To develop a theoretical construct of touch as it relates to nursing, an extensive was made of the basic and accepted theories of touch, and a survey was conducted of current practices of touch by approximately 900 health personnel in two Dallas, Texas hospitals. Survey data were gathered by observation of 180 sessions involving approximately 540 patients and was limited to the nature and extent of the touch rather than its effect on the patient. The findings indicated that a majority of the patients were touched in some way and that many circumstances, such as age, sex, race, and socioeconomic background influenced its use. Registered nurses touched almost twice as often as other personnel, and the areas most frequently touched were the patient's hand, forehead, and shoulder. Patients on the pediatric, labor and delivery, and intensive care wards received the most touch, and those listed in good and fair conditions were touched 70 percent more often than those acutely ill. From the findings and based on concepts of touch, a theoretical construct was developed which states that touch is an integral part of nursing intervention and is to be used judiciously as a means and basis of communication. (SB)
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THE DEVELOPMENT OF A THEORETICAL CONSTRUCT OF THE CONCEPTS OF TOUCH AS THEY RELATE TO NURSING

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CHAPTER I

INTRODUCTION

The use of touch to convey meaning has been used since the beginning of mankind. Every known culture has assigned some meaning to the act of touch. It is used between parent and child, between lovers, and between friends. Touch can convey love, kindness, empathy, and a multitude of other meanings. It has been used extensively in the medical disciplines—from the time of the witch doctors to the present day of the modern practitioner of medicine. Members of the medical discipline have found the "laying on of hands" to be a beneficial therapeutic tool.

Illness has been found to be a traumatic event in the life of most individuals. The necessity of removing the individual from his family and familiar surroundings and placing him in a "culture of illness" (30, p. 123)—the hospital—serves only to increase his anxiety. As a result the patient perceives the hospital as an impersonal, formidable place of great activity where he lies inactive and alone. His world diminishes, becoming only his bed and bedside unit; he exists in a culture which is alien to him.
The illness and subsequent hospitalization frequently cause many psychoneurotic manifestations. The individual tends to become egocentric, dependent, anxious, and depressed (20, p. 209). Because of his hospitalization, the patient is placed in a social setting similar to that of his childhood. The responsibility of activities of daily living is assumed by others. To cope with his feelings, the patient reacts to the total situation in a very regressed and infantile manner (20, p. 209).

The first language an infant understands and responds to is touch. Evidence has been presented that an infant will not survive if he is not touched and fondled (20, p. 252; 24, p. 292; 9, pp. 69-83). Touch continues to be one of the most meaningful forms of nonverbal communication. A gesture, a look, an odor can all convey a message; but it is touch that communicates comfort, love, security, and warmth; and these have universal meaning. Touch allows one to feel that he is perceived haptically. It confirms one's being; he may say, "I am touched; therefore, I am."

No other of the helping professions has the direct access to another's body as do the members of the medical and nursing profession; they are allowed, even expected, to touch the patient in the performance of their duties. Doctors and nurses have an obligation to meet the total needs of their patients. The pathogenic processes occurring in the body of the individual affect his emotional health, and conversely his
emotional state affects the ability of his body to respond to the pathogenic processes. Thus, members of the health disciplines must include measures to aid the patient in accepting his regression and dependency.

Ruesch found that when a patient experiences inner conflict, he is capable of receiving only one message at a time (27, pp. 41-45). The doctor or nurse may be talking to him concerning his welfare, and the patient may be in such inner turmoil that he is incapable of comprehension. If touch is the first and most meaningful language of an individual and the one he responds to the longest, it would appear logical that touch can be employed by the doctor or nurse to convey a message to the patient experiencing emotional regression as a result of illness and hospitalization.

This study dealt with the development of a theoretical construct of the concepts of touch as they relate to nursing. This construct is based on a survey of current practices and is consistent with accepted theories of touch.

Statement of the Problem

The problem of this study was the development of a theoretical construct based on a survey of current practices and consistent with accepted theories of touch as they related to nursing.

Purposes of the Study

The purposes of this study were the following:
1. To identify the basic and accepted theories of touch as they relate to nonverbal communication in the area of patient care.

2. To survey the current utilization of touch by health team personnel with hospitalized patients.

3. To develop a theoretical construct of the concepts of touch as they relate to nursing with implications for academic nursing and practice.

Background and Significance

Touch has been found to be the earliest and most elemental mode of communication that the human organism learns. The mother and child communicate by this means throughout gestation and into the child's early years. "Tactile communication is never wholly superseded, it is elaborated by the symbolic process" (12, p. 214). Vocal language, beginning between the ages of two and five, has a great many advantages, but its meaning and significance depend upon prior tactile experiences (27, p. 62). L. K. Frank contended that all symbolic communications, verbal or written, can be decoded by the receiver only insofar as his previous experiences, often sensory, provide the necessary meaning (12, p. 214).

Animal data revealed that a mother's licking of her young, particularly in the perineal area, is an essential cutaneous stimulation process. If the newborn animal is not licked in the perineal region in order to stimulate
his peripheral sensory nerves, he is likely to die of gastro-intestinal or genito-urinary malfunction (24, p. 292). Hammett found that rats which had been gentled, that is stroked and handled, were better operative risks than those which had not been so gentled. In ungentled rats he found a constant state of high irritability and neuromuscular tension as compared with gentled rats.

The contractions of the uterus during labor represent powerful cutaneous stimuli calculated to activate the essential organs of respiration and digestion in the fetus. To support this hypothesis—that touch is essential for life—Drillien (9) presented the following evidence: that babies born by Caesarian section and infants born prematurely, not having experienced these contractions at birth, showed a significantly higher incidence of nasopharyngeal and respiratory difficulties. Shirley (29) found that prematurely born children achieved bowel and bladder control later and with greater difficulty than do children born at full term after a normal labor and delivery process. The cutaneous contact between an infant and mother appeared undoubtedly pleasurable and satisfying. This act of communication between them seemed to be the first language the infant understood and the one he responded to the longest (24, p. 296).

According to Wolf (33), touch continues to be the primary language of the developing child; he wants to touch everything. By touching objects of affection, the child gains
his first emotional and sensuous knowledge of others (33, p. 49). Likewise, the child establishes his body image by feeling and exploring his own body and thus communicates with himself through touch.

In all human cultures the touching of another is evidence of affection and friendliness. Avoidance of touching another indicates the withdrawal of affection or social rejection (12, p. 298). Spurgeon English (11) has stated that love and touch are inseparable and indivisible. Love cannot arise in the human being without touch. The supreme act of touching is the sexual act, and with it is a physiological release of tension through orgasm.

Frank (12) suggests that tactile stimulation during infancy is extremely important to the development of the individual. Inadequate touching may retard and mar the development in a variety of areas, such as in speech, cognition, symbolic recognition, and capacity for more mature tactile sensitivity. Existing data have revealed that individuals receiving inadequate tactile stimulation in infancy are susceptible to disorders of the gastro-intestinal and respiratory tracts and possibly the genito-urinary tract. Behavioral data suggested that these individuals are preoccupied with securing tactile stimulation in various ways. Thus, Osler's aphorism, "Taking a lady's hand gives her confidence in her physician" (25), is well taken. It is also
known that holding someone's hand under conditions of stress is likely to give a feeling of greater security.

Montagu has schematically presented the need for touch as follows (24, p. 299):

\[
\begin{align*}
\text{Physiological tension} & \quad \text{urge or need to} & \quad \text{which leads} & \quad \text{to the} & \quad \text{homeostasis} \\
\text{General tension} & \quad \text{be caressed} & \quad \text{act of contacting} & \quad \text{soothing effect}
\end{align*}
\]

Montagu indicated the need for additional study in identifying the use and effect of tactile stimulation. He reported a case history of a woman thirty years of age who suffered from severe asthmatic attacks. The doctors diagnosed her as one who had not received adequate tactile stimulation and referred her to a physiotherapy department for massage by an expert masseuse. She continued these treatments several months and during the five years since has been in excellent health (24, p. 300).

Studies of emotional disorders have revealed significant findings regarding the use of touch. Schizoid and schizophrenic personalities that are unable to enter the symbolic, cognitive world of ideas as accepted by others have frequently been found to be rejected by or deprived of mothering (12, p. 301). Frank (12) suggested the need for studies using tactile communication with mentally disturbed patients who are less accessible to other modes of communication.
Jourard (18), who has done extensive research in self disclosure, described a self-alienated person as one who does not disclose himself truthfully and fully; that is, a person who can never love or be loved. This individual works constantly to avoid becoming known by others. The result of this self alienation places him in a constant state of stress which often manifests itself in the form of a psychosomatic illness. The more an individual struggles to conceal his true self, by creating a false self, the greater the discrepancy is between the two; therefore, becoming known by others is threatening and the presence of another can produce stress. This stress can lead to many psychosomatic illnesses, such as ulcers, asthma, colitis, and migraine headaches (18, pp. 26-27). Selye (28) proposed and documented the physiological effects of stress in the human body.

E. T. Hall (19) has coined the word proxemics to refer to the distance maintained in encounters with others. He identified a series of expanding and contracting zones around each individual which are extensions of the sensory experience—touch, hearing, smelling, and seeing. Hall named the space closest to an individual the intimate zone and defined it as the space within arms' length. This zone is used for love making, comforting, and protecting. When strangers cannot be kept out of this zone, individuals experience stress. The next zone he named the personal zone, which extends from arms' length to about four feet. Within this personal zone,
private conversation is conducted. The social zone, lying four to ten feet from the body, Hall found to be the space in which people work together in an office or engage in social conversation at a party. This zone also serves as a buffer to screen out people in the zone beyond. The fourth and final zone is the public zone, which includes all other space beyond ten to twelve feet (19, p. 163). Each individual utilizes these zones to practice self concealment.

But what happens when these zones are invaded without permission—for example, when one becomes ill and dependent upon others?

Illness has been found to be a traumatic event in anyone's life. When denied the opportunities for a full, rich, and independent life, man has often become frustrated. There are tendencies for individuals to return to an earlier, more satisfying period in life when difficulties arise (32, p. 31). This regression does not need to be permanent; however, if traumatic events continue to occur frequently or are of long enough duration, the regression may become frozen. The present situation can become so painful and the future so threatening that one is driven to the past in an attempt to escape both the present and the future. This childish behavior can occur frequently as a consequence of illness (32, p. 31).

The alteration of an individual's body image has been found to be another important aspect leading to stress and frustration. In our society a body image is a work of art,
an embellishment, or camouflage of endowment. When one's body deviates from normal function or appearance, the individual experiences anxiety, insecurity, and low self-esteem (18, p. 19).

While experiencing illness, the patient temporarily withdraws from adult responsibility and in conjunction with the health team dedicates himself to the goal of regaining his health. Since his world has become very child-like because others have assumed all responsibility for his life and activity, he is now free to react as he did when he was a child—dependent and egocentric. The hospital personnel, aware of all these manifestations of illness, should provide an atmosphere in which the patient can give free range to his feelings (20, p. 209). However, the personnel often contribute to his frustration by failing to explain hospital procedures and routine, thereby compounding his emotional regression.

Hospital personnel regularly assume a bedside manner as they enter each patient's presence. Jourard criticizes this technique and states that "one of the latent functions of the bedside manner is to reduce the probability that patients will behave in ways that are likely to threaten the nurse" (18, p. 113). He also notes that the bedside manner prevents the patient from revealing information which could be helpful to the health team personnel in meeting the total needs of the patient. According to Jourard, to meet the total
needs of the patients, health team personnel should practice self disclosure and create a climate conducive for patients to reveal their true selves. Dunn has suggested that there is a growing reason to suspect that a person will become ill when he has lost his zest for living (10, p. 4), when his relationship with people has become impersonal, and when faith in the future has been lost. Another important aspect to be considered is that people get well not because of the medicine alone, but because they have faith in the symbols and rituals of the hospital and the health team. When the patient has tangible proof that he is a unique, worthy individual and is treated as such by everyone, he experiences a rise in spirit that in some way helps his body to throw off illness (18, p. 139).

Health has been a value concept held by our culture throughout history. Individuals sometimes become ill because they behave in such a way that illness will occur. The meaning of illness then has been interpreted as a protest, a means of communicating to others that all is not well and that certain needs are not being met (18, p. 102). The illness itself, the hospitalization, the sudden dependence and inability to assume responsibility for daily activities contribute to a sick person's anxiety. He has lost the ability to control his personal space and the ability to continue practicing self concealment. Thus, it is theorized that he is frightened and anxious for his physical health, his
emotional state and the revelation of his true self. He has no choice but to escape this intolerable situation by regressing to a more pleasurable period (20, p. 209) - the past. It must also be pointed out that many people in all cultures still regard illness as punishment for evil deeds of omission or commission, evidence to all that the individual has sinned.

It was in light of the above data and of the health team's obligation to meet the total needs of the patient throughout his stages of illness that this study to develop a theoretical construct of touch was undertaken. A review of literature revealed a dearth of data regarding the use of touch as a means of nonverbal communication with hospitalized patients. Jourard (17) states that he made a cursory check of the use of touch in one hospital and reported that in two hours of observation, there was almost no physical contact between health team personnel and the patients. However, through long and intimate contact with the hospital milieu, members of the health team have observed the opposite.

It appeared that a study of touch as it related to nursing has value in identifying existing concepts, in determining what is presently being done, and in developing a theoretical construct. The findings could have significance for hospital administrators in developing physical facilities and satisfactory environments, as well as planning
for the daily care of patients. It also has implications for nursing administrators, who have accepted the responsibility of identifying and meeting the total needs of their patients, and nursing and medical schools, which assume the responsibility for teaching students better patient care. It should have significance for each individual health team member who desires to establish a rapport with his patient in order to be of maximal benefit.

Definition of Terms

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

Health team personnel are members of the medical and nursing professions and students in educational institutions of medicine and nursing. Included also are ancillary personnel, such as licensed vocational nurses, aides, and orderlies.

Medical personnel are members of the medical and nursing profession and students in educational institutions of medicine and nursing.

Ancillary personnel are individuals employed as assistants to members of the medical team, such as licensed vocational nurses, aides, and orderlies.

Necessary touch is a form of personal contact with the patient in the performance of the medical or nursing duties, primarily cognitive in nature. Examples are observed when
the nurse bathes the patient, changes the dressing of a patient's wound, or a doctor examines the patient by palpation or use of a stethoscope.

Non-necessary touch, primarily affective, is a form of personal contact with the patient outside the realm of procedural duties. This is one method of nonverbal communication used to convey meaning.

Design of the Study

A theoretical construct of touch was developed from the basic and accepted theories of touch obtained from an extensive review of literature and a survey of current practices of touch by the members of the health team with hospitalized patients. Data gathered by the observational method during the survey were restricted to the nature and extent of the touch itself rather than extended to an attempt to ascertain the effect that touch had on the patient. Observations were also restricted to the behavior of health team personnel on occasions other than procedural.

Basic Assumptions

The first assumption was that all patients experience a certain amount of stress because of admission to a hospital, where they are removed from familiar family and social environment and placed in a "culture of illness" (30, p. 123).

It was also assumed that all health team members are concerned with meeting the total needs of the patient, which
include physical, psychological, and emotional aspects. This assumption was based on the knowledge that members of the medical and nursing profession are with the patient during many of his physical and emotional crises and that they have a greater access to the individual than members of other professions.

A further assumption was made that the method of collecting data by observation would not vary significantly from observer to observer and that existing differences would not affect the results.

A final assumption was that observations taking place in the mornings would not significantly affect the nature and extent to which non-necessary touch was utilized throughout the day and night.

Procedure for Collection of Data

The collection of data was accomplished by the following methods:

1. An extensive review of the literature was conducted to identify the basic and accepted theories of touch.

2. The observational method was used to collect data to determine the current practices relative to the use of touch by health team members with hospitalized patients. The factors involved were:
   a. Frequency of touch employed by health team personnel.
b. Identification of members of the health team who employ touch.

c. Portions of the body most frequently touched.

d. Type of hospital in which touch was most frequently used.

e. Economic and social status of the patient as a factor influencing frequency of touch.

f. Diagnosis and/or physical condition as a factor influencing frequency of touch.

g. Age, race, and sex of the patient as factors influencing frequency of touch.

The data were collected on the medical, surgical, pediatric, obstetric (post partum and labor room), intensive care unit, psychiatric, and surgical recovery wards of a private hospital and a charity hospital in Dallas, Texas. The health team personnel included sophomore, junior, and senior nursing students; junior and senior medical students enrolled at two state-supported universities, registered nurses, interns, residents, teaching staff and the private physicians utilizing both hospitals for the care of their patients. Also included were the aides, orderlies, licensed vocational nurses regularly employed by both hospitals.

In accordance with the findings of Wolfe concerning superiority of observational techniques utilizing nurses as opposed to trained non-nurses (34, pp. 52-53), nurses trained for this purpose were utilized to collect the data. Practice sessions were held prior to the collection of data to ensure uniformity and validity of observation.
A copy of the tally sheet, which was kept by each observer to record the observations, appears as the Appendix.

The morning hours were divided into thirty-minute periods from seven until twelve noon. From these eleven periods, one thirty-minute period was chosen, through use of a table of random numbers, for collection of data.

Thirty minutes for each observation was chosen because the average bedside visit by a doctor and his staff was found to be four to five minutes in length, while the average registered nurse spent eighteen minutes with each patient during each shift (1, p. 22). Using these national averages, one may see that one group of doctors could visit six patients within that thirty-minute period.

There were nine wards in each hospital for a total of eighteen wards utilized to collect data. These wards were numbered and chosen through the use of a table of random numbers. On each ward the rooms, averaging ten rooms per ward, were also numbered and selected through the use of a table of random numbers for collection of the data. Comparable bed capacity in each room was included in the rooms selected at random. This was done to ensure uniformity between the two hospitals. Nine observational sessions were held each day. It was hoped that through this random selection of time periods, wards, and rooms, bias of the routine of medical and nursing staff would be minimized.
The data were collected for a two-week period, with an intervening week between the two weeks chosen, to eliminate the possibility of bias in observing the same patients interacting with medical and nursing staff. The average length of hospital stay in Texas is seven days (6, p. 1). It can then be assumed that the patient census will be different the second week of observation. A total of 180 observational sessions were held in both hospitals.

The average insurance policy carried by each family allows an overall average of $19.69 per day for room allowance (3). In the private hospital there were several suites costing $45 to $75 a day. Occupancy of these suites supplied the criterion for identifying affluent and/or prestigious persons from whom data were collected.

To determine the frequency of touch by health team personnel and patients near the same age for the purposes of this study, the investigator used the age range of 18-25, 26-33, 34-41, 42-49, 50-65, and 66-100.

Permission to conduct the survey was obtained from each hospital's administrative staff.

The purposes of the observers were unknown to the health team personnel on the wards of both hospitals.

Upon the basis of the extensive theoretical review proposed in Section I of this study and supported by empirical data observed and collected as part of Section II, a set of propositions is offered as a remaining portion of
the study. The propositions reflect a conceptual approach for teaching and implementing touch in the field of nursing.

Procedure for Analysis of Data

The basic and accepted theories of the concepts of touch, as they relate to nonverbal communication in the area of patient care, are presented as a basis for the development of a theoretical construct of touch as they relate to academic nursing practice.

Data gathered from a survey of the current utilization of touch by health team personnel with hospitalized patients were treated statistically to facilitate analysis.

Frequency distribution and analysis of variance were utilized to determine whether a significant difference existed between the two hospitals involved. The following analysis of variance formula was used:

\[ F = \frac{\hat{\sigma}_1^2}{\hat{\sigma}_2^2} = \frac{\sum (X - \bar{X})^2}{n-1} \]

The .05 level of confidence was used to determine level of significance between the involved categories. Appropriate tables were utilized to present the data for clarity and comprehension.

Data gathered from a review of the concepts of basic and accepted theories of touch and from the survey of
current utilization of touch by health team members supported a theoretical construct as it related to nursing with implications for academic nursing and practice.

Summary

It was within this framework, then, that the present research set forth to develop a theoretical construct of touch as it relates to nursing. This construct is based on a review of the concepts of basic and accepted theories of touch and on a survey of current utilization of touch by health team members.

Chapter II presents a survey of literature concerned with touch occurring in nursing and other behavioral disciplines. Chapter III contains the analysis of data obtained from the survey. Chapter IV raises the basic questions regarding how the concepts have been related to nursing. The concepts of touch identified from an extensive review of the literature are introduced in Chapter V. From these concepts a theoretical construct of touch with a set of supporting propositions is presented. Chapters I through V should serve to make more meaningful the summary, recommendations, and implications presented in Chapter VI.
CHAPTER BIBLIOGRAPHY


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CHAPTER II

SURVEY OF LITERATURE

Whenever a man becomes aware of another human being, his world expands from the narrow realm of self to include his relationship with others. By reaching out to someone, for whatever reason, he begins the process of communication. There is the desire to exchange feelings, thoughts, and words with another, to have someone understand, encourage, comfort, or simply be interested in one's self and ideas. The first and most fundamental means of communicating is through some form of touch. Touch can be the only means of communication, and it can be a basis for meaningful verbal exchange.

From the beginning of time people have been nursing those who were ill. A very significant factor in the ill person's recovery is often the effective communication and understanding between him and the health team. Illness can often intensify the patient's normal reactions and impede his ability to understand and communicate with others. Non-verbal exchanges are often more readily and accurately understood by the patient than verbal. Therefore, touch, as the most elemental and fundamental mode of communication, is an essential component of effective nursing care. Often a
patient can be reached, consoled, and encouraged through the use of touch, and with this basis of understanding the patient can be aided in his recovery.

Although the importance of touch as nonverbal communication is readily admitted, there has been very little research in its function and effect. In Chapter II an exhaustive survey of the research projects and studies conducted and articles written on touch as a means of nonverbal communication was presented. These studies involved interpersonal and intrapersonal communication in general and within the hospital atmosphere in specific.

**Communication**

**Mechanics of Communication**

Communication is the matrix in which all human activities are embedded. It links person to person and person to his environment. It can be conceived as including all the processes by which people influence others and are influenced by others (58, p. 6). People relate to each other through communication. The desire and need to communicate is innate in all human beings. It is as basic to man's nature as food and sex (19, p. 384). Only through communication can man's greatest need as a human being--the need to become one, that is, to be a loving human being and to love and be loved--be reached.
The individual can reach the maximum potential of which he is capable only when he can maintain a continuum of balance and purposeful direction within his environment. Open channels of communication are more important to the freedom of the mind than any other component of the problem-solving mechanism. Society is dependent for its smooth functioning on the success of its individuals. Therefore, the high-level wellness not only of the individual but also of society can be maintained only when lines of communication are kept open.

The process of communication can be observed and experienced. In order to communicate, the individual (or social organization) must possess the function of perception, the ability to register incoming signals. The sense organs of the body are equipped with a set of receptor cells, which receive messages from outside the body. The individual must be able to evaluate impressions received against the background of previous ones and to make decisions. Equally important in communicating is the ability to transmit messages—to express the results of internal deliberations and to signal these to others. The effector organs of the body are the senders of messages.

In order for a message to be understood, signals must be phrased in terms which are understandable to others. The technical aspects of this process are referred to as codification. When the receiver understands the code, the signal
becomes to him a sign (57, p. 898). Language is a significant codified system of verbal communication between people. The meanings of its signals have been agreed upon, so that one person can speak to another and be understood.

In any area of communication, verbal or nonverbal, there are certain elements which give the message its essential characteristics: (a) the psychologic modality which enters into communication (the feeling state), (b) the means by which the communication is effected, (c) the reality to which the message pertains, and (d) the meaning contained in the message (63, p. 910).

Man needs a certain amount of gratifying communication in his life in order to learn, to grow, and to function in a group. All events that significantly curtail communication will eventually produce serious disturbances. When communication becomes too frustrating, man finds ways of protecting himself by withdrawing, screening, or otherwise controlling the exchange (57, p. 903).

Many difficulties and disorders in communication as a skill derive from disturbed communication in childhood. Some kinds of interpersonal disturbances of communication in childhood (as well as adulthood) can evoke anxiety and even panic. Two of the most important influences on the development of the child's ability to communicate are his cultural environment and his home environment. Culture has an intimate influence through language and through nonverbal means. The
role of the mother is fundamental to the emergence of communication in all its modes (63, p. 920).

Communication is indissolubly bound to the learning process. It has been found that disadvantaged children will show developmental deficits in verbal conceptual functioning and in the ability to relate to the world of things and people. They generally have the expectation that the adult will be distant, denying, and punishing, and they show a vagueness of self-concept (6, p. 15). These children show an inadequacy in the use and understanding of verbal language. This inadequacy stems from several sources. The basic problems, however, seem to be an absence of models of correct and communicative spoken language and an environment in which communication has been limited to the minimum essentials. Thus the child lacks experience in conveying meaning, observation, and feeling, and in having his meaning understood and received with interest and concern.

In attempting to remedy the child's inadequacy in verbal communication, teachers of the disadvantaged have attempted to set up paths of communication by beginning with experiences on the sensory level—seeing, feeling, tasting, hearing, and discriminating elements of the environment. As the child gradually masters the use of language, these sensory experiences can then be translated into verbal form. The eventual goal is to strengthen capabilities which are the child's underpinnings for learning language, the most important means
of human communication and the symbol system without which higher order cognitive processes—thinking, reasoning, generalizing—cannot be attained (6, p. 16).

Therapeutic communication is an experience in itself. The sharing of information and the pooling of knowledge give the person a sense of mastery. Anxiety is diminished, obstacles are overcome, and the limited power of one individual is amplified through the support of others. The result is a feeling of security (57, p. 905).

Nonverbal Communication Modalities

Studies in human communication have dealt mainly with the area of verbal communication. However, the importance of certain nonlanguage behaviors to the procedures of man's relating to his fellow man is becoming more and more apparent. Pioneer investigation in these areas has only recently been done, and a great deal of observation and research is necessary before the symbols of nonlanguage behaviors can be more thoroughly codified and their meanings understood.

It was not until the 1950's that studies began to appear reporting systematic efforts to transcribe gestures and other nonlanguage (or nonverbal) behaviors, and to understand the culturally prescribed codes that moderate their use and significance in human communication (20, p. 110). The important nonverbal communication modalities include paralanguage, body motion, proxemics, and touch.
Paralanguage.--Paralanguage refers to an area of vocal behaviors which includes speech nonfluences, and other non-language sounds such as laughing, yawning, and grunting. There was a series of cooperative efforts beginning in the early 1950's by certain linguists, anthropologists, and psychiatrists to define these behaviors. George Trager (65, p. 4) culminated these efforts in an article which was the first and is perhaps still the most authoritative systematizing of paralinguistic behaviors. In this article Trager outlines paralanguage as having two principal components: vocalizations, which he describes as "variegated noises, not having the structure of language"; and vocal qualities, "modifications of all the language and other noises" (65, p. 4). Vocalizations include vocal characterisers such as laughing, crying, and belching; the vocal qualities of intensity, pitch height, and extent; and vocal segregates, the English "uh-uh" for a negative response, "uh-huh" for affirmation, and "uh" for hesitation (65, p. 6). Trager's work was preliminary, but it does constitute the foundation for further work in the field.

Paralinguistic systems which are closely related to Trager's are those of Pittenger and Smith (52), Pittenger, Hachett, and Daneby (51), and Hachett (25). Austin (5) presented an abbreviated paralinguistic system plus a new approach to vocal segregates emphasizing their tonal aspect. Crystal and Quirk (14) presented a fully developed and
innovative contribution to the transcription of paralanguage, employing a pitch-contour approach to analyzing intonation.

The phenomena of hesitation (various types of pauses or other nonfluences, such as stutters and repetitions) have had more extensive investigation than any other class of paralinguistic behaviors. They are studied as to the three main parameters of length, type (unfilled or filled; that is, silent or filled with some type of phonation, such as "um," "er," or "uh"), and location in the speech stream. One of the earliest investigators of pauses was G. F. Mahl (44).

Body Motion.--The nonverbal communication modality of body motion or kinesic behavior involves gestures and other body movements, such as facial expression, eye movement, and posture. Ray Birdwhistell developed detailed and comprehensive systems for transcribing body motion (7). He first took on the task of developing a transcription system which provided for virtually every motion, analogous to the phonetic transcription for speech. He studied in detail the internal structure of communication units as might be emitted by any single communicant. A. E. Scheflen (60) based his studies on the modality of body motion more broadly on communication on the social level. Both of these investigators were less interested in the personalities of the communicants than in the actual structure of the communicant behaviors. They focused on communication as a social system rather than as an indication of psychic processes.
Other investigators have been interested in the physiological implications of their research in body motion communication. Ekman and Friesen (21) differentiate four types of body motion cues: body acts, body positions, facial expressions, and head orientations. These four types of cues differentially convey information about the nature and the intensity of emotion. Sainesbury (59) finds significantly more body movements occurring during stressful periods of interviews than during non-stressful interviews. Dittman (18) found that moods were differentiated by frequency of body movement and also that different body areas were active for different moods.

Visual interaction as a part of body motion has been studied more extensively than any other behavior in its modality. Although it is only a small segment of this modality, the act of one person's looking into the eyes of another plays an important role in communication. R. V. Exline (23) is one of the most active investigators of visual interaction to date. His results indicate distinctly different patterns of visual interaction for male and female subjects. In general females tend to look more at the experimenter than males. Both males and females make more use of the line of regard when listening than when speaking. Argyle, Lalljes, and Cook (4) found in their studies a dominance pattern, manifested by whichever of the interactants felt himself to be the observer and which the observed. This perception was
based both on visual condition (who could see more of the other) and on the cognitive set of the interactants.

**Proxemics.**--The term *proxemics* was coined by Edward T. Hall to refer to the use of social and personal space and man's perception of it. In his books *The Silent Language* (29) and *The Hidden Dimension* (28), he reports his findings on the relationship between culture, space, and communication. He maintains that everything man is and does is associated with the experience of space. The positioning of oneself in relation to another conveys meaning. Hall distinguishes three types of spatial organization: that involving fixed-feature, which is organized by unmoving boundaries; that involving semifixed feature, which is organized by movable boundaries or objects; and that involving informal space, which is the distance maintained in encounters with others. He identifies four distance zones commonly used by people in Western culture in their relations with other people. These range from close, intimate distance, which includes touch, to personal and social distance, to the extreme of public distance.

Space is important to the communication process in three ways: first, as a message source particularly in intra-personal communication; second, as a nonverbal message in interpersonal communication; and third, as affecting the message (53), or giving it a certain tone.

Spatial changes give a tone to a communication, accent it, and at times even override the spoken word. The
flow and shift of distance between people as they interact with each other is part and parcel of the communication process. The normal conversational distance between strangers illustrates how important are the dynamics of space interaction. If a person gets too close, the reaction is instantaneous and automatic—the other person backs up. And if he gets too close again, back we go again (29, p. 160).

Every living thing has a physical boundary, and it also has a non-physical boundary. The non-physical is more indefinite than the physical, but it is just as real (29, p. 146). The innate drive to gain, maintain, and defend the space within this non-physical boundary is the essence of the silent language of space. This act of laying claim to and defending this space or territory has been termed "territoriality." This term was developed to describe the attitude of certain animals toward their territories, but the term was extended to include preferences of human beings for areas and objects in a study by Altman and Haythorn (2). In man, territoriality becomes highly elaborated, as well as being very greatly differentiated from culture to culture. Robert Ardrey (3) hypothesizes that man's striving to acquire and defend territory is due to the fact that along with war and possibly love, the possession of territory is one of the few means of satisfying at one time all three of man's basic needs—the need for identity, stimulation, and security.

Touch.—There have been very few studies on touch as a nonverbal communication modality. E. T. Hall (28) discusses some of the cultural differences in the kind and extent of
tactile communication generally permitted. W. M. Austin (5), the noted linguist, suggests the psychophysical term *haptics* to refer to the study of patterns of tactile interaction. L. K. Frank (25) contributes a most extensive and comprehensive review of literature through 1956 on tactile communication. In an important article entitled "The Sensory Influences of the Skin" (48), M. F. Ashley Montagu is concerned with the way in which the skin acts as an initiator and as a necessary condition of behavior. He maintains that the skin as an organ has a greater functional significance for the physiological and psychological development of the organism than has previously been thought. He pointed out through research and through cited studies the relation between cutaneous stimulation and the development of the sustaining systems of the body.

A few exploratory studies on touch have recently been done. Sidney Jourard (35) conducted one study in which subjects were asked to complete questionnaires giving information on which of their body parts had been seen or touched by four target persons (mother, father, same-sexed friend, and opposite-sexed friend) and on which of these person's body parts they had seen or touched within the past twelve months. This study revealed apparently clear-cut cultural patterns for tactile interactions. There were marked sex differences; females were touched more by all target persons. Also, tactile interaction with opposite sexed friends was
strikingly greater than with any of the other target persons. Jourard and J. E. Rubin (37) expanded this study by comparing the subjects' touching behavior with the four target persons with self-disclosure to these same persons. They found no strong relationships between touching and self-disclosure.

Vidal Clay (13) conducted a field study of the normal tactile interpersonal behaviors of forty-five mother-child pairs in a public-recreational setting. A series of observations was done, distinguishing three social classes and four age groups of children (infant through four-year-olds). Physical contacts between child and mother were categorized according to kind of tactile behavior and were still photographed at high speed. Clay found no phase of high tactile contact between mothers and children. The mothers gave less tactile communication to their youngest children, more to their toddlers, and less to the (succeedingly) older children. Even then the mothers seemed to use touch more for caring for the children and controlling their behavior than for affection. Most of the child-initiated contacts were of the affectionate attachment kind.

In all human cultures physical contact between persons plays an important role in their interpersonal relations. It is a vital means of communication between close friends and family, and it also can shade or color communication between any two people. A hand-shake between two people just becoming
acquainted can express much of their initial attitudes toward one another.

Touch can express many of a person's inner feelings and reactions; through touch he can convey these feelings to others. Putting an arm around another person, holding hands, and walking arm-in-arm are expressions of affection or friendliness. Avoidance of these contacts indicates the withholding of affection or social nonrecognition.

In Western cultures it is still the practice of well-bred persons to apologize to a stranger whom they may accidentally have touched, and to do so even to a friend or close relative. To establish contact with another is an act of communication, of social recognition. If there have been no formal or other occasion for such social recognition the act is considered out of place (48, p. 298).

Touch is a means of expressing anger, frustration, excitement, happiness--any number of human emotions. By striking at another person, one can express hostility toward that person. By patting another's shoulder or arm, it is possible to convey solace and comfort.

Touch plays a crucial role in human communication and behavior. Although it is never superceded, it is elaborated by the symbolic process. In many interpersonal relations tactile "language" is actually more expressive and more fully effective than vocal language. The meaning and full significance of many verbal symbols depend upon prior tactile experience to give the symbol its meaning and its affective richness. These previous tactile experiences very often color or intensify the content of the symbolic messages.
The role of emotional reactions and persistent affective responses (anxiety, guilt, hostility) in communications needs to be more fully recognized and further clarified, especially since every message sent and received by a person evokes some physiological change which if of sufficient magnitude or persistence we call emotional or affective. The communication between two persons may be governed more by these physiological emotional reactions than by the content of the message especially since the coding of a message may be warped or distorted by the emotional reaction of the sender. The quality or intent of a message, as contrasted with its content, may be conveyed by the emotional coloring-tone of voice, facial expression, gestures, or lightness or heaviness of touch and the recipient may respond largely to this intent or quality. Thus small children often respond more to quality than to content, hearing the tone of voice more than the words spoken by a parent, and responding to the kinesic messages (25, p. 216).

Hospital Communication

Patient Responses to Hospitalization

The person who becomes ill generally experiences not only the actual physical pain and discomfort but also a variety of complex psychological reactions. Illness first produces in most persons undesirable, unpleasant, and painful sensations, a diminishing of strength and stamina, and the gradual inability to perform many habitual tasks. The person who is ill often responds to these feelings with anxiety concerning his welfare and frustration over not being able to assume his usual responsibilities and to function normally.

In addition to the reactions of the patient to the physical illness itself and to the psychological responses
which it invokes within him, the patient who is hospitalized is also strongly affected by the atmosphere within the hospital. For those who are chronically ill hospitalization is necessary, and as such it has a comforting meaning for the patient. However, hospitalization, the hospital atmosphere, and certain hospital procedures can threaten the basis of the patient's psychological well-being--his need for identity and for a sound self-concept. Hospitalization can affect these basic needs of the patient by causing depersonation, regression, and sensory deprivation. These effects are anxiety-producing to the patient and can have a direct bearing on his recovery and psychological comfort during his stay in the hospital.

Anxiety is one of the most common and strongest responses of the patient to illness and hospitalization. Illness represents a threat to the person's body integrity, well being, and ability to function interpersonally and in society. The necessity of being placed in a hospital intensifies this threat.

When a patient enters the hospital he enters not only with his physical ailment but also with a great deal of anxiety and fear regarding his illness. Whether expressed or not, the fear of suffering, invalidism and death is always present (54, p. 54).

The threat to life, the loss of body integrity, and the fear of disfigurement are also present in surgical patients, and they seem to present themselves in more acute and dramatic forms than with physical illness.
As with most of the patients' reactions, anxiety is not necessarily pathological and can actually be beneficial to him. A moderate amount of anxiety represents the patient's concern for his health and can motivate him to seek medical advice and aid in his recovery through concerned care of himself. However, it is when the reaction of anxiety becomes excessive that psychological problems may arise. It has been relatively well established, for example, that a moderate amount of preoperative anxiety is more likely to aid in post-operative psychological adjustment, but that a high anxiety level or an absence of anxiety before the operation is predictive of post-operative psychological problems (1, pp. 219-220).

There are certain hospital situations which can produce directly or increase the patient's anxiety. Among these are the patient's observations of other very ill patients close at hand and of ward rounds. This report by a patient with lung cancer of his hospital experience vividly expresses the terror which close contact with other serious illness can cause:

When I saw the three other patients in my room, I didn't want to believe my eyes. It was suppertime and the patients were eating... These men stood by their beds and carefully poured a thin pink liquid into small glass tubes. Then they held the tubes high over their heads. The fluid drained down out of the tubes through a thin, clear plastic hose which disappeared into one nostril. They had to eat this way because throat, mouth, tongue and esophagus had been cut away in surgery. I could actually see the back wall of their gullet--the
entire front of the throat was laid open from just below the jaw down almost to the breast-bone . . . The sight of these "tube feeders" shocked and depressed me more than anything since the day I learned I had cancer (49, p. 72).

Wards rounds may be reassuring to patients if they are properly conducted. However, there have been two studies on the effects of ward rounds which report their dangers to the patient's health. Preuss and Solomon observed forty-four patients on thirty-two ward rounds over a period of eight months. They reported that three of these showed "a marked anxiety reaction, with motor restlessness and agitation during the ward rounds while the group was approaching the patient's bed." Two of these patients showed an increase in blood pressure and seven of the ten had an increase in pulse rate. The more fear the patient had about his illness, the more inclined he seemed to be to misinterpret and distort the doctors' reports. The researchers concluded that

Ward rounds represent an acute stressful situation to the patient because at that time he believes he is undergoing an examination which will decide his fate. The doctors represent, in the patient's fantasies, godlike figures who will pass judgement on him (54, p. 54).

K. A. J. Järvinen investigated the effect that ward rounds had on patients with myocardial infarctions. He reported that six out of thirty-nine patients affected with acute myocardial infarction who died seven days to six weeks after the onset of the infarction did so during or shortly after ward rounds. He based the following statements on his findings:
This cannot be dismissed as a coincidence. Four of the ward rounds in connection with which the deaths occurred involved, even to the casual observer, an unusually heavy mental stress to the patient. In two cases discharged from the hospital, eagerly awaited by the patient, was to be decided upon at that very occasion. In another two cases, the round was that of the physician-in-chief, made only once or twice a week.

The conclusion is that the warm round may sometimes constitute such a heavy strain on the patient that in cases in which this stress may be deleterious, as in myocardial infarction, it may constitute a danger (34, pp. 319-320).

**Depersonation.**—A physician who was relating his experience of hospitalization wrote, "By entering the hospital as a patient I was exposing myself to all the indignities, to the loss of privacy, that are part of the nature of institutions in general and hospitals in particular" (1, p. 221). Man's instinctive territoriality represents his basic need for identity. His attitude toward space may vary, however, with the time, his own inner reactions to a situation, and the general conditions surrounding and thus affecting him. A person reacts differently to crowds depending on whether the weather is cold or not and whether the people are his friends or strangers. The person who is ill reacts to crowded conditions and people differently from the way he reacts when he is well.

A patient's need for privacy has always been recognized in the hospital, but usually only for physical needs—protection from exposure of the body or isolation from a communicable disease. By wider social definition, privacy means "being away from others of one's own species" (47, p. 512).
In relation to territoriality, it also means standing on one's own ground. When a patient enters the hospital he is in strange surroundings and out of his own familiar territory. Because of the nurses' twenty-four hour presence there, it is usually considered their territory. Doctors and administrators, by their own less frequent presence, nonverbally recognize these territorial rights.

If territorial instincts are operant, then the patient is the transgressor into the nurses' territory and already feels a burden of guilt and tension. Far from the center of his own ecologic domain, he is timid and apologetic, and more likely to lose any battles on this unfamiliar ground (47, p. 512).

When the patient is put to bed, often on a ward, he immediately establishes his ward territory. He identifies his bedside table and water pitcher and puts his belongings in his drawers. He then identifies the territory of the other patients in the room or ward. He may make acquaintance with them but will usually not cross over into "their" territory. The respect for a patient's right to the furnishings on his side of the room is not as trivial a consideration as it may first seem. His need for recognition and respect for his territorial rights may be intensified with illness.

E. T. Hall (28) has observed that American Caucasian or Negro patients attempted to achieve privacy in the hospital by self-screening, a deliberate withdrawal of self from the social context. This behavior was their way of avoiding the
presence of strangers when forced to be physically close. This need for privacy can be readily observed in hospital wards and even more particularly in the hospital recovery room. Territorial behavior seems to become even more apparent when a person is in an unconscious or semiconscious state (socially unguarded), as when awakening from surgical anesthesia.

Following general anesthesia, the most common first re-orientation of the patient to his environment and his reestablishment of identity has been observed to be tactile. As a patient begins to awaken, he generally touches the side rails first, either grasping or sliding his fingers along the rails. As he becomes more conscious, he becomes more aware of persons around him. Although other patients are no more than two feet away, the patient does not seem to "see" other patients, but does recognize the nurse more than ten feet away. The patient seems to identify the nurse as the only means to achieving better territorial and identity gains (47, p. 513).

Regression.—When a person views himself as ill and abandons pretenses of health, he has accepted the fact that he is ill. In our society this includes accepting help from physicians and their aides. The sick person temporarily withdraws from his adult responsibilities and concentrates on the problem of getting well. Instead of making his own decisions, he now delegates this responsibility to the health
team. Because of this regression, the patient's world becomes simpler, more childish, and constricted. His social setting is now similar to his childhood.

This regression to childlike response to illness and hospitalization is adaptive and often significant for survival. Through social and emotional regression the sick person re-distributes his energies to facilitate the healing process. He focuses his concerns on the selfish matters of satisfying simple physical needs for rest, food, absence of pain, physical comfort, and the relief of bodily tensions (40, p. 211). Being put to bed, being cared for by nurses, and having most of his bodily functions taken over by them add to his regression by making him dependent (and aware of his dependence) upon them. Very often this state of regression and dependence (necessary for his recovery) presents a threat to the independence and self-concept of the patient. If it becomes exaggerated or too frightening, he may panic or react in an opposite fashion by rebelliousness and a refusal to accept the role of patient (1, p. 219).

Sensory deprivation.--In the hospital it is at times both necessary and medically therapeutic to place certain persons in isolation. A common example of this would be a person with a communicative disease. Patients who are physically unpleasant to approach, such as a badly burned patient or a malodorous cervical cancer patient, need to be placed apart from other patients. Other patients are isolated because they cause anxiety among the hospital personnel,
such as the young patient dying of cancer. All of these patients who are separated from other patients experience a lack of human contact and a decrease in sensory stimulation.

Experiments have been done of the effects of different kinds of sensory deprivation. Marian Zuckerman (66) conducted a study in which subjects were confined in a cubicle for eight hours. This confinement produced negative effects on the subjects, who expressed somatic complaints, tedium stress, unreality stress, contemplative response, and activation of the adrenal cortex. They had the feeling of being cut off from reality, difficulty in directed thinking, and an increase in vivid memories. Women experienced a higher level of stress attributed to the unreality of the sensory deprivation but were less prone to admit sexual thoughts. When confined in pairs, women also expressed more affective arousal, particularly hostility, somatic discomfort and general stress, than did the men. It was found in this study that sensory deprivation consists of an anxiety reaction which was related to the cutting off of one's normal sensory ties with reality and the appearance of unusual perception and ideas.

In a study by John Davis (16) volunteer subjects were exposed to an environment where visual, auditory, and tactile sensations were reduced as much as possible. They expressed a variety of subjective disturbances ranging from anxiety
and oppression to illusions and hallucinations. Davis also conducted two series of experiences to test the effect of social contact in a standardized sensory deprivation situation. In the first series five pairs of male strangers were tested. One of each pair was placed in a tank-type respirator. They could not see each other, but they were permitted to converse. In the second series eleven married couples were tested similarly. The results of these two experiments indicate that social contact provided in this manner did not eliminate the effects of sensory deprivation, but it did somewhat alleviate them.

Myriam David and Genevieve Appell (15) investigated the care received by institutionalized infants experiencing maternal deprivation. Two observations on procedures in the institution helped to account for the symptoms of sensory deprivation found in the infants. One was the high number of nurses who cared for an infant during its stay. An average of twenty-five persons shared the care of one child; the range was between sixteen and thirty-three. The other was the shortness of contact between nurse and baby and the nearly total lack of social contact between these acts. It was found that the infants exhibited symptoms of isolation; that is, the lack of response to external stimuli and to spontaneous behavior such as crying, smiling, and new achievements. They also showed a lack of communication and interaction. This maternal deprivation led to a decrease in pleasure or
pain provided by or related to human beings; a decrease of stimulation coming from human beings; and a decrease and an inconsistency in responses to signals coming from the body.

It has been found that patients in isolation in the hospital develop a psychiatric syndrome which is remarkably similar to disturbances in sensorium observed in these sensory deprivation experiments. The patients hallucinate, become confused, and clinically have a form of delirium. This delirium is usually relatively easy to manage, however, and is centered on decreasing the amount of human and sensory isolation (1, p. 222). Confinement in the Intensive Care Unit also produces symptoms and effects of sensory deprivation. In an appraisal of the psychologic hazards of such a unit, Hackett, Cassem, and Wishnie (27) found that the frequency of psychological difficulties ranged from thirty to seventy per cent and confinement in these units has been described by patients as an ordeal. In this study fifty patients from ages thirty-seven to seventy-four (mean age of fifty-eight) were observed. The average length of stay in the unit was four to eight days. Four patients died during this study; sensory monotony and sleep deprivation were found to be the principal causal factors in the deaths.

Communication Between Patient and Health Team

Being able to communicate both verbally and nonverbally with the patient is an important aspect of the total healing
process. The right kind of communication at the right time can be of invaluable aid in the recovery of the patient. Even so, the wrong communication can hinder his progress, possibly both physically and psychologically. "To be able to use both verbal and nonverbal communication therapeutically is a skill of high order" (8, p. 15).

The actual physical plan of the hospital can facilitate or impede good health team communication and functioning. Separate and well-defined nurses' and physicians' areas may help each group to preserve its territory, but this may also serve as a barrier to doctor-nurse interchange. This could in turn affect communication between patient and health team and thereby also patient care (53, p. 396).

Just as illness can intensify certain psychological reactions of the patient to territorial rights and interpersonal situations, it can also impede his ability to understand and communicate with the health team. Because of this, nonverbal communications are often more accurately received by the patient than verbal. The perceptive nurse will often communicate with the patient by means of instinctive and sensitive touch. Touch can often restrain a patient who needs to be quieted, when strength alone cannot restrain. Like the voice, touch can be modulated to produce the effect which is needed (43, p. 102).

In communicating with the patient, members of the health team instinctively make emotional and subjective value
judgments. A longitudinal study of freshman nursing students at Presbyterian-St. Luke's Hospital School of Nursing in Chicago was made to determine their evaluative propensity. These students tended to reject patients who did not meet their standards of behavior. They unconsciously expressed their disapproval by a reluctance to converse with and to touch these patients (50). This means of noncommunication or communication of disapproval can cause anxiety and stress within the patient. Often he does not know the reason for this disapproval and in his fantasies can relate it to his illness. This conclusion by the patient, of course, can be detrimental to his recovery to health.

There has been some study on the question of the effective use of touch with patients. Findings have revealed that the use of touch involves considerable risk, since it may be misinterpreted by either patient or nurse fifty percent of the time. Being touched frequently increases the anxiety of the patient; therefore, the individual situation should be carefully considered (17, p. 296). Often the nurse's interpretation of the psychiatric patient's needs and her corresponding encouragement or discouragement of communication can aid or hinder his contact with reality. Charlton (12) concludes from her studies that when the nurse interprets the symbolic verbal and nonverbal behavior of the patient as a request for physical contact and then responds nonverbally by initiating physical contact, the
patient may move toward the nurse. When the nurse communicates disapproval of physical contact by the patient, he may withdraw.

In working with a schizophrenic patient, the therapist takes into account the patient's abnormal relationship with his mother and through transference attempts to have him re-experience this relationship in a more normal way. Some therapists feel that one of the most important ways is through physical contact accompanied by corresponding feeling for the patient and reassuring words. Other therapists feel that all physical contact, even hand shaking, should be avoided. Again, the therapist must weigh all of the factors and decide on an individual basis whether to touch the patient (46, p. 21).

The patient often places the nurse in the mother role. This is due in part to her potentially soothing touch, which is reminiscent of that of the mother. The nurse needs to be aware of this possibility and determine how to act in this role so as not to create anxiety for the patient (46, p. 24).

Touch Communication

The Elemental Language

The earliest and most elemental mode of human communication is the act of touch. Even before birth a baby is surrounded by warm contact in the womb and is continually stimulated by the events of his small world. During the nine months of gestation the embryo and foetus receives the
rhythmic impacts of the maternal heartbeat and develops a response to it (25, p. 223). During labor the contractions of the uterus represent, among other functions, a series of massive cutaneous stimuli which activate such vital systems as the respiratory and gastrointestinal. The newborn baby first communicates with his environment through the pressures of the mother's flesh and of the obstetrician's hands.

The skin is the envelope which contains the human organism and provides its basic mode of communication, touch (19). As an organ of communication, both for sending and receiving messages, the skin is highly complex and versatile, with an immense range of functional operations and a wide repertory of responses. It is continually exposed to the direct impact of the environment and mediates these sensations to the organism. The skin is sensitive to warm and cold temperatures, to pain, and to pressure, with varying thresholds to stimulation, but these perceptions are relative to the immediate state of the organism. The subject may respond to the same stimulation in different ways at different times. There are also apparent alterations in sensitivity response with age, as evidenced by the increased awareness of the skin and frequent attention. Areas of the body differ in tactile sensitivity, as is dramatically shown by the several erogenous zones and the specific areas sensitive to being tickled. Sensitivity is also increased or decreased by repeated experiences, such as shaving the face,
plucking the beard, eyebrows, or body hair, and by calloused hands and soles of feet (25, p. 218).

All of an infant's early communication is by touch, and for some time it seems to be the language which he understands best. The infant has a number of early tactile experiences: being cuddled or patted rhythmically, touching the lips to the mother's body and more specifically to the nipple, increasingly fingerling or handling the mother, especially the breast. He is also fed, bathed, and has his diapers changed by human hands. Babies seem to differ widely in their needs for tactile experiences and in their response to tactile ministrations. They are dependent upon the mother person who may provide these generously or may deny or largely deprive the infant of these experiences (25, pp. 224-225). Other sources of satisfaction, such as the attachment to a blanket, a soft cuddly animal, or the enjoyment of some other tactile contact, especially of textures, may serve as substitutes for contact with the mother. Studies of infants and children have shown that nothing is more important to early physical and mental growth than touch. Through touch the child begins to establish and maintain intercourse with the world, and his process of development and maturation may in part be viewed in terms of his communicative development.

The noted psychologist Harry F. Harlow conducted a series of experiments which illustrate the importance of
touch even to animals. He built two surrogate mother-figures for monkey babies. One of these was built of wire, and it gave milk and afforded some sense of protection against danger. The other was built of sponge rubber and terry cloth and gave no milk. When given a choice, the baby monkeys went to the terry cloth mother for the comfort of her soft "touch." The results of these experiments contradicted the accepted theory that a baby loves its mother because she provides food. Dr. Harlow concluded that touch and the comfort it affords is a more important part of the love and that nursing is perhaps less important as a source of food than as a source of reassuring touch (30).

Words soon begin to accompany the actions of the mother toward the child, and he learns to associate the two. Later, words alone suffice and touching is often no longer considered necessary. For example, a mother consoles a fretful infant by patting him gently. As he grows older, she pats him while murmuring encouraging words. Eventually she simply calls reassuring words to him from the other room. In this way, words replace touch, and distance replaces closeness (42, p. 94). The baby's perception of the world is built upon and initially shaped by tactile experiences. Early tactile experiences enter into and largely shape this subsequent learning and use of patterns of communications (25, p. 230).

Touch usually constitutes the first act of communication between infant and mother. Through touch the infant begins
to feel the affection and love, or lack of it, of the mother and to express his feelings to her. Spurgeon English states that love and touch are inseparable and indivisible, that love cannot arise in the human being without touch and sensuous arousal, and that the cooperation necessary for social conformity is not possible without affection and tactile stimulation (22). By touching the object of affection the child gains his first emotional and sensuous knowledge of others. "The first positive instinctual behavior toward a desired object consists in diminishing the distance between oneself and the object, and finally in the wish to swallow it" (24, pp. 37-38). The first gratification comes with the intake of milk, and the first perception of reality occurs through oral incorporation.

The newborn infant with underdeveloped, inadequate capacity for homeostasis apparently requires tactile experience for maintaining his equilibrium. He keeps warm through bodily contacts, and when he is disturbed emotionally, he usually responds to patting, stroking, or caressing. The close, tactual contact of being held firmly generally reassures a child. The early tactual experiences establish the individual's early pattern of intimacy and affection.

The baby develops confidence in the world, trust in people, through these early tactile relations which reciprocally establish the meaning of the world for him and also his expectations and feelings toward that world (25, p. 229).
Denial or deprivation of these early tactile experiences can damage his future ability for learning, such as in the areas of speech, cognition, and symbolic recognition, and especially in his capacity for more mature tactile communication.

During an infant's first years, the mother is generally closest to him, and she is the person with whom he first learns to communicate. Harlow (31) describes three phases in the mother-child affectational system: a phase of maternal attachment, a phase of maternal protection, and a phase of maternal ambivalence. The maternal attachment phase includes the first four months of the baby's life and is the time when the mother's tactile contact needs are the greatest. During this period, the baby requires the most mothering in order to survive. In his study of mother-child tactile communication Vidal Clay disagrees (13). He finds that a separation of the bodies of mother and child occurs in the American culture.

From the time the child is born he is kept away from the mother in things like cribs, carriages, and baby carriers. When the infant is in distress or when it is the "right time," the mother goes to him to perform her essential mothering services, after which she returns him to his bed or play area. American mothers largely omit the phase of close bodily attachment (13, p. 205).

Reva Rubin (56) has discussed her findings on the mother's tactile needs during this first phase in the affectional system. She concludes that the woman who loves must enfold the person she loves, must draw the person close in
a tight embrace; her upper arms and breast ache for this contact. This action is an impulsive one which takes will power to inhibit. Its overt expression in action is usually limited by the appropriateness of the given situation. As it was pointed out in Clay's study, however, this response cannot take place in a maternity or pediatric ward in the hospital. Levy (41) disagrees with this opinion and believes that feelings of maternal love are not naturally endowed but are acquired over time and in the experiences in the mother-child relationship.

Rubin discusses the orderly progression and sequence of the nature and amount of contact between the mother and her infant, as observed in maternity wards. This progression is from very small areas of contact to more extensive, and from the periphery of the infant's body toward centripetally. The rate of this progression is dependent on the mother's attitude toward herself in this particular role and on her perception of the infant's reciprocal response to her.

The mother's initial contacts are usually exploratory in nature. She is uncertain of the baby's responses and tenuously touches him with her fingertips. In maternal touch the fingertips stage precedes that of commitment. Commitment seems to await some personally evocative response of the infant, such as a burp or the way he cuddles. Later in the baby's development (about three months) he expresses unbounded pleasure in the mother's touches. The response
must come from the baby, however; no one else can evoke the mother's commitment to him. After the fingertips stage, the whole hand is used for maximal contact with the infant's body. The mother's hands are relaxed and comfortable and express how she perceives herself and her relationship with the baby. She transmits to him her security in herself through touch, and his responsiveness to her firm comforting touch feeds back into her own well-being. The increasingly larger body surface involved in contact indicates a deepening relationship in which the mother is becoming very much committed (56, p. 828).

**Self Image**

The baby begins to communicate with himself by feeling his own body. He explores its shape and textures with his hands and in this way begins to establish his body image, which is reinforced or often negated by pleasurable or painful tactile experiences with other human beings. Later, he focuses his vision on his fingers and feet and so begins to build up a visual image to supplement and to reinforce his tactile experiences. Throughout one's life, the feel and appearance of the body is a basic fundamental of one's concept of himself. Touching and being touched by others is an important means of expanding human awareness. To make growth and self-actualization possible, it is necessary to understand that capacities, organs, and organ systems
press to function and to express themselves. They need to be used and exercised. Such use is satisfying and disuse is irritating (45, p. 201). When body activities are successful, they lead to a feeling of more freedom and an increase in the concept of the self as a capable person (62, p. 50).

As culture attains higher forms, it dissociates itself by abstractions and reduces the immediacy of personal experience. The physical body more often becomes an abstraction or symbol which represents the person's real being. Western man has shown increasing estrangement from his body. He tends to be less aware of it, less accepting of it, and depends increasingly on cosmetics and prosthesis (11, pp. 122-123). However, by being anxious to enhance the appearance of the skin, he is also showing a need for more intense tactile communication where the skin serves as the message which is perceived visually as a sign or symbol, or sometimes as a signal to evoke a direct physiological response (25, p. 237).

Grooming the skin, bathing of all kinds, anointing, oiling, perfuming the skin, plucking hair, shaving, are patterns for modifying communication by the skin, again relying upon visual cues to indicate tactual readiness for communication (actual or symbolic). Such grooming and decorating may also serve as signs of rank, caste, prestige, authority which others recognize and respond to with appropriate conduct. Indeed, these skin decorations and coverings are of large significance in the assumption and performance of various roles when not only the individual assuming a role must act in a prescribed manner, but others must respond appropriately if the role performance is to be completed (25, p. 238).
The body image can cause conflict within a person when he fails to perceive the body and its parts and to adapt them as they actually exist, and when there is a discrepancy between the body image perceived and that maintained by the ego as ideal (38, p. 152). The person who is ill very often experiences this inner conflict. When he has also lost some or all control over his body functions, he perceives himself as not meeting his own ideal. Although there is nothing shameful about any functions of the body per se, the inability to control them often produces shame within one's self. Shame is the personal, private judgment of failure passed on self by self. It is a merciless judgment. To have one's shame seen by others only serves to reverberate and amplify awareness of shame. There is an ego failure in which all defenses are mustered—withdrawal, denial, rationalization, and repression (55, pp. 20-23).

A very significant event in the development of personality has been recognized in the child's learning to distinguish between "me" and "not me." This is often stated as his first "facing of reality." The child first perceives even the "not me" as belonging to him, such as my mother, my bottle, my crib, my rattle. Only later does he recognize the things that are not him and not his existing in the world of reality. This transition from a world governed largely by touch communication to the symbolic world and acceptance of adult concepts is not always an easy one. Some children
may only partially give up their idiosyncratic "not me" and try to live on two levels of communication, while others may be unable to attain even this degree of participation in the consensual world, continuing to rely on signals (25, p. 231).

In his well-known book *I and Thou*, Martin Buber is concerned with the twofoldness of our one world. He understands the human being as having an attitude of twofoldness and a view of the world as being twofold, in accordance with the twofold nature of his primary words.

The primary words are not isolated words but combined words.
- The one primary word is the combination I-Thou.
- The other primary word is the combination I-It; wherein, without a change in the primary word, one of the words He and She can replace It.
  - Hence the I of man is also twofold.
  - For the I of the primary word I-Thou is a different I from that of the primary word I-It (9, p. 3).

These primary words intimate relationships. They do not describe that which exists independently of them, but being spoken they bring about existence. They are spoken from the being.

- If Thou is said, the I of the combination I-Thou is said along with it.
- If It is said, the I of the combination I-It is said along with it.
  - The primary word I-Thou can only be spoken with the whole being.
  - The primary word I-It can never be spoken with the whole being.
  - There is no I taken in itself but only the I of the primary word I-Thou and the I of the primary word I-It.
  - When Thou is spoken, the speaker has no thing for his object... Thou has no bounds.
  - When Thou is spoken, the speaker has no thing; he has indeed nothing. But he takes his stand in relation (9, pp. 3-4).
The primary word *I-Thou* establishes the world of relation. The stronger the *I* of the primary word *I-Thou* is in the two-fold *I*, the more personal is the man. In the instinct to make contact with another (first by touch and then by visual touch of another being) the inform Thou is very soon brought to its full powers, so that the instinct turns out to mean mutual relation or tenderness. The instinct to create new things or to analyze those existing is also determined by the inborn Thou, so that a "personification" of what is made and a "conversation" takes place. "The development of the soul in the child is inextricably bound up with that of the longing for the Thou, with the satisfaction and the disappointment of this longing . . ." (9, p. 28). The child is born into the world from the undivided primal world which precedes form. Only gradually, by entering into relations with others, can the personal, actualized being develop and fully emerge out of this primal world (9, p. 28).

The reality of the world and of the self is mutually potentiated by the direct relationship between self and another. When a person becomes too tiresome or disturbing, another is apt no longer to be emphatically responsive. This attitude is often referred to as depersonalization. Partial depersonalization of others is extensively practiced in everyday life and is regarded as normal (60, pp. 46-47).
Some philosophers feel that ours is an age of disembodiment. The self is more or less detached from the body, which is felt more as one object among other objects in the world than as the core of the individual's own being. The disembodied self is merely a spectator—he engages in nothing directly. The embodied person is in his body completely and has a sense of personal continuity in time. He has a sense of being alive and real and knows himself to be substantial. He has as his starting point an experience of his body as a base from which he can be a person with other human beings. This sense of identity is based on understanding of one's own self, but it also requires the existence of another by whom one is known and understood. Touch is an important means of acquiring this identity and sense of reality (59).

In meaningful dialogue between two people, the innermost i is relating to the innermost Thou. Such a dialogue requires an awareness and readiness to receive the human encounter that could shake the underpinnings and foundation of an individual's I-ness. Its lodestone is touch—the touch of togetherness at the right moment. It is at this moment that the I-ness and Thou-ness melt into a single fusion. This is the interpenetration of the I-ness and Thou-ness in an aura of eternity (33). Paul Tillich has coined the word *kairos* to express the miracle when eternity touches time (64).

Touch is the fundamental of being-in-the-world; it is the vehicle par excellence by which man locates himself in
space and time. All senses act as a dynamic whole, one complementing the other in a reciprocal fashion. The result is a sensory Gestalt—a true stimulus for behavior (11, p. 126). Man's tactual contact with the earth gives him the base for higher order operations. Surrendering this tactuality creates anxiety because "touch" is lost. It is this tactuality in the newborn infant which in his basic orientation to the mother and to life (11, p. 127).

In psychiatric wards patients reach out to touch as a substituted form of communication. They want to reassure themselves of their continuity and existence. Through reassuring touch the words spoken between patient and therapist can take on more meaning, and trust can be founded and shared. On a geriatric ward touch also often enhances or even supersedes the need to verbalize and offers reinforcement on a level more coincident with deficit status. The anticipation of decline and death in such patients—the ultimate separation—forces them to cling tactualy not only to the world but to the unconscious residuals of the mother symbiosis. Tactuality genetically reinforces the indivisibility and wholeness of man's self and counters this sense of impending separation (11, p. 127).

Self-Disclosure

The fundamental motive of human behavior is not self-preservation but the preservation of the symbolic self—
the basic purpose of all human activity is the protection, the maintenance, and the enhancement, not of the self but of the self-concept or the symbolic self (32). Man finds himself in the dilemma of recognizing and accepting himself as he is and his relationships with others. His identity depends largely on his having someone who knows and accepts him as he is. The knowledge that one person has of another is most easily and truthfully gained by the latter's disclosure of himself. When a person wants to be known, he will do everything in his power to make sure that the other person's image of him is as accurate as possible. He reveals to another what he is thinking and feeling, what he is experiencing. In this way each can share experience and come to know his innermost self. In order to do this fully and freely, the disclosing person must trust that he is in no danger when he is thus unguarded, defenseless, and open.

It takes a great deal of courage to give that much of one's self. The true being is most often concealed and camouflaged before others in an effort to foster a sense of safety, to protect against unwanted but expected criticism, hurt, or rejection.

This protection is purchased at a steep price. When we are not truly known by the other people in our lives, we are misunderstood. When we are not known, even by family and friends, we join the all too numerous "lonely crowd." Worse, when we succeed too well in hiding our being from others, we tend to lose touch with our real selves, and this loss of self
contributes to illness in its myriad forms (36, p. iii).

A fear of closeness and self-disclosure to another is an expression of anxiety that all closeness might be followed by subsequent rejections. It often expresses the fear of an individual with a weak ego that closeness might endanger his identity or destroy the boundaries between his own ego and that of another person (10, p. 199).

A very direct and literal way of encountering another person or of disclosing oneself to another is through touch. Through touch one person can awaken another's experience of his own body. Those who communicate through touch can get closer and understand one another better than when limited to verbal disclosure. It would seem that in relationships of love or deep friendship, full, reciprocal disclosure of self is of the essence. If self-disclosure is a means of reducing distance between persons and of establishing or sustaining contact, self-disclosure and physical contact should show some relation.

A study of this relationship of these two modes of encounter was made by Jourard and Rubin (37), who administered a body-contact questionnaire and a self-disclosure questionnaire to eighty-four female and fifty-four male, unmarried college students between the ages of nineteen and twenty-two. In this study the two measures of intimacy, self-disclosure, and body-contact were found
virtually independent. A low but significant correlation was found among men in relation to a same-sex friend and among women in relation to an opposite-sex friend. These would signify slight tendencies toward equating these two orders of intimacy. But the most striking finding is the fact that these two ways of being are not strongly or markedly correlated.

The virtual independence of self-disclosure and body-contact in the subject's relationships to parents and peers perhaps reflects the role of body-contact in our American society. . . . Touching is equated with sexual intent, either consciously, or at a less-conscious level. The fact that it is the opposite-sex friend with whom the most widespread (over the body) physical contact is exchanged points to that interpretation. . . . The fact that women show at least a slight tendency toward equating physical contact and self-disclosure suggests they may be better integrated than the men--who show a similar slight tendency in relations to their same-sex friends, but not to their girl-friends. . . . Women appear most disposed to "give" themselves physically and in the mode of verbal self-disclosure. Perhaps this integrity likewise makes them more vulnerable to hurt and deception (37, p. 47).

Increasing numbers of psychiatrists and psychologists are now viewing psychotherapy not as a something which one does to or for a patient, a treatment that calls for careful techniques of verbal responding, but rather as an exploration of the possibilities for dialogue between these two people. The patient is afraid of his spontaneous being and is unable to reveal himself freely and wholly in therapy. The therapist may also be afraid for several reasons to let himself respond in honesty to the patient. In time they each become more
unself-conscious in revealing their true selves to each other. The patient comes to have no doubts concerning the subjective being of the therapist, and the therapist is clearly informed of the patient's experiencing as it unfolds (36, p. 185).

Self-disclosure is a measurable facet of man's being and his behavior, and that understanding of its conditions and correlates will enrich our understanding of man in well-being and in disease.
CHAPTER BIBLIOGRAPHY


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CHAPTER III

PRESENTATION OF DATA

Chapter III presents data obtained from the survey of current practices of touch. The chapter is divided into four parts:

1. Description of the Two Hospitals and Activities of Health Team Personnel;
2. Survey of Current Practices of Touch;
3. Comparison of Current Practices of Touch as Observed at Parkland and Presbyterian Hospitals; and
4. Summary Table of the Most Significant Findings.

Description of the Two Hospitals and Activities of Health Team Personnel

Parkland Memorial Hospital is a 500 bed city-county hospital located in Dallas, Texas. It is a teaching hospital which serves as an educational unit for students from the University of Texas Southwestern Medical School, Texas Woman's University College of Nursing, and El Centro Junior College Department of Nursing. In addition, Parkland has an active allied health fields educational program, as well as one of the largest internship and residency programs for medical doctors in the United States.
In the role of a city-county hospital district, Parkland assumes the responsibility for caring for all the medically indigent in Dallas County. All emergencies occurring throughout the county are brought to Parkland, unless the patient or relative requests another hospital.

The patient population at Parkland is primarily comprised of the lower socio-economic group and a large percentage of medicare patients. However, there is a fairly constant number of middle and upper middle class patients. Occasionally, due to trauma emergencies or for diagnostic purposes the patient population will include individuals from the upper socio-economic class.

Presbyterian Hospital, a 250 bed church-sponsored hospital, located in far north Dallas, has been in operation since 1960. Presbyterian Hospital also serves as an educational unit for students from the University of Texas Southwestern Medical School, Texas Woman’s University College of Nursing, and El Centro Junior College Department of Nursing. Presbyterian also has an active allied fields educational program, and a limited internship and residency program.

The wards at Parkland Memorial Hospital are approximately thirty to thirty-five beds each. The daily nursing staff consists of two to four registered nurses, four to six licensed vocational nurses, six to eight aides, and occasionally an orderly. The patients, for the most part, are very ill and in need of highly competent nursing care.
They are housed in two and four-bed rooms on each ward. The medical staff consists of a Chief of Staff of a particular field of specialization, such as neurosurgery or thoracic surgery. He is responsible for the medical care of all patients on that service. Under him are first, second, third, and fourth year residents who are specializing in that field of medicine. The intern is a recent medical school graduate gaining practical experience in treating patients. He often rotates through many services and has the responsibility for the immediate care of each patient on his team. Junior and senior medical students also care for the patients and are responsible to the intern for the quality of care they provide under the auspices of a medical school faculty member. Sophomore, junior, and senior nursing students are also assigned to care for patients on the various wards. They function under the supervision of their nursing instructor, but are responsible to the head nurse on each ward for the quality of care given to the individual patients.

Licensed vocational nurses provide much of the technical care of patients. They also have extensive patient contact in the performance of their duties. Aides and orderlies function in the role of ancillary personnel who also frequently provide physical care for the patients. Thus, it can be seen that one patient on a ward at Parkland Memorial Hospital could come in daily contact with as many as fifteen
to twenty health team personnel, all responsible for his welfare. On several occasions as many as fifty-five health team personnel were observed on a single ward making medical teaching rounds or providing care to the patients.

Presbyterian Hospital employs a higher percentage of registered nurses and a corresponding lower number of ancillary personnel. The wards at Presbyterian Hospital have a thirty-bed capacity with one and two-bed rooms only. The average daily number of nursing staff at Presbyterian Hospital is approximately eight, four to five of whom are usually registered nurses. The population of students from the medical and nursing schools, as well as interns and residents, is considerably less than at Parkland Memorial Hospital. However, the number of practicing physicians is significantly increased. Each patient has his own physician. Whereas at Parkland the intern is responsible for one to fifteen patients on a specific ward, a patient at Presbyterian will see his physician one or two times daily and that physician may have as few as one or two patients in the hospital.

The patient population at Presbyterian is mainly comprised of patients from the middle class and some who are from the upper class. In recent years Presbyterian, as well as other private hospitals, is caring for an increasing number of Medicare patients.
Survey of Current Practices of Touch

A total of 180 observational sessions were held. The time, ward, and rooms were randomly selected in the two hospitals. Four trained nurse observers were utilized to collect the data. Nine wards with comparable bed capacity in each room were utilized at both hospitals. The sessions were 30 minutes in length and were conducted only during the morning hours when health team personnel census would be the greatest. Forty-nine of the 180 observational sessions at Presbyterian Hospital and 52 at Parkland Memorial Hospital yielded from 1 to 20 occurrences of touch. There were approximately 540 patients and 900 health team personnel included in the survey. The total number of touches recorded from all observational sessions was 452.

Occurrence of Touch by Health Team Personnel

Table I shows the members of the health team the total number of touches for each category at each of the hospitals.

As is evident in the table, health team members at Parkland Memorial Hospital touched more frequently than those at Presbyterian Hospital. It may be noted that junior nursing students at Parkland touched patients most frequently. A sharp contrast was observed with the senior nursing students with no occurrence of touch recorded.
<table>
<thead>
<tr>
<th>Health Team Personnel</th>
<th>Parkland</th>
<th>Presbyterian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Doctor</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Resident</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Intern</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Senior Medical Student</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Junior Medical Student</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>58</td>
<td>96</td>
</tr>
<tr>
<td>Senior Nursing Student</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Junior Nursing Student</td>
<td>73</td>
<td>0</td>
</tr>
<tr>
<td>Sophomore Nursing Student</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Licensed Vocational Nurse</td>
<td>69</td>
<td>5</td>
</tr>
<tr>
<td>Aide</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Orderly</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>60</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>308</strong></td>
<td><strong>144</strong></td>
</tr>
</tbody>
</table>

Registered nurses at both institutions touched patients frequently, much more than was anticipated. The licensed vocational nurses at Parkland used touch frequently. They are at the patient's bedside more often than registered nurses and for longer periods of time each day than students.
They are also mainly from the same ethnic origins and socio-economic class as the patients at Parkland. It may be noted that the licensed vocational nurses at Parkland used touch fourteen times more frequently than the licensed vocational nurses at Presbyterian. The patient population at Presbyterian contrasted sharply with Parkland.

The intern, who had the most direct and frequent contact with patients of all the medical practitioners, did not touch at either hospital. As mentioned above, neither did the senior nursing student. It may be speculated that both groups are striving to achieve their role expectations, and in our culture distance is often equated with professionalism. It is encouraging to note that after graduation, the nurse does use touch as one means of communication.

**Occurrence of Touch by Age of Health Team Personnel**

Table II presents the health team personnel by age groups and the use of touch.

It is of interest to note that 72 per cent of all touches were done by health team members between the ages of 18 and 33. Studies cited in Chapter II of this dissertation indicate that in the American culture touch is equated with sexual intent and is especially avoided by this age group except with opposite sex friends. It may also be noted in Table VII that patients receiving the most touch were in the 26 to 33 year old group.
TABLE II

OCCURRENCE OF TOUCH BY AGE OF HEALTH TEAM PERSONNEL

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Total Number of Recorded Touches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parkland</td>
</tr>
<tr>
<td>18-25</td>
<td>182</td>
</tr>
<tr>
<td>26-33</td>
<td>53</td>
</tr>
<tr>
<td>34-41</td>
<td>22</td>
</tr>
<tr>
<td>42-49</td>
<td>30</td>
</tr>
<tr>
<td>50-65</td>
<td>20</td>
</tr>
<tr>
<td>65-100</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
</tr>
</tbody>
</table>

Health team personnel's use of touch decreased with increasing age so that personnel fifty and over accounted for only 6.8 per cent of touch occurrence.

Occurrence of Touch by Sex of Health Team Personnel

Table III shows the various members of the health team's use of touch by sex.

As might be expected, females touched 85 per cent more than males. One obvious reason is there were more female members on the health team than males. Also, females seem to communicate instinctively more freely by touch than males.
### TABLE III

**Occurrence of Touch by Sex of Health Team Personnel**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Total Number of Recorded Touches</th>
<th>Parkland</th>
<th>Presbyterian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>41</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>267</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
<td>144</td>
<td></td>
</tr>
</tbody>
</table>

### Occurrence of Touch by Race of Health Team Personnel

Table IV shows the race of various members of the health team who use touch.

### TABLE IV

**Occurrence of Touch by Race of Health Team Personnel**

<table>
<thead>
<tr>
<th>Race</th>
<th>Total Number of Recorded Touches</th>
<th>Parkland</th>
<th>Presbyterian</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>200</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Negro</td>
<td>99</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Latin American</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
<td>144</td>
<td></td>
</tr>
</tbody>
</table>
The health teams of both hospitals were primarily members of the Caucasian race, which may explain why 73 per cent of touch was done by this race. There is, however, a large population of Negro aides and licensed vocational nurses at Parkland. Since the patient population has a large percentage of members of the Negro race who also come from similar socio-economic backgrounds as do the aides and LVN's, this may account for the large (22 per cent) percentage of touch by Negro employees. There is also a fairly large number of Latin American patients and employees at Parkland, who in their culture use frequent physical contact. However, only two occurrences of touch were recorded by members of the Latin American race.

**Occurrences of Touch by Areas of the Patient's Body**

Table V presents the areas of the patient's body most frequently touched by health team personnel.

The patient's hand was the part of the body most frequently touched, with the forehead being the second most frequently touched area by the health team personnel at both hospitals. The patient's abdomen was an area frequently chosen by health team personnel at Parkland. It may be noted that health team members touched practically all parts of the patient's body as one means of communicating with him. The extremities of the patients at both hospitals
accounted for 60 per cent of the most frequently touched areas.

### TABLE V

LOCATION OF TOUCH ON PATIENT'S BODY 
BY HEALTH TEAM PERSONNEL

<table>
<thead>
<tr>
<th>Location</th>
<th>Parkland</th>
<th>Presbyterian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fingers</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hand</td>
<td>68</td>
<td>23</td>
</tr>
<tr>
<td>Wrist</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Forearm</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Arm</td>
<td>31</td>
<td>16</td>
</tr>
<tr>
<td>Elbow</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Shoulder</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>Toes</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Foot</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Ankle</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Leg</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Knee</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Thigh</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Neck</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Hair</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Forehead</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Ear</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Cheek</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Chin</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Chest</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Abdomen</td>
<td>28</td>
<td>2</td>
</tr>
<tr>
<td>Back</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Buttocks</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Genitalia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Body (infant's)</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Nose</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Lips</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>308</strong></td>
<td><strong>144</strong></td>
</tr>
</tbody>
</table>
Occurrence of Touch by HospitalWARDS

Table VI shows the wards at both hospitals where the use of touch was observed.

TABLE VI
OCCURRENCE OF TOUCH BY HOSPITAL WARDS

<table>
<thead>
<tr>
<th>Wards</th>
<th>Total Number of Recorded Touches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parkland</td>
</tr>
<tr>
<td>Medical</td>
<td>7</td>
</tr>
<tr>
<td>Surgical</td>
<td>5</td>
</tr>
<tr>
<td>Pediatric</td>
<td>105</td>
</tr>
<tr>
<td>Post Partum</td>
<td>0</td>
</tr>
<tr>
<td>Labor and Delivery</td>
<td>67</td>
</tr>
<tr>
<td>Recovery Room</td>
<td>31</td>
</tr>
<tr>
<td>Comatose</td>
<td>35</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>12</td>
</tr>
<tr>
<td>Intensive Care Unit</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
</tr>
</tbody>
</table>

The Pediatric Ward at Parkland Memorial Hospital accounts for 24 per cent of all touch. It may be noted that during the nursing students' junior year they are assigned to the Pediatric Ward at Parkland, and from Table I it was observed that the junior nursing students touched more frequently than any other health team member. Also
during the nursing students' junior year they are assigned to the Obstetrical Ward and care for patients in the Labor and Delivery Room. This is the second area that touch occurred most frequently.

Intensive Care Units at both hospitals accounted for 17 per cent of the total touching. This is an area of extreme anxiety for patients, and one of the major functions of the nurse is to provide constant emotional support. There were few students present in the intensive care areas; so it may be noted that if the student population were not counted, the registered nurses in the Intensive Care Units touched patients the most frequently. Also, it is of interest to note that in the wards with the greatest amount of stress potential (Pediatrics, Labor and Delivery, Recovery Room, Comatose, and Intensive Care) touch was used more often than in any of the other areas.

Occurrence of Touch by Condition of Patients

Table VII shows the frequency of touch occurring by condition of patients. The terms used for assigning patient condition have been defined by the Dallas Hospital Council as:

**Good:** Vital signs are stable and within normal limits. Patient is conscious and comfortable. His prognosis is good or excellent.

**Fair:** Vital signs are stable and within normal limits. Patient is conscious. He is uncomfortable or may have minor complications. Favorable prognosis.
Serious: Acutely ill with questionable prognosis. Vital signs may be unstable and not within normal limits. A chance for improved prognosis.

Critical: Questionable prognosis. Vital signs are unstable and not within normal limits. There are major complications; death may be imminent.

TABLE VII

OCCURRENCE OF TOUCH BY CONDITION OF PATIENTS

<table>
<thead>
<tr>
<th>Condition of Patients</th>
<th>Total Number of Recorded Touches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parkland</td>
</tr>
<tr>
<td>Good</td>
<td>115</td>
</tr>
<tr>
<td>Fair</td>
<td>123</td>
</tr>
<tr>
<td>Serious</td>
<td>9</td>
</tr>
<tr>
<td>Critical</td>
<td>61</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
</tr>
</tbody>
</table>

The conditions good and fair comprise 70 per cent of all touch. This may support the studies that have found that health team members have a fear of death and find it difficult to provide the emotional support necessary to the acutely ill patient. Another factor to consider is that the health team personnel are often so busy with the technical aspects of stabilizing the patient's condition that there is not time to provide the emotional support necessary.
Occurrence of Touch by Age of Patients

Table VIII shows the frequency of touch occurring by age group of the patients.

**TABLE VIII**

**OCCURRENCE OF TOUCH BY AGE OF PATIENTS**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Number of Recorded Touches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parkland</td>
</tr>
<tr>
<td>0-1</td>
<td>80</td>
</tr>
<tr>
<td>2-3</td>
<td>4</td>
</tr>
<tr>
<td>4-5</td>
<td>24</td>
</tr>
<tr>
<td>6-7</td>
<td>0</td>
</tr>
<tr>
<td>8-12</td>
<td>0</td>
</tr>
<tr>
<td>13-17</td>
<td>0</td>
</tr>
<tr>
<td>18-25</td>
<td>18</td>
</tr>
<tr>
<td>25-33</td>
<td>93</td>
</tr>
<tr>
<td>34-41</td>
<td>19</td>
</tr>
<tr>
<td>42-49</td>
<td>1</td>
</tr>
<tr>
<td>50-65</td>
<td>58</td>
</tr>
<tr>
<td>66-100</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
</tr>
</tbody>
</table>

All age groups were touched frequently except for the three groups between six and seventeen years of age where no
.touches occurred. This finding supported other studies that have also shown little to no touching occurring in this age range in spite of the evidence that appropriate touch is very important to the growth and maturation process during this period. The next age range with the most infrequent touch was the forty-two to forty-nine range. The twenty-six to thirty-three year old patients were touched the most frequently of all age groups (25 per cent). This finding appears to refute studies that have shown this age group do not touch others except opposite sex friends.

Occurrence of Touch by Sex of Patients

Table IX shows the frequency of touch by sex of the patients.

<table>
<thead>
<tr>
<th>TABLE IX</th>
<th>OCCURRENCE OF TOUCH BY SEX OF PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Total Number of Recorded Touches</td>
</tr>
<tr>
<td></td>
<td>Parkland</td>
</tr>
<tr>
<td>Male</td>
<td>141</td>
</tr>
<tr>
<td>Female</td>
<td>167</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
</tr>
</tbody>
</table>
The patient population at both hospitals is usually made up of a slightly higher number of females, a circumstance which may explain why more females are touched than males. There is a considerably higher percentage (68 per cent) of touch occurring at Parkland Memorial Hospital than at Presbyterian Hospital (32 per cent). The socio-economic classes comprising the patient population at the respective hospitals may be one factor that influenced the use of touch.

**Occurrence of Touch by Race of Patients**

Table X shows the frequency of touch by race of the patients.

<table>
<thead>
<tr>
<th>Race</th>
<th>Total Number of Recorded Touches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parkland</td>
</tr>
<tr>
<td>White</td>
<td>165</td>
</tr>
<tr>
<td>Negro</td>
<td>133</td>
</tr>
<tr>
<td>Latin American</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>308</strong></td>
</tr>
</tbody>
</table>

The Caucasian patient was touched 66 per cent of all recorded touches. The majority of the patient population
of both hospitals is comprised of Caucasians. However, at Parkland the Negro is the second most frequently hospitalized race. There is also a large number of Latin Americans treated at Parkland. Although in the Latin American culture, touch is a frequent and accepted practice, it was rarely used by any member of the health team including Latin Americans to communicate with the Latin American patient.

**Comparison of Current Practices of Touch as Utilized by Health Team Personnel at Parkland Memorial and Presbyterian Hospitals**

Analysis of variance was used to determine whether there was a significant difference in the occurrence of touch between health team personnel at Parkland Memorial Hospital and Presbyterian Hospital. The .05 level of confidence was used to determine significance between the categories involved. Table XI gives the data on the comparison of current practices of touch as utilized by health team personnel at the two hospitals studied.

The level of significance far exceeded original expectations. In all categories, health team personnel at Parkland accounted for 67 per cent of the total touches. Factors influencing this may be the similar socio-economic backgrounds of patients and health team personnel at Parkland. Also, there was a larger number of personnel having patient contact at Parkland than at Presbyterian.
TABLE XI

COMPARISON OF CURRENT PRACTICES OF TOUCH AS UTILIZED BY HEALTH TEAM PERSONNEL AT PARKLAND AND PRESBYTERIAN HOSPITALS

<table>
<thead>
<tr>
<th>Ward, Health Team Member Location of Touch</th>
<th>Total Number of Recorded Touches</th>
<th>F Value</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parkland</td>
<td>Presbyterian</td>
<td></td>
</tr>
<tr>
<td>Ward, Health Team Member Location of Touch</td>
<td>308</td>
<td>144</td>
<td>3.6129*</td>
</tr>
<tr>
<td>Ward, Health Team Member Sex</td>
<td>308</td>
<td>144</td>
<td>5.0282*</td>
</tr>
<tr>
<td>Ward, Health Team Member Race</td>
<td>308</td>
<td>144</td>
<td>4.4194*</td>
</tr>
<tr>
<td>Ward, Health Team Member Age</td>
<td>308</td>
<td>144</td>
<td>4.1849*</td>
</tr>
</tbody>
</table>

*Significant beyond expected level of significance.
The majority of personnel at Parkland appear to be within the eighteen to thirty-three year old age range. The data showed that this group did 72 per cent of all the touching.

**Affluency**

Observation sessions were conducted to determine whether the known affluent/prestigious patient was touched. The criteria for determining affluency was the occupancy of suites at Presbyterian Hospital costing $75 daily, since the average insurance policy allowed an overall coverage of $19.69 per day for room allowances. Ten observational sessions were held in the suites at randomly chosen times. No incidents of touch occurred throughout the ten sessions. This finding supported the other findings at Presbyterian Hospital that non-necessary touch was not used as a mode of communication by health team personnel even though Presbyterian holds a reputation for quality medical and nursing care.

**Summary of Significant Findings**

Based on conducted observational sessions as reported herein, the following findings are offered:

1. Health team personnel who touched most frequently were the registered nurses for a total of 154 touches.

2. The second most frequent occurrence of touch was by the junior nursing students with a total of 73 touches.
3. The interns and senior nursing students did not use touch.

4. The age group of the health team most frequently using touch was the 18 to 25 year old group with a total of 228 touches. The next group was the 26 to 33 year old group with a total of 99 touches.

5. The age group with the most infrequent use of touch was the 66 to 100 year old group for a total of 5 touches.

6. The sex of the health team member using touch most frequently was the female, for a total of 393 touches.

7. The race of the health team member using touch most frequently was Caucasian, for a total of 330 touches.

8. The race using touch most infrequently was the Latin American, with only two touches reported.

9. The location on the patient's body touched most frequently was the hand with 91 touches, followed by the forehead with 54 touches and the shoulder with 41 touches.

10. Locations on the patient's body not touched by any health team members were the fingers, toes, ankle, and genitalia.

11. The age group of the patients most frequently touched was 26 to 33 years old, for a total of 110. The next most frequent age group was 0 to 1 year old, for a total of 63 touches.
12. Age groups with no touch being reported were the 6 to 17 year old patients.

13. The female patient was touched the most frequently, with a total of 239 touches being reported.

14. The race of the patients most frequently touched was Caucasian, for a total of 299 touches.

15. The race of the patients receiving the fewest number of touches was Latin American, for a total of 7.

16. The hospital wards where the most frequent use of touch occurred were the Pediatric Ward, with a total of 110 touches; Labor and Delivery Room, 80 touches; and Intensive Care Units, 80 touches.

17. The hospital wards reporting the most infrequent occurrences of touch were the Psychiatric Ward, 15 touches; Surgical Ward, 7; and Post Partum, 3 touches.

18. The most frequent occurrence of touch by the condition of patients was for those listed as good, for a total of 179 touches. The patients listed as fair had a total of 144 touches.

19. Patients listed as in serious condition were touched most infrequently, receiving only 40 touches.
CHAPTER IV

IMPLICATIONS OF CONCEPTS OF TOUCH FOR NURSING

Nursing had its beginning with the birth of mankind. Throughout its long history nursing has been characterized as a doing profession. Man first cared intuitively for those who were ill. As those nursing gained more knowledge, they began to organize nursing into a more formalized curriculum under the direction of physicians. Perhaps because nursing has always been a doing profession, it has been slow to conduct its own research and scientifically support each act in the practice of nursing. Only in more recent years has nursing begun to identify its own body of knowledge and to develop a scientific basis for the practice of nursing. It is significant to note that touch, one of the most effective therapeutic tools the nurse has employed since the advent of nursing, has received little or no attention in the area of research to determine its importance.

The practice of nursing is a complex and demanding task in many different ways. In the modern hospital nursing involves first caring for the patient’s physical needs. However, the nurse also carries a responsibility for all areas of her patient’s welfare—protecting his privacy and
territorial rights, and being alert to his special fears and anxieties. In caring for her patients, the nurse has a responsibility to the physician. She must understand and carry out his special orders for patient care and keep him informed of his patients through her observations and reports. The nurse must also be concerned with the other health team personnel with whom she works, on her ward and in the hospital. Therefore, the nurse is expected to communicate skillfully and efficiently with a variety of individuals.

She must communicate with the physician in a learned way, utilizing the medical vocabulary effectively. She must learn to communicate in a concise and pertinent manner. In addition to communicating effectively verbally, she must also interpret the physician's nonverbal behavior and select the proper channels and time to communicate her message to him in order that it may be received. This same skill must be exhibited with ancillary personnel as well as with members of departments throughout the hospital and in the community which are involved in the rehabilitation of the patient.

There are numerous factors involved in effective health team communication. Many of these are in areas which are important to any kind of interpersonal communication—the nonverbal modalities. The actual physical space of the hospital itself can facilitate or impede good health team
communication. Tables for four in the staff dining hall, rather than for eight or more, can aid interchange. The felt need of different professions to protect their territorial rights can be detrimental to communication between and among the professions. Segregated and well-defined nurses' and doctors' areas may help each group preserve its territoriality, but may serve as a barrier to nurse-doctor interchange and in turn affect patient care. One profession may fear that another group might encroach on its designated area of practice. Some physicians feel, for example, that the term diagnosis belongs only to them and that the use of nurse's diagnosis is a threat to their territorial jurisdiction.

The use of personal space is certainly a vital factor in effective health team communication. As in any interpersonal exchange, the unspoken message can be more accurately received than the verbal message. For example, if a physician were to ask for the most recent blood pressure reading of his patient and then start walking down the corridor before the nurse could reply, this change in spatial relationship would distort the interpretation of the original question. A patient's concern about having a contagious disease would not be alleviated if the doctor said, "Your disease is not contagious," and yet stood a substantial distance from the patient.
The most important and complex task of the nurse is in the area of communication with the patient. She must be cognizant of their socio-economic backgrounds, their intellectual as well as educational levels. She must also be well versed in the psychopathology the patient may be experiencing. Within a brief period of time the nurse must be able to identify these factors, assess the needs of each patient, formulate and implement an effective care plan which will best benefit the patient. This task is complicated by the nurse's being called upon to do this task effectively for thirty, sometimes forty, patients each day. In addition, the professional nurse is often twenty to twenty-five years of age with only a few years of nursing experience.

It is perhaps in the area of nurse-patient interpersonal relationships that the nonverbal communication modalities play their most important role. It has been pointed out in Chapter II how greatly an illness, change of outlook as far as dependence, and change of environment can affect the patient's reactions. His attitudes toward his personal space and territorial rights can often be exaggerated under these changed conditions. Ordinary fears can be distorted and become real problems to his general state of mind and health. The nurse is the one who has the responsibility for arranging many of the things which can increase or diminish these attitudes and fears.
The compatibility of patients in a ward or room should not be overlooked as an important aspect of patient care. This is an area where the nurse's correct assessment of the patients' personalities has a direct bearing on the patient's general welfare. The nurse can respect and protect the patient's need for having a territory of his own by careful placement of his belongings in his closet and bedside table. The nurse can respect the patient's right to and need for privacy by making him aware of intended nursing care and being certain that these procedures are agreeable to him. In this way he is also an active participant in caring for his needs.

Considering the vitally important yet extremely complex task of the nurse to communicate effectively on so many different levels with such a wide spectrum of people, it seems imperative that this area of nursing be researched. It is the intent that this and more extensive research and experimentation will offer tangible assistance in simplifying the nurse's task and will contribute to the whole body of nursing knowledge. An analysis of the studies on touch presented in Chapter II and of the concepts identified from this analysis seems to raise certain questions which are pertinent to the development of a theoretical construct of touch:

1. What is the essential content of the mechanics of touch that would most benefit the nurse in the performance of her task?
2. What knowledge of the use of touch as a means of communication would most benefit the nurse?

3. How could the nurse use touch as a means of establishing communication?

4. How could the nurse's knowledge of touch as a means of communicating emotions aid in her assessment of the individual patient's needs?

5. What should the nurse know regarding touch as a means of communicating ideas and how could she judiciously use this knowledge?
CHAPTER V

DEVELOPMENT OF A THEORETICAL CONSTRUCT

Definition of Concept

Particular situations involving communication in general and touch communication in specific have been observed and researched in the studies cited in Chapter II. From these particular instances some general observations on the effects and results of communication and of touch can be made.

The term concept can be defined as a universal, an abstraction of particular events or precepts, which is built from observational data and verified by research and repeated occurrence. Concepts provide ways to observe, classify, and guide interactions. To operationalize a concept means merely to make explicit the relation between the event base (a variety of observational data to which a particular concept refers) and the response to it (24, p. 41).

The concepts of touch which have been drawn from the studies of Chapter II have been organized into five broad categories. These categories are the abstract universals of touch communication in the American culture. The concepts included within these categories are listed from the more
general to the more specific, being applied finally to the hospital.

Concepts of Touch

A. Mechanics of Communication

1. Communication is the matrix for all interpersonal and intrapersonal relationships (23).
2. The need and desire to communicate with others is basic to the nature of man (23).
3. Open channels of communication are vital to the individual's ability to reach his maximum potential (23).
4. Culture has an important influence on communication through verbal and nonverbal means (25).
5. Communicative signals must have specific meanings to both sender and receiver if the message is to be understood (22).
6. Language is the significant codified system of verbal communication between people (22).
7. Without language the higher order cognitive processes of thinking, reasoning, and generalizing could not be attained and related (5).
8. The nonverbal communication modalities include para-language, body motion, proxemics, and touch (6).
9. The process of communication can be both observed and experienced (22).
B. Touch as a Means of Communicating

1. The skin provides the most basic and elemental mode of communication—touch (9).

2. In all human cultures physical contact between persons plays an important role in their interpersonal relations (20).

3. Verbal symbols often depend on prior tactile experience to give the symbol its meaning and full significance (9).

4. Touch is the fundamental of being-in-the-world; it is the vehicle par excellence by which man locates himself in time and space (3).

5. Throughout a person's life, the feel and appearance of the body is a basic fundamental of his self concept (18).

6. The refraining from or the avoidance of touching another person can communicate the withholding of affection or social non-recognition (20).

7. Being able to communicate both verbally and nonverbally with the patient is an important aspect of the healing process (2).

8. To be able to use both verbal and nonverbal communication therapeutically is a skill of high order (2).

9. Because illness can intensify certain psychological responses of the patient to territorial rights and interpersonal relations and thereby impede his
ability to communicate, nonverbal communication is often more accurately received than verbal (17).

10. Touch can greatly facilitate the healing process or can be detrimental to it, depending on the individual case (19).

11. Patients who must be isolated experience sensory deprivation in varying degrees (1).

C. Touch as a Basis for Establishing Communication

1. The newborn baby first communicates with his environment through the touch of his mother's flesh and of the obstetrician's hands (9).

2. The role of the mother is fundamental to the emergence of communication in all its modes (25).

3. Two vitally important influences on the child's ability to communicate are his home and cultural environments (25).

4. The baby's perception of the world is built on and initially shaped by tactile experiences (9).

5. The baby develops confidence in the world and trust in people through early tactile relations (9).

6. The baby begins to communicate with himself by feeling and exploring his own body, thereby developing his own body image (18).

7. This body image is reinforced or negated by pleasurable or painful tactile experiences with other human beings (18).
8. Disturbed communication in childhood can cause many difficulties and disorders in communication as a skill (9).

9. Those who are inadequate in verbal communication can often be reached by experiences on the sensory level, such as seeing, feeling, tasting, hearing, which later can be translated into verbal form (11).

10. The patient often places the nurse in the mother role, partially due to her potentially soothing touch, which is reminiscent of that of the mother (19).

D. Touch as a Means of Communicating Emotions

1. The cooperation necessary for social conformity is not possible without affection and tactile stimulation (7).

2. Touch can express many of a person's inner feelings and reactions and convey these feelings to another (20).

3. Only through communication can man's greatest need as a human being, the need to love and be loved, be reached (23).

4. Love cannot arise in a human being without touch and sensuous arousal (7).

5. The first positive instinctual behavior toward a desired object consists in diminishing the distance between one's self and the object and finally in the wish to swallow it (8).
6. In the American society, touch is generally equated with sexual intent, either on a conscious or less-conscious level (13).

7. The individual's identity depends largely on his having someone who knows and accepts him as he is (12).

8. Body contact by one's self and with others is an important means of expanding human awareness (18).

9. The most direct and literal way of encountering another person and of disclosing one's self to another is through touch (12).

E. Touch as a Means of Communicating Ideas

1. Communication is indissolubly bound to the learning process (11).

2. The child's early tactile experiences enter into and shape his subsequent learning abilities, in the areas of speech, cognition, symbolic recognition, and especially in his capacity for more mature tactile communication (9).

3. Man needs some gratifying communication in order to learn, grow, and function in a group (22).

4. Curtailed communication will eventually produce serious disturbances in an individual (22).

5. Touch is essential for the physical and mental growth of the infant (9).
6. Open channels of communication are more important to the freedom of the mind than any other component of the problem solving mechanism (22).

Definition of Construct

In an attempt to organize and establish relationships in the data collected and presented in Chapter II, a number of concepts have been identified. Thus, the results and observations of these specific studies were reduced to a limited number of generalizations which could be more clearly and closely related to this study. The inferences which were drawn from these concepts and from the direct observations of this study, the results of which have been presented in Chapter III, can be reduced to a still higher level of abstraction. This higher level is referred to as a construct, since it is "constructed" from concepts, which are at a lower level of abstraction (24, p. 41). This construct of touch is a theoretical abstraction of observed facts, giving the general meaning which they are intended to convey.

Theoretical Construct

The act of touch is an integral part of nursing intervention and is to be used judiciously between nurse and patient, health team and patient, and health team and nurse as a fundamental mechanic of communication, a vital means of communicating, a basis for establishing communication, and as an important means of communicating emotions and ideas.
The purpose in making observations of patient-nurse interaction in specific situations and in first establishing concepts and then an abstract construct of touch is that these can be used to determine the circumstances in which touch can be used most beneficially. The construct of touch, as stated above, cannot be related to specific and particular situations. It is an abstract definition based on observed situations. If these observations are to be validated and utilized in research, they must be defined in operational terms.

These definitions form the necessary basis for carrying out further research and for verifying and confirming the theoretical construct of touch.

Propositions

1. The greater the patient's sense of isolation and sensory deprivation, the greater his need for relatedness to others through touch.

2. The greater the patient's altered body image, the greater his need for acceptance through touch.

3. The greater the patient's feeling of depersonation, the greater his need for identity through touch.

4. The greater the patient's regression, the greater his need for communication through touch.

5. The greater the patient's anxiety, the greater the nurse's responsibility regarding the appropriateness of the use of touch.
6. The greater the patient's dependency, the greater the nurse's responsibility regarding the appropriateness of the use of touch.

7. The greater the patient's self concealment, the greater his need for communication through touch.

8. The greater the patient's need for privacy, the lesser his need for touch.

9. The greater the patient's need for territorial imperative, the lesser his need for touch.

10. The lesser the patient's self esteem, the greater his need for confirmation through touch.

11. The greater the patient's sense of rejection, the greater his need for acceptance through touch.

12. The greater the patient's fear of death, the greater his need for relatedness to others through touch.

Discussion

Although many circumstances arise necessitating the nurse to exercise her judgment in the use of touch, there appear to be four alternatives she considers:

1. To use touch as an effective means of communicating a message.

2. To refrain from using touch as being unnecessary for effective communication.

3. To refrain from using touch as being inappropriate or anxiety-producing to the patient.
4. To refrain from using touch as being inappropriate or anxiety producing to the nurse.

**Sensory Deprivation**

It was found in the survey of current practices of touch that the wards (Pediatric, Labor and Delivery, and Intensive Care Units) creating the greatest amount of sensory deprivation reported the most frequent occurrence of touch. Studies cited in Chapter II indicate the need sensory deprived patients have for tactile contact (5, 26, 10). Individuals experiencing sensory deprivation responded favorably when tactile contact was instituted. The use of touch appears to aid the patient in orienting himself to time and place, as well as lowering his anxiety and reducing the number of somatic complaints. Patients further benefited by reestablishing a relatedness to others. When the nurse identifies patients that are experiencing a sense of isolation or sensory deprivation, her most effective channel of communication is touch.

**Altered Body Image**

The body image is developed from infancy and remains an essential factor for self-actualization throughout one's life. The feel and appearance of the body is a basic fundamental of a person's concept of himself. Conflict arises within a person when there is a discrepancy between the actual body image and that maintained by the ego as
ideal (14, p. 152). Although no planned observations were held of health team interacting with altered body image patients, the survey found less frequent touch occurring with the patients listed as serious and critical. It was also noted that the more identical the patients were to the health team (regarding age, sex, race, etc.) the more frequent touch occurred. It might be assumed that the more altered the patient's body the more difficulty the nurse will have in touching the patient. However, the patient is experiencing conflict and feelings of rejection and is in need of acceptance as he now exists. The nurse must, therefore, work through her own feelings and communicate this acceptance of the patient by the most effective means—touch.

Depersonation and Regression

Maintaining one's individuality in a hospital is a very difficult and frustrating experience. The most frequent way patients react to this loss of identity is through regression. The inability to maintain his individuality or territory creates such anxiety that the patient withdraws and delegates the responsibility of making decisions regarding his welfare to the health team. Because of this, the patient's world becomes simpler and more childish (16). His social setting is now similar to that of his childhood. Nurses, aware of the patient's feeling of depersonation and subsequent regression, must communicate with the patient in the language
that was most effective in his childhood—touch. It was the first language of communication and the one that is the most long remembered (9, 23). Nurses often have difficulty accepting this child-like regression and dependence of patients. However, articles cited in Chapter II report the necessity of this regression for the patient's successful recovery (16). The patient has the right to be as ill as he needs to be, and the nurse has the responsibility to meet the needs of the patient.

Anxiety

In many situations the nurse cares for patients experiencing anxiety. This may vary from a patient who is anxious regarding a pending laboratory report to a patient on a psychiatric ward experiencing psychotic anxiety.

The nurse's responsibility regarding the appropriateness of touch is very great. In many instances the patient's defense mechanisms are such that if touch is used by the nurse the patient's defenses will collapse leaving the patient with the inability to cope with his crisis. A touch may cause a complete psychotic break. There are times, however, when tactile contact becomes the patient's only link with reality, helping maintain his sense of reality (4). It is a way of reassuring the patient of his existence and continuity. The survey found very little touch occurring on the psychiatric wards. However, studies cited in
Chapter II (3, 4) indicate the need psychiatric patients have for touch, although it was pointed out that touch may be misinterpreted 50 per cent of the time (4).

Dependency

Patients on medical-surgical wards, as well as psychiatric wards, may develop a dependency upon the health team. In many instances this is a necessary component of a patient's successful recovery. However, the degree of dependency may become so extreme that the patient is unwilling to resume responsibility for his own behavior. Nurses, in the past, have vacillated between making patients pathologically dependent upon them to meeting only the most superficial physical needs. As stated previously, touch can be misinterpreted 50 per cent of the time (4); therefore, the nurse's responsibility regarding the appropriateness of the use of touch is greater. Touch can be a most beneficial therapeutic tool with a dependent patient. It is used frequently by psychiatrists and psychiatric nurses as a means of guiding the patient back to independence (4, 12). However, at all times touch should be used judiciously.

Self Concealment

Patients who practice self concealment, for whatever reason, have a need for communication. The more self concealment a patient does, the more stress he is experiencing (12). The basic purpose of all human activity is the
protection, the maintenance, and the enhancement, not of the self, but of the self concept (12). Man wants his true self to be revealed to others. In order to do this fully and freely, the disclosing person must trust that he is in no danger when he is unguarded, defenseless and open. It takes a great deal of courage to give that much of one's self (12).

A direct and literal way of encountering another person is through touch. Those who communicate through touch can get closer and understand one another better than when limited to verbal disclosure (12).

The bedside manner has been criticized by Jourard (12) as having as its function to reduce the probability that patients will behave in ways that are likely to threaten the nurse. The bedside manner also prevents the patient from revealing information to the health team personnel which could be helpful in meeting the total needs of the patient.

By creating a climate where a patient feels safe to practice self disclosure the nurse and patient become partners in the goal to return the patient to health. Touch, then, is the most effective means of communicating with the patient practicing self concealment.

Privacy

The architecture of hospitals, the daily routine, and the frequently large number of health team personnel
preclude the patient's chance for privacy. The patient's territory, his personal belongings, and oftentimes his body are invaded without permission by members of the health team. Patients often become angry, irritable, or depressed. They are experiencing sensory overload, and this may be as stressful to them as sensory deprivation.

**Territorial Imperative**

Along with the patient's need for privacy is his need for territorial imperative. His world has become his bed, bedside table, and closet, and these areas are regularly invaded without permission. The need for privacy and territorial imperative are greater in some patients than in others. The nurse, cognizant of the individuality of each patient, should be alert for clues that privacy and territory are important needs to certain patients. She then has the responsibility for meeting these needs, which may frequently include knocking on the patient's door and waiting for permission before entering, explaining the procedure to be done to the patient and obtaining permission before approaching the patient (2). Refraining from touching the patient is often the most appropriate means of communicating with the patient.

**Self Esteem and Rejection**

Patients from various socio-economic levels, ages, race, and physical conditions are often experiencing loss of
self esteem or sense of rejection. The hospitalization and frequently the modified patterns of living necessitated by the diagnosis cause the patient to have feelings of rejection and inferiority. These patients have a need for confirmation of their worth, as well as a need for acceptance as they now exist. Nurses, along with many members of the health team, tend to impose their values, biases, and prejudices upon others. The refraining from touching may do great harm and further confirm an individual's sense of worthlessness (21). Conversely, the touching of another may increase his self esteem—especially if the touch is by one whom he admires and respects.

The survey of touch found that health team personnel used touch judiciously. They did not touch equally patients of all races, ages, and conditions at both hospitals. The nurse, therefore, has the responsibility for initiating the use of touch as an effective means of confirming a patient's worth and accepting him as he is—whatever his state, and regardless of the nurse's values, biases and prejudices.

**Death**

The patient's fear of death increases his need for relatedness to others through touch. The patients admitted to hospitals inevitably fear the possibility of death. For some, it becomes a reality. Küber-Ross found that health team personnel often have a fear of death and are frequently
unable to render the support and empathy that is so necessary to the patient at this critical period (15). As noted in the survey, the more seriously ill patients were touched less frequently than those listed as good and fair. Also, the greatest occurrences of touch were with the younger age group and on wards with the lowest mortality rate. The fact that touch also occurred frequently in the Intensive Care Units may be interpreted as the health team's denial that one of their patients will die and not that they are providing the emotional support necessary for the dying patient.

The nurse, whenever she cares for a patient who has a terminal prognosis, has the responsibility for meeting his unique set of needs. Anticipation of death—the ultimate separation—forces the patient to cling tactually not only to the world, but to the unconscious residuals of the mother symbiosis—the nurse (3, p. 127). The nurse, therefore, must communicate with the patient through touch.


20. Montagu, Ashley W. F., "The Sensory Influences of the Skin," Texas Reports on Biology and Medicine, II (Summer, 1953), 291-301.


CHAPTER VI

SUMMARY, RECOMMENDATIONS, AND IMPLICATIONS

Summary

The problem of this study was the development of a theoretical construct of touch based on a survey of current practices and consistent with accepted theories of touch as they related to nursing.

The survey of literature identified the importance of the use of touch as one means of nonverbal communication. From the studies of Jourard, Ruesch, Rubin, and others, the major concepts of touch were identified. These were arranged into five major categories: mechanics of communication, touch as a means of communicating, touch as a means of communicating emotions, touch as a basis for establishing communication, and touch as a means of communicating ideas.

The survey of current practices of touch conducted in both a private and a charity hospital in Dallas, Texas, revealed that from 180 observational sessions held, 101 sessions recorded from 1 to 20 incidents of touching.

The survey included approximately 540 patients and 900 health team personnel for a total of 452 touches, or 8 out of 10 patients visited by health team personnel were
touched. The health team members using touch most often were registered nurses, touching almost twice as often as the next highest group, junior nursing students. The 18 to 25 year old, white female was the age, race, and sex touching most often. The portions of the patient's body most frequently touched were the hand, forehead, and shoulder. Patients most frequently touched were the 26 to 33 year old, white female.

The wards recording the greatest occurrences of touch were the Pediatric, Labor and Delivery, and Intensive Care wards. The patients listed in good and fair conditions were touched 70 per cent more often than those more acutely ill. The health team at Parkland Memorial Hospital used touch significantly more (.001 level) than the health team at Presbyterian Hospital.

The findings indicated that an overwhelming majority of patients were touched in some fashion by some members of the health team, and that many circumstances such as age, race, sex, and socio-economic background influenced its use.

From this data and based on the concepts of touch, the following theoretical construct of touch was developed:

The act of touch is an integral part of nursing intervention and is to be used judiciously between nurse and patient, health team and patient, and health team and nurse as a fundamental mechanic of communication, a vital means of communication, a basis for establishing communication and as an important means of communicating emotions and ideas.
A set of supporting propositions is offered as one step toward developing a theory of touch as it relates to nursing.

**Recommendations**

Based on data presented in Chapter II and conclusions formulated from Chapters III and V, the following recommendations are offered:

1. That the theoretical construct and the supporting propositions be tested for confirmation.
2. That a study be conducted to determine how the hospitalized patient perceives touch.
3. That a study be conducted to determine whether there is a correlation between self disclosure and the use of touch by health team personnel.
4. That a study be conducted to determine whether health team personnel perceive themselves as utilizing touch and how they react to being touched.
5. That a similar study be conducted utilizing the concepts identified and applying these to other helping professions.
6. That this study be replicated in other cultural settings such as Italian, French, Oriental, and South American.

**Implications**

The theoretical basis for nursing practice is continuously evolving, and new concepts are constantly being challenged and tested as they evolve.
The implications of this study are that for the first time an attempt has been made toward identifying the concepts of touch and for improving the quality of communication between health team members and patients. The findings have implications for hospital administrators, who have the responsibility for developing physical facilities and satisfactory environments, as well as the quality of daily care given to each patient.

The findings also have implications for nursing and medical school faculties, who have the responsibility for teaching students that the science of healing is also an art and that it is the responsibility of each practitioner to communicate by the most effective channel to each patient regardless of personal values and biases.

The findings also have implications for nursing administrators, who have accepted the responsibility for identifying and meeting the total needs of their patients whatever the circumstances.

The findings have implications for each individual health team member who desires to establish relatedness with his patient in order to be of maximal benefit.

Finally, there are implications for the nurse scientist who desires to test the construct and propositions as an additional contribution toward developing a theory of touch and establishing nursing as a science.
Dec 1, 1969

Mr. C. Jack Price, Administrator
City County Hospital District
5201 Harry Hines Blvd,
Dallas, Texas 75235

Dear Mr. Price:

As part of the requirements for a doctorate in Education at North Texas State University, I am preparing to gather data for my dissertation. The dissertation is concerned with the use of touch by the health team personnel with hospitalized patients as a means of nonverbal communication.

Data will be collected by the observation method for a two week period in seven randomly selected 30 minute sessions each day on a Medical-Surgical, Obstetric, Labor room, Recovery room and Psychiatric ward. Similar observations will be conducted at a private hospital. The activities of the observer will be unknown to the health team personnel.

There will be no expense to the hospital, inconvenience nor disruption of patient care activities.

I have discussed my data gathering methodology with Mr. Paul Gross of your staff and he has indicated approval.

I would very much appreciate receiving administration's approval to conduct this study at the Dallas County Hospital District. If this approval is granted I would prefer to begin the collection of data around February 1, 1970.

Kathy Barnett
Doctoral Candidate, School of Education

Jack Cross, Ed.D., Committee Chairman
School of Education
December 3, 1969

Miss Kathy Barnett
1800 Scripture Street
Apartment No. 1
Denton, Texas 76201

Dear Miss Barnett:

This will acknowledge receipt of your request of December 1st, to conduct a study at the Hospital District in association with your dissertation.

Please consider this your formal approval to proceed with your collection of data as specifically outlined in your letter beginning, February 1st, 1970.

Very truly yours,

C.J. Price, FACHA
Administrator

cc's - Mr. Paul A. Cross
Mrs. Elizabeth L. Wright
December 9, 1969

Miss Kathy Barnett  
1800 Scripture  
Denton, Texas  

Dear Miss Barnett:

In reply to your letter of December 1 outlining a partial fulfillment of your requirements for a Doctorate in Education, Presbyterian is happy to have you do these observations as outlined in paragraph 2 of your letter.

By copy of this letter, Nursing Service is asked to work with you on the scheduling of whatever times will be appropriate.

Good luck on your old-fashioned approach to nursing care.

Cordially yours,

Rod Bell  
Administrator

RMB:DR

CC Mrs. Barbara Woodard  
   Director  
   Nursing Service
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**Miscellaneous**

Blue Cross Hospitalization Insurance Actuarial Department, Dallas, Texas. Telephone conversation of June 6, 1969.
