Illinois Wesleyan University
Digital Commons @ IWU

Honors Projects | Nursing, School of

1993

Factors Affecting Communication Between Emergency Department Nurses

Malynnda Wright '93
Illinois Wesleyan University

Recommended Citation
Wright '93, Malynnda, "Factors Affecting Communication Between Emergency Department Nurses" (1993). *Honors Projects.* Paper 32.
http://digitalcommons.iwu.edu/nursing_honproj/32

This Article is brought to you for free and open access by the Nursing, School of at Digital Commons @ IWU. It has been accepted for inclusion in Honors Projects by an authorized administrator of Digital Commons @ IWU. For more information, please contact sdaviska@iwu.edu.
©Copyright is owned by the author of this document.

Factors Affecting Communication Between Emergency Department Nurses

Malynnda Wright
Illinois Wesleyan University
Senior Nursing Student
Honors Research 1992-93

102 East University
Bloomington, Illinois 61701
(309) 556-2365

INTRODUCTION

Communication of essential patient data is vital to provide effective immediate intervention in an emergency department or trauma center. The information must be complete and conveyed in a clear concise manner as quickly as possible. Without effective communication, valuable time can be wasted performing repetitious assessments, instead of conducting procedures that can save lives and reduce the length of the patient's stay. According to the Standards of Emergency Nursing (1975), "Emergency nursing practice is affected by the brevity of patient interaction with the nurse, the stressful climate created by lack of control over the numbers of individuals seeking emergency care, and the limited time frame in which to evaluate the effectiveness of intervention" (p. 5). Since nurses have little control over situations in the emergency department, they must make the best use of the available time through effective communication.

Many variables within the emergency setting affect communication. For example, factors related to the individual nurse, such as level of expertise, may affect the quality of communication. Organizational factors may also impact the communication of concerning patient information. Swansburg (1990) identifies that "a supportive climate will produce clear communication to support productive nursing workers and effective teamwork" (p. 386). When factors such as time of day and staffing adequacy affect workers, then they also affect workers' communication.

Although many research studies have focused on factors affecting communication between nurses and patients, no nursing studies were found which investigated factors affecting the communication of essential patient information among nurses. Furthermore, no studies were

identified which examined communication among nurses in an emergency department.

REVIEW OF LITERATURE

Potter and Perry (1989) defined communication as the "ongoing, dynamic series of events that involves the transmission of information or feelings between two or more people" (pp. 491-492). They also describe communication, whether verbal or nonverbal, as an active process with the basic elements of a sender, receiver, message, and channels. The message is the information that is sent or expressed in communication. Through initiation of interpersonal communication, a sender transmits a message through channels which can be visual, auditory, tactile, or written methods. The person to whom the message is sent is the receiver who determines if the information was conveyed and received appropriately.

The idea of triage was brought from the military to the emergency department in order to reduce the time needed for patient assessment and allow more time for care. Yet, the lack of knowledge concerning communication between emergency nurses and whether it is effective, can defeat the purpose of triage. Rund and Rausch (1981) proposed concepts of triage such as early patient assessment, determination of urgent cases, prioritizing cases based on the urgency, documentation, and disposition all require good communication to be effective.

In an emergency department, patient assessment information is transferred between the triage nurse and the primary nurse through verbal, nonverbal, and/or written channels. For communication to be successful, accurate information must be conveyed, which will lead to immediate medical treatment. If communication is correctly sent and

received, then the communication is considered effective and proper interventions can be conducted. Garvin and Kennedy (1988) assumed that the communication process is integral in order to attain specific health-related goals.

Accurate communication "requires knowledge of words and their various meanings as well as the contexts within which they can be used" (Swansburg, 1990, p. 393). In health care, such knowledge is specific to the hospital unit and entails not only words to convey meaning, but also actions. Thus, an emergency department will have certain gestures and knowledge specific to the emergency department. One of the best ways to understand the communication in an emergency department is through experience. With experience, one becomes familiar with the setting and the methods of communication among the employees. As Potter and Perry (1989) stated, "the most effective message is clear, organized, and expressed in a manner familiar to the person receiving it" (p. 493).

Factors that influence communication can be categorized in several ways. Swansburg (1990), for instance, identifies factors that affect communication as "limitations to perception [that] are cultural and emotional" (p. 388). Another way of categorizing factors according to Potter and Perry (1989) is by interpersonal variables, which are defined as "perceptions, values, cultural background, knowledge, and roles and the setting of interaction" (p. 493). Mowad and Ruhle (1988) provided other groupings: "external factors include environmental aspects such as time constraints, the noise level, crowding, and distracting stimuli. Internal factors include physical limitations, mental or emotional state, orientation, preconceptions, physical factors such as pain, and grief. Interpersonal factors include differences in educational levels, language, cultural

differences, [and] intellectual differences" (p. 18). Other authors identified important factors affecting communication as emotions, relationships, sociocultural background, space, and territory. Referents motivate both the sender and the receiver to communicate. Referents are those feelings, thoughts, items, or people that have the potential to influence communication. With many influencing factors, it is difficult to use any one categorization. Determining what general factors that affect communication that are specific to the emergency unit provides a basis from which to identify individual and organizational factors.

Individual factors influencing communication are present in an emergency setting. It is important to attempt to reduce the effect of these factors in nurse-nurse relationships to facilitate communication. For instance, knowledge and education play a role in a nurse's ability to communicate. One hypothesis by Garvin and Kennedy (1988) was that "baccalaureate programs might put more emphasis on communication" (p. 164) which may positively influence communication abilities. Much controversy exists regarding how much education affects communication abilities. Harrison, Pistolessi, and Stephen (1989) stated "although students can learn requisite communication skills, it is not known whether they retain these skills,..., or continue to improve their effectiveness and they gain more knowledge and experience in nursing" (p. 75). If the former part of this statement is true, then nurses with the lesser amount of education should be able to communicate just as well as the nurses with more education. But, if the latter part is true, then the more education a nurse has, the better he/she should be at communicating. Harrison, Pistolessi, and Stephen (1989) also pointed out that personality and social circumstances affect communication. Thus, the ability to effectively

communicate is not totally depedent upon educational achievement. Communication may also be affected by perceptions, emotions, previous experiences, education, spatial area, the presence of others, time, and feelings. These variables influence the nurse-nurse communication in the emergency department.

In addition, several factors external to the idividual affect communication. One variable usually uncontrolled by the nurse is the staffing patterns. Mason (1991) makes three points demonstrating the difficulty in determining emergency department staffing needs. First, unlike other units in a hospital where the census remains relatively stable, an emergency department's census and demands can alter rapidly in a matter of minutes. Second, the nursing care necessary for an individual patient can change from minimum care to maximum care in seconds. Third, it is virtually impossible to predict the amount and types of cases each shift might encounter in an emergency setting. Because of these conditions in the emergency department, unpredictable staffing is difficult with which to cope. The number and level of expertise of the nurses can fluctuate from one shift to the next which in turn affects communication. For example, if the staff level is too low for patient census, communication might become rushed and strained due to time restraints and nursing care needs. Vice versa, if staffing is too high, nurses might resent working when they could be doing other activities and make inappropriate comments to colleagues. They could also become distracted from their work and neglected to communicate accurate information concerning patients who are receiving care.

Berger, Seversen, & Chvatal (1991) isolated several issues frequently identified by nurses as disturbing in the work environment. These

included "inadequate staffing,..., dealing with situations where patients are discussed inappropriately, and dealing with colleagues' irresponsible activity" (p. 517). When problems with staffing occur, these issues can strain the communication between nurses.

Staffing plays an important role in employee relations in another way. Due to differences in personalities, preconceptions, values, past background, experience, and education, nurses may simply not work well together. As a result, their communication may become tense and ineffective. Although the research was conducted in a critical care unit, Young, Maguire, & Ovitt (1988) stressed the importance of making reports between nurses "more time and content efficient" (p. 374). In order to do such, staffing should be coordinated between nurses to reduce tension which causes poor communication. .

According to Garvin and Kennedy (1988), "studies examining other communication variables and their relationship to type of nursing education do not provide conclusive results" (p. 162). They further discussed research studies that found no difference in communication abilities between nurses from various educational backgrounds (diploma, associates, baccalaureate) and their communication ability. But, research studies countering the former statement were also discussed. Furthermore, other studies have pointed out that regardless of the program, "various training and educational programs have been effective in improving interpersonal communication" (Garvin & Kennedy, 1988, p. 162).

Another factor affecting the ability to communicate may be the level of expertise. Benner (1984) identified five levels of expertise of practitioners from novice to expert. She also stated that one does not

necessarily need to have more experience in order to be considered an expert. Many variables other than level of experience come into play when one evaluates level of expertise. For instance, "the ability to adapt communication to the demands of different individuals and situations and to consider explicitly another person's beliefs and values in regulating behavior requires a high level of interpersonal competence" (Kasch & Lisnek, 1984, p. 64).

Kasch (1986) utilized some of the concepts he and Lisnek developed from their 1984 article to provide the ground work for a theory of nursing actions in nurse-patient relationships. Even though the pieces focus on nurse-patient interactions, these concepts can also be applied to nurse-nurse relationships. Kasch (1986) assumed "that nurses engage in an active construction and interpretation of experience, [and] it follows that the individual nurse's definition of the situation is the generative source of nursing action" (p. 227). If such a statement is considered true, nurses' individual perceptions, which are separate and distinct from others, influence their actions and communication to colleagues. These perceptions are construed following exposure to specific situations and become the foundation for future interactions that are similar to the first situation. From previous experiences and ideas, the nurse determines what is important and communicates this information to fellow workers. Kasch further stated that "nurses' interpersonal action is functional, strategic, and goal-directed" (p. 227). In addition to actions, the communication that nurses employ is also goal-directed in hopes of achieving the accurate transmission of vital patient information. In the perfect situation, "the nurse functions as a communication strategist, controlling interpersonal behavior in ways designed to enhance chances of

accomplishing specific goals" (p. 227). Thus, as a strategist, the individual nurse should, through her/his behavior, try to reduce the effects of internal variables influencing interaction in order to achieve effective communication. Realistically, this is not always possible. Many factors affect the communication between nurses which can result in disrupted interactions and inadequate patient care.

Kasch described communication as "information transmission--using language to relay information" (p. 58). A main function of the triage nurse is to convey relevant information concerning the patient to the primary nurse. Each nurse communicates differently. Because of characteristics, educational background, style, personality, and experiences, each nurse transmits information, whether through language or body movements, to achieve a desired goal. That goal is to relay pertinent information. In order to achieve this goal, one must first identify those factors which affect communication.

ASSUMPTIONS

1) A communication dyad consists of the transmission of information between a sender and a receiver
2) Communication can be observed by an individual separate from the interaction, that a dyad can be selected and the transferral of information observed.

PURPOSE

The purpose of this study was to:

a) explore selected nurse-specific factors and relate them to the level of education and level of expertise of the nurse, and examine how those factors affect effective communication of patient information between triage nurses and primary caregiving nurses.

b) identify and describe organizational emergency departmental factors that affect effective communication of patient information between triage nurses and primary caregiving nurses.

SPECIFIC AIMS

Two research questions were addressed in this exploratory study:

1) What is the effect of specific nurse factors:

   a) level of education

   b) level of expertise

   c) other...

   on the effectiveness of communication between the triage nurse and the primary nurse?

2) What is the effect of organizational factors in an emergency department:

   a) staffing

   b) presence of others

   c) other...

   on the effectiveness of communication between the triage nurse and the primary nurse?

METHODS

Design

The basic research design of this study was descriptive and exploratory.

Setting

The research was conducted at a large midwestern hospital in Central Illinois. This hospital was selected because of its classification as a Level I Trauma Center and its dedication to research. The nurse manager of the emergency department and the Trauma Nurse Coordinator gave much support and willingly offered their expertise. These were critical factors in the selection of a research facility. Typical shifts were 12 hours beginning at different times depending on the schedule. In addition, communication during both weekday and weekend shifts was observed. Different times were selected for observation to obtain a mixture of staff and cases in each of the three trauma levels. In this setting, the patient came to the emergency department and was assessed by the triage nurse. Then, the triage nurse categorized the patient based on the urgency of their complaint and transferred the assessment information to a primary nurse.

Definitions

1. Triage:

    a. literature:

    "Entails sorting patients in terms of disposition, destination, or priority" (Champion, 1986, p. 79).

b. operational:

Triage level was described as level 1, 2, or 3 by verbal report of the triage nurse to the investigator or by observation of room assignment.

In the emergency department:

1= Emergent, trauma rooms (top priority)

2= Urgent, trauma rooms and holding beds

3= Nonurgent, exam rooms

2. Nursing Roles:

a. literature:

Triage Nurse: the nurse "delegated the duty of prioritizing patients who come to an emergency department for care" (Mowad & Ruhle, 1988, p. 14).

b. operational:

1. Triage Nurse: utilized the literature definition.
2. Primary Nurse: the nurse who receives the communicated information concerning a patient and is responsible for that patient's care.

3. Communication:

a. literature:

1. verbal: "spoken or written word" (Potter & Perry, 1989, p. 493).
2. nonverbal: "transmission of messages without the use of words" (Potter & Perry, 1989, p. 495).

b. operational:

Communication dyad:

Interaction between the triage nurse and the primary caregiving nurse: the transmission of verbal or nonverbal information by the triage nurse (as the sender) concerning an observed patient to the primary nurse (as the receiver). The triage nurse and the primary nurse are two separate individuals.

4. Effective communication:

a. literature:

"Effective communication, or mutual understanding, demands that C=A; in other words, meaning as apprehended by the receiver must be identical to the original meaning of the sender" (Kron, 1967, p. 24).

C= receiver's interpretation of the message

A= message the sender delivered

(See Appendix A)

b. operational:

Determined on a five-point Likert-type scale ranging from one (as most ineffective) to five (as most effective). Primary nurses rated the verbal and nonverbal communication from the triage nurse. Communication was determined effective with a rating of five or four, neutral with a rating of three, and ineffective with a rating of two or one. (See Appendix E)

5. Expertise in Clinical Practice:

   a. literature:

   The level of expertise in clinical practice is defined as one of five categories: novice, advanced beginner, competent, proficient, and expert (Benner, 1984).

   b. operational:

   The level of expertise in emergency room practice as determined by the Nurse Manager's rating of each nurse on one of five expertise categories.

6. Staffing Level:

   operational:

   The staffing level is defined as above normal, normal, and below normal by the charge nurse based on the relation of number of staff to number of patients at the beginning of the observation period in which the investigator is collecting data.

Instruments

Demographic questionnaire: A basic demographic questionnaire was developed that requested information on age, gender, education, experience, certifications received, position held, and work patterns. (See Appendix B)

Data Collection Forms:

1. Shift Description Form: A general summary of shift; information including present shift, staffing level, and general field notes. (See Appendix C)

2. *Data Collection Form for Trauma Room:* A collection form to describe each observed communication dyad between the triage nurse and the primary nurse involved. (See Appendix D)
3. *Effectiveness of Communicator Form:* A five-point Likert-type scale (five=most effective and one=most ineffective) rating the effectiveness of communication from the triage nurse, as perceived by the primary nurse and from observation on behalf of the researcher. (See Appendix E)

Benner's Scale: A scale utilized by the Nurse Manager to rate the clinical expertise of the nurse as one of the following: novice, advanced beginner, competent, proficient, and expert for definition. (See Appendix F)

Protection of Human Subjects

A proposal was submitted to the hospital's medical research committee and to the Institutional Review Board. Permission for the research proposal was granted by both committees. Emergency department nurses were invited to participate in the study during the designated time. Consents were distributed and time allotted for questions at a staff meeting. Those not in attendance were approached at a later date and invited to participate. Those participating signed consent forms and received a copy. (See Appendix G). Basic elements of informed consent were addressed as well as the hospital's institutional disclaimer items. Data that could possibly reveal the identity of participants were coded, with access only to the primary investigator.

Sample

The sample was comprised of twenty registered nurses who were employed in the selected emergency department during the time of research from January 4 to January 25, 1993. All agreed to participate in the study by signing a consent form. (See Appendix C) There were 19 (95%) female nurses and one (5%) male nurse. The average age was 36.8 years (N=19). The range of years worked in all types of nursing was two to 28 years with the average of 13.8 years. The number of years worked as a nurse in an emergency department ranged from two to 20.5 years with the average of nine years. The number of years spent working in their present position at the hospital in the emergency department was three weeks to 20.5 years with the average of 5.9 years.

Positions within the emergency department varied. Such roles included 16 staff nurses, two assistant managers, one manager, and one clinical educator. Eighteen of the the nurses were certified as trauma nurses and two were not certified. Although some nurses worked several, the shifts normally worked included the following: seven a.m. to seven p.m. (n=six), seven p.m. to seven a.m. (n=eight), rotating shifts between seven a.m. and seven p.m. (n=five), and, the nurse manager, whose hours fluctuate.

There were no registry nurses, two worked part-time, and 18 worked full-time. Seven nurses (35%) had received their nursing education through a diploma school, nine (45%) through an associate program, and four (20%) through a baccalaureate (BSN) program. (See Chart 8) Six nurses (30%) at the time of the data collection were enrolled in BSN completion programs. The highest degree in nursing earned for subjects were seven diplomas, six associate degrees, four baccalaureate

degrees, and one masters. Other college preparation outside of nursing education comprised varying number of hours in obtaining a BSN, one year of music education, emergency medical technician training, ACLS (Advanced Cardiac Life Support), PALS (Pediatric Advanced Life Support), a BS, BA in psychology, and a BA in biology. Twelve of the nurses stated they had taken a course in communication while seven stated they had not.

The nurse manager in the emergency department rated a 17 of the 20 staff nurses according to Benner's Scale, novice to expert. Four nurses were rated as experts, four were rated as proficient, seven were rated as competent, one was rated an an advanced beginner, and one was rated as a novice. (See Chart 9) Two nurses were not scaled and considered missing data. The nurse manager did not scale herself and the researcher in addition chose not to scale her.

Procedures

A brief description of the research proposal and the investigator's role was given to the nurses at a regular staff meeting. After consenting to participate, each nurse present completed the demographic questionnaire. (See Appendix B) Those not at the meeting completed the consent and demographic form prior to observation. The nurse manager of the emergency department, who was familiar with Benner's work on novice to expert, was provided with Appendix F to use for rating of the nurses. The nurse manager then rated each nurse on level of expertise according to Benner's Scale (1984).

Observation times included all shifts (7 a.m. to 7 p.m., 7 p.m. to 7 a.m., 12 a.m. to 12 p.m., and 12 p.m. to 12 a.m.). At the beginning of each

shift, brief data concerning the observed shift, including notes of staffing patterns, was collected on the shift description form to provide context (See Appendix C). Selected observations were chosen to include all three levels of triage.

As a participant observer, the investigator observed the communication between the triage nurse and the primary nurse (as defined). The researcher then recorded information concerning verbal and nonverbal communication and variables which affected communication using field notations, as described by Strauss and Corbin (1990), on the data collection form for trauma room (See Appendix D). Following the communication dyad, the investigator interviewed the primary nurse when time and situation permitted. The researcher asked the primary nurse to verbally rate the a) effectiveness of the communication received from the triage nurse on a scale of one to five with one being the least effective and five being the most effective; (See Appendix E) and to give b) general information about the interaction; and/or, c) factors influencing the communication. The information from the primary nurse was recorded on the effectiveness of communicator form by the researcher (See Appendix E). During the observation times, open ended questions were utilized concerning communication between nurses.

DATA ANALYSIS

Through participant observation, information was collected on observed communication dyads. Descriptive statistics were used to determine the results. Communication dyads were separated by level of effectiveness and described in relationship to level of education and to level of expertise. Through qualitative analyzation of field notations, the

investigator identified categories of other factors affecting communication between the triage nurse and the primary nurse in this emergency departmental setting.

FINDINGS

Thirty-two complete dyads of communication between a triage nurse and a primary nurse were observed. These consisted of five in the emergent trauma level (level one), 13 in the urgent trauma level (level two), and 14 in the nonurgent trauma level (level three). Ten observations were made during the seven a.m. to seven p.m. shift and 22 were made during the seven p.m. to seven a.m. shift. Eighteen of the 32 observations were conducted during the week (Monday through Thursday) and 14 observations were conducted on the weekend (Friday through Sunday).

Observations were conducted on six different days throughout the month of January, three weekdays and three weekends. Collection times ranged from 1133 (military time) to 2205. The average length of each collection period was three hours. Data related to each case such as time, trauma level, shift, and day of week helped assure a mixture of cases. Fourteen different nurses, out of twenty who consented to participate, were observed in the 32 dyads. Twenty-seven communication dyads were selected for analysis after elimination of those cases in which the triage nurse and the primary nurse were the same individual and when the nurse was not scaled on Benner's scale.

Effectiveness. Of the 27 communication interactions, 15 were rated as effective with a score of four to five, six were rated as neutral with a score of three, and one was rated ineffective with a score of two to one, by the primary nurse. (See Chart 1) Due to uncontrollable

circumstances which prevented questioning of the primary nurse following the communication from the triage nurse, six dyads were not scored on the effectiveness scale and were eliminated from analysis. Yet, of the 15 communication dyads observed in this setting, the majority of interactions were rated as effective by the primary nurse. One clarification by the primary nurse was noted by the observer, in field notes, which alluded to effective communication: "she is to the point"

Expertise. Individual nurse-specific factors which were analyzed included level of expertise and education. Of the 15 communication dyads rated as effective with a score of four or five, four (26.6%) were between expert nurses (triage to primary and/ primary to triage: T to P and P to T). Three (20.0%) dyads occurred between a novice nurse as the triage nurse to an expert nurse. Five (33.3%) were between a competent nurse and an expert (T to P and P to T). Two cases (13.3%) were between a competent and a novice (T to P and P to T). Finally, only one (6.6%) occurred between two competent nurses. (See Chart 2). From analysis of field notes it was determined that the majority of the communication dyads rated as effective by the primary nurse (79.9%) involved the transmission of information either from an expert triage nurse or to an expert primary nurse. Comments made by the primary nurse in describing the triage nurse suggested that experience affected the communication dyad. One primary nurse was observed to comment, "that nurse does a good job...the position takes experience, which she has."

Five of the 27 dyads were given a rating of three, or neutral, on the effectiveness scale. Analysis of field notes revealed four dyads (80%) involved an expert nurse. Two of the dyads (40.0%) occurred between a competent and an expert nurse (T to P and P to T), and two (40.0%) were

between an expert and a novice (T to P and P to T). (See Chart 3). Finally, only one dyad was rated as ineffective, with a rating of two or one, which occurred from a novice as the triage nurse to an expert as the primary nurse. When the investigator questioned the primary nurse on the effectiveness of the communication by the triage nurse following the dyads rated as three or below, several comments were made that suggest other factors such as the situation and emotions can influence this communication: "she's very uptight" and "she appears rushed right now."

EDUCATION

Another individual nurse factor analyzed was the level of education. Of the 15 dyads rated as effective, six (40.0%) of the triage nurses either had their BSN or were in the process of a BSN completion program (BSN/BSN COMP.). Nine (60.0%) of the cases had triage nurses with a diploma or associates education (D/As.). (See Chart 4). With respect to the primary nurses, 12 (80.0%) were BSN/BSN COMP., and three (20.0%) had a/an D/As. education. (See Chart 5). More often, when the dyad was rated effective (four or five), the primary nurse was a BSN/BSN COMP. Of the five dyads rated neutrally, two (40.0%) triage nurses were BSN/BSN COMP., and three (60.0%) were D/As. (See Chart 6). Just the opposite occurred with the primary nurses. Three (60.0%) were BSN/BSN COMP., while two (40.0%) were D/As. (See Chart 7). The only ineffective dyad had a diploma nurse as triage and a BSN as primary.

Education/Expertise Effect. The level of education was compared with the level of expertise. The mean level of expertise for both BSN and BSN COMP. was 1.85 (one equalling expert according to Benner's scale). The mean level of expertise for both diploma and associate levels of

education was 2.9. From analysis, the average level of expertise of the BSN/BSN COMP nurses is higher, or in other terms, there are more experts among this group.

ORGANIZATIONAL FACTORS

Staffing. Examination of staffing patterns revealed that at no time was the emergency department understaffed. The nurse manager always had a specific number of nurses scheduled (three) with one on call in case the census increased quickly.

Presence of others. No cases were observed in which communication between the triage nurse and the primary nurse occurred in front of family members. Thus, there was no variability in relation to staffing or the presence of family. Twelve dyads were observed in which a physician was present. Out of the 12 cases; three (25.0%) were not rated on the effectiveness scale, one (8.3%) was rated as ineffective, four (33.3%) were considered neutral, and four (33.3%) were rated effective.

ADDITIONAL FACTORS

Additional factors which might have influenced the communication between the triage and the primary nurse were identified through analysis of observational data and labeled: patient identity and uncontrollable factors which influenced the amount of communication between the nurses which in turn influenced the effectiveness of the interaction.

Patient Identity

FREQUENT FLYERS. The investigator noted through observational notes that when "frequent flyers" came to the emergency department the communication decreased in amount and involved more nonverbals. One

nurse said that when a patient continually comes in for treatment, everyone knows them and knows why he/she is here; therefore, "you don't need a report." Another comment was that "I know why that patient is here...he is in for drugs." Nonverbal actions observed when "frequent flyers" were admitted for care. Analysis of field notations revealed the following: rolling of the eyes, walking slower than normal to the exam room, and posturing as if frustrated. Such communication suggested that nurses assumed everyone in the emergency department knew the patient and would not need anymore information other than a name to know why the patient was there. In addition, opinions about the patient were given. Even though information was assumed, the communciation in these cases was often rated less effective than a four or five suggesting that a lack of information or offering opinions leads to ineffective communication.

VIPs. Furthermore, if the patient was considered important or with political or economic influences in the hospital, the patient received immediate attention and was placed in a room away from distractions. One case, for instance, was an employee of the hospital and known to the staff. The patient was quickly admitted and treatment took place in an exam room away from the distractions from other patients. Very little extra communication occurred between nurses in order to prevent breech of confidentiality. The dyads concerning a VIP were rated as fours and fives which were higher than those of the "frequent flyers." This communication was short and precise, which follows the definition for effective communication.

Uncontrollable Factors

CODE SITUATIONS. In trauma level one (emergent) cases, verbal communication was virtually nonexistent since nurses are often unable

obtain a complete history of the patient, yet the care was immediate. During a respiratory arrest (when a patient stops breathing), for example, little verbal communication was observed. Nurses simply used nonverbal actions to communicate. They automatically acted in response to the situation without needing verbal communication. What little verbal communication that transpired was usually commands such as: "hand me that syringe," or "get another IV started."

OVERDOSE. In these situations, the communication was also reduced between the triage nurse and the primary nurse. For example, one case included a patient who had taken too many asprin, was awake, but unable to communicate. The primary nurse had some difficulty directing her care because the report from the triage nurse contained minimal information. It was clear from her nonberbal communicaiton that she was frustrated. When asked by the observer whether the communication was effective she replied "no, because there is nothing to communicate."

In both the above situations, little communication transpires, but the circumstances are very different. This implies that in cases when actions are automatic, such as the code, no communication is needed and when information is given, it is considered effective since it was not expected. Whereas the other situation of the overdose, much data concerning the patient is missing and there is no information to communicate. This dyad was rated ineffective. Such instances may simply be a reality of an emergency department since many cases are unexpected and nurses can not prepare for them.

DISCUSSION

Through observation of the emergency department, it was noted that individual nurse variables and organizational variables did influence the communication between the triage nurse and the primary nurse. Findings from this study corresponded with Swansburg (1990) who stated that the supportive environment would help produce clear communication. For the emergency department, the supportive environment included always having a minimum number of nurses working and eliminating the presence of family during report sessions.

Just as Potter and Perry (1989) described the many ways communication is transmitted, so did the nurses in the emergency department utilize many different ways. Much of the communication was verbal or written. With certain cases as with the "frequent flyers," nonverbal actions such as rolling eyes were employed to transfer meaning. Another unrelated instance occurs during the code situation. Nurses did not need to utilize words, they automatically knew what needed to be done.

One would assume that when the nurse's level of education and expertise increases, so would his/her ability to communicate. Garvin and Kennedy (1988) thought that the BSN nurse would possess better communication skills. After analysis of data, the percentage distribution of BSN graduates/students supported this notion. Results also revealed that as the level of expertise increased, the ability to communicate was heightened. However, these results concerning education and effectivnes should be considered with caution due to the limited number of the sample.

Organizational factors did play a role in the communication between the triage nurse and the primary nurse. Staffing, though, did not seem to affect the interaction simply because this variable did not change throughout the research. In 50% of the dyads, doctors were present, yet this factor did not appear to affect the nurses' communication. Likewise, none of the staff said that the presence of the physician bothered them. Furthermore, the presence of family was not observed in any of the cases.

Other factors did influence communication. When the patient was known by the staff, was an employee of the hospital, or was unable to themselves communicate to the nurse, the interaction between the triage and the primary nurse was more often rated lower on effectiveness. In special circumstances, communication was virtually nonexistent as in a code situation. The nurses' actions were goal directed and purposeful. In these instances the nurse functioned "as the communication strategist, controlling interpersonal behavior in ways designed to enhance chances of accomplishing specific goals" (Kasch, 1986, p. 227).

LIMITATIONS

Several points need to be addressed in relation to the research. First, the rating of level of expertise according to Benner's scale was done by only one person. Therefore, the risk of bias was present. To strengthen future studies, interrater reliability should be established by having two persons knowledgeable on Benner's scale of expertise to evaluate the staff nurses. Second, following each communication dyad, it was not always possible to question the primary nurse on the effectiveness of the communication due to time and situational factors. As a result, some ratings were interpreted by the researcher which may not be accurate

perceptions. No validity studies were conducted on the effectiveness scale. Third, more information was collected from the nurses and on each dyad that may affect the communication but could not be analyzed due to the limited nature of this study.

IMPLICATIONS

The implications for the future are many. Studies need to be conducted which select specific factors, identified from this research, and analyze their affect on communication. For instance, the influence of doctors was not significant but might be under different circumstances. Also, more cases in all trauma levels need to be examined. Furthermore, a more reliable and consistent measure needs to be developed which evaluates the effectiveness of communication. The instruments and coding of nurses according to Benner's scale should also be conducted with more than one person to establish reliability.

Other questions need to be addressed. How does the level of expertise of the primary nurse affect his/her rating of the triage nurse on the effectiveness of the communication? What are the influences of the triage/primary nurse dyad? For instance, does the amount of trust between the two influence communication? How long have the nurses known each other? And, do their personalities go well with each other? Does the level of fatigue play a major role in the communication? If so, does more attention need to be given to staffing patterns to ensure that those nurses who have conflicting personalities do not work together? And, does more attention need to directed to make sure nurses do not get fatigued?

This study raised more questions than it answered. It can provide the groundwork for future studies. Many variables identified in this research need to be selected and analyzed in more detail concerning their effects upon communication. Finally, more research on communication between nurses, in any situation, needs to be conducted to evaluate its effectiveness.

REFERENCES

American Nurses' Association Division on Medical-Surgical Nursing Practice and Emergency Department Nurses' Association. (1975). Standards of emergency nursing practice. Kansas City, MO: American Nurses' Association.

Barnlund, D. C. (1968). Interpersonal communication: Survey and studies. Boston: Houghton Mifflin.

Barnum, B. S., & Mallard, C. O. (1989). Essentials of nursing management. Rockville, MD: Aspen Publishers.

Benner, P. (1984). From novice to expert: Excellence and power in clinical nursing practice. Menlo Park, CA: Addison-Wesley Publishing.

Berelson, B. (1952). Content analysis in communication research. Glencoe, IL: Free Press Publishers.

Berger, M. C., Seversen, A., & Chvatal, R. (1991). Ethical issues in nursing. Western Journal of Nursing Research, 13(4), 514-521.

Borden, G. A., Gregg, R. B., & Grove, T. G. (1969). Speech behavior and human interaction. Englewood Cliffs, NJ: Prentice-Hall.

Cales, R. H., & Heilig Jr., R. W. (1986). Trauma care systems. Rockville, MD: Aspen Publishers.

Garvin, B. J., & Kennedy, C. W. (1988). Confirming communications of nurses in interactions with physicians. Journal of Nursing Education, 27(4), 161-166.

Harrison, T. M., Pistolessi, T. V., & Stephen, T. D. (1989). Assessing nurses' communication: A cross-sectional study. Western Journal of Research,11(1), 75-91.

Kasch, C. R. (1986). Toward a theory of nursing action: Skills and competency in nurse-patient interaction. Nursing Research, 35(4), 226-230.

Kasch, C. R., & Lisnek, P. M. (1984). Role of strategic communication in nursing theory and research. Advances in Nursing Science, 7(1), 56-71.

Kron, T. (1967). Communication in nursing. Philadelphia: W. B. Saunders.

Mason, M. G. (1991). Evaluating nursing productivity in the emergency department. Nursing Management, 22(10), 120J-CC-120P-CC.

Mortensen, C. D. (1972). Communication: The study of human interaction. New York: McGraw-Hill.

Mowad, L., & Ruhle, D. C. (1988). Handbook of emergency nursing: The nursing process approach. Norwalk, CN: Appleton & Lange.

Rund, D. A., & Rausch, T. S. (1981). Triage. St. Louis: C. V. Mosby.

Sereno, K. K., & Mortensen, C. D. (1970). Foundations of communication theory. New York: Harper & Row Publishers.

Straus, A., & Corbin, J. (1990). Basics of qualitative research. Newbury Park, CA: Sage Publications.

Swansburg, R. C. (1990). Management and leadership for nurse managers. Boston: Jones & Barlett.

Wakefield, B. (1976). Perception and communication. Urbana, IL: Clearinghouse on Reading and Communication Skills.

Young, P., Maguire, M., & Ovitt, E. (1988). Implementing changes in critical care shift reports. Dimensions of Critical Care Nursing, 7(6), 374-380.

CHARTS

Chart 1

% of Communication Dyads by Level of Effectiveness

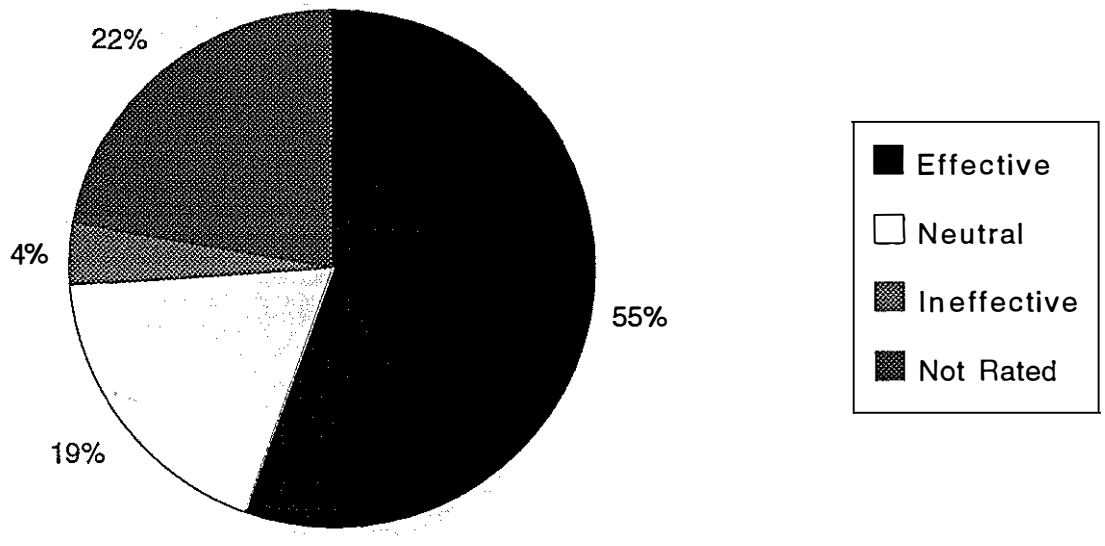


Chart2

% of Effective Communication Dyads by Level of Expertise

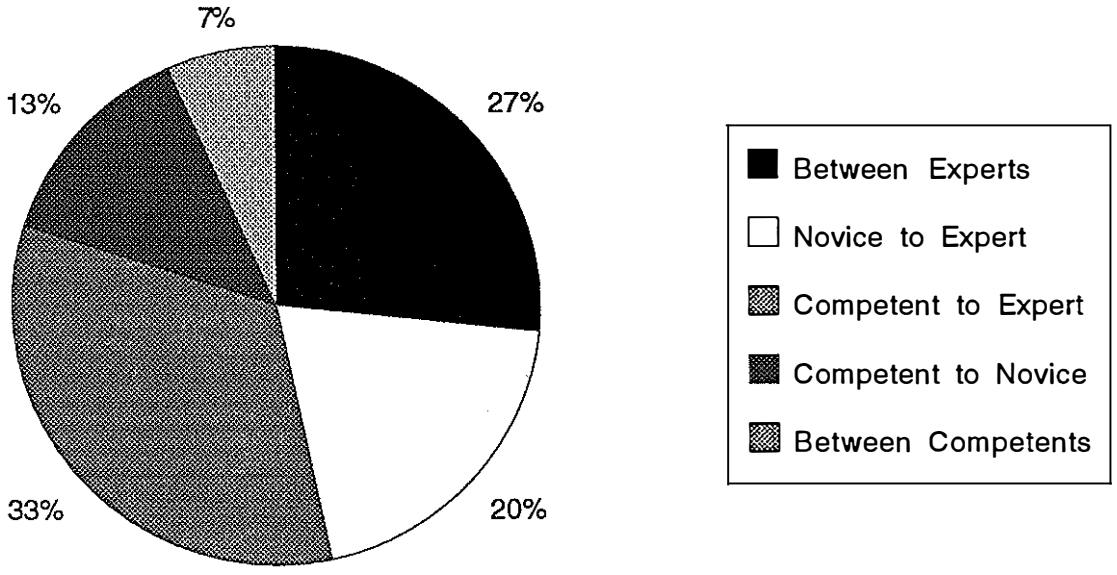


Chart3

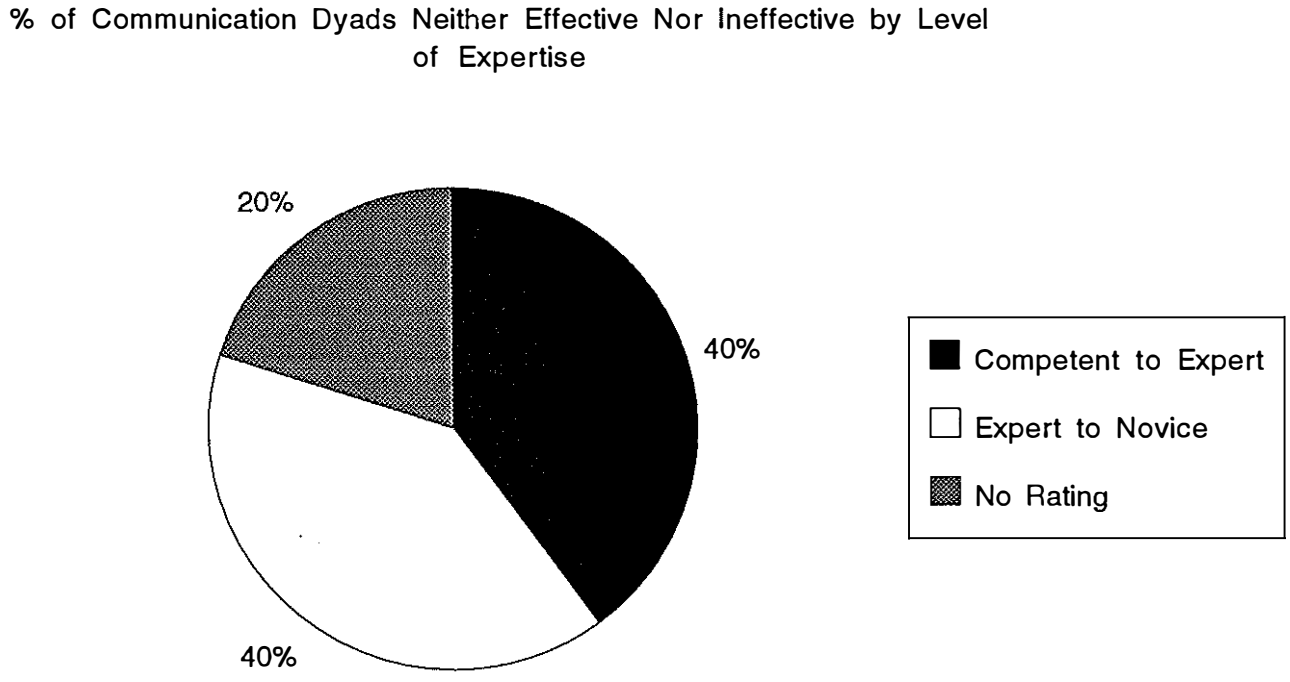

% of Communication Dyads Neither Effective Nor Ineffective by Level of Expertise
20%
40%
40%
Competent to Expert
Expert to Novice
No Rating

Chart4

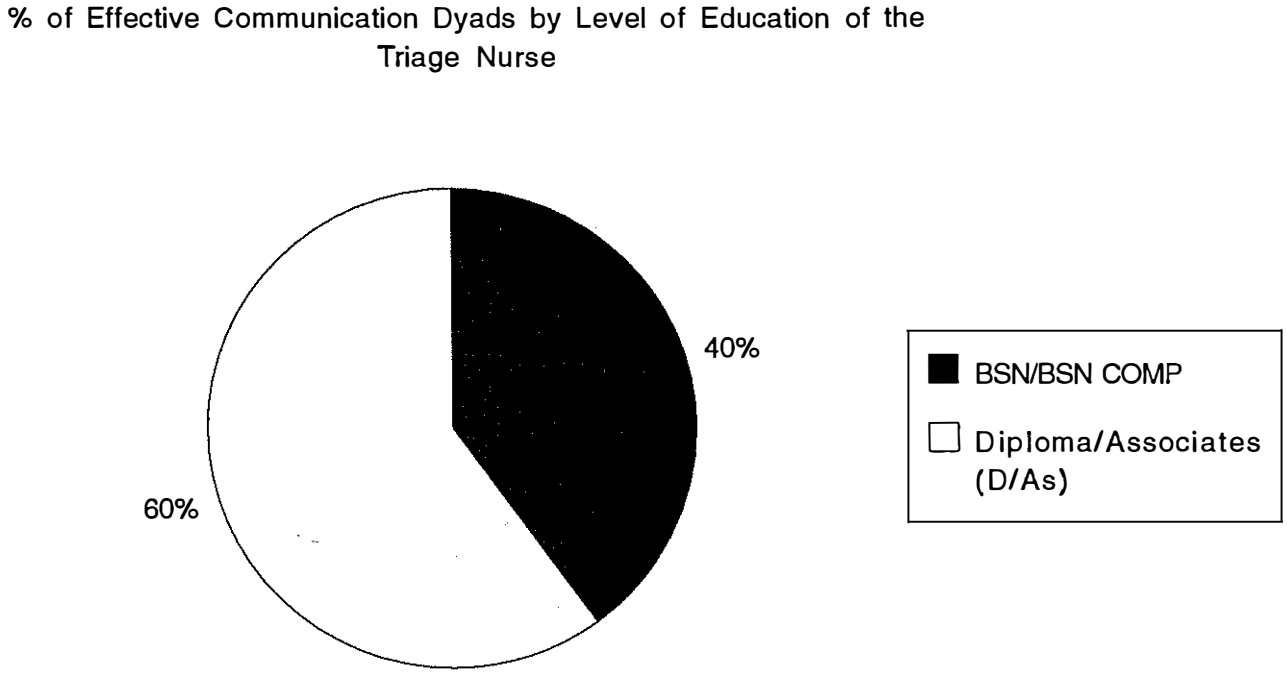

% of Effective Communication Dyads by Level of Education of the Triage Nurse
40%
60%
BSN/BSN COMP
Diploma/Associates (D/As)

Chart5

% of Effective Communication Dyads by Level of Education of the Primary Nurse

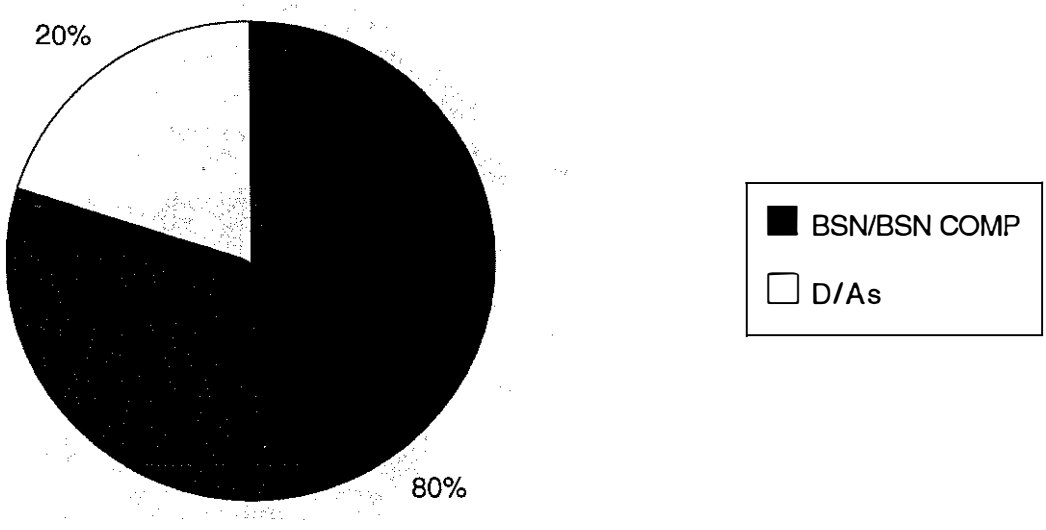


Chart6

% of Neutral Communication Dyads by Level of Education of the Triage Nurse

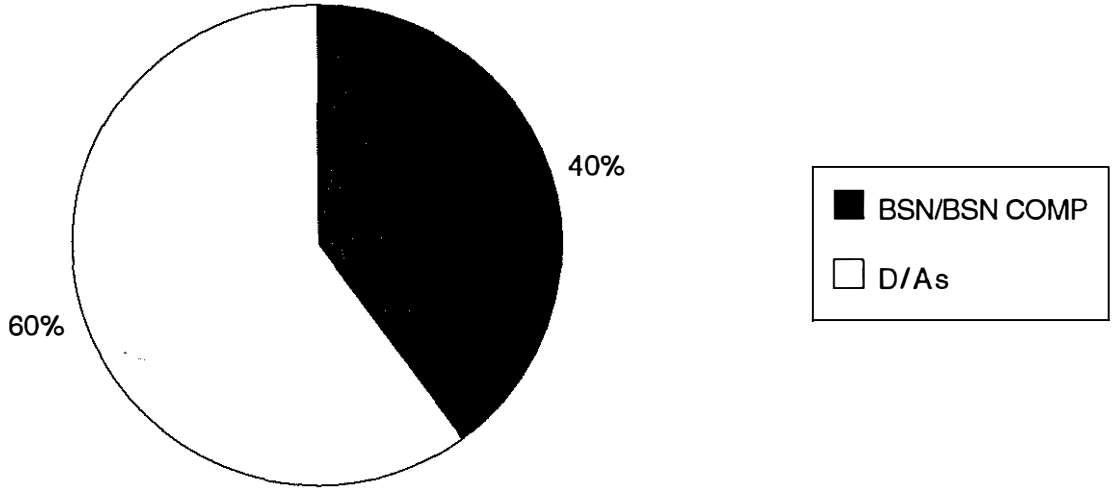


Chart7

% of Neutral Communication Dyads by Level of Education of the Primary Nurse

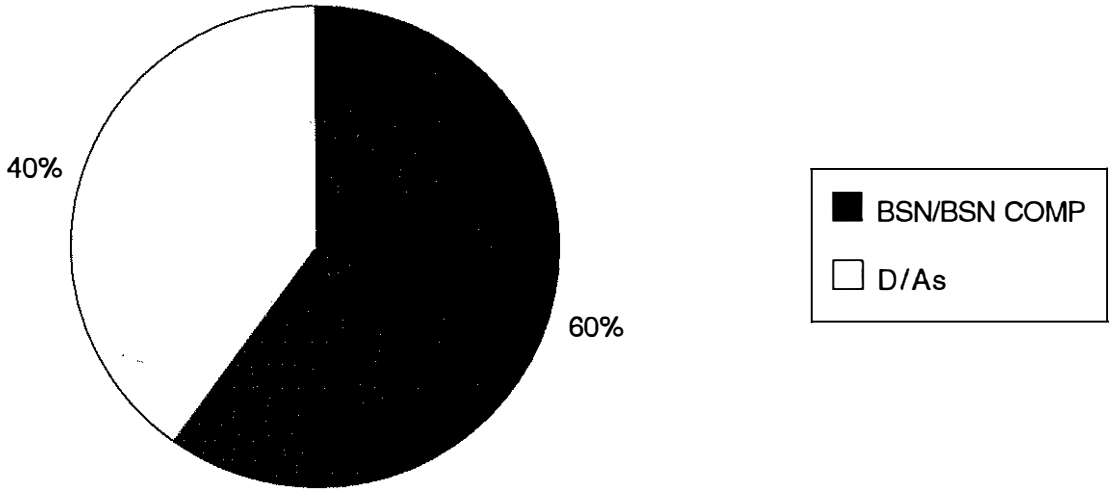


Chart 8

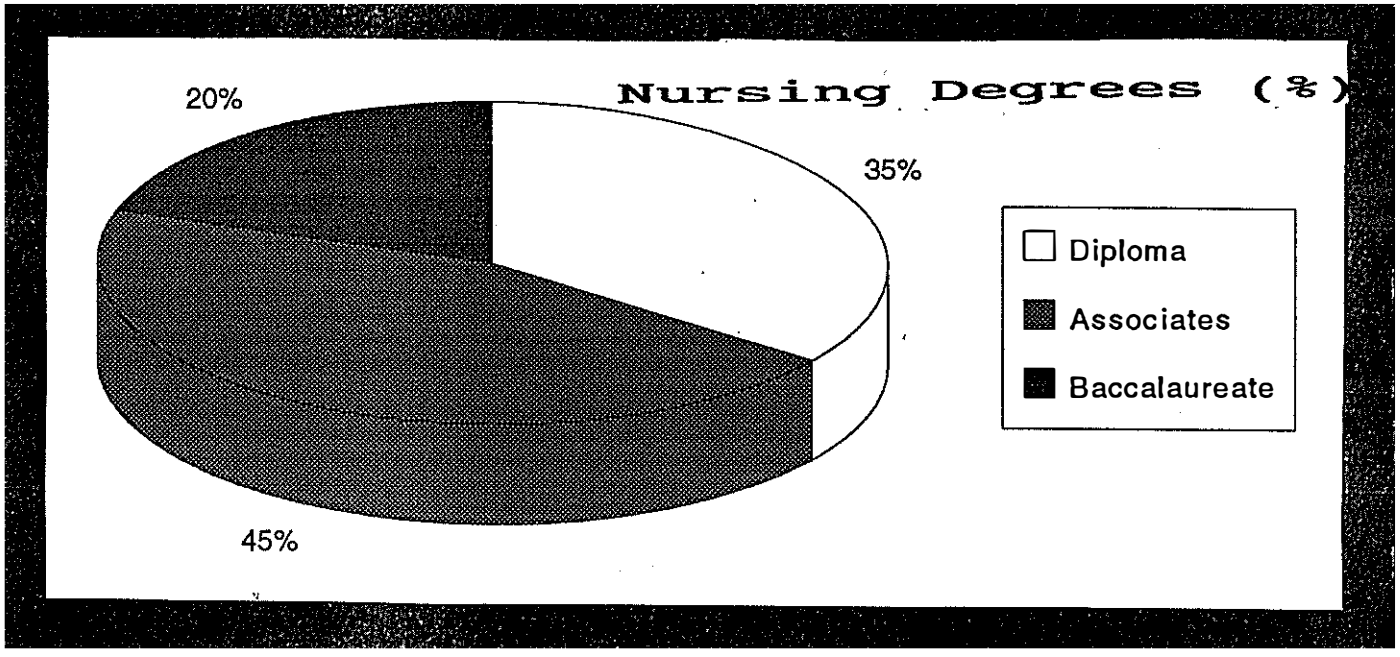
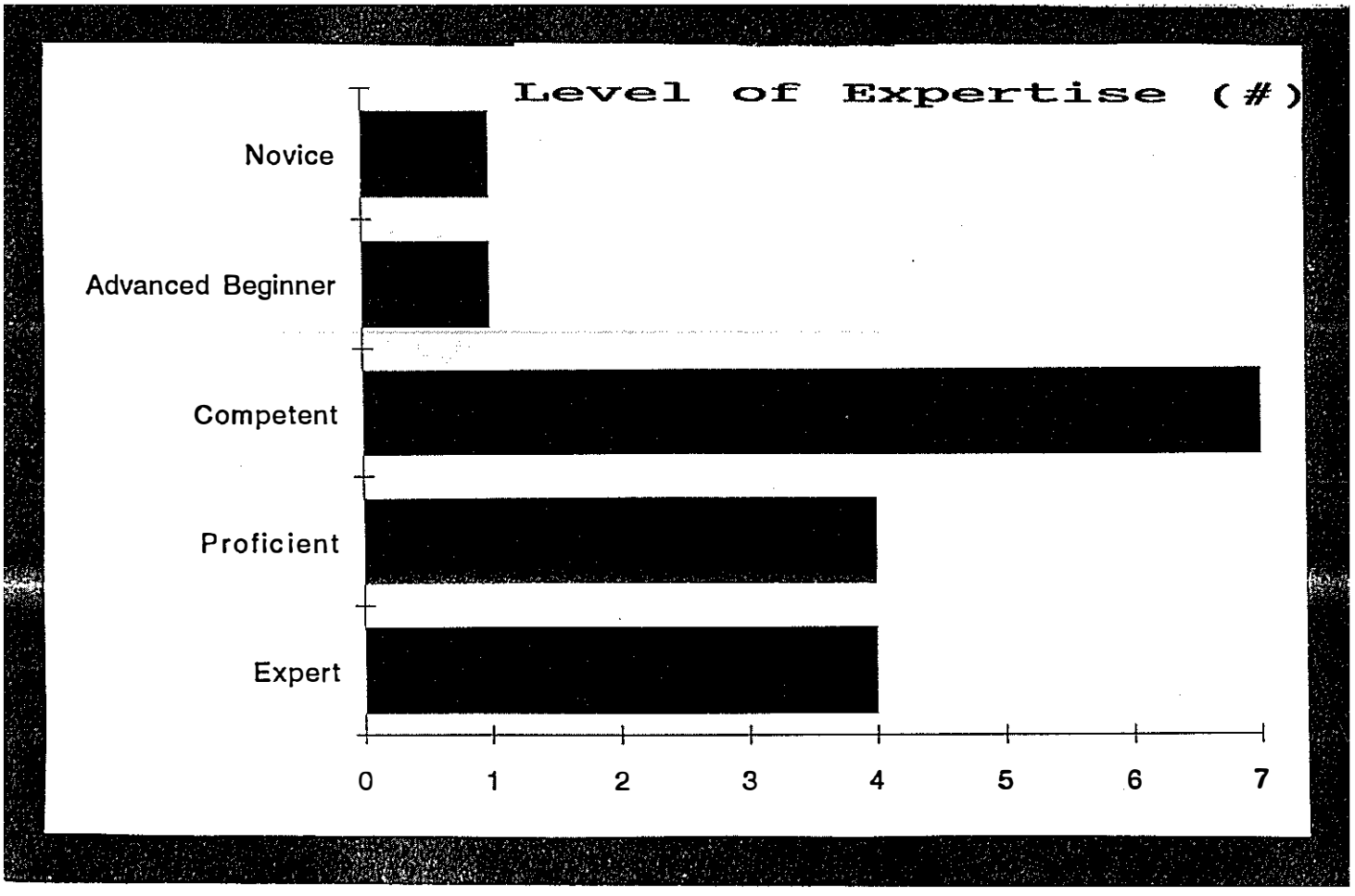
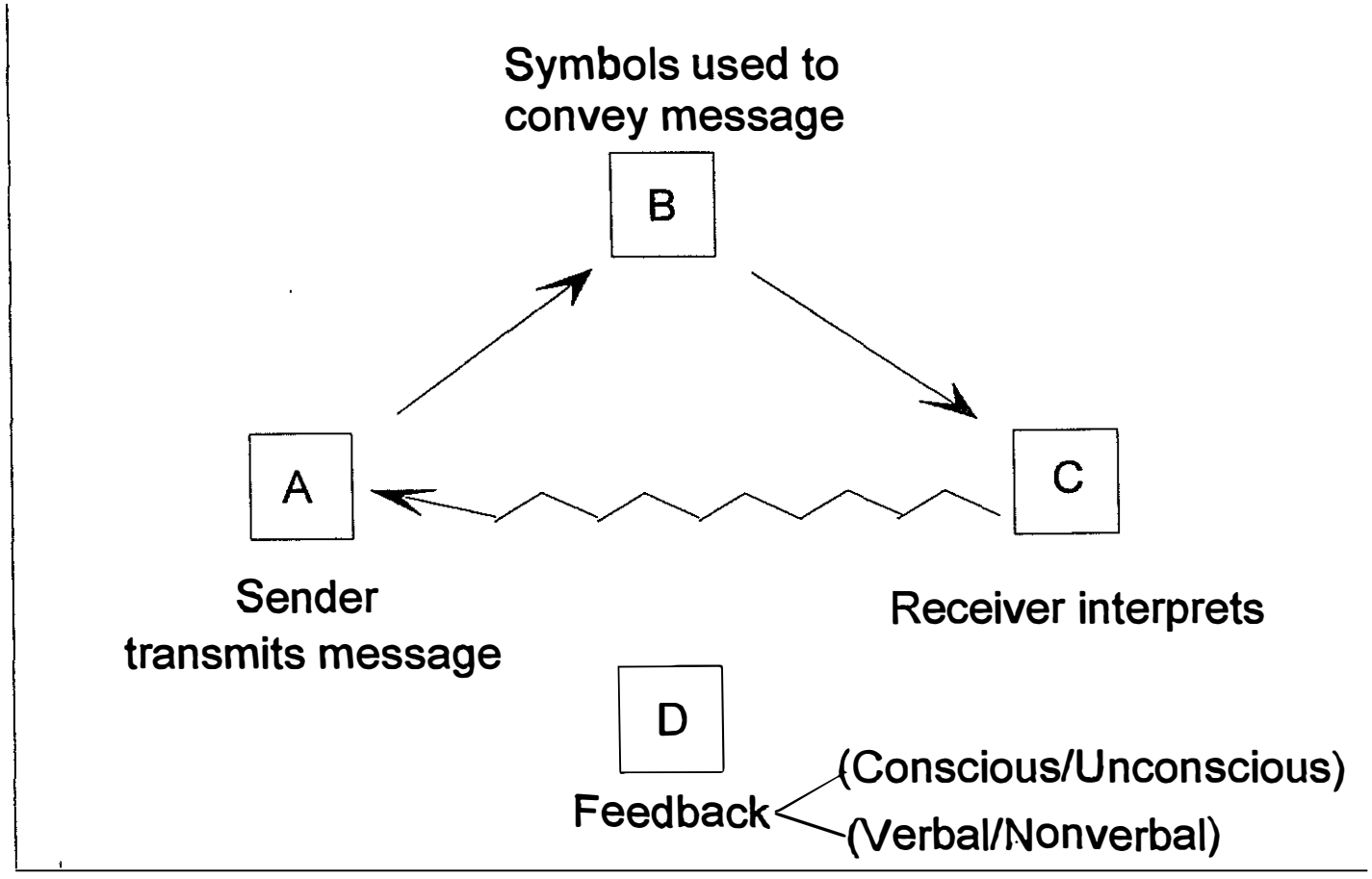

Nursing Degrees (%)
20%
35%
45%
Diploma
Associates
Baccalaureate

Chart 9


Level of Expertise (#)
Novice
Advanced Beginner
Competent
Proficient
Expert
0
1
2
3
4
5
6
7

APPENDICES



From: Kron, T. (1967). Communication in nursing. Philadelphia: W. B. Saunders.

NAME_____

CODE ID_____

Demographic Questionnaire for Trauma Room Nurses

1. What was your age on your last birthday? _____

2. Please circle your gender: Female Male

3. How many years have you practiced nursing? (Include part-time work and full-time work.)
   _____ (years)

4. Considering all your professional nursing experience, how many years have you worked as a trauma/ER room nurse?
   _____ (years)

5. How long have you worked in the Carle Trauma Center?
   _____ (years)

6. What is your current position at Carle? _____

7. Do you have certification as a trauma nurse? Yes No

8. What shift do you generally work? _____

9. Which best describes your work status?
   a. Full time
   b. Part time
   c. PRN
   d. Other _____

10. What best describes your <u>basic</u> <u>education</u> as a registered nurse?
    a. Diploma School
    b. Associate Degree program
    c. Baccalaureate Degree program
    d. Other _____

11. What best describes your highest degree in nursing?
    a. Diploma
    b. Associate Degree
    c. Baccalaureate Degree
    d. Master's Degree
    e. Doctoral Degree

12. Please list additional college preparation (courses taken, degrees in nursing or other fields), if any.

    _____

    _____

    _____

13. With the exception of nursing courses have you ever enrolled in a course, workshop, or inservice on communication? Yes No

Thank you for your time.

Shift Description Form

(To be completed at beginning of each shift)

Date: _____

Shift: _____

Staffing: Above Normal

Normal

Below Normal

General field notes:

Case No. _____

Data Collection Form for Trauma Room

1. Date/day of week: _____ 2. Shift: _____ 3. Time _____

4. Triage Nurse _____ 5. Primary Nurse _____

6. Triage level: 1 2 3 (confirmed with director)

7. Place of interaction:
   a. Emergency Room
   b. At desk
   c. Other _____

8. Presence of doctors: No Yes

9. Presence of family: No Yes In ER room
   Outside room
   Other _____

10. Others present (EMT staff, etc.):

11. Environmental factors (noise):

12. Type of case (if relevant):

13. Description of interruptions:

14. Observations:

Effectiveness of Communicator

Case No._____

Date: _____

Time: _____

Identifying case information:

Trauma Rm # _____

Bed # _____

InjuryIllness_____

On a scale of 1-5, with 1 as not effective and 5 as most effective, rate the effectiveness of the communication from the triage nurse in facilitating patient care?

Not Effective	1	2	3	4	5	Very Effective
	❑	❑	❑	❑	❑	

Briefly, what factors, if any, facilitated or hindered the communication?

Benner's Scale
From Novice to Expert

Novice: The stage in the Dreyfus model of skill acquisition where no background understanding of the situation exists, so that context-free rules and attributes are required for safe entry and performance in the situation (p. 296). (5)

Advanced Beginner: A stage in the Dreyfus model One who can demonstrate marginally acceptable performance; one who has coped with enough real situations to note, or to have pointed out by a mentor, recurring meaningful situational components. The *advanced beginner* has enough background experience to recognize aspects of a situation (p. 291). (4)

Competent: A stage in the Dreyfus model of skill acquisition typified by considerable conscious, deliberate planning. The plan dictates which attributes and aspects of the current and contemplated future situation are to be considered most important and which can be ignored. The *competent* stage is evidenced by an increased level of efficiency (p. 292). (3)

Proficient: A stage in the Dreyfus model The *proficient* performer perceives situations as wholes rather than in terms of aspects, and performance is guided by maxims. There is a qualitative leap or discontinuity in problem approach between the *proficient* and the competent level of performance. The *proficient* performer recognizes a situation in terms of the overall picture. This person recognizes which aspects of the situation are *most* salient. The *proficient* performer has an intuitive grasp of the situation based upon a deep background understanding (p. 297). (2)

Expert: A level attained when the performer no longer relies on an analytical principle to connect her or his understanding of the situation to an appropriate action. One who has an enormous background of experience with an intuitive grasp if situations. One who is able to focus on the accurate region of the problem without wasteful consideration of unfruitful, alternative diagnoses and solutions (p. 31). (1)

Definitions:

Expertise: Developed only when the clinician tests and refines theoretical and practical knowledge in actual clinical situations. *Expertise* develops through a process of comparing whole similar and dissimilar clinical situations with one another, so an expert has a deep background understanding of clinical situations based upon many past paradigm cases. *Expertise* is a hybrid of practical and theoretical knowledge.

Experience: Transactions count as *experience* only when the person actively refines preconceived notions and expectations. This "negative" view of *experience* has positive outcomes. Experience is gained when theoretical knowledge is refined, challenged, or disconfirmed by actual clinical evidence that enhances or runs counter to the theoretical understanding.

Benner, P. (1984). From Novice to Expert: *Excellence and Power in Clinial Nursing Practice.* Menlo Park, CA: Addison-Wesley Publishing Company, Inc.

CONSENT FORM

Study Title: Communication Between Emergency Room Nurses
Investigator: Malynnda A. Wright, Undergraduate Honor's Student
Illinois Wesleyan University School of Nursing

You are invited to participate in a research study which I am conducting to describe the communication between nurses in the emergency room. I believe the study will lead to an initial understanding of factors which affect communication between triage nurses and primary caregiving nurses. Future research that evolves from this study may help to improve the communication process between nurses and ultimately promote better patient outcomes.

By participating in this study, you will experience no personal or professional risks to yourself as a Carle employee. You will be asked to complete a brief demographic questionnaire, which should take no more than 5 minutes of your time. Following my observation of the interaction between you and another nurse in the emergency room setting, I may ask one or two brief questions, but only when you are not involved in nursing responsibilities.

You should understand that your participation is strictly voluntary and you may withdraw from the study at any time. If you have questions about the study, you may call me at (309) 556-2365 or the School of Nursing at (309) 556-3051. All information is strictly confidential; your identity will be indicated through a code number, with me having the only access to the codes. Data will be reported so that confidentiality is maintained.

I have received a copy of the consent form, been informed of my rights as a participant and voluntarily choose to participate in this study.

Date_____ Participant's Signature_____

Date_____ Witness Signature_____

Date_____ Investigator's Signature_____