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Perceptions of collaboration between emergency nurses and paramedics

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

PERCEPTIONS OF COLLABORATION

BETWEEN

EMERGENCY NURSES AND PARAMEDICS

A thesis submitted in partial satisfaction of the
requirements for the degree of

MASTER OF SCIENCE

IN

NURSING

by

Linda Stacey Boylan

1995

THESIS COMMITTEE APPROVAL SHEET

To: Acting Dean Jacgulin Hartley
School of Nursing

This thesis, written by Linda Stacey Boylan, and entitled Collaboration between Emergency Room Nurses and Paramedics, having been approved in respect to style and intellectual content, is referred to you for judgement.

We have read this thesis and recommend that it be approved.

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Date of Defense: April 12, 1995

The thesis of Linda Stacey Boylan is approved.

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Dr. Richard L. Campbell
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Florida International University, 1995

DEDICATION

I dedicate this thesis to my husband, Edwin Marshall Starks. Without his support, understanding, friendship and most of all his love, the completion of this work would not have been possible. I also dedicate this thesis to myself, for fulfilling an aspiration that contributes to my professional and personal growth.

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ABSTRACT OF THE THESIS
PERCEPTION OF COLLABORATION BETWEEN
EMERGENCY ROOM NURSES AND PARAMEDICS

by

Linda Stacey Boylan

Florida International University, 1994

Miami, Florida

Professor Donna Rush, Major Professor

Collaboration between emergency room (ER) nurses and paramedics is vital due to the increasing number of critically ill patients entering the hospital via the "911" system. This descriptive study examined the perception of the collaborative relationship using the Revised Pehl Collaboration Scale (RPCS) and by qualitative data from four free response questions.

The results of this study indicated that the overall relationship between the ER nurses and paramedics was friendly but not fully trusting. The content analysis of the free response questions identified that the "report" of patient information was the origin the most conflict. The nurses felt that paramedic patient assessment, patient priorities, and by-pass protocol were problems. Whereas,

the paramedics identified the nurses condescending manner and mistrust, not being "listened" to, and overcrowded emergency rooms as the source of conflict. Data was not statistically significant with regards to personal attributes or social demographics from the RPCS.

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Chapter 1

Introduction

Problem Area

A person's first contact with the health care system is often through the emergency medical system (EMS) and/or the emergency room. The meeting is usually due to a "misfortune" of the patient. It is emergency room (ER) nurses and the paramedics that care for the patient as first responders as part of the health care system.

The prehospital management of critically ill patients by paramedics is a relatively new concept in the medical field and unique to the United States. In other countries that provide prehospital life support, the services are administered directly by physicians (Caroline, 1983). Beginning in the late 1960s, an alternative to the physician staffing the rescue vehicle was developed as the role of the paramedic (Caroline, 1983).

The history of the use of emergency personnel dates back to the time of the Napoleonic wars when light carriages were used to transport the injured (Palmer & Gonsoulin, 1990). This system was used until the industrial revolution when the development of the automobile was introduced.

The arrival of the paramedics in the early 1970s was prompted by several social, technological and medical

events. These events include: (1) the development of high speed vehicles and highways in the 1950s and 1960s, which resulted in the increasing number of fatal accidents, (2) publication of a National Academy of Science/National Research Council "White Paper" (1966) which described a sordid picture of emergency health care in the U.S., (3) passage of the National Highway Safety Act in 1966 requiring prescribed levels of emergency response along the highway systems in order to qualify for continued federal highway monies, (4) the organization of the National Registry of Emergency Medical Technicians in 1970, (5) the creation of residency program for emergency physicians by the American College of Emergency Physicians in the mid-1970s, and (6) the return of Vietnam Veterans trained in trauma treatment and having experience in flying helicopters (Palmer & Gonsoulin, 1990).

This occupational blossoming has not occurred without it's share of obstacles. Uncertainty of objectives and functions, rapid growth, frequent policy modifications, poor image, and hesitancy of acceptance by medical professionals contributed to job instability (Palmer & Gonsoulin, 1990). Initially, paramedics were limited to minor treatments and transportation, but now with the advances in medical care, the role of the paramedic is expanding. This expansion includes skills that ER nurses and physicians perform such

as intubation, interpreting electrocardiograms and the administration of thrombolytic agents.

The standard for the actions of the paramedics was originally found in the historical concept of the "Good Samaritan", where an individual is protected from liability when rendering aid to another in a prudent fashion (Palmer & Gonsoulin, 1990). Current practices are now more complex. The paramedic provides emergency interventions and life saving maneuvers with the use of skills and protocols mandated by the state in a prehospital environment. Legal precedent for the actions of the paramedic is lodged within each state's medical practice act which specifies standards of care and the procedures that EMS providers, at all levels, may perform.

The focus of paramedic education is on short term care providing emergency interventions and brief medical treatment with safe transport of the critical patient to the emergency room, in contrast to, nursing education which has placed emphasis on the prevention of illness, pathology and treatment of both acute and long term problems, and rehabilitative care (Stewart, 1990). Registered nurses have trained more intensively and for a greater duration of time encompassing broader aspects of patient care. This includes biological, medical, psychological, developmental, social, cultural as well as holistic approaches. These differences

in educational goals and skills frequently causes disharmony between the paramedic and the emergency room staff.

Paramedics deal with a variety of medical and non-medical occupational duties. The services are provided within a surrounding of medical protocols made up of "dull" as opposed to "trauma" runs. Many thrive on the psychological "high" or "adrenalin rush" associated with the rescue and the life saving environment. The paramedics are rewarded on how they execute extrication, packing, transporting and delivering the emergency patient in the shortest period of time. Therefore, they depend on an increasing number of exciting "runs" to validate their role as a paramedic. Upon arrival to the emergency room the paramedics want a quick, smooth transfer of the patient so they can return to service. Palmer (1983) describes this phenomena:

Paramedics and emergency medical technicians develop a need for role validation associated with the ambulance runs that call forth advanced lifesaving, rescue and medical skills. Metaphorically, this need turns paramedics into "trauma junkies", because answering calls involving multiple casualties, physical trauma, and fast paced action becomes the "real" work of emergency medical service personnel. Calls evoking less sophistication of response behavior are devalued.

The quick paced philosophy of the EMS service along with the educational goals frequently cause friction the relations between the paramedic and the emergency room

personnel (Palmer & Gonsoulin, 1990; Stewart, 1990). The process of managing and transporting critically ill patients to the emergency department demands communication and cooperation. If the process is complicated by miscommunication, competition, disagreement, and different perspectives toward patient care, the outcome for the patient can range from uncomfortable to disastrous. Interpersonal communication and collaboration between ER nurses and paramedics is the key element in the smooth transfer of patients from the prehospital emergency medical system to the hospital system.

Problem Statement

The recent expansion of the role of the paramedic to include administration of thrombolytic agents and other high technological procedures has developed rapidly. This new growth along with the differences in education of the paramedic, creates friction and dissension among the personnel. In their 1988 study on the work-stress burnout among paramedics, Grigsby & McKnew found that negative interpersonal relationships with coworkers and emergency room personnel and certification requirements, produced the two highest correlations with the burnout measure. Communication and teamwork are essential among emergency

personnel in order to provide congruent and quality patient care.

Collaboration is the relationship between associates of different professions working together toward mutual goals (Homonoff & Maltz, 1991). In this case, the goal is to provide high quality care to the patient. ER nurses and paramedic work jointly to provide quality care to a patient in emergent situations but in distinctively different work settings with different occupational and educational frameworks.

Numerous organizations support collaborative practice among health care professionals. The American Medical Association (AMA) jointly sponsored the National Joint Practice Commission which was a task force to explore boundary issues between nursing and medicine. In 1981, the commission was dissolved and they published "Guidelines for Establishing Joint or Collaborative Practice in Hospitals" (Morgan & McCann, 1983). The American Hospital Association (AHA) supports the concept that hospital administrators should be actively involved in joint practice to help physicians and nurses attain a level of practice acceptable to them, to their institutions, and to the committees they serve.

The American Nurses Association (ANA) in the 1980 Social Policy statement defined collaboration as a "true

partnership in which the power on both sides is valued by both, with recognition and acceptance of separate and combined spheres of activity and responsibility, mutual safeguarding of the legitimate interests of each party, and a commonality of goals that is recognized by both parties" (American Nurses Association, 1980). The ANA continues to support collaborative practice among nurses and among all health care providers.

Even though, there is a collective belief that collaboration is a concept that is significant for health care, the policies or statements have not been incorporated into practice by the providers. Therefore, the focus of this study is the perception of the collaborative relationship between ER nurses and paramedics.

Purpose

The purpose of this study is to examine the nature of collaborative relationships between ER nurses and paramedics in Southern Dade County, Florida. The focus includes:

1. investigating the relationship between selected demographic variables and collaborative perceptions.
2. investigating the differences in collaborative perceptions between ER nurses and paramedics.
3. identifying contextual factors in the collaborative relationship.

Interpersonal communication is most prominent during the "report" of patient information from paramedic to ER nurse. Interdisciplinary collaboration is needed to provide quality patient care and promotes fellowship among the departments.

Research about the collaborative relationships among health care professional is limited; with research on the interaction of paramedics and emergency room nurses almost obsolete. This study expands the existing literature and provide future area of research.

Research Question

The research question proposed for this study is: What is the nature of the perceptions of the collaborative relationship between emergency room nurses and paramedics? It has been shown that interactions between nurses and physicians and nurses and paramedics are generally positive but each profession is more likely to interact among themselves. Limited interaction undoubtedly contributes to poor communication between the professions. This study looks at the nature of collaborative relations via the following study questions:

- 1) What effect does the personal attributes of age and gender have on the perceptions of the collaborative relationship between ER nurses and paramedics?

- 2) What effect does the social demographics of experience and level of education have on the perceptions of the collaborative relationship between ER nurses and paramedics?
- 3) What are the differences in the perceptions of the collaborative relationship between ER nurses and paramedics?
- 4) What are the contextual factors in the collaborative relationship between ER nurses and paramedics?

Study Variables

The main study variable is the collaborative relationship which includes the following study variables: Personal attributes, social demographics, positive interaction, active participation, equality of influence, and shared responsibility and accountability.

Personal attributes for this study include age and gender of the nurses and paramedics. Social demographics for this study include years of experience as a paramedic, not including emergency medical technician (EMT) experience and level of education. These items will be collected in Part I- Demographics.

Positive interaction, active participation, equality of influence, and shared responsibility and accountability will be determined by the Collaborative Practice Perception Scale. The obstacles or areas of conflict will be defined per the participant in the Free Response section of the questionnaire. The Free Response area will also identify those contextual areas of collaboration not previously

identified in the review of literature or in the survey section.

Assumptions

1) Collaboration is enhanced when there is open communication, positive interaction, active participation, equality of influence, and shared responsibility and accountability.

2) Open communication is essential for the transfer of information and assists in maintaining the continuity and quality of care of the patient.

3) Health professionals have a responsibility to share information that helps individuals make informed decisions about their health care (King, 1981).

4) Perceptions of the nurse and the paramedic influence the interaction (communication) process (King, 1981).

5) Goals, needs and values of the nurse and paramedic influence the transaction process (report) (King, 1981).

Definition of terms

Authority- a transactional process characterized by active, reciprocal relations in which members' values, backgrounds, and perceptions play a role in defining, validating, and accepting the directions of individuals

within an organization (King, 1981, p.124).

Collaboration- a practice that involves interaction between individuals or groups that enables the knowledge and skills of both professions to synergistically influence the patient care being provided (Weiss & Davis, 1985).

Communication- an information processing, a change of information from one state to another (King, 1981, p.69). It is a process by which information is transmitted through a common system of symbols, signs or behaviors (Haber, 1982).

Decision-making- a dynamic and systematic process by which a goal-directed choice of perceived alternatives is made, and acted upon, by individuals or groups to answer a question and attain a goal (King, 1891, p.132).

Interaction- a process of perception and communication between person and environment and between person and person, represented by verbal and nonverbal behavior that are goal-directed (King, 1981, p.145).

Organization- a system whose continuous activities are conducted to achieve goals (King, 1981, p.119). It is composed of human beings with prescribed roles and positions who use resources to accomplish personal and organizational goals (King, 1981, p.119).

Perception- a process of organizing, interpreting, and transforming information from sense data and memory (King,

1981, p.24). It is each person's representation of reality; awareness of persons, objects, and events (King, 1981, p.146).

Power- a capacity to use resources in organizations to achieve goals; a process whereby one or more persons influence other person in a situation; the capacity or ability of a group to achieve goals (King, 1981, p.124).

Role- a set of behaviors expected when occupying a position in a social system (King, 1981, p.93).

Status- the position of an individual in a group or a group in relation to other groups in an organization (King, 1981, p.129).

Transaction- a process of interaction in which human beings communicate with the environment to achieve goals that are values (King, 1981, p.82).

Prehospital- any area in which emergency medical services are provided prior to admission to the hospital emergency room.

Paramedics- persons who have completed the requirements for licensure and have passed the examination given by the state and that have worked in a prehospital environment for at least one year.

Registered nurses- persons who have completed the requirements for R.N. licensure and have passed the state licensure examination. Emergency nurses are registered

nurses who have worked in the emergency room setting for at least one year.

Continuity of care- the logical, smooth flow of care of the patient from the time they enter the health care system through being discharged home (Tappen, 1983).

Significance

The use of "911" calling system has helped in saving many lives by rapidly providing emergency care. The elevated number of critically ill patients entering the emergency room has made the communication between the nurses and paramedics even more vital.

Collaboration is an important aspect of any working relationship and is enhanced when there is open communication. Good communication and working relationships with paramedics contributes to nursing by providing a pleasant and trusting working environment. This benefits the patient by furnishing a smooth transfer from prehospital to hospital care when the patient is unable to care for himself. Research in the area of prehospital care and emergency nursing is crucial due to the increasing number of patients using the emergency medical system.

Patient perceptions of the emergency experience are formed during encounters with the emergency personnel, the hospital and the rescue system. Hospitals have become

increasingly concerned with consumer responses to the care given because it is important in recruiting patients for future visits. Dortar (1993) documents the practical benefits of collaboration to hospital administrators is shown by increased consumer satisfaction.

Eubanks (1991) states that hospital chief executive officers (CEOs) have been concerned with the quality of patient care. The CEOs have observed that the solution is immersed in the relationship between nurses and physician as well as all the other disciplines within the hospital. This issue has recently become of interest because of the changes in the health system. The success of individual hospitals will be linked to the ability of each institution to facilitate the nurse-physician relationship. Hospitals that succeed in improving this relationship will thrive; those that do not will lose nursing employees, admitting physicians, and, ultimately patients (Eubanks, 1991).

Teamwork is the process by which a group of people work together towards a common goal (Tappen, 1983). It requires a degree of cooperation and communication with others. Communication by positive feedback, documenting and recognizing that a job has been done well, increases self esteem which affects job satisfaction and job retention. Communication maintains the continuity of care and allows

the nurses and paramedics to contribute to the total health care system.

Nursing Implications

Prehospital care is a rapidly expanding area of health care and is the gateway for many patients into the health care system. Strong cooperation is necessary to provide quality patient care. The benefit of this study to nursing practice consist of increasing the awareness of the emergency nurse and paramedic to the collaborative practice between the professions. This increased perception will benefit the quality of patient care due to increased teamwork and a sense of continuity. Collaborative endeavors assist in creating a pleasant and trusting working environment. The final and most significant benefit is the increased awareness that ER nurses and paramedics have a similar occupational goal in caring for the well-being of the acutely ill patient.

A survey of the literature indicates the need for maximum voluntary collaboration by emergency nurses and paramedics is critical. Nurses and paramedics continue collaborative efforts in an unstructured manner. Therefore, their success in achieving a substantial impact in enhancing the relationship is minimal. This study will help to increase the awareness of collaboration and identify areas

of conflict in the present interactions of emergency nurses and paramedics. These identified areas can be addressed in nursing education when discussing the roles of other health care professionals. Closer collaborative practice between nursing education and other health care professionals is essential to give students, both nursing and paramedic, a prospective of the various roles within health care and a complete representation of the patient's care from prehospital through admission to the hospital and eventually discharge home.

The primary benefit of this study to nursing research is expanding the knowledge regarding the interactions between ER nurses and paramedics. Providing information on areas of conflict in communication between ER nurses and paramedics is crucial in promoting a collaborative relationship.

The literature defines collaboration and describes collaborative practices but there is a paucity in means to measure it's components. In 1988, Pehl developed a tool to measure collaboration between nursing service administrator and nursing practice. The study uses this new tool, revised for a clinical setting with emergency nurses and paramedics to assist with the validation of the tool. Nursing research on the construct of collaboration is significant because collaboration is vital in all working relationships.

Chapter 2

Review of the Literature

Introduction

The concept of collaboration within the nursing profession has been explored with physicians in the academic setting, within multidisciplinary conferences, and among nurses but little is known about the relationship between nurses and paramedics. This review of literature will present, in the following order, findings related to competition and cooperation, nurse-physician collaboration, nurse-physician conflict, collaboration among nurses and other health care professionals, and nurse-paramedic interactions.

Competition and Collaboration

Some of the earliest research of the effects of cooperation and competition was complete by Morton Deutsch in 1949. His studies showed that there was a higher degree of coordination, friendliness, and productivity in cooperative groups than in competitive ones. This outcome has been reported by other researchers (Hammond & Goldman, 1961; Jones & Vroom, 1964; Klein, 1956; Mintz, 1951; Myers, 1962; and Napier & Gershenfield, 1973).

Napier and Gershenfield (1973) points out that a

competitive and hostile climate is likely to result whenever people who are engaged in problem-solving feel that the other side wants to reduce their power. Hellriegel and Solcum (1974) presented a summary of the consequences of competitive and cooperative interpersonal relationships. The result of competitive relationships revolve around antagonism and power minimization; suspicion and hostility; separation of interests; and misleading communication. On the other hand, cooperative relationships emphasize interest and power enhancement; trust and responsiveness; sensitivity to common interests and convergence of beliefs; and accurate communication.

Kolb, Rubin, and McIntyre (1974) outlines three of the consequences of utilizing competitive strategies. They are:

- 1) The development of a competitive, win-lose climate that emphasizes the separateness of "we" and "they" and feeling that "we" are superior and "they" are inferior. Individual factions or groups under competitive pressure invariably rate themselves above-average in both cohesion and ability.
- 2) Distortions in judgement. Individuals or groups under competitive pressure invariably evaluate their own contributions as best, and fall into downgrading efforts of others.
- 3) Distortions in perception. Experiments demonstrate that under competitive pressure persons perceive that they understand the other persons' proposal when in fact they do not. Consequently, areas shared in common are likely to go unrecognized.

In summary, then, cooperative groups exhibit the following characteristics:

- 1) More effective intermember communication.
- 2) More friendliness, more helpfulness, and less obstruction.
- 3) More coordination, more division of labor, more orientation to task achievement, more orderliness in discussion and higher productivity.
- 4) More feeling of agreement and similarity of ideas, more confidence in one's own ideas and in the value others attach to those ideas (Deutsch, 1973).

The competitive values system has emerged from hundreds of years of thinking has become deeply webbed into our beliefs about the nature of conflict. Conflict in organizational settings has its core in the competition over something perceived to be scarce. Status, prestige, power, and influence are among the resources perceived to be scarce (Kraus, 1980). This perceived scarcity continues to reinforce competition and teaches competition as a positive value system instead of collaboration.

Collaboration between Physicians and Nurses

Literature about collaboration between physicians and nurses have been in the area of cooperative learning in the academic setting. Numerous research studies have addressed the collaborative relationship between nurse practitioner

students and medical schools. A cooperative effort between a school of nursing and a university hospital department of medicine was initiated to educate acute care nurse practitioners. Nurse practitioners were responsible for case management of patients in collaboration with physicians. Results showed promise for interdisciplinary patient management and nurse-nurse and nurse-physician collaboration (Shah, Sullivan, Lattanzio & Bruttomesso, 1993).

LeRoux, Gutierrez & Todaro (1993) describes the collaborative role between a university school of nursing and a medical center for a perinatal nurse practitioner program. The study shows effective collaborative practices within an academic setting. Williams (1993) recounts the development of the Texas Medical Center Collaborative Preceptor Program, which also shows collaborative practices within a university setting. Most of the collaborative research performed within the academic arena has been effective because research and education is the primary focus.

Torgersen & Chamings (1994) looked at the collaborative perceptions that anesthesiologists and nurse anesthetists have on each other in nurse anesthesia educational programs. Results highlight important areas of conflict between the two groups including unequal and hierarchical relationships

regarding shared responsibility, access, power, and recognition in health care decision-making. The study also noted definite philosophical and political differences between the two groups.

Collaboration between groups with similar occupational descriptions becomes strenuous because of possible role confusion, such as with the nurse anesthetist and the anesthesiologist. This role strain leads to competition and conflict.

Nurse-Physician Conflict

Morgan and McCann (1983) discusses the historical perspective of the nurse-physician relationship. Conflict between the male physician and the female healer has been identified as early as the 13th century when the first European medical schools appeared. By the 14th century, there was a great demand for university trained physicians and "well-to-do" young men flocked to the universities to become doctors. Women at that time were almost universally excluded from medical schools and licensing laws appeared that prohibited the practice of medicine by anyone except the university trained physician. Many of the lay healers were women and women who dared to cure without a license was considered a witch and put to death (Morgan & McCann, 1983).

Throughout history nursing has gone through three

ideologies. With "Nightingalism", the nurses were considered the hand-maiden of the physician and with paternalism, the hospital played the role of the father figure or "big daddy". At present, professional collectivism is in progress with nurses banding together to determine their own working conditions and quality of nursing practice. Even with this last evolution, there are many physicians who continue to view nursing as an extension of medicine and not a discipline in and of itself (Morgan & McCann, 1983).

The educational gap between physicians and nurses creates a barrier in the relationship. Holkelman (1975) recognizes the difference in educational preparation and the fact that physicians and nurses place different values on specific areas of health care continuum. This difference in emphasis continues to be a source of communication difficulties.

Campbell-Heider & Pollack (1988) looked at barriers to physician-nurse collegiality from an anthropological perspective. They found that the hierarchical framework of health care requires that a single individual be ultimately responsible, legally and clinically to manage the patient's care. Physicians occupy that role which cause nurses to be viewed as physician extenders or helpers. Often emergency nurses feel that they are responsible for the patient's care

once the patient enters the hospital and may view the paramedics as the nurse's helper.

Researchers have identified the sources of nurse-physician conflict (Kalish & Kalish, 1977), the consequences of ineffective communication (Prescott & Bowen, 1985), and means of interaction (Kennedy & Garvin, 1988). It has been shown that interactions between nurses and physician are generally positive but physician are more likely to interact with other physicians and nurses are more likely to interact with other nurses (Kerr, 1986). Limited interaction undoubtedly contributes to poor communication between the professions. This communication pattern is similar to nurse-paramedic relations and therefore may apply to the situation.

Collaboration between Nurses and Other Health Professionals

Cooperation is a key issue when there is collaboration between nurses and other health professionals. Cooperation and collaboration are components of collegiality. Collegiality is the professional relationship between two or more persons in the same profession who share equal power and authority and work together or participate in reaching similar goals (Beyer, 1981). Several studies have noted the need for collegial relations among nurses (Beyer, 1981; Beyer & Marshall, 1981; Dick, 1986; McMahon, 1990) and

interdepartmental collegiality (Carroll, 1987; Iles & Auluck, 1990; Williams, 1985). In all studies, it is agreed that collegial and collaborative relations are important in providing a good working environment. Dick (1986) specifically reported a relationship in collegiality decreasing burnout among nurse faculty. Campbell & Dowd (1991) showed that collaborative projects improved collegiality and decreased intrapersonal conflicts.

Nurse-Paramedics Interaction

C. E. Palmer has studied the occupational behavior of paramedics and emergency medical technicians (EMT's) for the last 10 years. Palmer (1983) examined paramedics and EMT's from an ethnographic concern as providers of emergency care and in articulating the flow of urban excitement of this occupational subculture. The data was collected by participant observation, informal interviews, conversation, listening to official radio traffic, and inspection of written documents. The majority of the data was obtained on the 490 hours spent with EMS personnel attending to 88 rescue calls. He concluded that with the occupational arena of excitement and danger, the paramedic performs a variety of roles constituting street work similar to police officers. These roles include authority figure, lifesaver, information specialist, partner, grief manager, and

counselor. Due to the newness of their medical function, paramedics are immersed in a work world abundant with teamwork demands, conflicts with medical and nonmedical personnel and vaguely defined legal standards.

A more recent research study by Palmer and Consoulin (1992) examines the nurse-paramedic interaction. This was an exploratory study in which structure interviews were conducted with 35 persons (21 paramedics and 12 full-time ER nurses and 2 ED physicians). The interviews ranged from 30-80 minutes. They focused on the general relationship and then on conflict as the basis of how the two groups interact. The researchers reported that open conflict between the nurse and paramedic are not frequent, but do occur. The primary area of conflict is the report from the paramedic to the nurse.

Many of the paramedics felt that they were not being listened to, or the nurse did not value the paramedic's assessment of the patient. Or if the paramedic was heard, they may be challenged as to the care given or their level of competence. They also claimed that they face numerous insults to their occupational identities such as being a "less than capable" member of the trauma team. They felt that the nurses had "superior attitudes" or thought of the paramedics as "peons" or "just ambulance drivers".

Some of the paramedics felt that there was conflict

because the nurses might be jealous of the roles paramedics play during trauma or emergency cases or of skills the paramedics are allowed to perform such as intubation. The paramedics reported that they believed that the ER nurses did not appreciate the time constraints or the working conditions in which they must provide care.

On the other hand, emergency nurses felt that the paramedics did not know when their medical control had ended once the patient had been brought to the ER. The nurses also admitted that they sometimes acted in a "condescending manner" toward those they thought were inferior in knowledge and skills. The most common responses reported from the nurses were related to the quality and type of patient care.

The attitudes and behaviors of the nurses and paramedics are affected by the training individually received which influence their interaction during the time of transfer. Palmer & Gonsoulin (1992) associated the power struggles and "turf wars" to the educational goals and training which produces different occupational perspectives. When the nurse and paramedics are on different tracks or wavelengths, and negative situations persist over time, relationships can degenerate to the point of harm for the patient.

Summary

Research examines the collaborative relationships between physicians and nurses, between nurses, and between other departments in the hospital. There is evidence in the literature that demonstrates that the relationship between nurses and physicians has developed over a long period of time and has adapted to alterations in society. Even though nursing is an evolving profession, there are many physicians who continue to view nursing as an extension of medicine and not a discipline in and of itself (Morgan & McCann, 1983).

The review of the literature on the interaction between paramedics and nurses or on interventions that may improve collaborative relationship has been scarce. Prehospital care is the newest emerging profession and occupies a role which is often viewed to be nurse extenders or helpers, especially in the emergency room. These concepts can create conflict which sabotages a collaborative relationship.

Theoretical Framework

King's Conceptual Framework for Nursing

Imogene King's conceptual framework for nursing is the theoretical foundation for this thesis and can be implemented in examining the relationship between nurses and paramedics. King utilized the general systems theory to

provide a structure for nursing as a discipline and a profession. The framework is grouped into three dynamics interacting systems: 1) personal system, 2) interpersonal system and 3) social systems.

A personal system is viewed by King as an individual, utilizing information that would assist nurses in understanding individuals. A human being is a complex, open living system that react to their environment on the basis of their perception, expectations, and needs. The concepts of body image, growth and development, perception, self, space and time are relevant to the personal system.

Interpersonal system focus on groups of individuals including dyads, triads, and small or large groups. Communication, interaction, roles, stress, and transaction are concepts more important to the interpersonal system.

King (1981) defines a social system as an organized boundary system of social roles, behaviors and practices developed to maintain values and the mechanism to regulate the practices and rules. Individuals within a social system share common goals and interests. Within the social system, the concepts of authority, decision-making, organization, power and status are utilized. In summary, an individual functions in social systems through interpersonal relationships in terms of perception which influence decisions regarding life and health.

Although King's concepts are placed in specific systems, they are applicable to each system due to the interrelation of the three systems. In examining the ER nurse-paramedic relationship, the concepts of authority, communication, decision-making, interaction, organization, perception, power, roles, status, and transaction are the most applicable in combining King's theory with the collaborative process.

In using King's general system framework where personal perceptions, interpersonal interactions and societal systems affect each interaction, the collaborative practices of paramedics and emergency nurses can be examined. The structure of the theory indicates some semipermeable boundaries of two or more individuals interacting in the health care system for the purpose that leads to a goal (Riel-Sisca, 1989). This element of interaction is connected by communication in a shared collaborative process. In this case, paramedics share information regarding the client's prehospital care and then collaborates with ER nurses to move toward the mutual goal of quality care for the patient.

If the interaction is positive, the nurse and paramedic feel a sense of camaraderie and the transaction is smooth. If the interaction is negative, the nurse or the paramedic may have interpreted the conflict as personal (individual

paramedic with individual nurse), interpersonal (certain rescue station with a certain emergency room), or organizational (all paramedics with all ER nurses). This is consistent with King's framework.

The environment along with personal characteristics influence responses to a situation. Each persons perception varies due to differences in their backgrounds, skills, abilities and values. All these points are incorporated to the communication patterns of a person.

Communication/Perception Theory

There is very little documentation on the communication patterns between the nurse and paramedic. Communication is a process by which information is transmitted through a common system of symbols, signs or behaviors (Haber, 1982). It involves an interaction between 2 people who co-act upon or affect each other. The interaction is simultaneous and flows in both directions.

The circular model of communication illustrates that communication includes a sender, a message, a receiver and feedback in a circular pattern (Haber, 1982). It is simplistic but contains the essential components of communication. Feedback is important in maintaining communication because it is both the mechanism and criterion by which our effectiveness is determined (Hein, 1973).

Positive feedback is a helpful source of information that reinforces our successful effort and reaffirms our expectations (Hein, 1973).

Communication is an important aspect of any collaborative working relationship. Studies have shown that adequate flow of information between people who are working together is necessary for smooth operation and for preventing misunderstandings. Also, people are more likely to exchange information when there is a sense of collaboration.

Collaborative Framework

Collaboration, used broadly, denotes one person working with another towards a mutual goal. The collaborative models for this study, have been examined within physician relationships and organizations.

Despite testimony to the value of cooperative efforts, there is continuing evidence of a significant discrepancy between the concept and practice of collaboration. Researchers have examined the relationship between pediatric psychologist and pediatricians. They found that when physicians and psychologists do work together their interactions are disrupted by misunderstanding, conflicts of interest or struggles for control even when such

collaboration who be helpful to the client (Dortar, 1983; Miller & Schwartz, 1990).

Dortar (1993) addresses the need for a comprehensive framework that describe the broad range of professional interactions. He defines interdisciplinary collaboration as any professional activity conducted between members of one profession and another. Collaboration is heavily affected by the individual characteristics of the colleagues and their settings. Three factors influence the initial decision to collaborate which include: 1) participant's beliefs about the need for and expectations of collaborative outcomes; 2) participants knowledge, skills and prior experience in collaborative activities; and 3) setting-based barriers and supports. This framework suggests that collaborative success will increase as the skills, beliefs and incentives for collaborations become inherent to practice.

Summary

King's conceptual framework and goal attainment theory are the developmental components of collaboration. Individual collaborative practice incorporates all of the past experiences, judgements and perceptions of the working encounters with the other person or agency. These thoughts and experiences influence future interactions and can either

enhance or diminish the relationship.

Nurses and paramedics interact during the patient report where there is not only a transfer of information but the transfer of power and authority. Palmer and Gonsoulin (1992) examined the nurse-paramedic interaction and found that open conflict between the nurse and paramedic are not frequent, but do occur with the primary area of conflict is the report from the paramedic to the nurse.

Within King's framework, interaction, communication, power, and authority are defined concepts which are interrelated in the interactions of human beings within their environment. Purposeful interactions require that the nurse and paramedic openly share information and agree on the means to achieve goals. By being open to cues given during the interaction, each participant is more able to process information (King, 1981).

Collaboration denotes one person working with another towards a mutual goal working environment. Purposeful, goal-oriented interaction among nurses and paramedics enhance the effectiveness of care and create positive outcomes for those involved. This is consistent with King's goal attainment theory along with the collaboration framework.

Chapter 3

Methodology

Design

A correlation descriptive study was used to examine the perception of the collaborative relationship between ER nurses and paramedics. Polit and Hungler (1991) describes correlational research as the exploration of interrelationship among variables of interest without any active intervention from the researcher and descriptive research as the accurate portrayal of characteristics of persons, situations, or groups and the frequency of occurrence. This was the most appropriate design to investigate and describe the possible relationship between the perceptions of collaboration between ER nurses and the paramedics and age, gender, level of education and experience.

Sample

The target population for this study was licensed paramedics working in a prehospital setting and registered nurses working in the emergency room setting. The subjects were obtained from a convenience sample of ER nurses and paramedics working in the southern part of Dade County. The subject selection was not based on age, gender or minority status. Excluded from the study were paramedics

and ER nurses that have been employed for less than one year due to limited interaction with each other, and persons who are both a nurse and paramedic due to the conflict in interest by being both a registered nurse and paramedic.

The paramedics were employed by the County emergency medical system. The paramedic sample contained paramedics from each shift (A, B, and C). The paramedics work 24 hours on duty and 48 hours off, therefore, the first 24-hour shift is the "A" shift, the second 24-hour shift is the "B" shift and the third 24-hour shift is the "C" shift.

The paramedics population in Southern Dade County was 100. This figure was obtained by contacting the Division Chief's office requesting the number of paramedics staffed at each station. This included 9 paramedics and 1 swing paramedic per station. The surveys were distributed by the Division's Special Assistant to the Officer in Charge at each station, who then distributed the surveys within their respective stations. There were no undistributed surveys returned. Twenty-eight (28%) of the 100 paramedics responded. Out of these 28, 2 paramedics were dropped from the survey because they were both registered nurses and paramedics. Therefore, only 26 surveys were included in the study.

The nurses were employed at local private community hospitals in Southern Dade County. These are community

hospitals where the County Fire Rescue paramedics transport their patients. Nurses from each institution and each shift were used.

The emergency nurse population in Southern Dade County was 116. This figure was obtained by contacting the ER nurse managers of each of the participating hospitals and requesting the number of nurses staffed. The surveys were distributed by the nurse managers within their respective emergency rooms. Eleven undistributed surveys were returned upon completions of the study period, 7 surveys from one emergency room and 4 from another. Twenty-three (22%) of the 105 emergency room nurses responded. Out of these 23, 2 were dropped from the study because the survey was returned incomplete. Therefore, only 21 surveys were included in the study.

Informed consent

To ensure protection of human rights of the participants, the following protocol was followed. A cover letter (Appendix A) was provided to the participants introducing the investigator and the study. The risks, benefits, rights and responsibilities of participation were outlined. The participants were instructed that they had the right to refuse participation or withdraw from the study at any time without penalty. The letter provided assurance

regarding confidentiality and voluntary participation. Informed consent was incorporated into the cover letter with the completion and return of the survey indicating consent of participation. Data collection commenced after approval in writing from the Research and Human Subjects Committees of Florida International University, the Medical Centers and the County Fire Rescue (Consents I-IV).

Instrument

The research instrument that was used in the study consists of three parts: 1) General Demographic Information (Appendix B), 2) Revised Pehl Collaboration Scale (RPCS) (Appendix C), and 3) Free response questions (Appendix D). Part 1 was developed by the investigator to collect demographic data for grouping of persons on personal and organizational variables that may influence collaboration. Emergency room nurses were asked to supply age, gender, basic level of nursing preparation, highest degree held, years since graduation from their basic nursing program, and years as an emergency room nurse. Paramedics were asked to supply age, gender, basic level of paramedic preparation, highest degree held, years since graduation from their basic paramedic program, and years on the County Fire Rescue.

Part 2, Revised Pehl Collaboration Scale (RPCS), was

modified from an established instrument called the Pehl Collaboration Scale developed by Linda Pehl in 1988. The original instrument was based on a concept analysis of collaboration completed by Pehl and was designed to measure collaboration as perceived by nursing deans and nursing service administrators. It was used with permission by Linda Pehl (Appendix E).

For use in this study, the investigator modified Pehl's Collaboration Practice Scale. There were 12 items that were not related to clinical practice such as curriculum issues, joint employment and specific educational objectives that were eliminated. The uneven distribution of the items on the original collaboration scale were due to the significance of the components identified in the concept analysis. The percentage of items eliminated from each factor was constant, therefore did not skew the original distribution. The order of the items on the survey have not been changed and no new items have been added. The wording was modified on the RPCS to make it appropriate for use in clinical practice (in this study, for use with ER nurses and paramedics).

The RPCS consists of 38 items related to perceptions of collaborative practice which separate into four domains. Domain 1: Positive Interaction-consists of 16 items related to sharing, mutual trust and respect, open communication and

exchange of information. Domain 2: Active Participation-contains 7 items relating to joint forces, depending on each other's skills and knowledge, interdependence, joint decision making and unified goal achievement. Domain 3: Equality of Influence-consists of 8 items related to power on both sides valued by both ER nurses and paramedics, recognition/acceptance of separate and combined spheres of influences, mutual safeguarding of legitimate interests of each party, equal input and partnership, and reciprocal respect. Domain 4: Shared Responsibility and Accountability-consists of 2 items related to accountability and responsibility. Table I displays the survey questions by collaboration factors.

Table I

SURVEY QUESTIONS BY COLLABORATION FACTOR

FACTOR I- POSITIVE INTERACTION

11. Confidence and trust should exist between ER nurses and paramedics.
13. ER nurses and paramedics should feel free to exchange ideas and opinions.
19. ER nurses and paramedics should share information about important events.
20. ER nurses and paramedics should share continuing education programs and educational software.
21. ER nurses and paramedics should socialize new nurses/paramedics into the professional role.
22. ER nurses and paramedics should have an opportunity to experience each others professional roles.
23. ER nurses and paramedics should work together on joint research projects.
24. Provisions should be made for feedback of interagency information via newsletter, memos, or patient updates.
25. There should be utilization of ER nurses and paramedics as role models for nursing and paramedic students.
28. There should be a consensus between the professional goals of ER nurses and paramedics.
29. ER nurses and paramedics should participate in joint committees.
30. There should be cooperative orientation activities between new ER nurses and new paramedics.
31. ER nurses and paramedics should explore issues related to educational programs together.
32. ER nurses and paramedics should explore patient care standards together.
36. Strategic long-term planning should be carried out between ER nurses and paramedics.

FACTOR II- ACTIVE PARTICIPATION

10. ER nurses and paramedics should work together as a team toward patient care goals.
12. ER nurses and paramedics should coordinate their efforts.
14. ER nurses and paramedics should cooperate for achievement of patient care goals.
15. ER nurses and paramedic should welcome information from each other.
16. ER nurses and paramedics should be willing to share knowledge and lend assistance to each other.
17. ER nurses and paramedics should deal with conflict openly.
18. ER nurses and paramedics should hold forums for discussions to explore concerns.
33. ER nurses and paramedics should resolve differences without hard feelings occurring.
34. ER nurses and paramedics should feel safe to disagree with the opinions of each other.
35. ER nurses and paramedics should establish and maintain friendly working relationships with each other.
38. There should be regular contact between ER nurses and paramedics through social functions.

FACTOR III- EQUALITY OF INFLUENCE

1. ER nurses and paramedics should have as much power as the other.
2. Suggestions of each person should be considered important.
3. Decisions on the patient's care should be made by both the ER nurse and paramedic.
4. Contributions of the ER nurse and the paramedic should carry equal weight.

5. The ER nurse and paramedic should have a clear idea of what the other is doing most of the time.
6. There should be a high degree of participation between the ER nurse and paramedic.
7. The ER nurse and paramedic should be encouraged to have her/his say before patient care decisions are made.
8. ER nurses and paramedics should discuss important problems they are confronted with.
9. ER nurses and paramedics should ask for help and suggestions from each other.
37. Consultations should occur equally between ER nurses and paramedics on patient care concerns.

FACTOR IV- SHARED RESPONSIBILITY AND ACCOUNTABILITY

26. ER nurses and paramedics should be accountable for quality patient care and patient satisfaction.
27. ER nurses and paramedics should be responsible for quality patient care and patient satisfaction.

A five point Likert scale was used to rate the "extent" of agreement for each statement where 1=strongly agree; 2=agree; 3=neutral; 4=disagree; and 5=strongly disagree. Likert scales are easily to understood by participants and easy to score. Reliability has been shown to increase as the scale is enlarged from two to five points. There is no statistical gain with greater than five points (Nunnally, 1978).

There are two parts to each statement. Part A, addresses the question, "To what extent do you agree or disagree with the statement in regarding the item necessary to collaboration?". If you strongly agree that the statement is necessary for collaboration, you would put a circle around 1 or if you strongly disagree, you would circle 5.

Part B, address the question, "To what extent do you agree or disagree with the statement in regards to how collaboration is practiced at present?". If you strongly disagree that the statement is the way collaboration is practiced at present, you would put a circle around 5 or if you strongly agree, you would circle 1. A comment section was allotted after each statement to allow participants to remark on individual components and to address any differences in their belief of what is necessary for collaboration verses what is practiced.

Part 3 consists of four free response questions that are open ended to allow the participants to express their overall or other concerns regarding ER nurse-paramedic relationship. The aspects being examined here include general perceptions of the nurse-paramedic relationship, ways of improving collaboration and conflicts among nurses and paramedics.

Reliability of an instrument is the degree of consistency with which it measures the attribute it is suppose to be measuring (Polit & Hungler, 1989). Conbach' coefficient alpha was used for the Pehl Collaboration Scale. The standardized item alpha for the nursing deans was .949 and .925 for the nursing administrators.

Validity is the degree to which an instrument measures what it is suppose to be measuring (Polit & Hungler, 1989). Pehl established both content validity and face validity by the tool being reviewed by four registered nurses who each had greater than 20 years in nursing education and nursing service administration.

Construct validity tests the extent to which the tool may be said to measure a theoretical construct or trait. This was completed through factor analysis. Factor analysis is a method for reducing a large number of variables into a smaller number called factors by discovering which ones "go together" and the relations between the clusters (Polit &

Hungler, 1989). Factor analysis demonstrated that forty-six of the fifty-two items had loadings of .40 or greater. Four items loaded on more than one factor and the researcher placed the items within the most appropriate factor. Four of the six items that factored with loadings less than .40 were retained because the items may be more appropriate for the clinical setting.

Procedure

The surveys were disbursed by the Principle Investigator to the ER Nurse Managers and the Fire Rescue Special Assistant, who issued the surveys to the Office in Charge of the rescue station. The Nurse Manager or Officer in Charge then distributed the questionnaire to the participants in their institution (emergency room or rescue station). A cover letter explaining the purpose of the research, informed consent and instructions for completion along with a self addressed stamped envelope were attached to the survey.

The data collection was obtained for a one month period in December. Both nurse and paramedic participants were asked to return the survey prior to the end of the month. Follow-up consisted of contacting the nurse managers and the Fire Rescue Special Assistant as a reminder to encourage the ER nurses and paramedics to participate in the study. This

was completed 14 days after the initial circulation of the questionnaires.

Data Analysis

The data analysis was done in 2 parts for the research question: What is the nature of the perception of collaborative relationship between emergency room nurses and the paramedics? Simple statistics was used to examine the individual groups in regards to the demographic data and RPCS survey. The paramedics were compared to the ER nurses in order to answer the study question regarding personal attributes of age and gender, and social demographics of level of education and experience by the use of Pearson's Product Moment Correlation. This type of analysis is seen with descriptive correlational research when comparing means of two groups. A significance level of ($p > 0.05$) was used as criteria for analysis.

For the second part, the free response questions, the data was analyzed by content analysis. Content analysis is a procedure for analyzing written or verbal communication in a systematic and objective fashion (Polit & Hungler, 1989). The goal of content analysis is to find relationships in the qualitative data that pertain to the research study. This is to answer the study question regarding areas of conflict between the ER nurses and paramedics. When the survey data

were received, they were visually verified for completeness and then processed for computation.

Chapter 4

Results

Based upon all data collected from the ER nurses and paramedics, the following results are presented. These results were analyzed using Lotus 1-2-3 software by a personal statistician. They are presented in the following manner:

1. Demographic characteristics for the emergency nurses and the paramedics were briefly summarized (Appendix F).
2. The research questions with their corresponding statistical information (Appendix G).
3. Content analysis of the free response questions.

Demographic Characteristics

The subjects for the nurse group were comprised of 18 females (81.8%) and 4 males (18.2%) with a mean age of 37.6 years. The majority of the nurses, 11 (50.0%) were prepared in associate degree programs, 8 (36.4%) in baccalaureate degree programs, 2 (9.1%) in diploma programs and 1 (4.5%) in a masters degree programs as a nurse practitioner. The highest level of education received by the majority of the nurses 10 (45.5%) was an associate degree in nursing, 4 (18.2%) with a baccalaureate degree in nursing, 3 (13.6%)

with a masters degree in nursing, 1 (4.5%) with a diploma certificate, and 4 (18.2%) with degrees other than nursing. The majority of the nurses reported their number of years from graduation as 6-11 years (N=6 or 27.3%) and the number of years as an emergency nurse as 2-5 (N=7 or 31.8%) or 6-11 years (N=7 or 31.8%).

The subjects for the paramedic group were comprised of 22 males (84.6%) and 4 females (15.4%) with a mean age of 38.2 years. The majority of the paramedics, 15 (57.7%) were prepared in certificate programs, and 10 (38.5%) in associate degree programs. The highest level of education received by the majority of the paramedics 11 (42.3%) was an associate degree and 10 (38.5%) with a certificate, and 3 (11.5%) with baccalaureate degree. The majority of the paramedics reported their number of years from graduation as 6-11 years (N=9 or 34.6%) and the number of years as a South Florida paramedic as 6-11 years (N=8 or 30.8%) or 12-17 years (N=8 or 30.8%). Table II displays the demographic comparison between the emergency room nurses and paramedics.

Table II
COMPARISON OF DEMOGRAPHIC RESULTS

	NURSES	PARAMEDICS
<u>Mean Age</u>	37.7 years	38.2 years
<u>Gender</u>		
Female	N=18, 81.8%	N=4, 15.4%
Male	N=4, 18.2%	N=22, 84.6%
<u>Basic preparation</u>		
Diploma	N=2, 9.1%	N=15, 57.7%
Associate	N=11, 50.0%	N=10, 38.5%
Bachelors	N=8, 36.4%	N=0, 0.0%
Masters	N=1, 4.5%	N=1, 4.5%
<u>Highest degree</u>		
Diploma	N=1, 4.5%	N=10, 38.5%
Associate	N=11, 50.0%	N=11, 42.4%
Bachelors	N=5, 22.7%	N=3, 11.5%
Masters	N=5, 22.7%	N=1, 3.8%
PhD	N=0, 0.0%	N=0, 0.0%
Other	N=0, 0.0%	N=1, 3.8%
<u>Years since basic preparation</u>		
0-5 years	N=4, 18.2%	N=7, 26.9%
6-11 years	N=6, 27.3%	N=9, 34.6%
12-17 years	N=7, 31.8%	N=7, 26.9%
18-23 years	N=4, 18.2%	N=3, 11.5%
24-29 years	N=0, 0.0%	N=0, 0.0%
30-35 years	N=1, 4.5%	N=0, 0.0%
36 or more	N=0, 0.0%	N=0, 0.0%
<u>Years Emergency Nurse/County Paramedic</u>		
0-1 year	N=0, 0.0%	N=0, 0.0%
2-5 years	N=7, 31.8%	N=8, 30.5%
6-11 years	N=7, 31.8%	N=5, 9.2%
12-17 years	N=6, 27.3%	N=8, 30.8%
18-23 years	N=1, 4.5%	N=5, 19.2%
24 or more	N=1, 4.5%	N=0, 0.0%

The Research Questions

The following tables display corresponding statistical information related to the research questions in this study.

Research question #1: What effect does the personal attributes of age and gender have on the perceptions of the collaborative relationship between ER nurses and paramedics?

Research question #2: What effect does the social demographics of experience and level of education have on the perceptions of the collaborative relationship between ER nurses and paramedics?

These research questions were analyzed by using Pearson's Product-Moment Correlations. Survey factors of age, education and experience were examined by individual collaboration factors to determine significant correlations. Mean age, highest level of education and years as emergency nurses or county paramedic were used for the calculations.

There was no correlation between the personal attributes or social demographics for the nurses or paramedics except for the paramedics age and collaboration at present. There is minimal positive correlation because the null hypothesis was rejected because the $r=0.434$ and the critical $r=0.423$. The P value is between .050 and .020. Even though this demonstrates statistical significance, the scatter diagram shows the points to be widely dispersed and of minimal value. Table III displays the results for the Pearson's Product Moment for nurses and paramedics age, education, and level of education with the four collaboration factors and both parts A and B of the survey.

Table III

Pearson's Product-Moment Correlations of Survey Factors and Demographics ($p < 0.05$)

	Factor IA			Factor IB			Factor IIA			Factor IIB		
	Pearson r	critical value	reject or retain Ho	Pearson r	critical value	reject or retain Ho	Pearson r	critical value	reject or retain Ho	Pearson r	critical value	reject or retain Ho
Paramedics												
age	0.159665	0.423000	retain	-0.016098	-0.423000	retain	0.107843	0.423000	retain	0.190170	0.423000	retain
education	-0.106233	-0.423000	retain	0.199653	0.423000	retain	0.036753	0.423000	retain	0.346519	0.423000	retain
experience	0.374126	0.423000	retain	-0.181316	-0.423000	retain	0.396023	0.423000	retain	0.024550	0.423000	retain
Nurses												
age	0.038440	0.423000	retain	-0.253996	-0.423000	retain	-0.001257	-0.423000	retain	-0.205513	-0.423000	retain
education	0.010801	0.423000	retain	0.105327	0.423000	retain	0.065950	0.423000	retain	0.080779	0.423000	retain
experience	-0.023321	-0.423000	retain	-0.057100	-0.423000	retain	-0.148031	-0.423000	retain	-0.221715	-0.423000	retain
	Factor IIIA			Factor IIIB			Factor IVA			Factor IVB		
	Pearson r	critical value	reject or retain Ho	Pearson r	critical value	reject or retain Ho	Pearson r	critical value	reject or retain Ho	Pearson r	critical value	reject or retain Ho
Paramedics												
age	0.012367	0.423000	retain	0.424340	0.423000	reject	0.181413	0.423000	retain	-0.312358	-0.423000	retain
education	-0.078709	-0.423000	retain	0.170710	0.423000	retain	-0.036776	-0.423000	retain	0.228663	0.423000	retain
experience	0.389154	0.423000	retain	0.216133	0.423000	retain	0.167806	0.423000	retain	-0.134874	-0.423000	retain
Nurses												
age	0.125190	0.423000	retain	0.073133	0.423000	retain	-0.077982	-0.423000	retain	0.211769	0.423000	retain
education	-0.163468	-0.423000	retain	-0.089093	-0.423000	retain	-0.046491	-0.423000	retain	0.020150	0.423000	retain
experience	0.118540	0.423000	retain	0.170960	0.423000	retain	-0.185600	-0.423000	retain	-0.106364	-0.423000	retain

FACTORS

I- POSITIVE INTERACTION

II- ACTIVE PARTICIPATION

III-EQUALITY OF INFLUENCE

IV- SHARED RESPONSIBILITY AND ACCOUNTABILITY

A-NECESSARY FOR COLLABORATION

B-COLLABORATION AT PRESENT

Research question #3: What are the differences in the perceptions of the collaborative relationship between ER nurses and paramedics? Scores for each question measuring perception were calculated in the following manner: Each individual's response for a specific questions was added, arriving at a sum total score for each question. The mean or average response was obtained for each question by dividing the total score by the number of subjects. Standard deviations were also calculated to determine the extent to which the mean was measuring the central tendency of the data for each question.

Table IV displays the perception results for the emergency nurses and the paramedics for both Parts A and B by Collaboration Factors. Appendix H displays the perception results by question for the emergency nurses and the paramedics for Part A (Necessary for Collaboration). Appendix I displays the perception results by question for the emergency nurses and the paramedics for Part B (Present Collaboration Practices). Appendix E contains the survey questions and percentages.

TABLE IV
PERCEPTIONS BY COLLABORATION FACTOR

FACTOR I- POSITIVE INTERACTION

<u>Average</u>	NURSES		PARAMEDICS	
	<u>Mean</u>	<u>Std.Dev.</u>	<u>Mean</u>	<u>Std.Dev.</u>
Part A	2.149	1.177	1.000	1.104
Part B	3.050	1.241	3.305	1.117

FACTOR II- ACTIVE PARTICIPATION

<u>Average</u>	NURSES		PARAMEDICS	
	<u>Mean</u>	<u>Std.Dev.</u>	<u>Mean</u>	<u>Std.Dev.</u>
Part A	1.788	1.228	1.922	1.123
Part B	2.660	1.199	2.942	1.046

FACTOR III- EQUALITY OF INFLUENCE

<u>Average</u>	NURSES		PARAMEDICS	
	<u>Mean</u>	<u>Std.Dev.</u>	<u>Mean</u>	<u>Std.Dev.</u>
Part A	2.347	1.492	2.016	1.138
Part B	2.931	1.195	3.063	1.067

FACTOR IV- SHARED RESPONSIBILITY AND ACCOUNTABILITY

<u>Average</u>	NURSES		PARAMEDICS	
	<u>Mean</u>	<u>Std.Dev.</u>	<u>Mean</u>	<u>Std.Dev.</u>
Part A	1.364	0.932	1.846	1.026
Part B	2.205	1.035	2.442	1.099

A two-tailed t-test was used to examine the difference between means to compare the paramedic scores with the emergency nurses. Both the nurses and paramedics strongly percieve that all factor are necessary for collaboration except for postive interaction ($p=0.0005$). The paramedic donnot percieve postivie interaction as an important part of collaboration therefore the null hypothesis that there is no differnce in perception was rejected. Table V display results for the two-tailed t-test.

Table V

Two-tailed t-test for differences between means (paramedic survey scores with nurses survey scores)				
	t-observed	t-critical	p value	reject/retain Ho @ 0.05
Factor I - A	-3.485705	-1.960000	0.0005	reject
Factor I - B	0.749020	1.960000	0.45386	retain
Factor II - A	0.394654	1.960000	0.69309	retain
Factor II - B	0.870384	1.960000	0.38409	retain
Factor III - A	-0.871228	-1.960000	0.38363	retain
Factor III - B	0.404236	1.960000	0.68603	retain
Factor IV - A	1.690599	1.960000	0.09091	retain
Factor IV - B	0.764430	1.960000	0.44461	retain

FACTORS

- I- POSITIVE INTERACTION
- II- ACTIVE PARTICIPATION
- III-EQUALITY OF INFLUENCE
- IV- SHARED RESPONSIBILITY AND ACCOUNTABILITY

- A-NECESSARY FOR COLLABORATION
- B-COLLABORATION AT PRESENT

Content Analysis

Research question #4: What are the contextual factors in the collaborative relationship between ER nurses and paramedics? The final question, "Is there anything you would like to add?" was omitted because the comments made by the participants pertained to the pervious questions or to the structure of the survey such as "The wording of the study was awkward" or "I based the answers on field paramedics not hospital-based paramedics".

Question 1- How would you describe your relationship with the ER nurses/paramedics? Thoughts regarding the general relationship between the emergency nurses and the paramedics varied, but responses were generally positive. Many of the nurses responded that there was the "Mutual respect" among the nurses and paramedics and there was a "Professional working relationship". Others gave positive answers ranging from "Excellent", "Good", and "Friendly". Three of the nurses felt that the relationship "Depends on who the paramedics are" and that it was "Selective on the basis of pervious interactions and rapport of certain rescue stations. The better ones (stations) seem to interact better and make more sound patient decisions". Three other nurses indicated that there was "Too much socializing", "Very poor, either flirting or arguing" and that "The present environment does not allow for effective

collaboration between the two groups".

The paramedic responses were not as positive as the nurses. Although some of the paramedics felt that there was a "Strong working relationship", the majority of the comments indicated that the relationship "Varies tremendously from ER to ER". "Depends on the institution" or that "Some are better than the others especially when the paramedic and the nurses have been working together for awhile" were common remarks. One paramedic summed up the relationship in one sentence: "They (nurses) are friendly but not fully trusting".

Question 2- What would you describe as common conflicts between the ER nurses/paramedics? The second free response question was directed toward common conflicts among nurses and paramedics. Both parties had similar statements regarding the areas of conflict. The nurses indicated that there were three major areas of conflict or stress. The majority identified that the patient report was the area that caused the most conflict. They felt that the paramedics had "Inconsistencies in histories or care in the field" or that the "Radio report assessment was not complete or accurate". Other responses recognized that "Final patient assessments differed from initial radio assessments" or that there were "Missed critical assessments". One nurse felt that "Poor assessment skills leads to a poor patient

report".

The second area of conflict was in regards to patient priorities. The level of facility the patient should be transported to or the level of transport (advanced cardiac life support, ACLS versus basic life support, BLS units) causes "Disagreement among the nurses and paramedics". The nurses felt that the "Skill levels" or "Focus of training" of the paramedics may contribute to their decision making ability.

The final identified area of conflict was concerning by-pass protocol. (By-pass is when a hospital emergency room notifies the EMS system that it is overcrowded and can not accept any more rescue patients at that time. Rescue units may bring a patient to a hospital on by-pass when the patient has an immediate life threatening condition, eg. cardiac arrest, or when all surrounding hospitals are also on by-pass.) Statements like "The ED is too busy to accept all EMS patients--we need to go on bypass frequently which irritates paramedics" and "Acceptance of patients, especially while on bypass" indicates a conflict. The nurses also felt that the "Paramedics don't understand the busy days in the ER" and that there is increased stress on the nursing staff when they are "The only hospital open".

The paramedic responses were numerous but similar to the views shared by the ER nurses. The majority of the

paramedics felts that "The nurses don't believe we know what we are doing" and that they received "Condescending comments from nursing staff concerning patient care". One paramedic boldly stated, "The feeling that many nurses have towards paramedics are that we are a substandard providers that are ill-trained and unqualified to administer patient care and that we don't have not enough knowledge or business doing the things that we do in the field. Nurses have even commented that 'its obvious that the paramedics take a different ACLS course because ours is too hard for them'".

The paramedics also identified conflict regarding decisions on patient care preformed on the streets. It was noted that there were differences between the nurses and the paramedics concerning the trauma criteria, the "Immediate necessity for patient care in high priority patients" or "In treatment of the patient ,both care and quality". One paramedic expressed, "What is obvious in the ER may not be in the street and visa versa. The nurses think paramedics can't properly assess patient".

Another set of responses from the paramedics indicates that they have difficulties in being "heard" by the nurses when transferring a patient from the rescue unit to the ER staff. "The nurses don't really listen to what we say in report" or they "Dismiss any data that we have reported to them". "We are often ignored when we arrive at the ER desk

with a patient" and the nurses "Think that we are on their turf when we drop patients off and that we should act accordingly".

Some paramedics think that conflict occurs because nurses are jealous of the role paramedics play in trauma and emergency cases. This jealousy is due to "Some nurses being resentful of the autonomy that the paramedics have in the field" and "That we can do things that they (nurses) can't and that only doctors are allowed to do". Other paramedics "Resent an RN who attempts to direct medical care via telemetry rather than relaying information between the medic and the doctor". They felt that the nurses wanted total control of them.

Although the paramedics did not identify by-pass protocol as a source of conflict, they did note a conflict with the nursing staff over the delivery of additional patients to the emergency room. They felt that the "ER nurses may feel overworked and resent paramedics bringing them patients to take care of".

Question 3- How could the collaborative relationship between ER nurses/paramedics be improved? The responses from both groups will be examined jointly due to the overwhelming similarity in remarks.

The most frequent response for improving relations would be cross training. This took several different forms

including switching roles, role playing exercises, or work exchange programs by having ER nurses ride rescue and paramedics spend a day in the emergency room. One paramedic stated, "Time and experience of each others job will increase our understanding and ease most conflicts".

Another method of increasing collaboration would entail combining resources for formal joint educational programs, inservices, and professional meetings or events. Less formal ways of enhancing communication would be by providing a means of sharing of information such as newsletters, bulletin boards and luncheons for joint staff meetings. This would allow both groups to "Examine each others goals, follow up on certain cases and verbalize any complaints".

Both nurses and paramedics indicated the importance in setting the same standards for both to follow by encouraging similar ACLS/Trauma certifications, training together and joint education. Several persons noted the need to improve ER/EMS quality assurance. Follow-up on certain patient cases, contagious conditions eg. tuberculosis, ongoing audits, random chart review-looking at prehospital care versus hospital care and the disposition of the patient are techniques to assure optimal patient care.

Finally, education to improve communication among nurses and paramedics. Improving the collaborative effort was stated by one paramedics as, "There is room for

improvement and we need to come together to accomplish one common goal.. the best and most efficient patient care."

Summary

Three of the factors of collaboration, active participation, equality of influence, and shared accountability and responsibility were perceived as important components of collaboration by both the emergency nurses and paramedics. The factor of positive interaction was not perceived as an important component of collaboration by the paramedics as demonstrated by the t-test for differences in the means. The quantitative data is supported by the content analysis due to the conflict noted by both the nurses and paramedics. The areas of conflict relate to interpersonal communication along with different occupational perspectives.

King's theory notes that communication is the key element in maintaining relationships. A persons' perceptions, values, needs, and educational background influences their interactions with the environment. When there are differences in perceptions, mutual goals cannot be obtained. Positive interaction is not viewed equally by the emergency room nurses and paramedics which may accounted for the areas of friction and conflict.

Chapter 5

Discussion

The purpose of this study was to determine the nature of the perception of the collaborative relationship between emergency room nurses and paramedics. The sample for this study contained both nurses and paramedics. The results indicated that there was no statistical correlation between the emergency nurses and paramedics when examining personal attributes or social demographics.

The content analysis provided more significant results. The findings of the content analysis demonstrated that the relationship between emergency room nurses and paramedics is friendly but not fully trusting. The free response questions identified that the "report" of patient information from the paramedic to the ER staff was the origin the most conflict. The nurses felt that paramedic patient assessment, patient priorities, and by-pass protocol were problems. Whereas, the paramedics identified the nurses condescending manner and mistrust, not being "listened" to, and overcrowded emergency rooms as the source of their conflict. This is consistent with the finding by Palmer & Gonsoulin (1992) who reported that open conflict between the nurse and paramedic are not frequent, but does occur.

The report given by paramedics and the visual assessment of the patient by the nurse at the time of transfer seems to represent "flash points" of conflict. During these critical minutes when the paramedics and nurses should be devoting their efforts toward a common goal, they are most susceptible to hostile interactions. Palmer and Gonsoulin (1992) associate the power struggles and "turf wars" to the educational goals and training which produces different occupational perspectives.

The level of education, focus of care (prehospital versus hospital), legal issues, and position of authority are the primary elements of conflict between emergency room nurses and paramedics. These components are similar to the conflict noted between nurses and physicians.

A barrier to communication is the educational gap between nurses and paramedics. This difference in education cause variations in the perceptions of each other and the world around them. As the level of education increases, the perspective of health care is examined from a higher capacity. Basic education or training level concentrates on the mechanics of performing profession related tasks. As further knowledge is acquired, the profession expands conceptually and a new perspective develops.

Nurses and paramedics have different educational preparation. The educational structure for entry level

nursing preparation is at the associate degree or baccalaureate levels. The entry level paramedic training is at the certificate or associate degree levels. Fifty percent of the emergency nurses in this study, have an associate degree as the basic level of preparation and 57.7% of the paramedics have a certificate as their basic level of preparation.

Morgan and McCann (1983) showed that the educational difference between nurses (who generally have undergraduate education) and physicians (who all have medical degrees) caused discord due to lack of communication, limited awareness of nursing roles and limited interactions with each other. Another researcher noted interactions between nurses and physician are generally positive but physician are more likely to interact with other physicians and nurses are more likely to interact with other nurses (Kerr, 1986). This communication pattern is noted with the emergency nurses and paramedics.

The focus of care between emergency nurses and paramedics is often a source of conflict. A study by Holkelman (1975) showed that physician and nurses place different values on specific areas of health care continuum. The physician focuses on medicine or the treatment of diseases where the nurses focuses on patient care from a holistic approach, caring for all aspects of the patient.

The values of the paramedic centers around the ability to quickly respond, provide immediate care, and safe transport to the hospital. The focus of each group is important to the care of the patient and makes each profession unique but can also create barriers to communication.

The hierarchical framework of health care requires that a single individual be ultimately responsible, legally and clinically to manage the patient's care. Physicians occupy that role which cause nurses to be viewed as physician extenders or helpers. Often emergency nurses feel that they are responsible for the patients care once the patient enters the hospital and may view the paramedics as the nurse's helper.

In the emergency room setting, the emergency room physician occupies the role of "the captain of the ship". The emergency room nurse often fills this position when the paramedics arrive because the physician is examining other patients. This framework of a single individual being responsible places strain on the transfer of power and authority from one person to another.

Power is the capacity to use resources in organizations to achieve goals (King, 1981). It is the ability to influence one or more persons to effect the outcome of a decision. Power is also a perception of control and authority.

Women and men have frequently differed in their approaches to power. Men have been socialized to compete openly with one another for a goal whereas women have been socialized to cooperate and comply with group wishes (Reis-Wieczorek, 1982). This socialization has occurred over a long period of time and is imbedded into societies values. Within the health care hierarchy, nurses (primarily female) and physicians (primarily male) have been accustomed to this socialization. Even as the nursing profession bands together for equality and empowerment, there are still many physicians who view nursing as an extension of medicine (Morgan & McCann, 1983).

The relationship between nurses and paramedics with regards to power socialization has been amiable but has hidden friction. The nursing profession is established and views the paramedics as "the new kids on the block" with limited education and experience. The nurses, just as physicians did before them, views the newcomers, as extensions of nursing. On the other hand, the paramedics who are primarily male, view themselves as in control with power due to their socialization.

A study by Falbo (1982) examined the power strategies used by masculine, feminine, androgynous and undifferentiated people in their intimate relationships. The power strategies varied along a directness continuum

which ranged from direct to indirect. The other dimension indicated the extent to which the strategies involved unilateral or bilateral decision making. They identified 13 power strategies broken into 4 quadrants used in the relationships. They included: 1) Bilateral and Direct- talking, reasoning, persistence, bargaining and persuasion; 2) Bilateral and Indirect- positive actions (smiling) and hinting; 3) Unilateral and Direct- asking, stating importance and telling; and 4) Unilateral and Indirect- negative actions (pouting), withdrawal and laissez-faire.

They concluded that bilateral and direct strategies were more commonly used by people who perceived themselves to have more power in their relationship while unilateral and indirect behaviors were used by people who perceived themselves as having less power. The typical strategies of the masculine and androgynous were direct and bilateral behaviors which are also typical of those with greater power. The strategies of the feminine and undifferentiated people were indirect and unilateral which are typical of persons with less power.

Various behaviors both direct and indirect and bilateral and unilateral are used with interaction between the nurses and paramedics. The concept of the male-female relationship and power between emergency room nurses and

paramedics should be considered an area for further research.

The level of education, focus of care, legal issues, male-female conflict and power are all concepts that influence decision-making processes. These perceptions are developed over time and determine our behaviors.

Attitudes and behaviors of individuals are affected by multiple of sources and unique pressures. However, it seems that there are structural features to the training received by nurses and paramedics that influence their interactions during the time of transfer. When the nurse and paramedics are on different tracks or wavelengths, and negative situations persist over time, relationships can degenerate to the point of harm for the patient.

In examining the ER nurse-paramedic relationship in relation to King's theory, it was noted that the concepts of authority, communication, decision-making, interaction, perception, power, roles, and transaction are the most applicable in this study with the collaborative process.

It was found that the power and authority of the paramedics stopped at the emergency room doors and the reign of power of the nurse started. Many of the paramedics and nurses felt that the other was overstepping the boundary when those guidelines were not followed. The paramedics resented when the nurses gave them orders of the radio

without first consulting the emergency physician and the nurses resented the paramedics taking control of patient care after report had been given to the nurse.

The element of interaction and transaction are connected by communication in a shared collaborative process. Within King's theory, the interaction phase where emergency room nurses and paramedics communicate is marred. Each person's perception varies due to differences in their educational backgrounds, skills, abilities and values. All these points are incorporated to the communication patterns of a person and influence their responses to a situation.

If the interaction is positive, the nurses and paramedics feel a sense of camaraderie and the transaction is smooth. If the interaction is negative, the nurse or the paramedics may have interpreted the conflict as personal (individual paramedic with individual nurse), interpersonal (certain rescue station or shift with a certain hospital, or organizational (all paramedics with all ER nurses).. This was demonstrated by the participants responses that the relationship "varied from emergency room to emergency room" or "depended on the rescue squad". The interactions also varied depending on the number of patients being treated in the emergency room, the acuity of the patient or activity (number of rescue calls) of the rescue squad.

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The results of the survey although not significant were encouraging and verified several of the assumptions. The majority of the participants responded favorably to the four components being necessary for collaboration. This supported the assumption that open communication, positive interaction, active participation, equality of influence, and shared responsibility and accountability are necessary for collaboration.

The second assumption which stated that open communication is essential for the transfer of information and assists in maintaining the continuity and quality of care of the patient was sustained because the patient report was the most common area of conflict. This showed that without open communication that the procedure of exchanging information can result in conflict. Two of the other assumptions also pertain to this process by identifying that the individual's goals, needs, values influence the interaction (communication) process.

Limitations of Study

The survey needed to be divided into separate questionnaires in order for the participants to stay focused on the topic of research. One survey to examine the factors for "necessary for collaboration" and the second to examine how "collaboration is at present."

The survey design also did not allow for subtle changes in the degree of collaborative practice. The Likert scale needed to be change to a 7-point scale that answered the questions "to what extent is this concept necessary for collaboration" and "to what extent is this concept present in the way collaboration is practiced at present". This is necessary in order to ascertain the degrees of collaboration which might make the survey items significant.

Finally, by changing the structure of the survey into separate components, the tool could be evaluated for content validity. Comparing the results of the original between nursing deans and administrators to application in the clinical environment.

1. In spite of the efforts made, one of the limitations of the study was the low response rate, 22% on the part of the nurses and 28% on the part of the paramedic.

2. Further, following a review of the literature, there was limited availability of a tool that measures the perceptions of collaboration. Therefore, the researcher modified an existing scale that had been utilized once with nursing deans and nursing service administrators.

3. Subject selection was made by convenience sampling which is the weakest of methods. In addition, the surveys were distributed to the participants by persons other than the Principal Investigator.

4. The survey instructions were not clear and may have contributed to many of the duplicate results.

5. The survey was unclear to a few of the emergency nurses to the type of paramedic being studied, field paramedics verses hospital-based paramedic.

6. Conducting a research study in the month of December may have distracted potential participants in completing and returning the survey.

7. A pilot study or a review of the survey from a formal expert panel may have reduced the number of limitations.

Recommendations

1. Replicating this study in another area representative of the general population, such as multiple counties, statewide or national, where there is a cross-section of both urban and rural paramedics.

2. Conducting a longitudinal type study where nurse-paramedics interactions are examined over a period of a year.

3. Conducting further research on the male-female aspect of the professions in regards to power strategies.

4. Conducting a study that examines the differences in behaviors with trauma verses non-trauma cases.

5. Continue to validate the Revised Pehl Collaborative Practice Scale, but with several revisions.

- A. Changing the Likert response to reflect the degree of collaboration from greater to lesser for the examination of the "necessary for collaboration" component of the survey.
- B. Changing the Likert response to 1=always, 2=often, 3=sometimes, 4=seldom and 5=never for the "collaboration at present" component of the survey.
- C. Separating the two components into individual survey to help decrease the confusion on which statement is being answered.
- D. Clearly specify the participants to be included in the study, ie. field versus hospital based paramedics.
- E. Performing a repeat factor analysis using clinical areas.

Nursing Implications

Prehospital care is a rapidly expanding area of health care and is the gateway for many patients into the health care system especially with the use of "911" emergency system. This has helped in saving many lives that otherwise would have been lost. The elevated number of critically ill

patients entering the emergency room has made communication between the nurses and paramedics even more important. Good communication and working relationships with paramedics contributes to nursing by providing a pleasant and trusting working environment. This benefits the patient by furnishing a smooth transfer from prehospital to hospital care when the patient is unable to care for himself.

Strong cooperation is necessary to provide quality patient care. This study has helped increase the awareness of collaboration and conflict in the present interactions of emergency nurses and paramedics. This increased perception will benefit the quality of patient care due to increased teamwork and a sense of continuity.

The study has also contributed to nursing by identifying factors of collaboration that can be addressed in nursing education when discussing the roles of other health care professionals. Closer collaborative practice between nursing education and other health care professionals is essential to give students, both nursing and paramedic, a prospective of the various roles within the health care system. Many suggestions, such as cross-training or joint education, have been identified by both nurses and paramedics improve the collaborative relationship. Incorporating these practices will enhance the developing the relationship and the future of

prehospital care.

Research in the area of prehospital care and emergency nursing is crucial due to the increasing number of patients using the emergency medical system. The primary benefit of this study to nursing research was expanding the knowledge regarding the interactions between ER nurses and paramedics. This study provided information on areas of conflict in communication between ER nurses and paramedics which is crucial in promoting a collaborative relationship. It also furnishes methods of improving the relationship which may provide future opportunities for research.

There is a paucity in the literature in measuring the components of collaboration. This study used an undeveloped tool in a clinical setting with emergency nurses and paramedics to expand the use of the tool. Although the study was not statistically significant, further research in the area of collaboration and developing tool to measure it's elements is important. Nursing research on the construct of collaboration is vital, not only within the health care system but to all working relationships.

Summary

Teamwork is the process by which a group of people work together towards a common goal (Tappen, 1983). It requires a degree of cooperation and communication with others.

Although the results of this study indicated that patient report was the common area for conflict, it also identified means by which the collaborative practice could be improved. Cross-training, joint educational programs, informal staff meetings and social luncheons were manifested to enhance relations.

Patient perceptions of the emergency experience are formed during encounters with the emergency personnel, the hospital and the rescue system. Open communication between ER nurses and paramedics is essential for the transfer of information and assists in maintaining the continuity and quality of care of the patient. As stated by one paramedic, "There is room for improvement and we need to come together to accomplish one common goal.. the best and most efficient patient care."

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APPENDIX A

Florida International University
School of Nursing

Perceptions of Collaboration between
Emergency Room Nurses and Paramedics

Dear Participant:

You are invited to be a participant in the research project entitled Perceptions of Collaboration between Emergency Room Nurses and Paramedics, to be conducted at Florida International University during the Fall Semester, 1994, with Linda S. Boylan, RN., as Principle Investigator. This project is to partially fulfill the requirements for a Masters of Science in Nursing.

Your participation in completing this survey is very important. Approximately 60 emergency room nurses and 60 paramedics will be involved in the study. Information obtained will be kept confidential and results will be documented only as a group report. Completing this survey will require approximately 30 minutes of your time. The survey will entail answering approximately 45 questions by placing a circle around the number that most appropriately responds to your perceptions.

There are no known risks or benefits involved and your participation is purely voluntary. You may withdraw at any time, without any negative consequences. The survey should be completed by December 31, 1994.

By completing and returning the attached survey, you will be giving consent to participate in this research study. There are no fees to pay nor will any monetary compensation of any kind be provided.

If at any time you feel you want further information, please contact Linda Boylan, RN, Principal Investigator, at (305) 385-8471 and/or Dr. Donna Rush, Faculty Supervisor, Florida International University, School of Nursing, at (305) 940-5971.

Once again, your assistance and cooperation is greatly appreciated.

Linda Boylan RN

APPENDIX B

DEMOGRAPHIC INFORMATION

EMERGENCY ROOM NURSES

The following information will be helpful in analyzing differences which may exist in the perceptions of emergency room nurses and paramedics regarding collaboration. Please consider each item and reply by circling the appropriate answer or filling in the blank.

- A. Age to nearest birthday_____years.
- B. Gender
1. Female
2. Male
- C. BASIC level of nursing preparation
1. Diploma
2. ADN
3. BSN
4. Other, please specify_____
- D. HIGHEST degree held
1. ADN
2. BSN
3. MSN
4. PhD
5. Other, please specify_____
- E. Years since graduation from basic nursing program
1. 0-5 years 5. 24-29 years
2. 6-11 years 6. 30-35 years
3. 12-17 years 7. 36 or more years
4. 18-23 years
- F. Years as an Emergency Nurse
1. 0-1 year 4. 12-17 years
2. 2-5 years 5. 18-23 years
3. 6-11 years 6. 24 or more years
- G. Are you licensed as a paramedic or emergency medical technician (EMT)?
1. no
2. yes, paramedic
3. yes, EMT

DEMOGRAPHIC INFORMATION

PARAMEDICS

The following information will be helpful in analyzing differences which may exist in the perceptions of emergency room nurses and paramedics regarding collaboration. Please consider each item and reply by circling the appropriate answer of filling in the blank.

- A. Age to nearest birthday_____years.
- B. Gender
1. Female
2. Male
- C. BASIC level of paramedic preparation
1. Certificate
2. Associate degree
3. Bachelors degree
4. Other, please specify_____
- D. HIGHEST degree held
1. Certificate
2. Associate
3. Bachelors
4. Masters
5. Other, please specify_____
- E. Years since graduation from basic paramedic program
1. 0-5 years 5. 24-29 years
2. 6-11 years 6. 30-35 years
3. 12-17 years 7. 36 or more years
4. 18-23 years
- F. Years as a Metro-Dade Fire Rescue Paramedic
1. 0-1 year 4. 12-17 years
2. 2-5 years 5. 18-23 years
3. 6-11 years 6. 24 or more years
- G. Are you licensed as a nurse?
1. no
2. yes, registered nurse
3. yes, licensed practical nurse (LPN)

APPENDIX C

REVISED PEHL COLLABORATION SCALE

This instrument is a scale that examines collaborative practice between emergency room (ER) nurses and paramedics. The statements reflect behaviors in which collaboration may be described. After you read each statement carefully, circle the number which best indicates 1) your PERCEPTION of the extent that each statement is necessary to collaboration between ER nurses and paramedics and 2) how you PERCEIVE the extent of how collaboration is practiced at present between the two groups. You may choose a response from one to five to describe your perception. If you think the statement is not appropriate to use in describing collaboration, circle "NA". The scale key is as follows:

1=strongly agree
2=agree
3=neutral
4=disagree
5=strongly disagree
NA=not appropriate

Example:

Part A: "To what extent do you agree or disagree with the statement in regarding the item necessary to collaboration?"

Part B: "To what extent do you agree or disagree with the statement in regards to how collaboration is practiced at present?"

ER nurses and paramedics almost always agree on patient care.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

A. If you strongly agree that the statement is necessary for collaboration, you would put a circle around 1 or if you strongly disagree, you would circle 5.

B. If you strongly disagree that the statement is the way collaboration is practiced at present, you would put a circle around 5 or if you strongly agree, you would circle 1.

If you are an emergency room nurse completing this instrument, you should think in terms of the paramedics you work with. If you are a paramedic completing this instrument, you should think in terms of the emergency nurses you work with.

SCALE KEY

1=strongly agree
2=agree
3=neutral
4=disagree
5=strongly disagree
NA=not appropriate

1. ER nurses and paramedics should have as much power as the other.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments _____

2. Suggestions of each person should be considered important.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments _____

3. Decisions on the patients' care should be made by both the ER nurse and paramedic.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments _____

4. Contributions of the ER nurse and the paramedic should carry equal weight.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

5. The ER nurse and the paramedic should have a clear idea of what the other is doing most of the time.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

6. There should be a high degree of participation between the ER nurses and paramedics.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

7. The ER nurse and paramedic should be encouraged to have her/his say before patient care decisions are made.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

8. ER nurses and paramedics should discuss important problems they are confronted with.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

9. ER nurses and paramedics should ask for help and suggestions from each other.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

10. ER nurses and paramedics should work together as a team toward patient care goals.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

11. Confidence and trust should exist between ER nurses and paramedics.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

12. ER nurses and paramedics should coordinate their efforts.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

13. ER nurses and paramedics should feel free to exchange ideas and opinions.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

14. ER nurses and paramedics should cooperate for achievement of patient care goals.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

15. ER nurses and paramedics should welcome information from each other.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

16. ER nurses and paramedics should be willing to share knowledge and lend assistance to each other.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

17. ER nurses and paramedics should deal with conflict openly.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

18. ER nurses and paramedics should hold forums for discussions to explore concerns.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

19. ER nurses and paramedics should share information about important events.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

20. ER nurses and paramedics should share continuing education programs and educational software.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

21. ER nurses and paramedics should socialize new nurses/paramedics into the professional role.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

22. ER nurses and paramedics should have an opportunity to experience each others professional role.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

23. ER nurses and paramedics should work together on joint research projects.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

24. Provisions should be made for feedback of interagency information via newsletters, memos, or patient updates.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

25. The should be utilization of ER nurses and paramedics as role models for nursing and paramedic students.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

26. ER nurses and paramedics should be accountable for quality patient care and patient satisfaction.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

27. ER nurses and paramedics should be responsible for quality patient care and patient satisfaction.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

28. There should be a consensus between the professional goals of ER nurses and paramedics.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

29. ER nurses and paramedics should participate in joint committees.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

30. There should be cooperative orientation activities between new ER nurses and new paramedics.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

31. ER nurses and paramedics should explore issues related to educational programs together.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

32. ER nurses and paramedics should explore patient care standards together.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

33. ER nurses and paramedics should resolve differences without hard feelings occurring.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

34. ER nurses and paramedics should feel safe to disagree with the opinions of each other.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

35. ER nurses and paramedics should establish and maintain friendly working relationships with each other.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

36. Strategic long-term planning should be carried out between ER nurses and paramedics.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

37. Consultations should occur equally between ER nurses and paramedics on patient care concerns.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

38. There should be regular contact between ER nurses and paramedics through social functions.

A.	1	2	3	4	5	NA	(Necessary to collaboration)
B.	1	2	3	4	5	NA	(Collaboration at present)

Comments_____

APPENDIX D

Free Response Questions

1. How would you describe your relationship with the ER nurses/paramedics?
2. What would you describe as common conflicts between the ER nurses/paramedics?
3. How could the collaborative relationship between the ER nurses/paramedics be improved?
4. Is there anything you would like to add?

APPENDIX E

Linda Boylan
13235-2 Southwest
#110 Terrace
Miami, Florida 33186

October 23, 1994

Dear Linda,

I enjoyed talking with you this evening regarding your interest in collaboration between emergency room nurses and paramedics. With the changes in our health care system, I think that the ability to collaborate effectively will be an essential skill required of all health care workers.

I think that the instrument that I developed for my dissertation, DEVELOPMENT OF AN INSTRUMENT TO MEASURE PERCEPTIONS OF COLLABORATION BETWEEN NURSING DEANS AND NURSING SERVICE ADMINISTRATORS, will be helpful in your data collection process. I do give my permission for you to use my instrument in your research. The instrument is copyrighted so I know you will give proper credit.

When you complete your Thesis, I would like to have a copy of the abstract. I am interested in seeing how others use the instrument in their own research.

Sincerely,

Linda Pehl, PhD
2208 University Dr.
Belton, TX 76513
(817)939-3865 (H)

APPENDIX F
EMERGENCY ROOM NURSES

The following information will be helpful in analyzing differences which may exist in the perceptions of emergency room nurses and paramedics regarding collaboration. Please consider each item and reply by circling the appropriate answer or filling in the blank.

- A. Age to nearest birthday mean=37.7 years.
- B. Gender
1. Female (N=18, 81.8%)
 2. Male (N=4, 18.2%)
- C. BASIC level of nursing preparation
1. Diploma (N=2, 9.1%)
 2. ADN (N=11, 50.0%)
 3. BSN (N=8, 36.4%)
 4. Other, please specify MSN ARNP (N=1, 4.5%)
- D. HIGHEST degree held
1. ADN (N=10, 45.5%)
 2. BSN (N=4, 18.2%)
 3. MSN (N=3, 13.6%)
 4. PhD (N=0, 0.0%)
 5. Other, please specify Diploma (N=1, 4.5%),
MBA (N=2, 9.1%), AD-Psychology (N=1, 4.5%), BSW (N=1, 4.5%)
- E. Years since graduation from basic nursing program
1. 0-5 years (N=4, 18.2%)	5. 24-29 years (N=0)
2. 6-11 years (N=6, 27.3%)	6. 30-35 years (N=1, 4.5%)
3. 12-17 years (N=7, 31.8%)	7. 36 or more (N=0)
4. 18-23 years (N=4, 18.2%)	
- F. Years as an Emergency Nurse
1. 0-1 year (N=0)	4. 12-17 years (N=6, 27.3%)
2. 2-5 years (N=7, 31.8%)	5. 18-23 years (N=1, 4.5%)
3. 6-11 years (N=7, 31.8%)	6. 24 or more (N=1, 4.5%)
- G. Are you licensed as a paramedic or emergency medical technician (EMT)?
1. no (N=22, 100.0%)
 2. yes, paramedic

Total Response-	N=25, 23.8%
Excluded Surveys-incomplete form	N=2, 1.9%
ER nurse 0-1 yr	N=1, 1.0%
both RN & medic	N=0
Total Included in Data Analysis	N=22, 21.0%

PARAMEDICS

The following information will be helpful in analyzing differences which may exist in the perceptions of emergency room nurses and paramedics regarding collaboration. Please consider each item and reply by circling the appropriate answer or filling in the blank.

- A. Age to nearest birthday mean=38.2 years.
- B. Gender
 1. Female (N=4, 15.4%)
 2. Male (N=22, 84.6%)
- C. BASIC level of paramedic preparation
 1. Certificate (N=15, 57.7%)
 2. Associate degree (N=10, 38.5%)
 3. Bachelors degree (N=0)
 4. Other, please specify (N=1, 4.5%) MBA
- D. HIGHEST degree held
 1. Certificate (N=10, 38.5%)
 2. Associate (N=11, 42.3%)
 3. Bachelors (N=3, 11.5%)
 4. Masters (N=1, 3.8%)
 5. Other, please specify Ed.S. (N=1, 3.8%)
- E. Years since graduation from basic paramedic program
 1. 0-5 years (N=7, 26.9%) 5. 24-29 years (N=0)
 2. 6-11 years (N=9, 34.6%) 6. 30-35 years (N=0)
 3. 12-17 years (N=7, 26.9%) 7. 36 or more (N=0)
 4. 18-23 years (N=3, 11.5%)
- F. Years as a Metro-Dade Fire Rescue Paramedic
 1. 0-1 year (N=0) 4. 12-17 years (N=8, 30.8%)
 2. 2-5 years (N=8, 30.8%) 5. 18-23 years (N=5, 19.2%)
 3. 6-11 years (N=5, 19.2%) 6. 24 or more (N=0)
- G. Are you licensed as a nurse?
 1. no (N=26, 100.0%)
 2. yes, registered nurse
 3. yes, licensed practical nurse (LPN)

Total Response-	N=30, 30.0%
Excluded Surveys-incomplete form	N=0
paramedic 0-1yr	N=1, 1.0%
both RN & medic	N=2, 2.0%
Total Included in Data Analysis	N=26, 26.0%

APPENDIX G
REVISED PEHL COLLABORATION SCALE

n= emergency nurses
p= paramedics

top number=number of responses
bottom number= percent

1. ER nurses and paramedics should have as much power as the other.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	4	1	1	10	6	0
	18.2	4.5	4.5	45.5	22.7	
p)	5	7	4	7	1	2
	19.2	26.9	15.4	26.9	3.8	7.7
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	0	0	6	10	5	1
			27.3	45.5	22.7	4.5
p)	1	3	6	8	4	4
	3.8	11.5	23.1	30.8	15.4	15.4

2. Suggestions of each person should be considered important.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	14	6	0	0	2	0
	63.6	27.3			9.1	
p)	18	4	0	2	1	1
	69.2	15.4		7.7	3.8	3.8
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	7	10	2	2	1	0
	31.8	45.5	9.1	9.1	4.5	
p)	3	9	9	4	0	1
	11.5	34.6	34.6	15.4		3.8

3. Decisions on the patients' care should be made by both the ER nurse and paramedic.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	9	4	3	4	0
	9.1	40.9	18.2	13.6	18.2	
p)	3	6	5	3	3	6
	11.5	23.1	19.2	11.5	11.5	23.1
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	1	6	5	7	3	0
	4.5	27.3	22.7	31.8	13.6	
p)	1	2	5	3	8	6
	3.8	7.7	19.2	11.5	30.8	23.1

4. Contributions of the ER nurse and the paramedic should carry equal weight.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	5	2	0	9	5	1
	22.7	9.1		40.9	22.7	4.5
p)	9	8	4	3	0	2
	34.6	30.8	15.4	11.5		7.7
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	1	7	0	8	4	2
	4.5	31.8		36.4	18.2	9.1
p)	1	6	7	7	3	2
	3.8	23.1	26.9	26.9	11.5	7.7

5. The ER nurse and the paramedic should have a clear idea of what the other is doing most of the time.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	12	8	0	0	2	0
	54.5	36.4			9.4	
p)	8	11	3	4	0	0
	30.8	42.3	11.5	15.4		
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	6	10	1	3	2	0
	27.3	45.5	4.5	13.6	9.1	
p)	2	8	11	5	0	0
	7.7	30.8	42.3	19.2		

6. There should be a high degree of participation between the ER nurses and paramedics.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	15	3	0	0	3	0
	68.2	13.6			13.6	
p)	12	10	1	3	0	0
	46.2	38.5	3.8	11.5		
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	3	11	4	3	1	0
	13.6	50.0	18.2	13.6	4.5	
p)	1	9	7	9	0	0
	3.8	34.6	29.2	34.6		

7. The ER nurse and paramedic should be encouraged to have her/his say before patient care decisions are made.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	7	7	3	2	3	0
	31.8	31.8	13.6	9.1	13.6	
p)	7	8	2	4	0	5
	29.2	30.8	7.7	15.4		19.2
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	4	9	4	3	0
	9.1	18.2	40.9	18.2	13.6	
p)	1	7	6	6	1	5
	3.8	26.9	23.1	23.1	3.8	19.2

8. ER nurses and paramedics should discuss important problems they are confronted with.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	13	4	3	0	2	0
	59.1	18.2	13.6		9.1	
p)	14	9	1	2	0	0
	53.8	34.6	3.8	7.7		
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	3	7	6	4	2	0
	13.6	31.8	27.3	18.2	9.1	
p)	3	9	6	8	0	0
	11.5	34.6	23.1	30.8		

9. ER nurses and paramedics should ask for help and suggestions from each other.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	11	5	2	2	2	0
	50.0	22.7	9.1	9.1	9.1	
p)	12	10	3	1	0	0
	46.2	38.5	11.5	3.8		
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	8	6	6	0	0
	9.1	36.4	27.3	27.3		
p)	2	5	7	11	1	0
	7.7	19.2	26.9	42.3	3.8	

10. ER nurses and paramedics should work together as a team toward patient care goals.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	18	2	0	0	2	0
	81.8	9.1			9.1	
p)	13	8	1	2	2	0
	50.0	30.8	3.8	7.7	7.7	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	4	10	5	4	1	0
	18.2	45.5	22.7	18.2	4.5	
p)	2	9	6	7	0	0
	7.7	34.6	23.1	26.9		

11. Confidence and trust should exist between ER nurses and paramedics.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	17	3	0	0	2	0
	77.3	13.6			9.1	
p)	18	6	1	0	1	0
	69.2	23.1	3.8		3.8	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	4	8	1	8	1	0
	18.2	36.4	4.5	36.4	4.5	
p)	1	9	5	10	1	0
	3.8	34.6	19.2	38.5	3.8	

12. ER nurses and paramedics should coordinate their efforts.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	16	3	1	0	2	0
	72.7	13.6	4.5		9.1	
p)	14	8	2	2	0	0
	53.8	30.8	7.7	7.7		
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	12	3	3	2	0
	9.1	54.5	13.6	13.6	9.1	
p)	1	10	11	4	0	0
	3.8	38.5	42.3	15.4		

13. ER nurses and paramedics should feel free to exchange ideas and opinions.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	18	1	1	0	2	0
	81.8	4.5	4.5		9.1	
p)	14	9	1	1	1	0
	53.8	34.6	3.8	3.8	3.8	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	4	10	2	3	3	0
	18.2	45.5	9.1	13.6	13.6	
p)	3	7	8	8	0	0
	11.5	26.9	30.8	30.8		

14. ER nurses and paramedics should cooperate for achievement of patient care goals.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	18	2	0	0	2	0
	81.8	9.1			9.1	
p)	13	9	1	0	2	0
	50.0	34.6	3.8		7.7	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	5	8	3	5	1	0
	22.7	36.4	13.6	22.7	4.5	
p)	1	8	9	7	1	0
	3.8	30.8	34.6	26.9	3.8	

15. ER nurses and paramedics should welcome information from each other.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	16	3	1	0	2	0
	72.7	13.6	4.5		9.1	
p)	13	10	1	0	2	0
	50.0	38.5	3.8		7.7	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	3	11	5	3	0	0
	13.6	50.0	22.7	13.6		
p)	3	6	10	6	1	0
	11.5	23.1	38.5	23.1	3.8	

16. ER nurses and paramedics should be willing to share knowledge and lend assistance to each other.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	17	3	0	0	2	0
	77.3	13.6			9.1	
p)	14	8	2	1	1	0
	53.8	30.8	7.7	3.8	3.8	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	5	10	1	6	0	0
	22.7	45.5	4.5	27.3		
p)	3	5	10	7	0	1
	11.5	19.2	38.5	26.9		3.8

17. ER nurses and paramedics should deal with conflict openly.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	17	1	1	1	2	0
	77.3	4.5	4.5	4.5	9.1	
p)	10	6	4	3	3	0
	38.5	23.1	15.4	11.5	11.5	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	8	5	6	1	0
	9.1	36.4	22.7	27.3	4.5	
p)	1	5	12	5	3	0
	3.8	19.2	46.2	19.2	11.5	

18. ER nurses and paramedics should hold forums for discussions to explore concerns.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	7	8	4	1	2	0
	31.8	36.4	18.2	4.5	9.1	
p)	4	9	6	2	3	2
	15.4	34.6	23.1	7.7	11.5	7.7
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	3	3	6	4	6	0
	13.6	13.6	27.3	18.2	27.3	
p)	1	1	4	10	6	4
	3.8	3.8	15.4	38.5	23.1	15.4

19. ER nurses and paramedics should share information about important events.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	9	8	2	1	2	0
	40.9	36.4	9.1	4.5	9.1	
p)	6	16	1	1	1	1
	23.1	61.5	3.8	3.8	3.8	3.8
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	5	8	3	3	2	1
	22.7	36.4	13.6	13.6	9.1	4.5
p)	1	6	10	5	1	3
	3.8	23.1	38.5	19.2	3.8	11.5

20. ER nurses and paramedics should share continuing education programs and educational software.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	7	7	4	2	2	0
	31.8	31.8	18.2	9.1	9.1	
p)	7	7	5	4	1	2
	26.9	26.9	19.2	15.4	3.8	7.7
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	5	8	3	3	1
	9.1	22.7	36.4	13.6	13.6	4.5
p)	0	4	4	10	4	4
		15.4	15.4	28.5	15.4	15.4

21. ER nurses and paramedics should socialize new nurses/paramedics into the professional role.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	9	2	6	3	1	1
	40.9	9.1	27.3	13.6	4.5	4.5
p)	10	1	7	4	0	4
	38.5	3.8	26.9	15.4		15.4
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	1	4	12	3	1	1
	4.5	18.2	54.5	13.6	4.5	4.5
p)	3	2	5	6	4	6
	11.5	7.7	19.2	23.1	15.4	23.1

22. ER nurses and paramedics should have an opportunity to experience each others professional role.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	8	8	3	1	2	0
	36.4	36.4	13.6	4.5	9.1	
p)	10	4	7	3	2	0
	38.5	15.4	26.9	11.5	7.7	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	7	3	0	10	0
	9.1	31.8	13.6		45.5	
p)	1	1	8	6	9	1
	3.8	3.8	30.8	23.1	34.6	3.8

23. ER nurses and paramedics should work together on joint research projects.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	6	7	5	2	2	0
	27.3	31.8	22.7	9.1	9.1	
p)	5	8	8	2	1	2
	19.2	30.8	30.8	7.7	3.8	7.7
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	1	7	4	6	2
	9.1	4.5	31.8	18.2	27.3	9.1
p)	2	2	10	2	7	3
	7.7	7.7	38.5	7.7	26.9	11.5

24. Provisions should be made for feedback of interagency information via newsletters, memos, or patient updates.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	NA
n)	6	9	4	2	1	0
	27.3	40.9	18.2	9.1	4.5	
p)	7	12	2	3	1	1
	26.9	46.2	7.7	11.5	3.8	3.8
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	NA
n)	2	2	6	5	7	0
	4.5	9.1	27.3	22.7	31.8	
p)	2	3	5	8	6	2
	7.7	11.5	19.2	30.8	23.1	7.7

25. The should be utilization of ER nurses and paramedics as role models for nursing and paramedic students.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	NA
n)	10	7	2	1	1	0
	45.5	31.8	9.1	4.5	4.5	
p)	8	6	6	2	1	3
	30.8	23.1	23.1	7.7	3.8	11.5
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	NA
n)	1	13	3	3	1	1
	4.5	59.1	13.6	13.6	4.5	4.5
p)	5	4	6	6	2	3
	19.2	15.4	23.1	23.1	7.7	11.5

26. ER nurses and paramedics should be accountable for quality patient care and patient satisfaction.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	NA
n)	18	2	1	0	1	0
	81.8	9.1	4.5		4.5	
p)	13	9	2	1	1	0
	50.0	34.6	7.7	3.8	3.8	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	NA
n)	6	9	3	4	0	0
	27.3	40.9	13.6	18.2		
p)	5	10	7	3	1	0
	19.2	38.5	26.9	11.5	3.8	

30. There should be cooperative orientation activities between new ER nurses and new paramedics.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	7	8	3	3	1	0
	31.8	36.4	13.6	13.6	4.5	
p)	6	6	9	2	0	3
	23.1	23.1	34.6	7.7		11.5
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	6	6	3	5	0
	9.1	27.3	27.3	13.6	22.7	
p)	1	2	7	8	4	4
	3.8	7.7	26.9	30.8	15.4	15.4

31. ER nurses and paramedics should explore issues related to educational programs together.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	6	8	4	2	2	0
	27.3	36.4	18.2	9.1	9.1	
p)	2	7	10	4	1	2
	7.7	26.9	38.5	15.4	3.8	7.7
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	1	6	5	6	4	0
	4.5	27.3	22.7	27.3	18.2	
p)	2	1	9	7	3	4
	7.7	3.8	34.6	26.9	11.5	15.4

32. ER nurses and paramedics should explore patient care standards together.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	7	7	6	1	1	0
	31.8	31.8	27.3	4.5	4.5	
p)	6	11	5	4	0	0
	23.1	42.3	19.2	15.4		
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	5	5	4	6	0
	9.1	22.7	22.7	18.2	27.3	
p)	1	1	13	6	4	1
	3.8	3.8	50.0	23.1	15.4	3.8

36. Strategic long-term planning should be carried out between ER nurses and paramedics.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	7	5	6	4	0	0
	31.8	22.7	27.3	18.2		
p)	3	6	9	3	0	5
	11.5	23.1	34.6	11.5		19.2
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	0	15	3	2	0
	9.1		68.2	13.6	9.1	
p)	1	2	6	7	4	6
	3.8	7.7	23.1	26.9	15.4	23.1

37. Consultations should occur equally between ER nurses and paramedics on patient care concerns.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	8	8	2	0	3	1
	36.4	36.4	9.1		13.6	4.5
p)	4	9	3	5	0	5
	15.4	34.6	11.5	19.2		19.2
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	0	4	9	3	5	1
		18.2	40.9	13.6	22.7	4.5
p)	2	3	3	10	3	4
	7.7	11.5	11.5	38.5	11.5	15.4

38. There should be regular contact between ER nurses and paramedics through social functions.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	3	5	6	4	3	1
	13.6	22.7	27.3	18.2	13.6	4.5
p)	5	7	8	3	0	3
	19.2	26.9	30.8	11.5		11.5
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	1	2	7	7	4	1
	4.5	9.1	31.8	31.8	18.2	4.5
p)	0	4	14	5	1	2
		15.4	53.8	19.2	3.8	7.7

APPENDIX I

PERCEPTIONS OF PRESENT COLLABORATION PRACTICES

NURSES				PARAMEDICS		
No.	N	Mean	Std.Dev.	N	Mean	Std.Dev.
1b.	20	3.952	0.722	22	3.500	1.077
2b.	21	2.091	1.083	25	2.560	0.898
3b.	21	3.227	1.125	20	3.700	1.269
4b.	19	3.350	1.276	24	3.208	1.079
5b.	21	2.318	1.257	26	2.731	0.857
6b.	21	2.455	1.033	26	2.923	0.917
7b.	21	3.091	1.124	21	2.952	0.999
8b.	21	2.773	1.165	26	2.731	1.021
9b.	21	2.727	0.962	26	3.154	1.026
10b.	21	2.500	1.118	26	2.731	0.943
11b.	21	2.272	1.250	26	3.038	1.018
12b.	21	2.591	1.114	26	2.692	0.773
13b.	21	2.591	1.302	26	2.802	1.001
14b.	21	2.500	1.197	26	2.962	0.940
15b.	21	2.364	0.881	26	2.840	1.026
16b.	21	2.364	1.110	25	2.840	0.967
17b.	21	2.818	1.072	26	3.154	1.013
18b.	21	3.318	1.361	23	3.864	1.013
19b.	20	2.476	1.258	23	2.957	0.908
20b.	21	2.318	1.257	24	2.375	1.184
21b.	20	2.286	1.278	22	2.227	1.203
22b.	21	3.409	1.527	25	3.840	1.081
23b.	19	3.550	1.244	23	3.435	1.245
24b.	21	3.591	1.267	24	3.542	1.224
25b.	20	2.524	0.957	23	2.826	1.274
26b.	21	2.227	1.041	26	2.423	1.044
27b.	21	2.182	1.029	26	2.462	1.151
28b.	20	2.952	1.133	24	3.167	0.898
29b.	21	2.955	0.976	22	3.636	1.150
30b.	21	3.136	1.290	22	3.455	0.988
31b.	21	3.173	1.175	22	3.364	1.068
32b.	21	3.318	1.328	25	3.440	0.941
33b.	21	2.864	1.254	24	3.125	1.201
34b.	21	2.455	1.269	25	2.760	1.242
35b.	21	2.000	1.128	25	2.360	0.843
36b.	21	3.136	0.919	20	3.550	1.071
37b.	20	3.429	1.050	21	3.429	1.178
38b.	20	3.524	1.052	24	3.167	0.799

INSTITUTIONAL REVIEW BOARD APPROVAL FORM

FLORIDA INTERNATIONAL UNIVERSITY

University Park Campus

Miami, Florida 33199

This is to certify that the program listed below has been reviewed and approved/denied by the Institutional Review Board (IRB) in accordance with the requirements of 45 CFR 46, including its relevant subparts.

Principal Investigator/Project Director: Linda Boylan

Title of Application: Perceptions of Collaboration Between Emergency Room Nurses and Paramedics.

Agency Submitted to: _____

Proposal Identification Number (if available): _____

Certificate of IRB:

_____ Date of IRB Review and Approval/Denial

☒ Full Board Review ☐ Expedited Review

Comments: Study was approved pending the following changes:

1. Please provide information on consent form as to approximate number subjects in the study.

Any problems should be immediately brought to the attention of the IRB Council

The Official signing below certifies that the information on this form is correct and the Institution assumes responsibility for assuring future reviews, approvals, and submissions of certification.

Karl G. Kroeck
Karl G. Kroeck, Chairperson,
IRB Committee

11/8/94
Date

27. ER nurses and paramedics should be responsible for quality patient care and patient satisfaction.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	18	2	1	0	1	0
	81.8	9.1	4.5		4.5	
p)	11	9	4	1	1	0
	42.3	34.6	15.4	3.8	3.8	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	7	7	5	3	0	0
	31.8	31.8	22.7	13.6		
p)	6	8	8	2	2	0
	23.1	30.8	30.8	7.7	7.7	

28. There should be a consensus between the professional goals of ER nurses and paramedics.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	3	7	7	3	1	1
	13.6	31.8	31.8	13.6	4.5	4.5
p)	7	4	10	2	1	2
	26.9	15.4	38.5	7.7	3.8	7.7
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	5	9	2	3	1
	9.1	22.7	40.9	9.1	13.6	4.5
p)	1	4	10	8	1	2
	3.8	15.4	38.5	30.8	3.8	7.7

29. ER nurses and paramedics should participate in joint committees.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	6	9	5	1	1	0
	27.3	40.9	22.7	4.5	4.5	
p)	6	8	6	3	1	2
	23.1	30.8	23.1	11.5	3.8	7.7
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	1	6	10	3	2	0
	4.5	27.3	45.5	13.6	9.1	
p)	1	2	8	4	7	4
	3.8	7.7	30.8	15.4	26.9	15.4

APPENDIX H
PERCEPTIONS NECESSARY FOR COLLABORATION

No.	N	NURSES		N	PARAMEDICS	
		Mean	Std.Dev.		Mean	Std.Dev.
1a.	21	3.773	1.312	24	2.667	1.213
2a.	21	1.636	1.150	25	1.440	0.983
3a.	21	2.909	1.276	20	2.850	1.276
4a.	20	3.333	1.522	24	2.167	1.067
5a.	21	1.727	1.135	26	2.115	1.012
6a.	21	1.818	1.435	26	1.692	0.067
7a.	21	2.409	1.370	21	2.143	1.082
8a.	21	1.818	1.230	26	1.654	0.875
9a.	21	2.045	1.331	26	1.731	0.811
10a.	21	1.455	1.157	26	1.923	1.238
11a.	21	1.500	1.158	26	1.462	0.887
12a.	21	1.591	1.193	26	1.692	0.910
13a.	21	1.500	1.197	26	1.692	0.991
14a.	21	1.455	1.157	26	1.846	1.167
15a.	21	1.591	1.193	26	1.769	1.085
16a.	21	1.500	1.158	26	1.731	1.021
17a.	21	1.636	1.298	26	2.346	1.385
18a.	21	2.227	1.203	24	2.652	1.218
19a.	21	2.045	1.224	25	2.000	0.894
20a.	21	2.318	1.257	24	2.375	1.184
21a.	20	2.286	1.278	22	2.227	1.203
22a.	21	2.136	1.217	26	2.346	1.299
23a.	21	2.409	1.231	24	2.417	1.037
24a.	21	2.227	1.084	25	2.160	1.084
25a.	21	1.955	1.147	23	2.217	1.140
26a.	21	1.364	0.932	26	1.769	1.012
27a.	21	1.364	0.932	26	1.923	1.035
28a.	20	2.619	1.045	24	2.417	1.115
29a.	21	2.182	1.029	24	2.375	1.111
30a.	21	2.227	1.165	23	2.304	0.953
31a.	21	2.364	1.226	24	2.792	0.957
32a.	21	2.182	1.072	26	2.269	0.953
33a.	21	1.909	1.240	26	1.692	0.991
34a.	21	1.818	1.154	26	1.692	0.821
35a.	21	1.591	1.193	26	1.538	0.843
36a.	21	2.318	1.103	21	2.571	0.904
37a.	20	2.045	1.364	21	1.962	1.344
38a.	20	2.952	1.253	23	2.391	0.966

33. ER nurses and paramedics should resolve differences without hard feelings occurring.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	11	7	1	1	2	0
	50.0	31.8	4.5	4.5	9.1	
p)	14	9	1	1	1	0
	53.8	34.6	3.8	3.8	3.8	
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	2	9	5	2	4	0
	9.1	40.9	22.7	9.1	18.2	
p)	3	4	7	7	3	2
	11.5	15.4	26.9	26.9	11.5	7.7

34. ER nurses and paramedics should feel safe to disagree with the opinions of each other.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	11	8	1	0	2	0
	50.0	36.4	4.5		9.1	
p)	13	9	3	1	0	0
	50.0	34.6	11.5	3.8		
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	5	10	1	4	2	0
	22.7	45.5	4.5	18.2	9.1	
p)	5	7	3	9	1	1
	19.2	26.9	11.5	34.6	3.8	3.8

35. ER nurses and paramedics should establish and maintain friendly working relationships with each other.

A.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	16	3	1	0	2	0
	72.7	13.6	4.5		9.1	
p)	16	8	0	2	0	9
	61.5	30.8		7.7		34.6
B.	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>NA</u>
n)	9	8	2	2	1	0
	40.9	36.4	9.1	9.1	4.5	
p)	5	7	12	1	0	1
	19.2	26.9	46.2	3.8		3.8

BAPTIST HOSPITAL
OF MIAMI
Nursing Administration

November 22, 1994

Linda Stacey Boylan
13235-2 S W 110 Terrace
Miami, Florida 33186

Dear Ms. Boylan:

Your research proposal "Perceptions of Collaboration Between Emergency Nurses and Paramedics" has been approved by the Patient Care Research Committee. The Committee requests you address the following issues:

- ♦ Obtain approval, before you begin your data collection, from the Emergency Department Administration; Craig McCall and Charles Sperrazza.
- ♦ Comparison of the nurses between the different institutions has not been approved.
- ♦ Results of the study are to be provided to the Emergency Department and Patient Care Research Committee upon completion of the study.

Good luck with your research. If I can be of any further assistance, please let me know.

Sincerely,

Linda Wortell RNC PhD

Linda Wortell, RNC, PhD
Chairperson Patient Care Research Committee

LW/llh

October 24, 1994

Ms Linda Boylan
Florida International University
Miami, Florida

Dear Ms. Boylan:

Congratulations on your efforts to complete the requirements for a Masters of Science in Nursing. We look forward to assisting you in your research project.

Special Assistant Robin Duren will be the primary liaison, and must be contacted prior to any contact with our paramedics. I am sure that you can understand that while we will attempt to facilitate your study we must primarily assure our community of fire-rescue service.

I would also ask that you be so kind as to provide our Department with a copy of your findings as well as any ideas which may enhance our public service.

If you need any further assistance please contact Special Assistant Robin Duren at 253-3765.

Sincerely,

E. C. Neafsey
E. C. Neafsey
Assistant Chief

ECN/rd

cc: Division 3

Always Ready, Proud to Serve

Date: October 13, 1994

Memo: Linda Stacy Boylan R.N.

From: Gwen Young R.N., M.S.N. /M
Chairperson, Nursing Research Committee

The Nursing Research Committee have reviewed your proposal and have granted permission for you to start data collection at South Miami Hospital at your convenience.

Enclosed is a copy of the procedure for conducting research at South Miami Hospital. Please forward a copy of the completed study for our records, and feel free to contact us if we can be of further assistance.

cc. Ms. L. Granata

October 31, 1994

Ms. Linda Boylan
South Miami Hospital
Charge Review Department
South Miami, FL

Dear Linda:

I am pleased to inform you that I have reviewed your research proposal titled "Perceptions of Collaboration between Emergency Nurses and Paramedics". I have discussed the proposal with the Emergency Department's Nurse Manager and we both approve of the staff participating in your study.

Please contact Cindy Braswell, RN, BSN, Nurse Manager of the Emergency Department as needed to facilitate the surveys reaching the nurses.

Best wishes in your endeavor.

Sincerely,

Gail Gordon
Gail Gordon, RN, MSN
Vice President of Nursing

GG:Dlt

cc: Cindy Braswell, RN, BSN

CONSENT VI

October 25, 1994

Ms Linda Boylan
Florida International University
Miami, Florida

Dear Ms. Boylan:

Congradulations on your efforts to complete the requirements for a Masters of Science in nursing. We look foward to assisting you in your research project at Deering Hospital, Emergency Room.

Gloria McEleven, RN., Emergency Services Director will be the primary liason between Deering Hospital Emergency Room and the Principal Investigator. We would also ask that you provide us with a copy of your findings.

If you need any further assistance, please contact Gloria McEleven at 256-5004.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gloria McEleven".

Gloria McEleven, RN
Emergency Services Director