilities in these areas.

The findings of this investigation were analogous to the results of an earlier investigation conducted by Schoen and associates (1973) concerning pediatricians' views of the expanded nursing role. In this study, too, physicians

expressed a negative attitude toward the nurse in expanded practice functioning autonomously in the diagnosis and treatment of children with minor illnesses. Likewise, pediatricians in both studies did not perceive a reduction in health care costs by utilization of the nurse in the expanded practice.

Conclusions

The major conclusions of this study supported by the data were as follows.

1. While the concept of the pediatric clinical nurse specialist was generally accepted by registered nurses, family practitioners, and pediatricians as indicated by the sample expressing a need for an expanded nursing role in child health care, there were discrepancies and disagreements on which tasks and functions were acceptable role behaviors

2. Registered nurses expressed a more positive attitude toward the tasks and functions the pediatric clinical nurse specialist should perform as identified in the literature than did family practitioners and pediatricians

3. Family practitioners and pediatricians identified role behaviors requiring judgment and evaluation on the part of the nurse as unacceptable, such as performing

physical examinations, diagnosing selected pediatric illnesses, treating selected pediatric illnesses, managing long-term patients, and ordering laboratory studies.

4. All three sample groups expressed a generally positive attitude toward the pediatric clinical nurse specialist assuming responsibilities related to psychosocial behaviors, such as teaching, data collection, and counseling.

5. Although registered nurses identified keeping the patient and family informed of the patient's condition as an appropriate role behavior, physicians denoted this behavior as unacceptable.

6. The sample identified the performance of minor surgical procedures as an unacceptable role behavior.

7. Physicians expressed reservations toward the pediatric clinical nurse specialist assuming responsibilities for role behaviors related to the administration and evaluation of health care, such as planning with the consumer and health team in meeting community's health needs, acting as a resource person in planning and evaluating nursing care, and participating in the evaluation of the efficiency and quality of child health care.

Implications

In this nursing investigation specific role behaviors (tasks and functions) were identified by family practitioners and pediatricians as being controversial in the provision of child health care by the pediatric clinical nurse specialist. Thus, with a significant number of physicians expressing a negative attitude toward the pediatric clinical nurse specialist performing specific tasks and functions inherent in the expanded role, it is highly unlikely that the pediatric clinical nurse specialist would be easily incorporated into the present health care system as an important member of the health care team. If the role of the pediatric clinical nurse specialist is to be actualized, the conflicts existing between medicine and nursing regarding the expanded role must be resolved.

Therefore, confrontation and collaboration between health professionals concerning these controversial issues are essential. Through interdisciplinary programs in a non-threatening setting, nurses and physicians can explore and discuss these issues in depth. Thus, the goal of these collaborative sessions should be to encourage the development of professional trust, mutual respect, open communication between the health professionals, and the resolution of role conflicts.

Further collatoration between the nursing and medical professions concerning the expanded role concept is imperative. Physicians need to be provided with accurate and adequate information concerning the expanded role concept, educational preparation of the nurses, competencies and expectations of the nurse in expanded practice, and the goal of the role to provide comprehensive health care with elimination of gaps and fragmentation of health care services.

Nursing educators must not only assume the responsibility of informing nurses of significant factors hindering the utilization of the nurse in expanded practice, but educators must also provide the nurse with the theoretical frameworks and the conceptual tools necessary for the nurse to succeed in overcoming these obstacles to role actualization. Thus, nurses preparing to assume expanded roles particularly need a scientific theoretical background in change and learning theories.

Recommendations

The following recommendations are offered for subsequent research in the areas of the expanded nursing role.

1. Further research related to the motives or rationale behind health professionals' attitudes toward the expanded nursing role

2. Additional time and motion studies to evaluate the efficiency with which health services are delivered in health settings utilizing the pediatric clinical nurse specialist

3. Further studies to evaluate the quality or quantity with which health care services are delivered in health settings employing the pediatric clinical nurse specialist

4. Additional investigations of physicians' attitudes toward the expanded nursing role. It would be advantageous to survey a group of physicians' attitudes before and after one year of working with a pediatric clinical nurse specialist

5. Replication of this study utilizing a Likert-type scale with more answer categories in order to obtain data with greater sensitivity to detect fine differences in the attitudes of various health professional groups

APPENDIX A

INTRODUCTORY LETTER

Dear Health Professional:

As partial completion of the requirements leading to a degree of Master of Science from Texas Woman's University, I am surveying opinions of health professionals regarding the pediatric clinical nurse specialist as a member of the health team in the delivery of health care to children. The pediatric clinical nurse specialist has earned a degree of Master of Science with an emphasis in clinical nursing of children.

Generally, the graduate curriculum for the pediatric clinical nurse specialist emphasizes content in the areas of growth and development, physical assessment, child health maintenance, child health problems, and child health teaching. The ultimate goal of the master's program is to prepare the pediatric clinical nurse specialist to assume greater responsibility in the delivery of comprehensive health care to children than the traditional nursing role,

I am seeking your voluntary participation in this study to survey health professional's opinions of the pediatric clinical nurse specialist in the delivery of health care to children. You will be asked to complete on a questionnaire expressing your opinion concerning the pediatric clinical nurse specialist providing care to children.

If you agree to anonymously participate in this study by completing the questionnaire, please read and sign the following attached consent form. Your opinion is of great value, and I appreciate your cooperation.

Thank you,

Janet Williams

APPENDIX B

CONSENT FORM

I do hereby consent to participate in the study to investigate health professionals' attitudes towards various components of the expanded pediatric nursing role conducted under the direction of the investigator, Janet Williams. I acknowledge having received the written and verbal explanation of the study.

Participant

Date

Witness

Date

APPENDIX C

QUESTIONNAIRE

Section I

Check appropriate response and complete spaces:

☐ Registered Nurse

Basic Educational Preparation:

☐ AD ☐ BS ☐ Diploma

Additional Formal Educational Preparation:

☐ None ☐ AD ☐ BS ☐ MS ☐ PhD

Age: _____ Years in Practice: _____

Type of hospital in which you primarily practice:

☐ Medical Center ☐ Community Hospital

Have you ever worked with a Pediatric Clinical Nurse Specialist?

☐ No ☐ Yes

Would you ever refer a patient and his/her family to a Pediatric Clinical Nurse Specialist for health care services?

☐ No ☐ Yes

Do you believe there is a need for an expanded nursing role to provide comprehensive health care to children?

☐ No ☐ Yes

DIRECTIONS: Respond to each of the following statements selecting the answer category at the right that best expresses your opinion.

Section II

To what extent do you think the Pediatric Clinical Specialist should assume the following functions in the delivery of health care to children?

1. Enable physician to practice more preventative medicine.
2. Increase physician's time to devote to more seriously-ill patients.
3. Enable physician to see more patients.
4. Participate in continuous evaluation of the efficiency and quality of child care.
5. Provide for increased patient, parents, and family teaching.
6. Produce a reduction in cost of health care.
7. Facilitate effective utilization of other health care services.
8. Make home visits to assess the patient's condition.
9. Make follow-up house calls after treatment by the physician.
10. Contribute to the continuity of patient care.

[illegible]

11. Facilitate communication among doctors, nurses, other health personnel, patients, and family.
12. Provide effective source for evaluation of nursing care.
13. Act as primary resource person for nursing care.
14. Plan with consumer and health care team in meeting the community's health needs.

Never	Rarely	Often	Almost Always

Section III

To what level do you think the Pediatric Clinical Nurse Specialist should assume the following responsibilities in the care of children?

1. Elicit and record patient's health history.
2. Perform patient's complete physical examination.
3. Diagnose and manage commonly occurring pediatric illnesses such as common colds, sore throats, vomiting, fever, and diarrhea.
4. Triage patients and make referral to appropriate physicians as deemed necessary.

Never	Rarely	Often	Almost Always

5. Order laboratory procedures when indicated.
6. Order treatments or prescribe medications for minor symptoms: fever, pain relief, and nasal congestion according to protocol or standing physician's orders.
7. Counsel parents and child about identified health problems.
8. Counsel parents and child about anticipated health care needs.
9. Keep patients and parents informed of patient's condition, i.e., interpret diagnostic findings.
10. Perform minor surgical procedures such as suturing of minor skin lacerations.
11. Initiate treatment in cardiac arrest, anaphylactic shock, and respiratory distress.
12. Manage and plan long-term patient care for children with chronic illnesses.
13. Provide well-child health care.

[illegible]

Section IV

To what extent should the Pediatric Clinical Nurse Specialist perform the following portions of the physical examination.

	Never	Rarely	Often	Almost Always
1. Use of the stethoscope to auscultate lung and breath sounds.				
2. Use of the stethoscope to auscultate heart sounds.				
3. Use of the stethoscope to auscultate bowel sounds.				
4. Use of the otoscope with pneumatic device to assess the ear and tympanic membrane.				
5. Use of the ophthalmoscope for funduscopy examination and evaluation of the eye.				
6. Percussion of the chest.				
7. Percussion of the abdomen.				
8. Palpation of the chest.				
9. Palpation of the abdomen.				
10. Eliciting of deep tendon reflexes.				
11. Use of the tuning fork to assess gross hearing ability.				
12. Examination and assessment of the genitalia.				
13. Usage of transillumination for physical assessment of the skull and other body parts as indicated.				

14. Assess visual acuity using a standardized eye chart.
15. Neurological assessment of the 12 cranial nerves.
16. Neurological assessment including such measures as skin pricks.
17. Neurological assessment including such measures as use of tuning fork to assess vibratory sensations.
18. Neurological assessment including such measures as testing the skin's perception of heat and cold.

Never	Rarely	Often	Almost Always

APPENDIX D

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

106

HOUSTON CENTER
1130 M.D. Anderson Blvd.
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Irving Community Hospital

GRANTS TO Janet Williams

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Current attitudes of Health Professionals Toward The Pediatric Clinical Nurse Specialist.

The conditions mutually agreed upon are as follows:

1. The agency (may) (~~may not~~) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (~~may not~~) be identified in the final report.
3. The agency (~~wants~~) (does not want) a conference with the student when the report is completed. *
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: * The agency requests a copy of finalized study.

Date Dec 28, 1977

Nancy B. Watt, DNS
Signature of Agency Personnel

Janet Williams
Signature of student

Nancy M. Bruce
Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

107

HOUSTON CENTER
1130 M.D. Anderson Blvd.
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Children's Medical Center of Dallas

GRANTS TO Janet Williams

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Current Attitudes of Health Professionals toward
the Pediatric Clinical Nurse Specialist.

The conditions mutually agreed upon are as follows:

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2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other: _____

Date 1-9-78

Luzanne Brach
Signature of Agency Personnel

Janet Williams
Signature of student

Dawn M. Bruce
Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

TEXAS WOMAN'S UNIVERSITY
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HOUSTON CENTER
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Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE _____

GRANTS TO Janet Williams

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Current Attitudes of Health Professionals toward
the Pediatric Clinical Nurse Specialist.

The conditions mutually agreed upon are as follows:

1. The agency (~~may~~) (may not) be identified in the final report.
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3. The agency (wants) (~~does not want~~) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: _____

Date Dec 28, 1977

Signature of Agency Personnel

Janet Williams
Signature of student

Dawn M. Bruce
Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

APPENDIX E

TEXAS WOMAN'S UNIVERSITY

Human Research Committee

Name of Investigator: Janet F. Williams Center: Dallas

Address: 4020 Holland #204

Dallas, Texas 75219

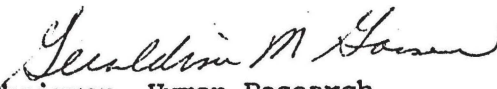
Dear Ms. Williams: Attitudes of Health Professionals Toward
Your study entitled the Pediatric Clinical Nurse Specialist

has been reviewed by a committee of the Human Research Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education and Welfare regulations require that written consents must be obtained from all human subjects in your studies. These forms must be kept on file by you.

Furthermore, should your project change, another review by the Committee is required, according to DHEW regulations.

Sincerely,


Chairman, Human Research
Review Committee
at Dallas.

APPENDIX F

DEMOGRAPHIC DATA OF SAMPLE OF REGISTERED NURSES

	Age	Years in Practice	Basic Education	Type of Hospital
1	22	1	B.S.	Medical center
2	23	1	B.S.	Medical center
3	23	3	Diploma	Medical center
4	24	2	B.S.	Large community
5	24	2	B.S.	Medical center
6	24	2	A.D.	Medical center
7	25	1	Diploma	Small community
8	25	4	Diploma	Large community
9	26	2	A.D.	Large community
10	26	3	B.S.	Medical center
11	26	2	A.D.	Small community
12	27	3	B.S.	Large community
13	27	5	B.S.	Medical center
14	28	5	B.S.	Medical center
15	30	7	Diploma	Medical center
16	31	7	Diploma	Medical center
17	31	10	Diploma	Medical center
18	32	10	B.S.	Large community
19	32	10	B.S.	Medical center
20	32	12	Diploma	Medical center
21	36	1	A.D.	Small community
22	39	19	Diploma	Medical center
23	40	19	Diploma	Small community
24	42	7	A.D.	Small community
25	43	23	Diploma	Small community
26	44	20	Diploma	Small community
27	47	12	Diploma	Small community
28	47	27	Diploma	Small community
29	47	27	Diploma	Small community
30	51	31	Diploma	Medical center
31	52	8	A.D.	Large community
32	56	36	Diploma	Small community
33	59	34	Diploma	Small community

N = 33.

DEMOGRAPHIC DATA OF SAMPLE OF PEDIATRICIANS

	Age	Years in Practice	Sex	Type of Hospital
1	29	1	Female	Medical center and Community
2	29	1	Male	Community
3	30	1	Male	Medical center
4	33	4	Female	Community
5	33	4	Male	Medical center
6	30	1	Male	Community
7	34	4	Male	Medical center
8	34	5	Male	Medical center
9	35	6	Male	Medical center
10	37	2	Male	Medical center and Community
11	39	8	Male	Medical center
12	39	10	Male	Medical center
13	39	7	Male	Medical center and Community
14	40	10	Male	Medical center
15	40	6	Female	Medical center
16	43	14	Male	Medical center
17	43	16	Female	Medical center
18	44	12	Male	Medical center
19	46	6	Male	Medical center
20	47	14	Male	Medical center
21	48	10	Male	Community
22	49	16	Male	Medical center and Community
23	52	24	Male	Medical center
24	59	30	Male	Community
25	61	33	Male	Medical center
26	70	40	Male	Medical center

N = 26.

DEMOGRAPHIC DATA OF SAMPLE OF FAMILY PRACTITIONERS

	Age	Years in Practice	Sex	Type of Hospital
1	29	3	Male	Medical center
2	29	4	Male	Community
3	30	2	Male	Medical center
4	30	4	Male	Medical center
5	34	9	Male	Community
6	35	10	Male	Community
7	39	12	Male	Medical center
8	40	13	Male	Community
9	46	6	Male	Medical center
10	46	18	Male	Medical center
11	46	18	Male	Medical center
12	48	20	Male	Community
13	49	14	Male	Community
14	49	25	Male	Community
15	50	20	Male	Medical center
16	52	17	Male	Community
17	52	20	Male	Community
18	52	22	Male	Community
19	56	25	Male	Community
20	56	27	Male	Medical center
21	57	24	Male	Medical center
22	58	28	Male	Community
23	59	32	Female	Community
24	60	33	Male	Community
25	49	16	Male	Community

N = 25.

REFERENCES CITED

- Abdellah, Faye. "Overview of Nursing Research 1955-1968, Part II." Nursing Research 19 (March/April 1970): 151-162.
- _____. "Nurse Practitioners and Nursing Practice." American Journal of Public Health 66 (March 1976): 245-246.
- Abdellah, Faye, and Levine, Eugene. Better Patient Care Through Nursing Research. New York: Macmillan Co., 1965.
- American Academy of Pediatric Executive Board. "Academy Policy in Relation to the Pediatric Nurse Associate." Pediatrics 59 (April 1976): 467-468.
- Andrews, Priscilla, and Yankauer, Alfred. "The Pediatric Nurse Practitioner." American Journal of Nursing 71 (March 1971): 504-508.
- Andrews, Priscilla; Yankauer, Alfred; and Connelly, John. "Changing the Patterns of Ambulatory Pediatric Caretaking: An Action-Oriented Training Program for Nurses." American Journal of Public Health 60 (May 1970): 870-879.
- Bates, Barbara. "Doctor and Nurse: Changing Roles and Relations." The New England Journal of Medicine 283 (July 1970): 129-133.
- Biddle, Bruce, and Thomas, Edwin. Role Theory: Concepts and Research. New York: John Wiley and Sons, Inc., 1966.
- Bullough, Bonnie. "The Law and the Expanding Role of the Nurse." American Journal of Public Health 66 (March 1976): 249-254.
- Cohen, W. "Current Problems in Health Care." The New England Journal of Medicine 281 (July 1969): 193-197.

- Conant, Loring; Robertson, Leon; Kosa, John; and Alpert, Joel. "Anticipated Patient Acceptance of New Nursing Roles and Physician's Assistants." American Journal of Diseases of Children 122 (September 1971): 202-205.
- Connelly, John; Steockle, John; Lepper, Edna; and Farrisey, Ruth. "The Physician and the Nurse--Their Inter-Professional Work in Office and Hospital Ambulatory Settings." The New England Journal of Medicine 275 (November 1966): 765-769.
- Coye, Robert, and Hansen, Marc. "The Doctor's Assistant." Journal of the American Medical Association 209 (July 1969): 529-533.
- Day, Lewis; Egli, Rosemarie; and Silver, Henry. "Acceptance of the Pediatric Nurse Practitioners." American Journal of Diseases of Children 119 (March 1970): 204-208.
- Duncan, Burris; Smith, Ann; and Silver, Henry. "Comparison of the Physical Assessment of Children by Pediatric Nurse Practitioners and Pediatricians." American Journal of Public Health 61 (July 1971): 1170-1176.
- Flynn, Beverly. "The Effectiveness of Nurse Clinician Service Delivery." American Journal of Public Health 64 (June 1974): 606-611.
- Ford, Loretta et al. "The Nurse Practitioner Question." American Journal of Nursing 74 (December 1974): 2188-2191.
- Ford, Loretta, and Silver, Henry. "The Expanded Role of the Nurse in Child Care." Nursing Outlook 15 (September 1967): 43-45.
- Ford, Patricia; Seacat, Milvoy; and Silver, George. "The Relative Roles of the Public Health Nurse and the Physician in Prenatal and Infant Supervision." American Journal of Public Health 56 (July 1966): 1097-1103.
- Foye, Howard; Chamberlin, Robert; and Charney, Evan. "Content and Emphasis of Well-Child Visits." American Journal of Diseases of Children 131 (July 1977): 794-797.

- Georgopoulos, B., and Christman, L. "The Clinical Nurse Specialist: A Role Model." American Journal of Nursing 70 (May 1970): 1030-1039.
- Heiman, Elliott, and Dempsey, Mary. "Independent Behavior of Nurse Practitioners: A Survey of Physician and Nurse Attitudes." American Journal of Public Health 66 (June 1976): 587-589.
- Hellman, Chris. "The Making of a Clinical Specialist." Nursing Outlook 22 (March 1974): 165-167.
- Hepner, J., and Hepner, D. The Health Strategy Game. St. Louis: The C. V. Mosby Co., 1973.
- Hinsvark, Inez. "Implications for Action in the Expanded Role of the Nurse." Nursing Clinics of North America 9 (September 1974): 411-423.
- Hocking, Irma; Hassanein, Ruth; and Bahr, Sister Rose. "Willingness of Psychiatric Nurses to Assume the Extended Role." Nursing Research 25 (January/February 1976): 44-48.
- Hoekelman, Robert. "What Constitutes Adequate Well-Baby Care?" Pediatrics 55 (March 1976): 313-326.
- Houpt, Roberta. "Pediatric Nurse Practitioner." Nursing Clinics of North America 3 (September 1974): 573-585.
- King, Carla. "The PNP Movement to Enter Graduate School." Journal of Nursing Education 15 (July 1976): 27-32.
- Kubala, Stephanie, and Clever, Linda. "Acceptance of the Nurse Practitioner." American Journal of Nursing 74 (March 1974): 451-452.
- Lambertsen, Eleanor. "The Extended Role of the Nurse in Providing Health Care." S.A. Nursing Journal 43 (September 1976): 11-16.
- Leininger, Madeleine, and Buck, Gary, eds. Health Care Issues, Fall 1974. Philadelphia: F. A. Davis Co., 1974.

- Lewis, Charles, and Resnick, Barbara. "Nurse Clinics and Progressive Ambulatory Patient Care." The New England Journal of Medicine 277 (December 1967): 1236-1241.
- Lewis, Edith. "A Nurse is a Nurse--Or Is She?" Nursing Outlook 20 (January 1972): 21.
- McMormack, Regina, and Crawford, Ronald. "Attitudes of Professional Nurses Toward Primary Care." Nursing Research 18 (November/December 1969): 542-544.
- McTaggart, Aubry, and McTaggart, Lorna. The Health Care Dilemma. Boston: Holbrook Press, Inc., 1976.
- Moore, Ann. "Nurse Practitioners: Reflection on the Role." Nursing Outlook 22 (February 1974): 124-127.
- Noether, Gottfried Emanuel. Introduction to Statistics: A Nonparametric Approach. Boston: Houghton Mifflin, 1976.
- O'Dell, Margaret. "Physicians' Perceptions of an Extended Role for the Nurse." Nursing Research 23 (July/August 1974): 348-351.
- Patterson, P. D., et al. "Parents' Reaction to the Concepts of Pediatric Assistants." Pediatrics 44 (July 1969): 69-75.
- Petersdorf, Robert. "Health Manpower: Numbers, Distribution, and Quality." Annals of Internal Medicine 82 (May 1975): 694-701.
- Porter, Karen. "The Clinical Nurse Specialist." Hospitals J.A.H.A. 47 (February 1, 1973): 135-141.
- Reed, David, and Roghmann, Klaus. "Acceptability of an Expanded Nurse Role to Nurses and Physicians." Medical Care 9 (July-August 1971): 372-377.
- Reiter, Frances. "Nurse Clinician." American Journal of Nursing 66 (February 1966): 274-280.

- Riehl, Joan, and McVay, Joan, eds. The Clinical Nurse Specialist: Interpretations. New York: Appleton-Century-Crofts, 1973.
- Runyan, John. "The Memphis Chronic Disease Program Comparisons in Outcome and the Nurse's Extended Role." Journal of the American Medical Association 231 (January 1975): 264-267.
- Schiff, Donald; Fraser, Charles; and Walters, Heather. "The Pediatric Nurse Practitioner in the Office of a Pediatrician in Private Practice. Pediatrics 44 (July 1969): 62-69.
- Schively, J. P. "The Role of Nurse Practitioner." American Journal of Obstetrics and Gynecology 122 (June 1975): 502-505.
- Schoen, E.; Erichson, R.; Barr, G.; and Allen H. "The Role of the Pediatric Nurse Practitioner as Viewed by California Pediatricians." California Medicine 188 (January 1973): 62-68.
- Scott, Samuel. "Patient Acceptance of the Nurse Practitioner." Journal of the American College Health Association 23 (June 1975): 364.
- Schulman, John, and Wood, Carol. "Experience of a Nurse Practitioner in a General Medical Clinic." Journal of the American Medical Association 219 (March 1972): 1453-1461.
- Secretary's Committee to Study Extended Roles for Nurses. "Extending the Scope of Nursing Practice." Nursing Outlook 20 (January 1972): 46-52.
- Shaw, Marvin, and Wright, Jack. Scales for the Measurement of Attitudes. New York: McGraw-Hill Book Co., 1976.
- Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Co., 1956.
- Silver, Henry. "Uses of New Types of Allied Health Professionals in Providing Care for Children." American Journal of Diseases of Children 116 (November 1968): 486-490.

- Silver, H.; Ford, L.; and Day, L. "The Pediatric Nurse Practitioner Program." Journal of the American Medical Association 204 (April 1968): 298-302.
- Silver, H.; Ford, L.; and Stearly, S. "A Program to Increase Health Care for Children: The Pediatric Nurse Practitioner Program." Pediatrics 39 (May 1967): 756-760.
- Spitzer, Walter. "Pediatric Nurse Practitioners." The New England Journal of Medicine 298 (January 19, 1978): 162-164.
- Spitzer, W.; Sackett, D.; Sibely, J.; Roberts, R.; Tech, M.; Gent, M.; Kerrin, D.; Hackett, B.; and Olyninch, A. "The Burlington Randomized Trail of the Nurse Practitioner." The New England Journal of Medicine 290 (January 1974): 251-256.
- Theiss, Betty. "Investigation of the Perceived Role Functions and Attitudes of the Nurse Practitioner Role in a Primary Care Clinic." Military Medicine 141 (February 1976): 85-89.
- Wallace, Tommie Ruth. "Perceptions of Performance Levels of Pediatric Staff Nurses." Master's thesis, Texas Woman's University, August, 1975.
- Watts, Malcolm. "On Extending Patient Care with Physician Extenders." Western Journal of Medicine 124 (March 1976): 234.
- White, Susan. "The Expanded Role for Nurses." Nursing '77 7 (October 1977): 90-93.
- Wright, Edith. "Registered Nurses' Opinions and an Extended Role Concept." Nursing Research 25 (March/April 1976): 112-114.
- Yankauer, A.; Connelly, J.; and Feldman, J. "A Survey of Allied Health Worker Utilization in Pediatric Practice in Massachusetts and in the United States." Pediatrics 42 (November 1968): 733-741.
- _____. "Pediatric Practice in the United States." Pediatrics 45 (March 1970): 521-551.