A STUDY OF INCIDENTAL TEACHING OPPORTUNITIES THAT OCCUR DURING VENIPUNCTURE ACTIVITY

by

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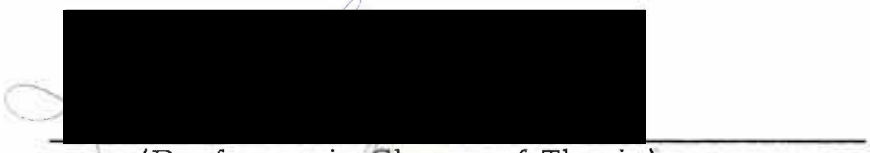

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CHAPTER I

INTRODUCTION

Introduction to the Problem

There is a consensus that the concept of nursing is not static, but is sensitive to the changing structure and patterns of behavior in our complex and dynamic society. Technological and scientific advances are profoundly affecting the patterns of disease, and thus the tasks of health services. The emphasis is on more and better comprehensive health care for the American public, especially in the realms of prevention, early detection and health maintenance. Today a special urgency dictates constant reappraisal of the role and function of nursing. The nursing profession must continue to meet the challenge that exists in helping to close the gap between what is known and what can be done about helping people to live healthier and more productive lives during a longer life span. (28, 49, 51, 54)

During recent years, the nursing profession has become keenly aware of the potential of scientific inquiry as the most effective method available for finding unity, order, or relationships that can be utilized for establishing reliable guides for nursing action. Furthermore, such guides can never be considered final, but are subject to revision and modification as further research findings broaden and deepen understanding. The momentum in nursing research is

steadily accelerating.

Although a majority of nursing research studies have, in the past, focused on administration and nursing education rather than on patient care, the presently reported studies do show an ever widening spectrum and diversity of nursing research interests. Creative imaginations are constantly conceptualizing new relationships. There is evidence of a trend toward research that offers the ways and means for improving and evaluating the quality of nursing care. If nursing is to achieve the ultimate goal of developing the highest quality of nursing care possible for the public which it serves, much remains yet to be done in analyzing the components of nursing care.

Abdellah and Levine state that:

> In the area of patient care, criteria need to be identified and developed that measure the effect of nurse actions upon physical and emotional care, teaching of patients, observation and communication of observations to nurses and others, teaching and supervision of nursing personnel, and participation with health team members in planning community health programs. (4)

Comprehensive and definitive analyses of some of the recurrent interactive aspects of nursing care activities can undoubtedly enhance the precision with which the universal elements of nursing care can be more clearly delineated and defined.

Statement of the Problem

One of the primary problems that exists in trying to determine the scope and nature of nursing, is the difficulty of differentiating between the extent and proportion of the overt and covert aspects of nurse-patient interaction. (3, 12, 60) The tendency has been to give priority, in categorizing nursing activities, to the most readily observable aspect of the procedure that is being performed at the time a study is being conducted. This has been particularly true in the numerous studies and surveys that have been conducted to determine what was being done, by whom and the extent of time spent on various categories of functions and activities. (14, 24, 57, 62)

The more recent studies have broadened into undertaking the analysis of the purpose and outcomes of nursing activities and how they relate to the quality of nursing care and to patient welfare.(4, 51) It appears that the pendulum of nursing research has swung from the overt to the covert, from the quantitative to the qualitative study of nursing.

Throughout the nursing investigational studies, regardless of the specific purpose or focus, recognition, at least by inference, is usually given to the fact that nursing practice is multidimensional and complex. This interrelatedness is not a new concept. Nursing traditionally has been identified as both an art and a science. There

is a universal lack of unanimity as to the degree and proportion of each of these broad elements that comprise nursing. (60)

Simmons and Henderson point up the difficulties in trying to identify nursing needs, by stating:

> . . . when it comes to assessing the health needs of individuals, their varying situations produce an infinite number of specific needs in endless combinations. The person who can meet each need must be present at the time the patient senses it and he must have a relationship with him that enables the one in need to accept help from another. (51)

There may be situations in which, what is obvious, may actually be secondary to the total outcome of what is being done. What is being done may be markedly influenced by the concomittant interrelations that are occurring. Frequently, the "hidden" underlying processes that are transpiring may be more relevant to the quality of care and the ultimate outcome than the procedure per se.

It has long been recognized that the nurse has a definite teaching responsibility in relation to disease prevention and the preservation of health. (15) This teaching aspect of nursing may represent a carefully conceived and extensive educational undertaking or might occur as an adjunct to another service in nursing care. (23) More and more emphasis is being placed on this teaching role of the nurse. However, there is a dearth of studies that analyze the incidental teaching that is an ongoing characteristic of the nurse-patient relationship. (6)

Likewise, recent nursing literature has placed much emphasis on the importance of communication skills in nursing. (54) Dorothy Smith proposes that "systematized communication may well be one of the most important criteria that can be used in evaluating nursing care." (53) The most common form of communication with patients is verbal. When verbal communication is occurring simultaneously with nursing procedures, the conversational content may or may not be directly related exclusively to the activity. A critical examination of the conversational content may reveal that the information the nurse is presenting is a form of teaching. Although it may be of a covert, rather than an overt nature, such incidental teaching may be highly significant to the individual seeking information.

In discussing the knowledge distinctive to the professional discipline of nursing, Wiedenbach states it "is embedded in what the nurse does and in why and how she does it; it may be isolated only through close examination of the elements within the clinical situation in which the nurse is functioning." (60) Conant conceives of this professional distinction as being a fertile area for research. She states:

> Although nursing as one of the practice disciplines shares many similarities with other helping professions, there are differences which may not only limit the applicability of knowledge from other disciplines but also may provide an excellent opportunity for nursing to contribute new knowledge... nurses can both talk and do... We can teach by

> demonstration as well as explanation. We can express our desire to help not only verbally, but also by actually being helpful in an immediate "doing" way. The skillful performing of a technical procedure may not only have a specified physiological effect on the patient, but also give the nurse a valuable opportunity to develop rapport and open the way for further communication with the patient. (17)

Facts are needed that could be relevant to and incorporated into components of a model system for nursing practice theory. (4, 51) There is need for studies of nursing activities that are procedurally centered, with attention being given to the covert aspects (such as incidental and spontaneous teaching) that are interwoven into the nurse-patient interaction.

Significance of the Problem

According to Simmons and Henderson, "patient-centered, goal-determined, variable-controlled, and experimental studies in nursing functions hold much more promise for the future of nursing than do the staff-centered, time-activity, survey-type studies of which there have been so many." (51) Nursing research leaders agree that focus of research efforts should be concerned with patient care. (4, 30, 36, 43, 51)

Systematic knowledge is needed to improve nursing practice. (4) Much has been done to date investigating nursing functions, activities, and personnel utilization. These studies have helped

nursing come a long way toward formulating statements of functions, but much yet remains to be done. (31)

Traditionally, because nursing is predominantly concerned with care of the sick, studies have been conducted within the framework of illness. Authorities are beginning to postulate that "all nursing functions should be derived from a study of the normal human being," (36) or that patient's requirements for nursing service may range from no requirements (a level of wellness) to a maximum of service. (4, 20) It is interesting to note that Florence Nightingale related nursing to the well and to health, for in her Notes on Nursing she wrote:

> The very elements of what constitutes good nursing are as little understood for the well as the sick. The same laws of health or of nursing, for they are in reality the same, obtain among the well as among the sick. (42)

Straub proposes that care starts "wherever we find ourselves practicing the profession of nursing." (54) As Schulz and Rudick see it, "The most important patient is the one who is up and about... The most important job is to keep him that way as long as possible." (49) In discussing development of a scale to measure the nursing care needs of patients, Abdellah and Levine suggest that: "A wellness scale would be valuable not only as a criterion measure for many different kinds of studies concerned with assessing the impact on patient welfare of different methods, procedures, or programs, but also as

a tool for planning and evaluating patient care." (4)

It would seem appropriate, therefore, that, inasmuch as wellness is what nursing is striving toward, evaluating what is going on as near as possible to the point where wellness exists and yet nursing interaction is occurring, might offer enlightenment that can be meaningful.

That nursing has a responsibility in the prevention of illness and disease cannot be denied. Heidgerken and others agree that health teaching is but one of the means by which nursing can contribute to the general well-being of the total society. (21, 28, 29, 49) It is the opinion of Straub that:

> Teaching is inherent in everything that the nurse does for or with a patient and his family. We, as nurses, do not have a choice between teaching or not teaching; our only choice is whether the teaching will be a positive learning experience or a negative, haphazard experience for the patient. (54)

Straub further cites that "Eleanor Lambertson has said that there is relatively little evidence that nurses are as perceptive about patient teaching as they are of other needs of patients and their families." (54) Inasmuch as teaching is an obligation of nursing, a focus on teaching opportunities that arise in a relatively simple setting under relatively stable conditions may shed some light on the extent and nature of teaching that accompanies a procedural skill.

Abdellah and Levine state that in nursing research, "scientific

inquiry begins with observations of seemingly unrelated phenomena. These observations are then organized into intelligible systems that show the relationships among the phenomena." (4) An analysis of one covert aspect (teaching) of an overt (venipuncture) nursing activity, under relatively stable conditions, in a homogeneous setting, involving comparatively well individuals, may elicit new facts and relationships that could contribute to the growing body of knowledge concerning the nursing practice theories.

Purpose of the Study

This study was undertaken for the purpose of attempting to identify and analyze the extent and frequency of incidental, spontaneous teaching opportunities that occur while the venipuncture procedure was being performed on 100 donors at a blood center.

The specific aims of this study were to seek answers to the following questions:

1. How often do teaching opportunities occur while a nurse is performing venipuncture procedure in a blood center?

2. What is the nature of the information that donors seek?

3. What is the extent of commonality of subject matter in the teaching opportunities that do occur?

4. Is there any difference between the subject matter that is sought by a first-time donor and a repeat donor?

5. Do teaching opportunities occur which are not noticed or are not followed up by the nurse?

Limitations

1. This study is limited to data collected by one nonparticipant nurse-observer, who recorded portions of conversation that transpired between a donor and the nurse who was performing venipuncture at the Blood Center of the Pacific Northwest Chapter of the American National Red Cross. Only those portions of conversation that involved possible teaching opportunities were recorded. For purposes of this study, information given to the donor in the form of instruction essential for the performance of the procedure was not considered as teaching. Conversation diversionary or desultory in nature was not recorded.

2. This study is limited to observations of 100 donor-nurse interactions that occurred during clinic hours when the observer was present. Observations were made on six separate occasions during the period from May 2 through May 16, 1967.

3. Observations in which any part of the conversation was inaudible to the observer, in which observer's presence was cause for comment from the donor and/or nurse and in which interruptions occurred which diverted the attention of the observer were classified as incomplete observations.

4. No attempt was made to:

   a. Identify the individual nurse's communication and teaching skills.

   b. Differentiate nurses according to such variables as age, type of basic nursing preparation, nature of experience, status of licensure or length of experience with venipuncture procedure.

   c. Explore causal relationships in situations in which possible teaching opportunities were not followed up by the nurse.

   d. Assess outcomes of teaching that might have transpired.

5. The findings of this study are pertinent only to this study.

Assumptions

For purposes of this study, it was assumed that:

1. Donors accepted for venipuncture could be considered well (healthy) individuals.[1]

2. The donor-nurse interaction, in the majority of situations would transpire as set forth in "Venipuncture Procedure" instructions as printed on pages 20 through 27 in the Blood Program Nursing

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[1] A history and physical procedure is used to eliminate donors who do not qualify medically.

Manual. (9) (Appendix A)

3. The procedure instructions cited above were adequate and comprehensive for the purpose stated.

4. Teaching opportunities would occur intermittently during only a portion of the donor-nurse interactions being observed.

5. Not all donor-nurse interactions would elicit teaching opportunities.

6. Venipuncture as performed by Red Cross nurses is within the legal practice of nursing. (9, 35)

Definitions

The following definitions are pertinent for the purposes of this study:

Complete Observation. Donor-nurse interaction in which complete verbal exchange was heard by observer.

Donor Status. Term used to designate individual's blood donation standing at the Blood Center, as to whether this visit is a first-time or repeat event.

First-time Donor. A donor who has never given blood at the Pacific Northwest Chapter of the American Red Cross Blood Center.

Follow-up. Verbal communication of the nurse specifically related to the preceding inquiry from a donor seeking information.

Incomplete Observation: A donor-nurse interaction in which:

a) a portion of the conversation was inaudible to the observer; b) observer's presence was cause for comment from the participants; or c) interruptions occurred which diverted the attention of the observer.

Interaction. Communication that transpires between donor and nurse during donor's presence in the donor room. This term is, on occasion in the body of the study, used interchangeably with observation and teaching opportunity.

Observation Classification. Designation given to system of categorizing the investigator's observer data as to completeness of the audibility of the interaction and/or occurrence of teaching opportunity. There are two main classifications: incomplete and complete. The complete observations are subdivided into Teaching and No Teaching whenever applicable.

Personal Health. Specific information requested by a donor concerning normality or deviation from normality of mental and/or physical functioning of the individual requesting the information.

Public Health. General question concerned with organized community health programs (other than the Red Cross programs).

Repeat Donor. A donor who has given blood previously at the Pacific Northwest Chapter of the American Red Cross Blood Center.

Teaching Incident. One specific event, centered around one category of teaching that occurs within a teaching opportunity.

Teaching Opportunity. An occasion that arises wherein and individual seeks information concerning personal health, the Red Cross programs, physiology and/or chemistry of blood and circulation, public health programs or mechanics of the venipuncture procedure. As stated in limitations of this study, instruction given by the nurse that is essential for the performance of the procedure is not included.

Transcript/Transcription. Typewritten copy of the communication that occurred between nurse and donor, that merited consideration as a teaching opportunity.

Procedure for Solution

Sources of data: Primary source of data was the transcriptions of shorthand recordings made by a nonparticipant nurse-observer of verbal communication between 100 donors and the nurses who were performing venipuncture at a Red Cross Blood Center.

The secondary sources of data were obtained from the literature and studies related to nurse activities, functions and classification studies, qualitative studies in nursing, general considerations in observational studies and communication and teaching as components of nurse-patient interaction.

Steps for Carrying out the Study

1. A review of the literature was conducted to establish a frame of reference.

2. The purposes of the study were established.

3. Limitations were delineated.

4. Assumptions were formulated.

5. Appointments were made with the Director, the Director of Nursing Services and the Chief Nurse of the Blood Center of the Pacific Northwest Chapter of the American National Red Cross. The purposes and method of the study were explained and administrative clearance for the study was secured.

6. A period of time was spent by the observer for acclimatization and orientation at the Blood Center, during which no data were collected.

7. A form was developed for recording observations. The form was reviewed by a group of registered nurses and revised as necessary.

8. A pilot study was conducted on April 25, 1967 in which 18 donor-nurse interactions were observed. Verbal communications pertinent to teaching opportunities were recorded. The results indicated that the transcriptions prepared by the observer were appropriate for the purposes established. Furthermore, the findings lent

themselves to tabulation and to the construction of tables for depicting the data.

9. Periods of observation were arranged. A total of 100 donor-nurse interactions was observed on six separate days.

10. Typed copies (in triplicate) of transcriptions were prepared within 24 hours, from shorthand notes taken of teaching related conversation.

11. A complete set of copies of the transcriptions was submitted simultaneously to a panel of three nurse-educators, who, working independently, identified whether a teaching opportunity occurred and if so, indicated into which teaching category it should be classified.

12. Results of the decisions of the panel members were analyzed for consensus.

13. The study was described, the data were compiled, tabulated and interpreted.

14. The study was summarized, conclusions drawn and recommendations were made.

Overview

The remainder of the thesis is as follows:

Chapter II contains a review of the literature and studies pertinent to the present study.

Chapter III gives an account of the setting, the procedure, development of the study, and the findings.

Chapter IV is the summary with conclusions and recommendations for further study.

CHAPTER II

REVIEW OF THE LITERATURE AND RELATED STUDIES

Introduction

In a review of completed research in nursing, Simmons and Henderson have identified three broad content areas: 1) nursing practice, 2) nursing education, and 3) nursing administration. (51) Abdellah and Levine concur with this general categorization and specifically describe nursing practice studies as those:

> . . . concerned with the actual provision of care to patients, whether this be direct, as in the giving of an intravenous infusion, or indirect, as in preparing nurses' notes. . . . The range of subject matter available for studies of nursing practice is enormous and can include industrial engineering studies of equipment and supplies as well as sociological studies of interpersonal relationships among members of the nursing team. Such studies can be very broadly conceived--as, for example, a study of the total system of providing nursing care to patients--or they can be limited to a very narrow area such as a study of one nursing procedure. Studies concerned with nursing practice can have the greatest impact on patient care, since they are concerned with matters that have direct and immediate consequences on patients. (4)

It is with a facet of nursing practice that this study is concerned. To establish a frame of reference, the literature was searched and reviewed. Discussion of these readings is presented under four general headings: 1) activity, function and classification studies,

2) qualitative studies in nursing, 3) general considerations in observational studies, and 4) communication and teaching as components of nurse-patient interaction.

Activity, Function and Classification Studies

Numerous early nursing studies were predicated on the urgency for determining the needs for personnel, assigning personnel to meet these needs, evaluating the performance of personnel, assessing personnel utilization and measuring the turnover of personnel. Research was also directed toward development of patient classification categories that could be adapted for use in planning the assignment of nursing personnel. The impetus for such studies correlates closely with the discrepancies that exist in the nursing personnel available to meet the increasing demands of the public for medical care, as well as the persistent escalation in nursing service costs.(4, 51)

The need for resolution of the imbalance of supply and demand grew to perplexing proportions during the decade between 1940 and 1950. As an expediency, research drew heavily upon existing methodological approaches that had proved efficient in industry and other disciplines. Such techniques as audits, performance evaluations, cost accounting and work sampling were adapted for assessing staffing needs. These task-centered, time-and-motion type studies provided a beginning basis for developing comprehensive patient care

planning, team nursing plans and as instruments for gathering data for administrative purposes, as well as for further research projects. (4, 36, 51)

Many of the methodological tools of research being used in recent and current nursing situations for the study of nursing still utilize elements of the time-study approach developed by industrial engineers. Abdellah and Levine summarize the framework of such tools as constituting:

> . . . (1) a scheme of classification of the activities of nursing personnel, and (2) a method for determining the amount of time personnel devote to each of the classes of activities during the period of study. The method does not attempt to evaluate quality of performance and is focused directly on what is being done, not why or how it is being done. (4)

One of the first studies which describes tasks performed by nursing personnel, was the classic by Johns and Pfefferkorn. This study was published in 1934 under the title, An Activity Analysis of Nursing and listed some 750 tasks performed by nurses. This was essentially an educational survey whose purpose was to establish guidelines for planning nursing theory curricula content, but included a full-length time study of nursing activities performed by student nurses. (34)

In 1948, the National League of Nursing Education published the results of the use of a patient rating method used in a study of nurse staffing patterns. The study was published as, A Study of

Nursing Services in One Children's and Twenty-One General Hospitals. It utilized the observation method along with a questionnaire and interviews with hospital personnel and hospital administrators. The rating method was based on the following four classifications: 1) degree of illness, 2) extent of activity, 3) number and complexity of treatments and procedures, and 4) nature of adjustment. The pediatric segment of this study included a fifth classification covering teaching and rehabilitative needs. The purpose of the study was to secure information on the type of nursing personnel giving patient care, the amount of nursing care needed per patient, and the proportion of hours of care which could be given by professional and non-professional workers. (40)

In 1950, the need for intensive investigation of nursing was so clearly recognized by the profession that a program for the study of nursing functions was authorized by the House of Delegates of the American Nurses' Association. (8) During the next ten years, some thirty research studies were carried out regarding nursing functions. These studies were first reported in a pamphlet, Nurses Invest in Patient Care, published by the American Nurses' Association. (10) Later, Hughes, Hughes, and Deutscher synthesized the findings of these studies and published them in book form, Twenty Thousand Nurses Tell Their Story. Fifteen of these studies used nursing activity analysis as the method, or as one of the methods, for

investigating the work of nurses. (33)

Viola Bredenberg in Nursing Service Research, published in 1951, used job analysis as a basis for her study. Data from job descriptions of all levels of nursing were listed in order of their importance. The study design included experimental use of ward clerks. Conclusions and recommendations from this study suggested personnel-patient ratios in terms of number of hours of nursing care per patient per day. (14)

An outstanding experimental study of nursing functions, published under the title, Patterns of Patient Care, was conducted by Frances L. George and Ruth P. Kuehn at the University of Pittsburgh. It constituted an intensive inquiry into the nursing service on a single ward unit. This study approached the question of how much nursing service and what categories were required by a group of non-segregated medical and surgical patients in a large general hospital. An analysis was made of the functions that could safely be delegated to non-professional personnel, such as ward clerks and nurse aides. The purpose was to devise a staffing pattern that would take into account the need for continuity and adequacy of nursing service, as well as a method of assigning personnel. The specific focus was upon more effective utilization of available personnel, of varying ranks, and in terms of their capacity, experience, and educational background. (24)

A limited but interesting attempt to explore the problems of staffing has been provided by Peter K. New, Gladys Nite, and Josephine Callahan in Nursing Service and Patient Care: A Staffing Experiment. This study, covering a period of nine consecutive weeks, directed attention to two main variables: 1) the ratio of staff nurses to auxiliary personnel and 2) the ratio of nursing personnel to patients. Some qualitative aspects were encompassed in this study in the form of patient and personnel satisfaction attitudes. One conclusion that the investigators presented was that too many nurses may be worse than too few. (41)

Problems of staffing have remained central issues in the functional studies, especially as focused on three objectives: 1) economical and effective combinations of nursing personnel for accomplishing the nursing care, 2) satisfaction that accrued to the personnel in the performance of their assignments, and 3) the quantity of nursing made available to patients.

Specific methodology guide books have emerged as a result of the persistent problem of shortage of professional nursing skills. One such guide, How to Study Nursing Activities in a Patient Unit was developed by the U. S. Public Health Service in 1957 and has been used extensively. Its utilization has been twofold. In addition to being used for gathering data on which to base administrative changes in assignment patterns, it has been employed as a criterion measure

in research studies. (4, 57)

This particular guide provides details for methodology in collection of data through work samplings. A single observer records activities performed by each member of the nursing team within a unit every fifteen minutes. Activities are classified according to two nominally scaled variables, the area of the activity and the level. Area of activity is subdivided into four main classes: 1) patient-centered, 2) personnel-centered, 3) unit-centered, and 4) other. The levels are seven differentiations of the nature of the skill, training and responsibility needed to perform the activity. (57)

Rose E. Christensen utilized the methodology suggested in the above cited guide book, in An Activity Analysis of Nursing Personnel on Two Selected Units in a General Hospital, an unpublished master's thesis presented to the University of Oregon School of Nursing in 1962. The purposes of the study were:

> To identify (1) the activities of nursing personnel, (2) how they spend their time with and away from the patient, and (3) whether they function at their own level or the level of other nursing personnel.

A conclusion of that study indicated there was no differentiation of responsibility or activity that could be found that was based on levels of preparation. A problem encountered was, that the descriptions of responsibilities of each group of personnel in the hospital studied essentially included the same scope of activities. (16)

There is a U. S. Public Health Service Publication which focuses specifically on How to Study the Nursing Service of an Outpatient Department. This manual is designed to assist hospital administrators evaluate nurse functions and utilization in the outpatient department. (58) A subsequent study conducted by the American Nurses' Foundation extended the methodology outlined in the preceding reference to include findings concerned with ascertaining some factors which are susceptible to change in the outpatient department. Notably this study recommended a shift of emphasis of the role of the outpatient nurse from administrative duties to duties more closely related to the teaching role. (12)

A methodology developed by the Veterans Administration for studying activities of nursing personnel, employs the diary device, in which the personnel studied, record their own activities in five-minute interval units. It classifies activities on the basis of a two-digit code. This code (7 classifications and 51 sub-categories) is designed on the basis of relative closeness to or distance of the activity from the patient. Systematic categorization of the diaries is made according to coding by jury method. (59)

The classification, activity and function studies discussed to this point are essentially those that have been primarily concerned with quantitative measurements of nursing practice. The next section of this chapter will discuss studies that have shifted focus toward

qualitative aspects of nursing practice.

Qualitative Studies in Nursing

Results of published nursing studies that have appeared within the present decade substantiate that research emphasis is now predominantly associated with those factors that are more closely related to the qualitative aspects of nursing practice and the interactive processes in the nurse-patient relationship. However, a few of the earlier activity type studies did include elements relating to patient welfare, satisfaction and quality of care.

A comprehensive study, directed by Marion Wright, was undertaken in the early 1950's at Harper Hospital in Detroit to improve patient care. After amassing an enormous amount of opinion and factual data from patients, physicians, and hospital employees, and after establishing a work simplification training program for personnel throughout the hospital, the investigator planned and tested a staffing pattern on one nursing unit in the hospital. Counts were made of the number of medications, treatments, and diagnostic procedures provided for each patient. These counts were then correlated with the intensity of illness of the patient according to a three-point degree of illness scale defined as acutely, moderately and mildly ill. The study group accepted the fact that employee satisfaction is based on opportunities for maximum utilization. (62)

In 1957, Reissman and Rohrer published a book presenting details of two consecutive studies conducted in a large urban general hospital during the period from 1952 to 1955. Both studies related to the changing concept of graduate nurse functions in hospital services, the nurse's relationship to other personnel and patients, and her position within the hospital structure. These studies began, critically and extensively, to analyze and assess the factors that are impinging on the nurse of "yesterday" and which are necessitating marked changes in the traditional nursing role concept. Conditions within the hospital gave the graduate nurses little choice between devoting more of their attention to technical procedures and administrative duties than to the personal aspect of patient care, was a major conclusion of this study. (46)

The trend toward concern with patient welfare began to appear more pronounced in the published study reports. One such study conducted by Gorham and Lichtenstein, used 2, 065 critical incidents as described by nurses and patients to get at specific nursing behaviors related to patient care and improvement. Each critical incident used was required to meet specific criteria. The incidents were then classified by the investigators into fifteen categories, descriptive of kinds of nurse behavior. These behavior categories, in turn, were grouped into five major areas: 1) improving the patient's adjustment to hospitalization or illness, 2) promoting the patient's comfort and

hygiene, 3) contributing to the medical treatment of the patient, 4) arranging administrative details, and 5) personal characteristics. Based on information gleaned from the classification and analysis of the job performance, several on-the-job evaluation procedures were tried out by head nurses and physicians and assessed by the researchers. (30)

Abdellah and Levine, under the auspices of the American Hospital Association and the Public Health Service set up and tested an elaborate mathematical model research design that was formulated to determine the relationship between number of nursing personnel and the amount of feeling of inadequacy of nursing services as expressed by both patients and personnel. Eight thousand, seven hundred patients, and 9,500 personnel (hospital administrators, physicians and nursing personnel) in 57 hospitals with different amounts of professional and total nursing care available, completed checklists whose scores reflected the respondents' feeling about inadequacy of nursing services provided. The patients appeared, in general, substantially satisfied or reconciled to what they received in nursing care, but they showed an awareness of the fact that they could profit greatly by better controlled physical environment for safeguarding rest and relaxation, by better served food, and by more personal

constant, and qualified nursing care.

The findings of this extensive research led the investigators to state that the amount of nursing care provided has a strong influence on the satisfaction of patients. Patients, other than those on obstetrical services, felt more satisfied when the number of professional nursing care hours were higher. This feeling of satisfaction was found to be less related to the total number of nursing hours available than it was to the number of professional hours available; that is, if the total nursing hours were high, but the number of professional nursing hours was low, there tended to be more patient dissatisfaction. The authors cautioned that these findings must be looked at critically since other causal factors probably existed. (5)

Primary values that resulted from this definitive study were: 1) development of data collection tools, based on expressed patient satisfaction as a criterion for measurement of quality of nursing care, that could be utilized in further research, as well as 2) the identification of hypotheses for additional research. Specifically, this study led to the publication, in 1957, of a checklist and guidebook for its use in appraising the level of patient care. It represents a methodology for applying quantitative scaling techniques to the measurement of adequacy of patient care. (7) This tool has proven to be useful in "numerous studies that have been conducted following its development." (4)

A study concerned with the identification of covert nursing problems was conducted by Abdellah. She contends that: "Nurses who are products of the present educational system have training in observation of overt but little or none in covert behavior. Training in the identification of both types of nursing problems is essential if professional nurses are to provide comprehensive nursing care." Three methods were used to identify covert aspects of nursing problems: 1) a modified version of the TAT (Thematic Apperception Test), 2) free answer method, and 3) direct questions. All methods involved eliciting responses from patients under varying conditions and in a variety of environments. This study led to the significant recommendation that a list be developed of recurring or persistent basic nursing problems that all nurses must be able to solve. (2)

Such a list was constructed and has been published with detailed explanations. (3) At the present time there seems to be a marked degree of agreement among the nursing authorities that the "List of Nursing Problems," proposed by Abdellah and co-workers, is a valid criterion measurement for defining a province of nursing endeavors. Variations of this list now appear in recent nursing publications and textbooks as a guideline for essential components of good nursing care. (11, 21, 25)

A most systematic and provocative study in the area of nursing function, with attention on the effects of nursing service on patient

welfare, was published in 1960 by The State University of Iowa. The proposition that increases in the amount or quality of nursing care will produce improvements in patient welfare, was tested in two ways: 1) by increasing the size of a ward nursing staff and 2) by introducing an inservice educational program designed to increase the amount and quality of the nursing care given by a ward staff. A major conclusion reached was that: "No improvement in patient welfare was produced by substantially increasing the size of the ward staff, by conducting inservice education programs, or by combining staff increases and inservice education." (32) This conclusion differs in some respects from one of the conclusions in the study (cited previously) by Abdellah and Levine. (5) However, both studies caution that other causal factors were probably co-existing during the studies. Leo W. Simmons is of the opinion that the Iowa "document bids fair to become something of a landmark in function studies on nursing care in hospital settings." (51)

A study will be discussed here which, though primarily concerned with nursing values in transition, has relevancy. Genevieve Rogge Meyer reporting on data gathered in the Los Angeles area, describes nursing as being in transition between two poles, tenderness (patient-centered care) and technique (technique and colleague-centered). The initial descriptive study aimed at exploration of social influence as it exists in the nursing situation. It later became a study

of attitudes of nurses and of student nurses, together with information about prevalent social perceptions among nurses. Four classifications of present-day nurses were differentiated and conceived of as "representing different adaptations to the fluctuating relationship between the two value traditions of tenderness and technique." The types were categorized as:

Type I The ministering angel
Type II The patient-oriented
Type III The colleague-oriented
Type IV The technical-administrative-oriented

The author states that "a new relationship between tenderness and technique is, and has been in the making." Furthermore, the suggestion is made that this blending between tenderness and technique:

> ...has been facilitated, if not prompted, by a move "outward" in nursing, as distinct from the move "upward" to more complex technical functions. The move "outward" has involved a growing concern with (1) the full problem of health, including its maintenance as well as its restoration, and (2) the psychological aspects of illness. This has meant the application of the scientific as well as the intuitive method to the problems of supportive emotional care and patient education. (37)

In a broad sense, the results and suggestions of this study indicate the emergence of a synthesis, of the quantitative and qualitative approaches to nursing research.

General Considerations in Observational Studies

The literature was reviewed for the salient features that should be considered in planning an interaction study based on observer data. Interpersonal interaction may be studied by means of collecting data through such techniques as interviews, questionnaires, projective techniques and available records related to interaction situations. Or interaction may be studied "by observing and making tape recordings in hospitals, clinics, homes--that is, wherever the nurse serves the patient. This method is possibly the most accurate one yet developed." (51) An authority in educational research, Carter V. Good, agrees on the efficacy of observational studies as applied to interaction. Good states: "Direct observation makes a contribution not usually present in controlled experimentation." (26) As applied to nursing, David J. Fox states:

> As a method, observation is particularly appropriate for complex research situations which are best viewed as complete entities and which are difficult to measure either as a whole or separately. This description holds for the process of nursing and so this method has had wider use in nursing care research than in many other research areas. I predict that this will continue to be true, as the simple premise holds that the best way to learn about a complex interpersonal situation is to watch it. (22)

The degree of participation of the observer is variable, depending on the purpose of the study. The means by which an observer

obtains the required data are summarized by Selltiz thus:

> The observer may himself participate actively in the group he is observing; he may be defined as a member of the group but keep his participation to a minimum; he may be defined as an observer who is not part of the group; or his presence may be unknown to some or all of the people he is observing. (50)

Because of the tendency of the nurse to empathize , Warren G. Bennis cautions that the "role of observer of a situation involving a nurse and a patient is a most difficult one for a nurse observer. " (12) In discussing fieldwork as a valuable tool for investigating social problems, Jeanne C. Quint offers similar precautions when she states:

> . . . nurses tend to "see" what goes on in the hospital in a stereotyped way--because they view that world through a nurse's eyes. In addition, nurses have been educated to think of problems from a practitioner's perspective in which primary values and motivating purposes are quite different from the perspective of the social scientist. (45)

However, it is the contention of Abdellah and Levine that the observational skills of the nurse "play an important part in her development as a nurse researcher. " They state further that: "Observations have meaning for the mind that is prepared to grasp their significance. Observers frequently miss what appear to be obvious facts. Knowledge acquired from the past and continued intellectual growth help the nurse to evaluate her observations objectively. " (4)

Subsequently, Abdellah and Levine also inject a note of caution

for the nurse observer when they state:

> It has been said that nurses make very precise observers, since they have been trained to assess the behavior of patients. This may well be true, but there is often a big difference between the kinds of observations made for the purpose of patient care and those required in research. Research observations are often concerned not with signs and symptoms presented by patients but rather with very subtle and intangible phenomena that are detected through the application of unstructured data-collecting instruments. A high level of skill is required on the part of the observer to insure the relevance and precision of such observations. (4)

Factors that affect the success of an investigation based on observation are summarized by Carter V. Good as:

> An appropriate group of subjects to observe
> Selection and arrangement of any special conditions for the group
> Length of each observation period, interval between periods, and number of periods
> Physical position of the observer and possible effect on the subject or subjects
> Definition of specific activities or units of behavior to be observed
> Entry of frequencies or tallies in the record, as a total for the entire observation period or by subdivisions of time within the observation period
> Scope of observation, whether for an individual or for a group
> Form of recording, including consideration of mechanical techniques and such quantitative factors as number, time, distance, and spatial relationships
> Training of the observer in terms of expertness
> Interpretation of observations (26)

In presenting direct observation as a primary tool of scientific inquiry, the authors of Research Methods in Social Relations, discuss

some of the advantages and limitations of this method of data collection. Perhaps the greatest asset of observational techniques is that they make it possible to record behavior as it occurs. Moreover, many forms of behavior are so taken for granted by the subjects under investigation that they escape awareness and resist translation into words. Thus, observation data need not be dependent upon the subject's ability to report. When reluctance to participate in research is encountered with individuals (whatever the reason may be), observation is less demanding of active cooperation on the part of the subjects. Although people under observation may deliberately try to create a particular impression, "it is probably more difficult for them to alter what they do or say in a life-situation than to distort their memory or report of what they have done or said." (50)

A problem in observational studies, as presented by Fox, is inherent in the complexities that arise in trying to keep the research situation natural. A particularly thorny dilemma is the ethical questions involved when participant and unknown observation methods are used. For, observing and recording what an individual does without his or her knowledge and permission violate the basic human right of privacy. He believes that researchers "have too easily abandoned direct observation in the belief that natural research situations are impossible to achieve." His contention is that "while distortion is unquestionably introduced it does not persist for long

periods of time. Therefore, if direct observation begins with a period of time for acclimatization and orientation during which no data are collected, in most instances, the research situation reverts to normal." (22) Other researchers agree that subjects seem to get used to observers if the behavior of the observer is such that the subjects are not threatened by the observer's presence. (47, 50)

Dr. Rena E. Boyle advocates the use of a lab coat so that the observer can be clearly identified and not confused with workers in the situation. Another advantage of the lab coat is that it serves as a reminder to the nurse observer that she is not a nurse, but a researcher in the situation being investigated. (13)

Methods and devices for recording of observer data vary. They may include such things as time-sampling procedure, shorthand records of conversation, still and motion-picture photography and sound-recording devices. (26) Selltiz and his co-authors advocate that the "best time for recording is undoubtedly on the spot and during the event. This results in a minimum of selective bias and distortion through memory." (50) Interaction is best studied by observing and making tape recordings, according to Simmons and Henderson. However, the question is raised that the knowledge that conversation is being recorded may inhibit the flow of natural communication. (51)

In concluding this discussion of observational techniques, a study will be cited that compared the abilities of non-nurse observers

to the abilities of nurse observers. A report of this study, conducted by Harvey Wolfe at Johns Hopkins Hospital, was published in Nursing Outlook, in February 1965. This experiment explored the question whether a non-nurse could recognize and record the details of nursing care with the same accuracy and thoroughness as a nurse. Four observers, two registered nurses and two non-nurses, who were technically skilled in making observations were used. The nursing care of fifteen patients was recorded by a nurse and a non-nurse observer. The records were edited to remove words which might reveal the identity of the observer. These sets of reports were given one at a time to a panel of nineteen reviewers (nursing educators, nursing service administrators, and hospital administrators) who made 236 judgments. Of these, 179 indicated that the report written by the registered nurse contained more information. The study demonstrated that non-nurses cannot substitute for nurses in making qualitative observations in nursing care. (61)

Communication and Teaching as Components of Nurse-patient Interaction

For purposes of this study, nursing literature in the general areas of interpersonal relations, communication, and teaching was examined. A brief overview of some of those factors most pertinent to this study follow.

Nursing care, by its very nature, involves interpersonal interaction. The nurse-patient relationship may be considered to be the essence of nursing. Joyce Travelbee expresses this social dynamism of nursing thus:

> Nursing is also a "process," and by that we mean it is an "experience" or a happening, or series of happenings, between a nurse, and individual, or group of individuals in need of assistance the nurse can offer.... Nursing situations, being experiences in time and space, are dynamic and fluid, and are ever in the process of evolving or becoming. (56)

The reciprocal process of communication is "the instrument through which changes are effected in nursing situations." (56) The necessity for knowledge and skills in communication techniques and processes is being emphasized in current nursing education. However, "studies on the quality, the quantity, the significance and the functions of communication between hospital functionaries are rare." (52)

Events that require nurse-patient verbal exchanges are constantly occurring within nursing situations. Aasterud believes that: "Within the scope of her own functioning, the nurse is always responsible for the explanation of her own actions." (1) It is axiomatic that the exercise of "procedural skills is always accompanied by some form of communication. Communication skills, particularly, are of special consequence, for it is through them that the patient's participation is gained for what is done to, with and for him." (60)

Effective nursing procedures and techniques have been developed, practiced and taught through the years, but "it has always been recognized that a procedure can become an end instead of a means unless there is continuing reappraisal." (54) Reappraisal must include assessment of the communication aspects of procedural nursing care. (1)

Nursing activities are visualized by Travelbee as "a vehicle through which the nurse responds to the human being in the patient and assists the patient to respond to the human being in the nurse." She further advocates that "nursing activities are transcended when they are considered as a means to an end but not as the end itself." (56)

Teaching is an established component of nursing care (3, 15, 51) All too often, however, it is conceived of as a formal, structured activity in and of itself. The role of the nurse as a teacher remains ambiguous and ill-defined. The scope and content of nurse teaching is still considered controversial by some authorities. (51)

According to Monteiro, the bedside nurse often "views patient teaching narrowly and has a stereotyped image of it as rather formal instruction. Consequently, she does not see the teaching which can occur through casual conversation, individual questioning, and discussion between nurse and patient." Furthermore, Monteiro believes that:

> The most important patient teaching is that which is done informally at the bedside, based on the patient's interests and immediate needs and oriented not only toward his present condition but toward his future health needs as well. This is the type of teaching that the bedside nurse has the unique opportunity to do and can do if she accepts teaching as an integral part of her nursing function.
>
> In its simplest form, informal teaching consists of unplanned incidental teaching in quasi-spontaneous response to a patient's statement or question. The nurse who is attuned to the need for teaching and who accepts teaching as part of her role can be very useful to patients. It can be very meaningful to the patient to receive an immediate individualized response to his expressed need. (39)

In a nurse-patient interaction study conducted by Lucy H. Conant, a widely accepted system of interaction analysis (Bales' Interaction Process Analysis) was used to study the development and nature of the role relationships of public health nurses and patients in home visits. The investigator suggests that: "In settings and situations where verbal activity is a necessary aspect of the nursing service given, the patterns of nurse and patient interaction may be directly related to the effectiveness of nursing care." The data for this study comprised tape recorded verbal interactions, which were scored by trained IPA (Interaction Process Analysis) scorers. A wide range of verbal behavior was seen on the part of both nurses and patients. Relationships were found between interaction patterns, satisfaction, extent of the home visit, and race of the patient. Nurses and patients tended to be more satisfied with the longer visits in which nurses had

a relatively low rate of asking questions. A high rate of nurse questioning was associated with a brief contact and a lack of satisfaction. The most satisfying pattern of interaction seemed to occur when a balanced exchange of giving and receiving took place between nurse and patient and in their role behavior. Definite patterns in role differentiation did develop in the interactions. One of the conclusions of that study was that although using IPA provided much information about the role relationships of nurse and patient in the 48 home visits analyzed, there were limitations in its ability to describe the nursing situation and the components of the nurse-patient interaction. (18)

A study to explore the effects of three different conditions of communication on the impact and resulting cognitive structuring of an unfamiliar and moderately stressful situation was undertaken by Mary E. Meyers. In her justification for the study she states:

> Any new event which impinges on an individual arouses tension and the person subjected to the stress employs various devices to assist in the reduction of this tension. Basic to the tension reduction is the need to attach some meaning to the event; to give it some cognitive structure.... For some people, factual information or actual past medical experience may provide sufficient meaning. (38)

The methodology of this study consisted of designing a new procedure to be done with the patient that would produce a mild degree of stress. The procedure was presented under three different conditions of communication: 1) a "structuring" communication designed to explain

the situation to the patient; 2) a "no" communication situation in which the patient was told nothing of what was going to happen to him; and 3) an "irrelevant" communication designed to distract or to divert attention from the designed procedure. Seventy-two adult hospitalized patients were included in the study. Conclusions drawn from this study included the finding that, less tension is created when the patient is given specific information upon which he can structure the event of impending stress. Furthermore, since tension is produced by distracting communication, this type of approach is the least desirable and in terms of tension reduction, it would be better to say nothing at all. (38)

To determine factors which are inhibiting effective patient teaching by professional nurses, Virginia Streeter conducted an investigation in which she held nineteen interviews with directors, supervisors, head nurses and general duty nurses in eight medical-surgical units in general hospitals in a large metropolitan area. The areas of patient teaching examined were:

1. Hospital orientation
2. Diagnostic and therapeutic procedures
3. Prevention of disease and promoting health
4. Disease conditions
5. Home-going instructions
6. Rehabilitation

The conclusions found that all areas were considered inadequately taught. Factors interfering with effective teaching were found to be:

1. Lack of time
2. Lack of knowledge about content
3. Inadequate knowledge of various teaching methods and lack of skill in using them.
4. Inability to teach so that patient understands
5. Poor communications between members of the health team.
6. Lack of emphasis placed upon teaching by nursing service personnel
7. Nurses' lack of responsibility in assuming the functions of a health teacher. (55)

In a study of nurse-patient communication practices conducted by Doris L. Schindler, a questionnaire was filled out by 94 registered nurses in nine randomly selected hospitals. The purpose of this study was to determine what nurses stated their practices to be in communicating with patients and their ability to identify types of nurse-patient communication. Conclusions based on the information obtained from the questionnaires indicated: 1) that the nurses in this study tend to state that refraining from offering false reassurance and stating one's own opinions and ideas were not effective communication practices; 2) there is some rejection of negative feelings and expressions and some degree of insensitivity to covert nursing problems; 3) that in answering the items on the questionnaire some of the nurses in this study may have been indicating socially accepted communication practices rather than those with which they were familiar. (48)

A study concerned with information desired by patients in relation to their diagnostic tests and the information nurses say they give

to patients in reference to them was undertaken by Dorothy M. Dragoo. Questionnaires were administered to fifty patients and forty-five registered nurses. Results of the data analysis indicated that: 1) both patients and nurses agree that patients wish to be told many diverse facts concerning their diagnostic tests; 2) there appeared to be a discrepancy between what the patients indicate they wish to know and what the nurse thinks the patients wish to know; 3) there was a further discrepancy between the consistency with which the nurses indicated that they provided explanations in response to patients' questions and their actual performance; and 4) the nurses seemed to assume that the physicians and the technicians were providing adequate explanations. (19)

Margaret L. Pohl conducted a study to investigate the teaching activities of the nursing practitioner in order to clarify her teaching role, to examine the scope of her teaching and to identify the basic nursing preparation needed for this function. A total of 1500 usable questionnaires were obtained by mail from respondents who were members of the American Nurses' Association as of August 1960. The sampling plan used was a stratified systematic sampling with the initial choice in each category randomized. Categories of nurse respondents were: 1) Private duty, 2) General duty, 3) Public health, 4) Occupational health, and 5) Office nurses. Derived from this study were two broad implications for the nurse's teaching role: 1) there

is confusion as to what this role is, and 2) there is a marked lack of preparation for this role. Further, the findings presented a picture of a large number of practitioners who want to teach and think they should teach and who, in fact, are performing teaching activities, but who do not have a clear concept of their teaching role and report that their preparation for teaching is inadequate. (44)

Summary of Review of Literature and Related Studies

In searching the literature and reviewing the studies concerned with nursing activities, functions, patient classification system and qualitative aspects of nursing, it is obvious that much information has been elicited that has generated positive action in the crucial area of nursing service. Much has been written and done about the more readily observable aspects of nurse-patient interaction. Research in nursing is beginning to yield the body of knowledge needed as a basis for improvement of patient care.

In arriving at conclusions, most of the quantitative type studies, have at some point in the investigations, made arbitrary subjective decisions for categorizing activities on the basis of the most important aspect of what was being done at the time of the study. Methodological designs did not include techniques for discriminating between primary and secondary (or underlying) activities.

Studies that concentrated on qualitative aspects and covert

factors in nursing practice have generally chosen as a focus, either the problem aspect, or the outcomes of nursing care approach. However, it remains questionable as to whether there is yet a clear distillation of what constitutes quality nursing care, in general or in particular.

As with the functional studies, those concerned with teaching, tend to look at teaching as a separate and discrete primary component of nursing care, rather than at the situations wherein it may be spontaneous and coincidental.

The literature has been searched unsuccessfully to find a study that has attempted to analyze repeatedly, one particular activity in depth in order to isolate specifically, relevant, concomitant, recurrent, underlying components of nursing care that might be involved in performing that one, so-called procedure. Furthermore, the search has likewise been unsuccessful for finding a nursing study that has been conducted under conditions that could be associated with the individual who stands at the beginning of the continuum of nursing care--a well individual.

CHAPTER III

REPORT OF THE STUDY

Purpose and Preliminary Preparations

This study was undertaken for the purpose of extracting from one distinct (overt) nursing activity entity, a single underlying (covert), but identifiable secondary and recurrent aspect of the primary activity. The specific field setting chosen for this study was the donor room of an American Red Cross Blood Center. Data were collected by a non-participant nurse-observer whose focus was on identifying and analyzing the extent and frequency of incidental and spontaneous teaching opportunities that occurred while venipuncture procedure was being performed at the blood center. Answers were sought to the following questions:

1. How often do teaching opportunities occur while a nurse is performing venipuncture procedure in a blood center?

2. What is the nature of the information that donors seek?

3. What is the extent of commonality of subject matter in the teaching opportunities that do occur?

4. Is there any difference between the subject matter that is sought by a first-time donor and a repeat donor?

5. Do teaching opportunities occur which are not noticed or

are not followed up by the nurse?

Prior to the study, nursing literature was searched and reviewed for articles and reports of studies related to activity, function and classification studies, qualitative studies in nursing, general considerations in observational studies and communication and teaching as components of nurse-patient interaction. Although no other research exactly paralleled the approach taken in this study, the literature review established a frame of reference which contributed toward clarifying the formulation of a methodology for isolating and analyzing the problem under consideration.

Conferences were held with the Director, the Director of Nursing Service, and the Chief Nurse of the Blood Center of the Pacific Northwest Chapter of the American National Red Cross. The general purposes and methodology of the study were explained and administrative clearance for the study was secured.

Periods of observation were arranged and guidelines for the status of the observer within the setting during the study period were established. The staffing pattern is a fluid one that changes from day to day and from week to week. There is a permanent core of full-time salaried staff, supplemented by salaried part-time workers as well as numerous categories of volunteer helpers.

Due to the variable constituency of the staffing and the donors on any one day at the blood center, it was deemed advisable, through

conferences with supervisory personnel to initiate the study with no formal announcement to the persons who would be under observation. Rather, when comments or questions concerning the presence of the observer arose, they were to be answered on an individual basis. The purpose was then to be given as: The observer is a graduate student at the University of Oregon School of Nursing who is conducting an independent study to ascertain what incidental factors are operating concurrently during the performance of a primary procedure. The persons who made inquiries were to be further assured that the study was not one that was designed for assessing quality of performance of personnel.

The observer had acquired experience previously in observing nursing activities in a hospital setting. However, in order to achieve familiarization with the unique characteristics of the setting chosen for this study, intermittent periods of time were spent at the Blood Center by the observer for acclimatization and orientation. No data were collected during these periods.

A format was devised for recording observations. A form was also developed for the transcriptions of the observer's shorthand notes. These were reviewed by a group of registered nurses and revised as necessary (Appendices B and C).

Setting

The setting selected for this study was the donor room at the Blood Center of the Pacific Northwest Chapter of the American National Red Cross. The donor room is divided into two general areas, hereafter designated as cubicles. In one cubicle, four beds are placed at right angles to each other in the form of a square. The second cubicle contains three beds, in a general horseshoe arrangement, with the open end facing the opposite cubicle. Each bed is numbered sequentially. There is a wheeled dressing cart, containing the equipment and supplies necessary for the venipuncture procedure, in the approximate center of each cubicle. There was a total of seven beds in the donor room throughout the period covered by the observations that form the basis for the study data. Chairs are placed at various locations throughout the donor room. (See Appendix D for diagram of donor room arrangement.)

Nurses are assigned to the donor room on a rotating basis by the supervisor. Only currently licensed registered nurses, whether regular or part-time employees, or volunteer nurses, are permitted to perform the venipuncture procedure. Assignments may be for periods of one or two hours or more, depending on the number of nurses present, and the flow of donors to and from the donor room.

According to the Blood Program Nursing Manual, (9) the actual

blood donation takes approximately five to seven minutes for the average donor.[2] However, the length of time the donor spends in the donor room varies. It is dependent upon individual differences of the donor, such as the: 1) location and type veins of the donor; 2) need for reassurance and instructions; 3) donor's awareness of what to expect; 4) response to the procedure; 5) donor status and 6) personal idiosyncrasies. Furthermore, varying degrees of donor waiting time occur proportionate to the ratio of nurses and donors present in the donor room. In addition, the amount of waiting time for a donor will be influenced by the specific step with which nurse is engaged in the procedure with a previous donor.

In the donor room, there are three categories of personnel that are involved in caring for donors, the supervisor, the venipuncture nurse and the volunteer escort. Personnel responsibilities pertinent to the objectives of this study are herewith presented in outline form.

The supervisor:

1. Circulates freely, checking the influx of donors at the points where records are being filled out prior to the donor's entrance into the donor room.

2. Adjusts the number of nurses in the donor room to meet the needs of the variable flow of donors.

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[2]The duration of the period of time covered by the actual blood drawing phase of the venipuncture procedure was not incorporated into the study design.

The supervisor (continued):

3. Coordinates the activities of the volunteers and the nurses in all areas of the blood center.

4. Serves as a resource person for personnel and donors.

5. Functions in the capacity of venipuncture nurse on occasions when difficulties are encountered with a particular donor, or when activities in the donor room are such that the services of an additional venipuncture nurse are required.

The venipuncture nurse:

1. Performs the details of the venipuncture procedure as specified in the "Venipuncture Procedure" instruction as printed in the Blood Program Nursing Manual. (Appendix A)

2. May work independently caring for one donor exclusively. Or, depending on the number of donors in the donor room at any one time, she may function in a team relationship with two or three other nurses working in a cubicle simultaneously. (Frequently, the venipuncture nurse is caring for two donors. Occasionally she may be caring for three or even four donors at approximately the same time at various steps in the venipuncture procedure.)

3. Observes the donor carefully throughout the entire procedure. (While performing certain steps in the procedure for one donor, she frequently shifts her attention to the others in the cubicle to note the donors' condition and progress of activity.)

4. Gives the donor instructional information essential for the performance of the procedure.

5. Talks to donors "to divert their attention from the process." (9)

6. Presents a friendly, competent manner toward the donor throughout the procedure. (9)

The volunteer escort:

1. Accompanies the donor into the donor room and escorts the donor to a vacant bed. (The bed to which the donor is directed is selected on the basis of the progress of activities within a cubicle at the time the current donor arrives. Priority for assignment to a bed is given to situations wherein the procedure for donors already present is nearing completion)

2. Instructs the donor to sit on the edge of the bed, facing toward the center of the cubicle.

3. Places the donor's card on top of paper towels at the head of the donor bed.

4. Places the blood bottle or plastic container beside the donor.

5. Covers the knees and legs of all women donors with a knee sheet.

6. Instructs male donors to roll up both sleeves and loosen neckties.

7. Tells the donor that the nurse will be with him or her shortly, if the nurse is occupied with a previous donor.

8. Accompanies the donor from the donor room, upon satisfactory completion of the donation.

All personnel assigned to the donor room are encouraged to foster a prevailing atmosphere of friendly concern for the individuals who are donating blood. This may be manifested in the form of conversation of a light and diversionary nature, at those times when the activity does not require instructional comments. The nurse's conversation may be directed to the donor with whom she is currently working, or it may be directed toward another donor in the cubicle, and occasionally to someone who is elsewhere in the donor room.

At times, the nurse's conversation may be directed toward more than one person at the same time. Periods of silence are discouraged unless specific circumstances warrant otherwise.

The administrative philosophy of the Blood Center is that the steps required for the withdrawal of blood from the donor should be performed as quickly and as smoothly as possible. The donor is to remain in the donor room only as long as is compatible with principles of aseptic technique, safety, comfort and well-being of the donor, and maintenance of technical standards that will ensure a satisfactory supply of blood for the ultimate recipient.

Procedure

A total of 100 donor-nurse interactions was observed on six separate days, during the hours the Blood Center was open from May 2 through May 16, 1967. The observer entered the setting, wearing a lab coat and an identifying name pin, indicating the observer's status as a registered nurse.

Chairs were placed at various locations, whose positioning near the donor beds enabled the observer to sit unobtrusively and record in a stenographer's notebook, the communication that transpired between the donor and a nurse. Whenever activity shifted from one area to another in the donor room, the observer was able to move from one chair to a more conveniently located one, without

interrupting the ongoing flow of activity.

As a donor entered the donor room, the observer recorded the time of entrance and the sex of the donor in the space designated on the observer recording form. Each interaction was numbered sequentially for the study. Subsequently, information such as the age, occupation and donor status was obtained from the blood donor registration card and entered on the observer recording form. Donors were assigned a study number in the order in which they became available for observer's attention.

The first time a nurse became a participant in the study, the observer record identified her by number. The same number was used for that nurse for subsequent observations throughout the study period. The numbers were sequentially assigned, according to the order of appearance of the nurse in the study.

Observer attention was directed toward donor initiated conversation with particular focus on questions asked by the donor and the responses made by the nurse to such questions. As stated previously, only those portions of communication that merited consideration as being related to teaching opportunities were recorded. Those portions of communication which were essential for the performance of the procedure were not recorded. Neither was any formal record made of conversation that consisted of exchanges of pleasantries or that was desultory or diversionary in nature. Observations wherein

the presence of the observer was cause for comment from either of the participants being observed, were classified as incomplete observations and no transcripts of communication was made, although duration of the procedure and donor identification information relevant to the study were recorded. Likewise, observations in which interruptions occurred which diverted the attention of the observer or in which a portion of the conversation was inaudible to the observer, were considered incomplete interactions, for the purposes of this study.

Upon completion of the blood donation procedure, the time the donor was escorted from the room was recorded in the observer's notes. The observation procedure was then repeated, focusing on the next donor-nurse interaction being initiated.

Following each observation period, typed copies (in triplicate) of transcripts were prepared within 24 hours. At the conclusion of the data collecting phase of the study, a complete set of copies of the transcriptions, together with an instruction sheet (Appendix E) was submitted simultaneously to a panel of three nurse-educators. Attached to each set of transcriptions were copies of the Red Cross Blood Center Venipuncture Procedure, limitations, assumptions and definitions for this study, along with a set of the specific questions with which this study is concerned.

Working independently, each panel member identified whether

a teaching opportunity occurred, and if so, indicated to which category of teaching content the incident should be assigned. Incidents judged to be teaching opportunities in which follow-up was omitted were also categorized. In interactions within which more than one teaching opportunity occurred, the panel members categorized each specific incident.

The results of this study will be presented in two sections. First, the information contained in the data for the total number of interactions observed will be presented, analyzed and discussed. Then, the data pertinent to the panel's identification and categorization of teaching content of the transcripts will be presented and related to the study questions.

Presentation and Interpretation of the Observer Data

Of the total of 100 donor-nurse interactions observed, 14 were considered incomplete observations, according to the criteria established for this study. Conversation that transpired during 43 of the interactions was a combination of instructional comments essential for the performance of the procedure and/or diversionary and desultory communication. These interactions were classified "No teaching," and no formal recording was made of these interaction communications. Transcriptions of shorthand notes were made of pertinent communication indicative of teaching opportunities that

occurred during 43 of the donor-nurse interactions observed.

Inasmuch as the total number of observations for this study was 100, the figures can be read as percent of the total. Thus, it can be seen that communication that merited consideration as having teaching opportunity occurred in 43 percent of the total interactions observed. Teaching opportunities may or may not have been occurring within the communication that transpired during those interactions considered as incomplete observations. However, they cannot be considered for evaluation as to teaching content. Therefore, of the total of 86 complete observations, teaching opportunities were deemed to have occurred in 43 of the interactions. That is, 50 percent of the completed observations were teaching related and 50 percent were not. The implication of this finding, which reflects a relatively high rate of occurrence of teaching opportunities, indicate that the potential for nurse teaching while care is being given could be extensive. This coincides with a statement made in the report of Pohl's study concerning teaching activities of the nurse practitioner, in which she states:

> Teaching can be accomplished even if there is no time set aside specifically for it--a large part of the nurse's teaching can be done while she is giving nursing care. (44)

Table 1 shows the number and classification of observations.

Table 1. Number and Classification of Observations According to Donor Status.

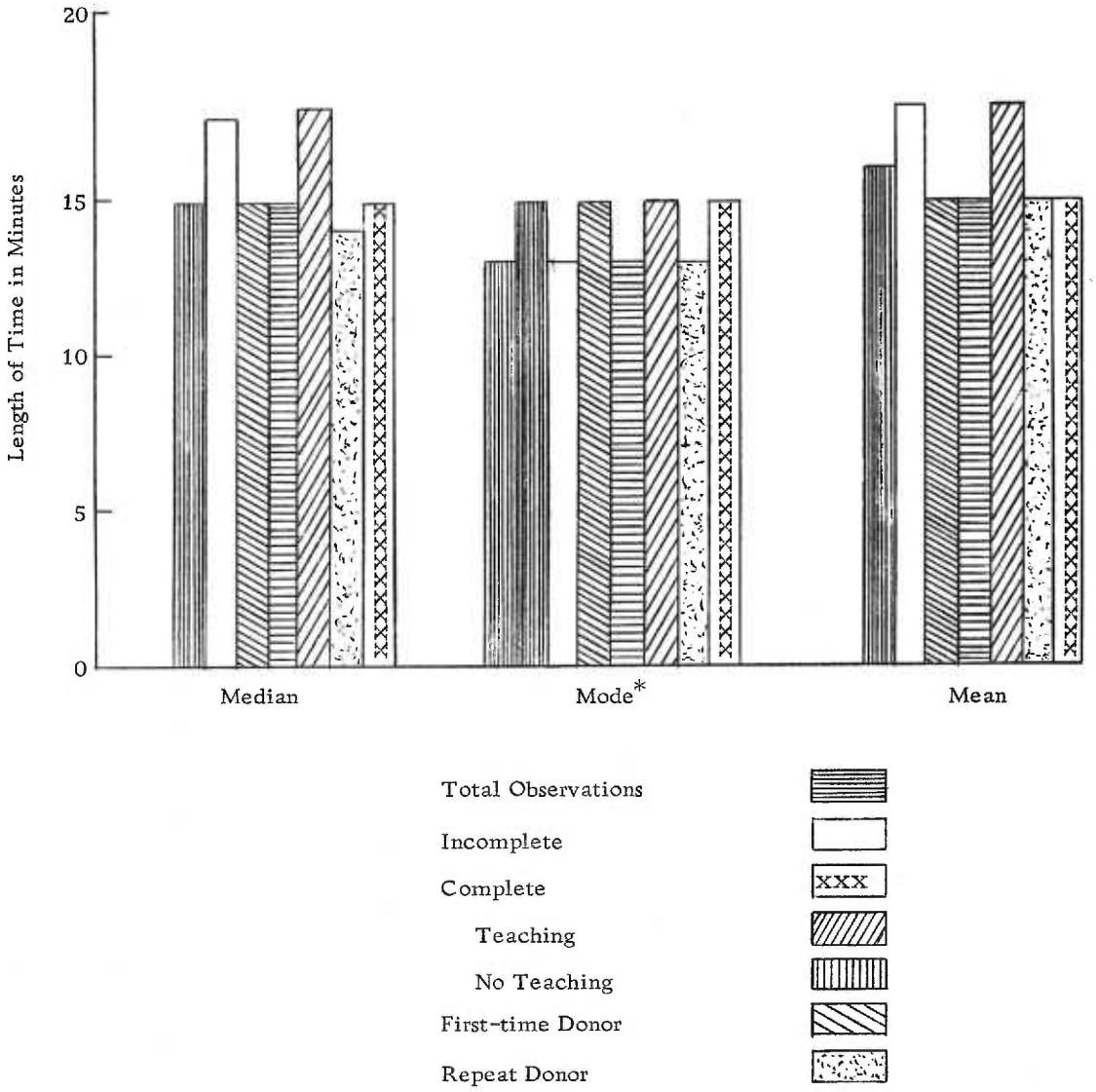
	Classification of Observation			
	Incomplete	Complete		
Donor Status		Teaching	No Teaching	Total
First-time	2	10	3	15
Repeat	12	33	40	85
Total	14	43	43	100

A summary of the time range of interactions observed was next made. An analysis of the range of the total length of time each donor was in the donor room showed a variance from a minimum of 9 minutes to a maximum of 35 minutes. Within this overall time range of 9 to 35 minutes, the duration for incomplete observations varied from 11 to 35 minutes. The duration of the interactions in which teaching communication was occurring was from 10 to 30 minutes. For "No Teaching" the duration ranged from 9 to 25 minutes. Duration of the interaction for first-time donors was from 12 to 30 minutes and for repeat donors from 9 to 35 minutes. Thus it can be seen that those observations in which no teaching opportunities were noted, transpired within the shortest time range. Regardless of the classification of observation or the donor status, the maximum duration of the donor-nurse interaction was relatively brief. Thus, the amount of time available for incidental teaching can be considered limited. This information is shown in Table 2.

Table 2. Summary of Classification of Observation, Donor Status and Range of Duration of Observation.

Classification of Observation			Donor Status		Range of Duration of Observation
Incomplete	Complete: Teaching	Complete: No Teaching	First Time	Repeat	
X					11 to 35 min
	X				10 to 30 min
		X			9 to 35 min
			X		12 to 30 min
				X	9 to 35 min

To determine the average length of time for the donor-nurse interaction, medians, modes and means were calculated for the various categories. From the information depicted in Figure 1, it can be noted that the average length of time for interactions could be stated as approximately 15 minutes. Those interactions in which teaching opportunities occurred tended to cover a slightly longer period of time than those in which no teaching occurred. No causal inferences can be made. However, it is interesting to speculate whether longer interactions increased the amount of time in which teaching opportunities could occur, or whether teaching opportunities might have increased the length of the interaction. Conjectures could likewise be made as to the possiblity that in the more lengthy incomplete observations, the observer's tolerance for concentration and the intensity of communication between the donor and nurse might



*There were two modes (13 and 15) for Total Observations

Figure 1. Comparison of Duration of Interactions by Median, Mode and Mean According to Classification of Observation and Donor Status.

have been functioning variables. An unanswered question that merits further study exists as to what the focus of communication really was during these incomplete observations. A study wherein tape-recordings were made of the complete communication between donor and nurse would undoubtedly clarify the communication content.

Further, it can be noted in examining Figure 1, that the average length of interactions involving first-time donors was longer than that involving repeat donors. A contributory factor undoubtedly is the fact that the policy of the Blood Center specifically recommends that, following the venipuncture procedure, first-time donors be encouraged to rest for a longer period of time than repeat donors. Consequently, a slightly longer period of time was available within which additional communication could transpire.

Age of the donor was included as an element in the data collection instrument. In determining the age groups for the study, consideration was given to the fact that donors under 21 years of age are required to furnish a consent and release form, signed by a parent or guardian, granting permission for donation of blood. As a consequence, the number of donors below the age of 21 is limited. The system of age grouping for this study was adjusted accordingly. An analysis of the age of donors indicates that a greater number of first-time donors are younger than repeat donors. Otherwise analysis of data revealed that, for purposes of this study, the age of the donor

was essentially irrelevant. This information is summarized in Table 3.

Table 3. Age of Donors According to Classification of Observation and Donor Status.

Age Group	Classification of Observation				Donor Status	
	Incomplete	Complete		Total	First Time	Repeat
		Teaching	No Teaching			
I. 18-28	6	10	7	23	8	15
II. 29-39	5	9	9	23	3	20
III. 40-49	1	18	14	32	3	30
IV. 50-59	2	6	13	22	1	20
	14	43	43	100	15	85

An indication of the ratio of the percentage of male-female donors is shown in Table 4. Other than that the male-female ratio of the study sample is substantiated by the overall ratio figures of the Pacific Northwest Chapter of the American National Red Cross Blood Center, the data collected concerning sex of the donor was essentially unrelated to the theme of this study.

Table 4. Comparison of Male-Female Donor Ratio According to Blood Center Percentage Figures and Study Data.

	Red Cross Blood Center N = 1567*	Study Data N=100
Male	75%	78%
Female	25%	22%

*Total number of donors who appeared at the Blood Center during May 1967.

To validate the appropriateness of the proportion of first-time and repeat donors in the study sample, figures for the month of May 1967 were obtained from the Blood Center. Table 5 indicates that, the proportion of first-time and repeat donors contained in the study data correlates closely with the proportion of first-time and repeat donors who were seen at the Blood Center during May 1967.

Table 5. Comparison of First-time and Repeat Donor Ratio According to Blood Center Figures and Study Data.

	First Time Donor		Repeat Donor		Totals	
	No.	%	No.	%	No.	%
Blood Center	259	16	1308	84	1567	100
Study Data	15	15	85	85	100	100

The occupation of donors was included as an identifying element in the data collecting process. Sixty-one different occupational types were represented in the study sample. Other than the category, housewife and/or homemaker, of which there were 13, there was no pattern of homogenity. The Master Tabulation of Observation Data (Appendix F) may be referred to for specific occupational details. For purposes of this study, occupational status of the donor was considered inconsequential.

Table 6 gives a listing of the nurse participants in the study, showing by observation classification, the number of interactions in

which each nurse participated. There was a relatively high rate of nurse participation in teaching related observations. A quantitative review of this listing reveals that a total of 15 different nurses was observed during the study. Twelve of these nurses were participants in interactions that merited teaching opportunity consideration, while three were not. Three nurse participants, numbers 1, 6, and 11, accounted for 49 of the total interactions observed. However, these same three nurses were participants in 27 percent of the complete interactions (combination of teaching and no teaching category). Although the qualitative aspect of the individual nurse's communication and teaching skills was specifically delimited to the study design, the figures in this table are indicative that some unanswered questions exist concerning this factor as a functioning variable in relation to this study. Such questions as: 1) the effectiveness of the responses given to the questions raised by the donors and 2) the nurse's perception as to her role as a teacher in situations such as were delineated for this study would merit further study. Both Conant (18) and Pohl (44) in their studies relative to nurse-patient interaction and teaching activities of the nurse practitioner respectively, indicated a need for more finite means of evaluating results of nurse-patient interaction and a more discrete definition by the practitioner of the nurse's teaching role. The number of nurse participants and amount of interaction has been shown in Table 6.

Table 6. Number of Nurse Participants and Extent of Involvement in Interactions According to Observation Classification.

Nurse	Classification of Observation			
	Incomplete	Complete		Total
		Teaching	No Teaching	
1	4	9	5	18
2	1	1	2	4
3	0	1	5	6
4	0	3	3	6
5	0	1	1	2
6	3	4	6	13
7	0	5	4	9
8	0	3	1	4
9	3	2	0	5
10	0	0	2	2
11	0	10	8	18
12	2	0	2	4
13	1	0	0	1
14	0	3	1	4
15	0	1	3	4
Totals	14	43	43	100

Recapitulation of Observer Data Findings

Eighty-six of the 100 observations were considered complete observations and eligible for the study. Teaching opportunities occurred in 50 percent of the complete interactions observed. The average duration of the interaction between a donor and a nurse while venipuncture was being performed in the donor room at the Blood

Center during the study period was ascertained to be approximately 15 minutes. The age, occupation and sex of the donors were essentially irrelevant for the purposes of this study. Data concerned with the extent of nurse involvement in teaching opportunity interactions, revealed that 12 of the 15 nurses observed were involved in at least one or more teaching opportunity interactions.

The next section of this chapter will be devoted to the presentation and interpretation of the data from the teaching content, as identified and categorized by the three-member panel.

Presentation and Interpretation of Teaching Content Identification and Categorization Data

A set of the 43 transcripts designated as teaching opportunity interactions was submitted to each of the panel members, together with background information necessary for the categorization procedure.

The variance in decisions of panel members as to whether teaching opportunities had occurred in nine of the interaction transcripts was such that those nine transcripts were eliminated from the analysis of teaching content. For itemization of specific interactions that were eliminated, refer to Master Tabulation of Teaching Content Identification and Categorization Data (Appendix G).

An example of a transcript wherein there was inability of the

panel to arrive at a conclusion as to whether a teaching opportunity had occurred is one in which no actual venipuncture was performed. When the donor entered the cubicle, the nurse was busy caring for two other donors whose venipunctures had terminated almost simultaneously. While observing the activity within the cubicle, the donor appeared faint. The physician on duty at the Blood Center was summoned to evaluate the donor's condition. Subsequently, after a period of rest and observation, the donor was advised to go home and no blood was drawn. In this interaction, the nurse communication that transpired was advisory and reassuring, but at no time did the donor specifically seek any information. Periods of donor communication were brief and comments were repetitious. One panel member judged that a teaching opportunity had occurred, one judged that an opportunity had occurred but was not followed up by the nurse and the third panel member judged that no teaching opportunity had transpired. (A copy of the complete transcript may be found in Appendix H - Sample No. 1). As stated previously, this transcript was not included in the analysis of teaching content.

The 32 transcripts wherein there was panel consensus that teaching opportunities had occurred, were combined with two other transcripts. In one transcript, three panel members concurred that a teaching opportunity had transpired which was not followed up by the nurse. In this particular interaction, although no direct question

was verbalized by the donor, the interaction as described by the observer's recording was deemed to be a neglected teaching opportunity. (Appendix H - Sample No. 2) In the other transcript considered eligible for analysis, interaction was judged a teaching opportunity by one panel member and judged "not followed up" by two members. This interaction contained two questions concerning length of time for blood collection, which were responded to by the nurse in a vague and circuitous manner. (Appendix H - Sample No. 3) With the inclusion of these two interactions in which teaching opportunity was judged to have been "not followed up by the nurse," the number of transcripts to be included in the teaching content analysis was 34.

In some interactions more than one teaching opportunity developed. One transcript, for example, included a donor question concerning the Red Cross insignia and a later question from the same donor was one concerned with the percent of B positive type blood. (Appendix H - Sample No. 4) Five out of fifteen of the interactions that contained two teaching opportunity incidents occurred with first-time donors. Table 7 indicates the number of interactions in which two incidents occurred, as well as the number of interactions in which a single incident occurred.

Table 7. Number of Teaching Incidents within Interactions According to Donor Status.

Donor Status	Number of Interactions Containing: Two Incidents	One Incident	Total
First-time	5	3	8
Repeat	10	16	26
Total	15	19	34

In those interactions where there was panel consensus that a teaching opportunity had occurred, but in which there was a variance between panel members as to the specific category of teaching, the category in which two of the panel members concurred was used for purposes of analysis of the teaching content.

There were 31 incidents in which there was panel consensus as to categorization of content. Majority agreement, two out of three panel members, was obtained for 18 of the incidents. A total of 49 teaching incidents occurred within the 34 interactions considered eligible for content analysis. Questions asked by the donor which were assigned to the same category by all panel members, sought information such as: "How long will it take?" or "How many people have negative blood?" (Appendix H - Samples 5 and 6).

Differences occurred in panel categorization where there was a possible overlap of content. For example when a donor asked why the nurse advised him to drink liquids for the next couple of days, two panel members categorized the incident at personal health and

one panel member assigned the incident to the category concerned with physiology and/or chemistry of blood (Appendix H - Sample No. 7). Table 8 reflects the extent of panel consensus for categorization of teaching content.

Table 8. Extent of Panel Consensus for Categorization of Teaching Content.

Teaching Content Category	Number of Incidents with Panel Consensus	Number of Incidents Assigned to Identical Categories by Two of the Panel Members	Total
A. Personal Health	3	7	10
B. Red Cross Programs	5	3	8
C. Physiology and/or Chemistry of Blood	7	2	9
D. Public Health	1	0	1
E. Mechanics of the Procedure	15	6	21
	31	18	49

This table is specifically applicable to the study question: "How often do teaching opportunities occur while a nurse is performing venipuncture procedure in a blood center?" It is apparent that this particular study question was formulated too broadly. If reference is made to the observer data information (presented in the previous section of this chapter), the answer could be stated simply that

teaching opportunities occurred in 50 percent of the donor-nurse interactions during venipuncture procedure. However, if an answer is sought to this question on the basis of the number of incidents that occurred, there is no definitive baseline with which to relate a precise answer to the question.

"What is the nature of the information that donors seek?" is another of the questions for which this study attempted to find answers. The teaching content analysis for this study was predicated on five predetermined teaching categories as were shown in Table 8. The transcripts for panel categorization included a sixth category: "Other (specify category which you think would be more approriate)." None of the panel members judged that any of the teaching incidents should be assigned into a category other than the five predetermined. Therefore, the predetermined categories were accepted as appropriate for the study and the sixth category was omitted from all data analysis. The five predetermined teaching categories were:

A. Personal Health

B. Red Cross Programs

C. Physiology and/or Chemistry of Blood and Circulation

D. Public (Community) Health
(other than Red Cross Programs)

E. Mechanics of the Procedure

There was a variety of questions asked in a number of different

ways. This corresponds with one of the findings of Dragoo's study concerning information that patients desired regarding diagnostic tests. That study indicated that "both patients and nurses agree that patients wish to be told many diverse facts concerning their diagnostic tests." (19)

Only one incident concerned with public health arose during the interactions that were considered eligible for content analysis. In this instance, the donor asked the question: "Are there any hospital banks around Portland?" The nurse's response includes an explanation of the existence of a commercial blood bank in the city. The transcript of this incident, along with two examples of the other four teaching content categories have been included in the appendix (Appendix H - Samples 8-16).

The greatest number of questions were concerned with mechanics of the venipuncture procedure, with the majority of questions in that category being asked by repeat donors. The category with the next highest frequency of occurrence was that concerned with personal health. Six of the ten incidents concerned with personal health were related to first-time donors, and four to repeat donors. The category in which there was the lowest number of incidents was public health. As stated previously, only one such incident occurred and it was related to a repeat donor. The categories concerned with Red Cross programs and physiology and/or chemistry of blood were

relatively equally represented, with eight incidents in the first category and nine in the latter category. Both of these categories contained two incidents related to first-time donors. Figure 2 depicts the number of teaching incidents in relation to teaching content category and donor status.

To determine the extent of commonality of subject matter in the teaching opportunities that occurred, percentage figures were calculated on the basis of the total number of teaching incidents (49) for each of the categories, according to donor status and total incidents for each category. Subject matter related to mechanics of the procedure was involved in 43 percent of the teaching incidents. Personal health was the focus of communication for 20 percent of the teaching. Questions relative to physiology and chemistry of the blood were asked 19 percent of the time. In 16 percent of the incidents, the Red Cross Programs were the topic of concern. A smaller percent (two percent) of the incidents was concerned with public health than with any other category. Figure 3 shows a comparison of the percent of time devoted to the five teaching categories.

There was a greater amount of disagreement in categories A and C, which led to the conclusion that these two categories tended to overlap. Therefore, a percentage was calculated for a combination of these two categories and was determined to be 38 percent. This information is reflected in Table 9 under the heading General

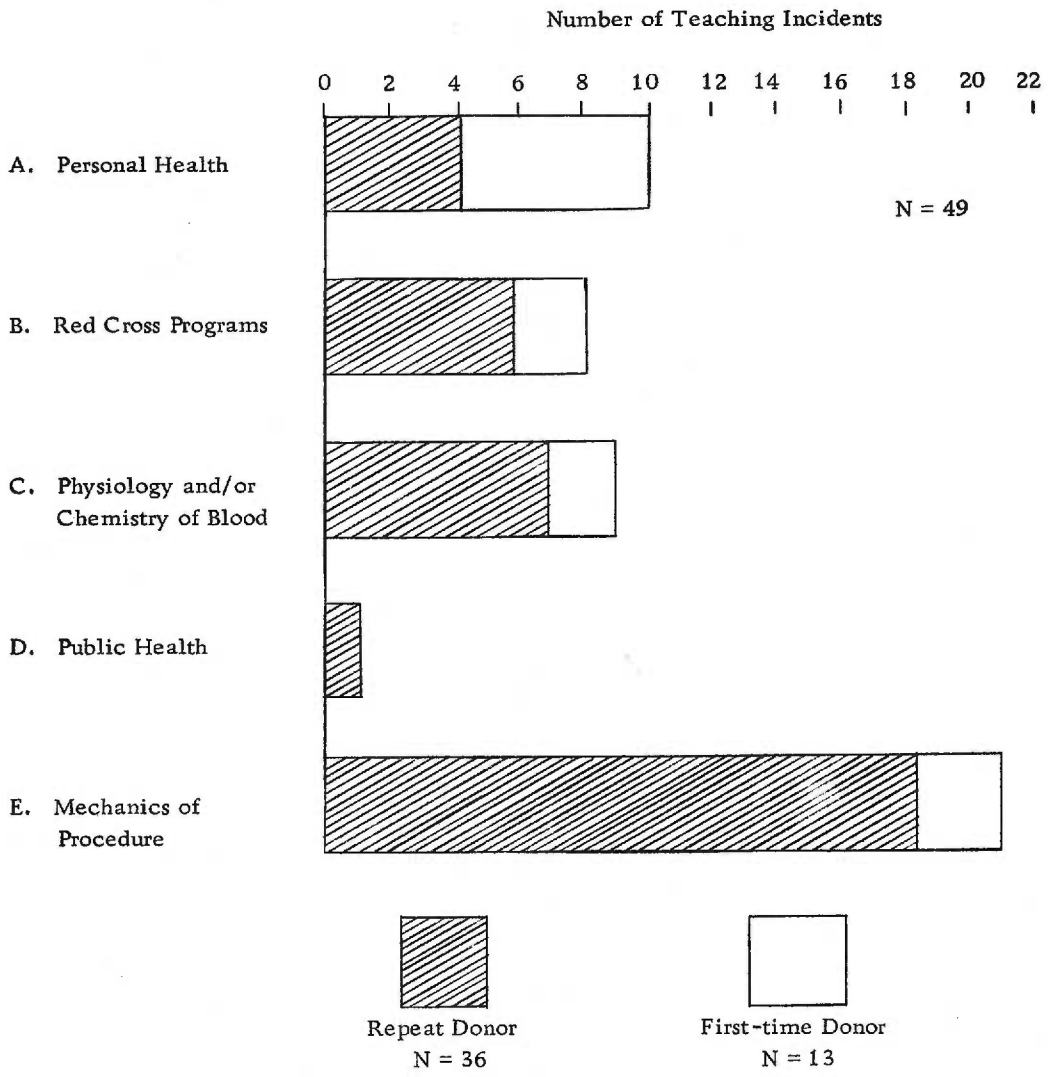


Figure 2. Number of Teaching Incidents in Relation to Teaching Category and Donor Status

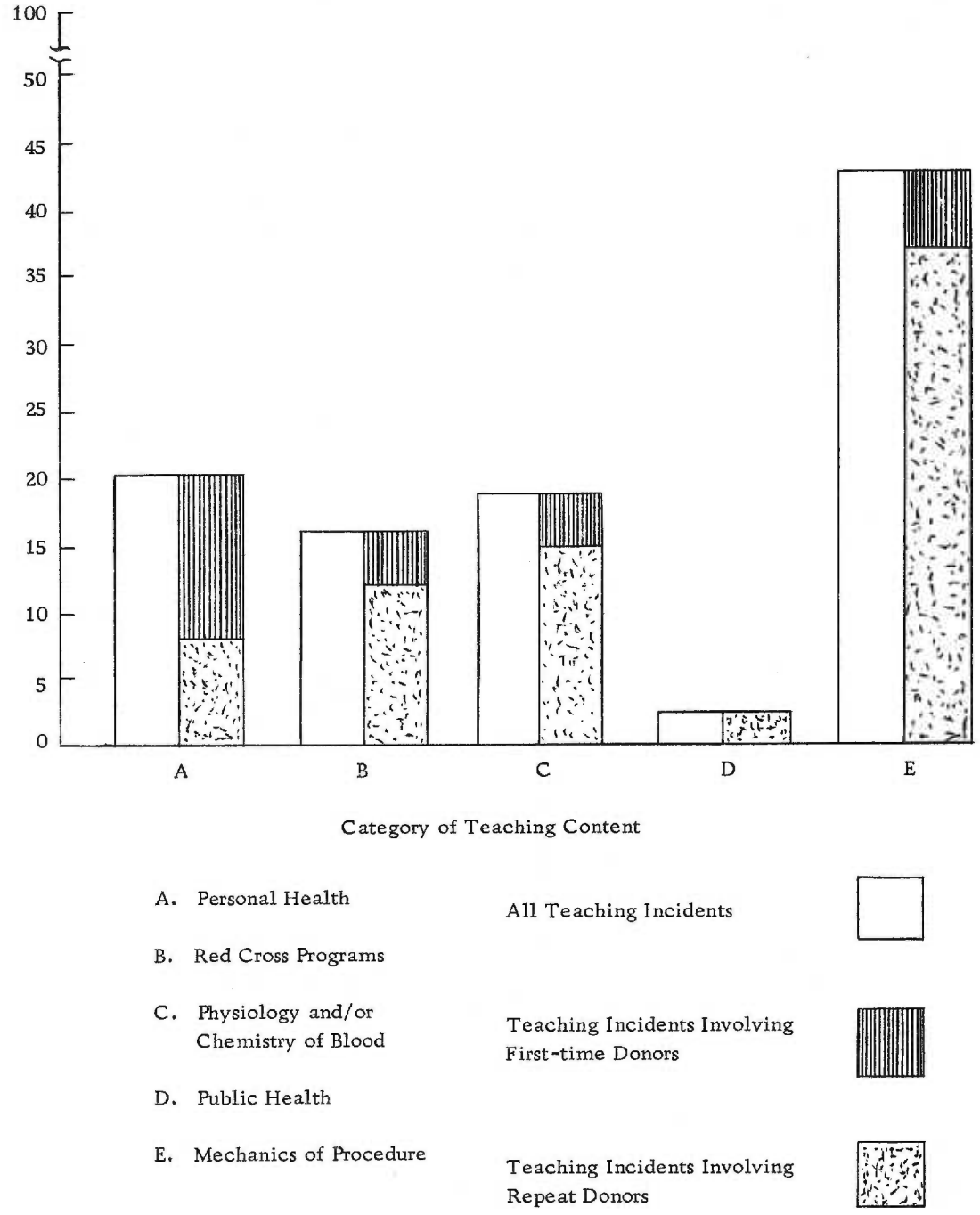


Figure 3. Commonality of Subject Matter in Percentages According to Teaching Category and Donor Status.

Personal Health. Because the Blood Center was the setting selected for the study it was anticipated that there would be exchange of information between the donor and the nurse, concerning the Red Cross Programs. Furthermore, the public relations section of the Blood Program Nursing specifies that the nurse has a responsibility for spreading "understanding of the Blood Program and of the whole Red Cross." (9) The categorization procedure was deliberately designed to extract those questions that were specifically pertinent to the Red Cross. However, as the Red Cross Programs are considered a part of the general public health community services, for final analysis as to the commonality of teaching subject matter, these two categories were also combined and a percentage figure calculated for overall Public Health Programs. It was determined to be 19 percent. In the abridged category groupings, the percentage (43 percent) for mechanics of the procedure remains the same. It can be seen, that in the setting chosen for this study, the individuals for whom the nurses were caring, were most concerned with obtaining information about the specific procedure with which they were involved.

In the study conducted by Mary E. Meyers in which the extent of patient's stress was correlated with the communication patterns that accompanied a procedure, it was concluded that less tension is created when the patient is given specific information upon which he can structure the event of impending stress. (38) That there was a

desire on the part of the donors to know details about the mechanics of the procedure leads one to conjecture as to whether this might or might not have been based on a need for a lessening of personal tension. Table 9 shows the number and percent of total teaching incidents according to three categories.

Table 9. Number and Percent of Total Teaching Incidents According to Three Categories.

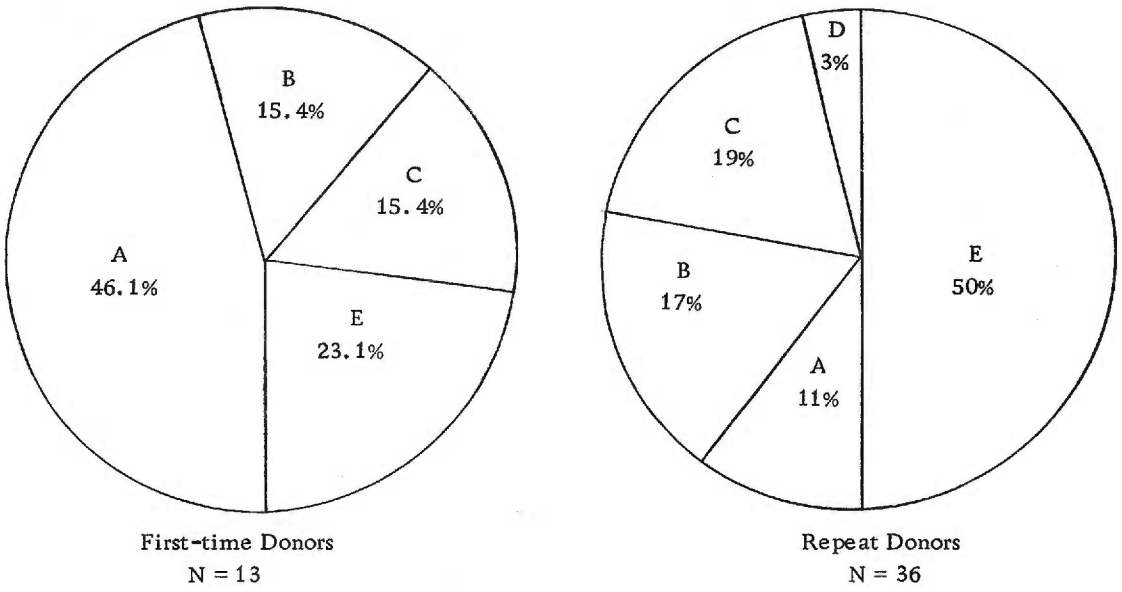
Teaching Category	Number of Percent of Total Teaching Incidents	
	Number	Percent
General Personal Health	19	38
Public Health Programs	9	19
Mechanics of the Procedure	21	43
Total	49	100

To compare the difference between type of subject matter sought by first-time and repeat donors, percentages of the total number of incidents for each class of donors were computed. There was a marked difference in the primary teaching category for which first-time donors sought information as compared to repeat donors. First-time donors' questions centered around personal health (46 percent), while repeat donors were most concerned with mechanics of the procedure (50 percent). No information was gathered by the investigator to determine the frequency of donations for repeat donors.

Nevertheless, it was noticed, by the observer at various times during the data collection phase of the study, that frequently the repeat donors conducted themselves with an air of complete familiarity with the donor room setting. On occasions they greeted the personnel in the room by name. The Blood Center formerly collected blood in glass bottles, but shortly after January 1, 1967, plastic bags were introduced for use for a majority of the blood collections. For many of the repeat donors, the plastic bag was an innovation which they had not seen before and in which they expressed interest. One donor asked: "Have you just started using plastic bags lately?" Another donor inquired: "Is that a new kind of bottle?" (Appendix H - Sample 17)

Furthermore, during the observation period a new type scale was introduced for weighing of the plastic container while the blood donation was in progress. This addition to the customary procedure was cause for discussion, sometimes nurse initiated and sometimes donor initiated. Questions such as: "Hey! What's that?" (Indicating scale attached to rack at bedside), or "Do you take it by the pound now?" were questions that occurred during some of the interactions (Appendix H - Sample 18).

A further examination of Figure 4 reveals that the incidence of information being sought by both first-time and repeat donors in the categories concerning Red Cross Programs and relative to physiology



A. Personal Health

B. Red Cross Programs

C. Physiology and/or Chemistry of Blood

D. Public Health*

E. Mechanics of Procedure

*No interaction occurred with first-time donor in which public health was subject for communication.

Figure 4. Comparison by Percentages of Teaching Content According to Donor Status.

and chemistry of the blood was essentially comparable. As stated previously, no first-time donor sought information about public health matters.

A study designed with more precise categorization would undoubtedly elicit information concerning the specific teaching needs of donors who appear consistently as repeat donors. In contemplating the data concerning the subject matter in which donors are interested, the thought occurs that if a study were conducted to assess the outcomes of the teaching covered in the initial donor visit, illumination might be cast upon whether the answers to questions raised result in satisfying the donor's need for information and further, whether this has any effect on whether the donor returns to contribute blood again.

The final question for which this study sought an answer was: "Do teaching opportunities occur which are not noticed or followed up by the nurse." As stated previously, the two interactions in which the teaching opportunity was judged "not followed up" were included in the content analysis figures. In retrospect, it would appear the study question, as phrased, was not definitive enough. Because of the lack of unanimity of the panel members concerning this classification, it can be conjectured that the definition given in the study for follow-up might not have been sufficiently comprehensive for eliciting a more meaningful analysis for response to this question. For instance, a transcript demonstrating the type of interaction that

occurred that was difficult to classify was one wherein the conversation was desultory and diversionary in nature but the topic of conversation was centered on a medication, pain and accidents, all topics which are often associated with nursing care. (Appendix H-Sample 19)

One of the conclusions of the study conducted by Doris Schindler concerning nurse-patient communication practices, inferred from nurses' statements of communication practices, that there was "some degree of insensitivity to covert nursing problems." The relatively low incidence of neglected teaching opportunities as brought out in this study, indicates a degree of difference from the inference mentioned above. Although, as mentioned previously, methodology of this study made no provisions for assessing the quality of the responses given to the donor's questions, it was apparent that the nurses who participated in this study were aware of the donor's need for information.

The overall view of the findings of the analysis of both the observer data and the panel identification and categorization of teaching content data will be summarized and related to the purposes of the study in the next chapter.

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was undertaken for the purpose of extracting a single covert, but identifiable secondary and recurrent aspect of one distinct nursing activity, from that primary nursing activity and subjecting that underlying component to examination and analysis.

Prior to and during the study described in this report, the investigator examined nursing literature and studies in the general areas of nursing activities and functions, qualitative aspects of nursing, and nurse-patient communication and teaching interactions. Although no other research was found that exactly paralleled the approach taken in this study, the literature review did establish a frame of reference and suggest guidelines for formulating the study design.

Focus of the study was on identifying and analyzing the extent and frequency of incidental and spontaneous teaching opportunities that occurred while a nurse was performing the venipuncture procedure at a Red Cross Blood Center.

Data were collected by a non-participant nurse-observer, who recorded portions of communication between a donor and nurse while a blood donation was being given. Only those communications that

merited consideration as being teaching opportunities were recorded. Observer attention was directed toward donor initiated conversation with particular focus on questions asked by the donor.

A total of 100 donor-nurse interactions was observed on six separate occasions. A total of 15 nurses participated in the interactions observed. The average duration of the interactions was determined to be 15 minutes. Eighty-six of the 100 observations were considered complete observations. Transcriptions were made of the teaching related communication from 43 of the 86 completed observations. These 43 transcriptions were submitted to a panel of three nurse-educators, who identified that there were 49 incidents in which communication merited consideration as teaching incidents. These 49 teaching incidents were categorized by the panel members as to subject matter content.

Findings

Findings pertinent to the questions this study sought to answer can be summarized as follows:

1. From the analysis of observer transcription data it was determined that teaching opportunities occurred in 50 percent of the completed nurse-donor interactions observed during the study period. Forty-nine specific teaching incidents were judged to have occurred during the 34 interactions that were considered eligible for the

teaching content analysis phase of the study.

2. The teaching content analysis, predicated on five predetermined teaching categories, revealed that 43 percent, nearly one-half, of the teaching opportunity incidents were related to mechanics of the venipuncture procedure. Personal health was the focus of communication for 20 percent of the teaching. Nineteen percent of the questions were relative to physiology and chemistry of the blood. Red Cross Programs accounted for 16 percent of the incidents. Only two percent of the incidents was concerned with public health.

3. First-time donors' questions centered around personal health (46 percent), while repeat donors were most concerned with mechanics of the procedure (50 percent). Differences in subject matter of concern to both first-time and repeat donors in the other four categories were not remarkable.

4. The panel members consensually identified only two incidents out of the 49 teaching incidents in which it was determined that teaching opportunities had occurred which were not noticed or were not followed up by the nurse.

Conclusions

The conclusions that can be drawn from the study findings can be specifically related to the study questions as follows:

1. "How often do teaching opportunities occur while a nurse is performing venipuncture procedure in a blood center?"

In answer to this question, it may be concluded that teaching opportunities occur frequently during the brief period of time while a nurse is performing a venipuncture procedure in a blood center.

2. "What is the nature of the information that donors seek?"

The data analysis revealed that the findings relevant to this question correlate closely with the data pertinent to the third question of the study. Consequently, conclusions will be presented in combination.

3. "What is the extent of commonality of subject matter in the teaching opportunities that do occur?"

A primary concern of the donors studied was in learning more about what is happening while venipuncture procedure activities are transpiring. Interest in information concerning personal health, Red Cross Programs and physiology and chemistry of the blood seemed of approximately equal importance to all the donors. Little interest was manifest in acquiring information about public health matters.

4. "Is there any difference between the subject matter that is sought by a first-time donor and a repeat donor?"

There was a marked difference in the primary teaching category for which first-time donors sought information as compared to repeat donors. First-time donors' questions centered around personal health, while repeat donors were more concerned with

mechanics of the procedure. Differences in subject matter of concern to both first-time and repeat donors in the other four categories were not remarkable.

5. "Do teaching opportunities occur which are not noticed or are not followed up by the nurse?"

It was concluded by the investigator that this question, as phrased, was not definitive enough. Hence, no conclusive answer can be given to this question, other than to state that teaching opportunities do occur that are overlooked or neglected.

The conclusions discussed above are specifically limited to the data obtained from this study as related to the study questions in particular. Certain broad conclusions emerge from an analysis of the data, but should, nevertheless, be viewed in terms of that data. The selection of the Blood Center for the study setting was purposive, predicated on the fact that little or no nursing research has been conducted under conditions that can be associated with the individual who stands at the beginning of the continuum of nursing care--a well individual. In this study setting, other than those needs associated with the technical aspects of the venipuncture itself, the physical nursing needs of a donor are relatively minimal and transitory.

The broad conclusions derived from analysis of the study data may be stated as follows:

1. Even in brief contacts with well persons, the nurse in

carrying out her function has opportunity for teaching. Further study, however, would be needed to determine if this is characteristic of other contacts or is unique to the Blood Center setting.

2. Nurses in this study seemed to recognize and capitalize on opportunities for teaching, even though the scope of interaction necessarily was small and the time brief.

3. Well individuals do seek health information when a nurse is in attendance and teaching may be more than just an "incidental" component of care.

4. When an individual is involved in a nursing procedure he is interested in learning specifics about that procedure. This conclusion tends to coincide with a finding of the Meyers (38) study on the relationship of communication patterns to patient's stress, that less tension is created when a patient is given specific information concerning a procedure.

5. It is possible to extract from the communication that transpires during a nursing care procedure, portions of that communication that underlie the mainstream of the essential communication theme.

Recommendations for Further Study

As an outgrowth of this study, it is recommended that the following suggestions be considered for further study:

1. That a study be done to evaluate the communication and teaching skills of nurses in relation to outcomes of learning that may result from teaching opportunities that transpire.

2. That a study be done of incidental teaching opportunities that arise during venipuncture procedure in other settings.

3. That a study similar to this study be conducted, in which refinements are incorporated into the design. Such modification as 1) use of more than one observer, 2) use of mechanical recording devices such as tape-recorders and motion pictures, and 3) possibly the addition of some form of questionnaire for the participants in the study, which was designed to elicit motivational factors could be given consideration.

4. That a study be done of some other well-defined nursing activity, to ascertain the possibilities of extracting some one covert aspect, other than teaching, from the primary nursing activity.

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APPENDICES

APPENDIX A

COPY OF
BLOOD PROGRAM NURSING MANUAL
VENIPUNCTURE PROCEDURE

STEP 6: VENIPUNCTURE PROCEDURE

The venipuncture is performed by either a registered professional nurse or a physician. Everything possible must be done to make this a safe, painless, comfortable procedure.

The donor room itself should be suitable for the procedure: the space should be kept clean and tidy so that aseptic technique can be followed. Access to the donor room should be limited to professional personnel, the assisting volunteers, and the donors so that a professional atmosphere can be maintained.

Vacuum-type, disposable donor bottles and expendable donor sets are standard equipment in the Red Cross Blood Program. The procedure has been developed so that a pint of blood can be safely withdrawn in 5-7 minutes.

The donor must receive the continuous attention of the venipuncture nurse (or her aide) every moment he is in the donor room. If the nurse is not ready for the next donor, she should so inform the escort.

The quantity of blood to be withdrawn is 480 cc. in ACD, 500 cc. in sodium citrate. In regional centers, however, the physician may accept persons from whom he wishes only 300 cc. of blood removed. The donor is carefully observed throughout the entire procedure; if he shows symptoms of a reaction, the withdrawal of blood is discontinued and treatment for the reaction should be instituted.

Only the veins in the antecubital space are to be used for the collection of blood, and no more than one venipuncture should be performed in each arm.

The donor should be reassured throughout the venipuncture. Talking with him helps keep his mind from the procedure. Since the sight of blood may be frightening or sickening to certain individuals, the bottle of blood should be as unobtrusive as possible. The hands and uniforms of personnel must be immaculate. If the hands are unavoidably soiled by blood, they should be immediately washed. Soiled uniforms should be changed or covered with a clean lab coat.

The donor should rest 10-15 minutes after the withdrawal of blood.

Outline of Venipuncture Procedure

Objectives

To remove blood from a donor's vein, under aseptic conditions, with safety and comfort to the donor.

To observe technical standards during the procedure to ensure a satisfactory bottle of blood for the recipient.

Factors Determining Ease of Venipuncture[1]

Accessibility of the vein

Size of veins

Thickness of vein walls

Degree of fixation of vein

Size of needle in relation to size of vein

Sharpness of needle

Degree of bevel of needle

Cleanliness of needle

Experience of person performing venipuncture

Position of needle in vein

Age of person having venipuncture

Cooperation of person having venipuncture

Equipment

1. Sterile Equipment for Donor Table

   Container with 2" x 2" sponges, dry

   Container with 2" x 2" sponges moistened with soap solution

   Applicator jar with applicators

   Sponge-holding forceps in container filled with 70% alcohol

   Disposable procaine-injection units

   Donor sets

   Blood-collection bottles with ACD solution* Each bottle has one rubber-stoppered vacuum-type tube (referred to as "pilot tube") firmly attached with acetate tape, and one vacuum-type tube attached with two rubber bands. Bottle and both tubes are pre-labeled with an identical whole-blood number.

   20-cc. syringes with 20 G 1½" needles

   Elastic adhesive compresses or other suitable dressings.

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*For collection of blood in sodium citrate solution, see p. 28.

[1]White, C. S. and Weinstein, J. J.: Blood Derivatives and Substitutes. Baltimore, Williams & Wilkins, 1947, p. 170

1. Unsterile Equipment for Donor Table

   Container of 2% aqueous iodine

   Container of 70% alcohol

   Adhesive tape ½"

   Tourniquets

   Handgripper

   Paper towels

   Donor set clamps (assorted)

   Mouth gags

   Emesis basin

   Specimen tubes, plain

   Red pencil

   Fountain pen

   Scissors

   Ammonia ampoules

2. Donor bed with bottle-holder attached

3. Small knee-sheet

4. Receptacle for waste

TEACHING GUIDE FOR OUTLINE OF VENIPUNCTURE PROCEDURE

What	*How*	*Why*
1. Greet donor.	Identify by name on donor registration card.	To gain donor's confidence and cooperation To be sure correct record is with donor
2. Check donor registration card.	Note any statements that have been made regarding medical history or amount of blood to be taken.	To mark bottle for plasma fractionation, if so indicated To safeguard donor

What	How	Why
3. Check whole-blood number.	Check whole-blood number to be certain that it is the same on all records: 1. Bottle label 2. Pilot tube 3. Serology tube 4. Donor registration card	For correct identification of specimens and bottle of blood
4. Select arm vein to be used.	Determine if donor has a preference. Have donor sit on side of bed. Examine both arms; tighten tourniquet if veins are not clearly visible. Select vein (usually median cubital, basilic, or cephalic). Release tourniquet.	For convenience of donor To determine vein that may be used with least discomfort and the best flow of blood
5. Place donor in comfortable position on donor bed.	Cover legs of women donors with small kneesheet. Assist donor in lying down. Place arm in a position level with body.	To protect women donors from unnecessary exposure. For donor's comfort
6. Prepare venipuncture site with soap, alcohol, and aqueous iodine 2%.	Place tourniquet in position, but do not tighten. Vigorously scrub skin overlying antecubital fossa for area of 4" x 4" with gauze sponge saturated with soap solution. Remove soap with applicator saturated with 70% alcohol. Apply 2% aqueous iodine solution to site, using applicator. Allow iodine to dry.	For donor's comfort For donor's and recipient's safety
7. Prepare blood collection bottle.	Expose rubber stopper of blood bottle. Apply 2% aqueous iodine to stopper by means of a sterile applicator. Using same applicator, apply iodine to pilot-tube stopper. Remove iodine from bottle stopper with applicator saturated with 70% alcohol; then remove iodine from pilot-tube stopper. Firmly close clasp of donor set.	To ensure sterility of bottle and pilot tube when stoppers are punctured by bottle needle

What	How	Why
7. Prepare blood collection bottle. (cont.)	Remove guard from bottle-puncturing needle. Insert bottle-puncturing needle through designated space on bottle stopper. Be careful that site of insertion and cannula of needle remain sterile. Invert bottle and note action of anticoagulant solution.	To determine whether there is a leakage of air (indicated by excessive number of bubbles). Discard bottle and donor set if leakage is observed.
8. Tighten tourniquet.	Apply at a point 2 inches above planned site of venipuncture. Determine (by presence of a normal pulse volume in the radial artery) that tourniquet is not too tight.	To help fix vein and prevent movement during puncture To obtain maximum distention of vein
9. Inject approximately ¼ cc. of 1% procaine hydrochloride intracutaneously. (Use disposable injection units or individual, sterile syringes and needle.)*	Raise small wheal at site of skin puncture. Place used procaine unit in box marked for such used units.	For donor's comfort For collection and later destruction
10. Cleanse area with 70% alcohol.	Apply 70% alcohol to prepared area.	To ensure safely prepared area through which to insert venipuncture needle
11. Adjust bottle in rack.	Invert and shake bottle several times. Place in inverted position in rack.	To coat sides of bottle with anticoagulant solution To ensure adequate mixing of blood with anticoagulant
12. Place handgripper.	Place in donor's hand. Instruct him to make firm fist when venipuncture is performed.	To aid in distention of vein
13. Insert venipuncture needle.	Remove guard from 17 G needle in donor set. Anchor vein by grasping forearm below the prepared area and pulling skin taut. (Note: The prepared site of venipuncture is to be treated with non-touch technique.)	 For donor's comfort and for ease in performance To prevent rolling of vein

*Procaine may be omitted at discretion of local medical advisory committee.

What	How	Why
13. Insert venipuncture needle. (cont.)	Hold needle at 20-45° angle, with bevel up.	
	Pierce skin directly over vein 1/8" to 1/4" below intended site of venipuncture with a sharp, sudden thrust.	
	Lower angle of needle to a 10-15° angle, with tip of needle beneath skin on top of vein and in the same direction as vein.	
	Use a slow, steady push of needle to enter vein wall.	To prevent forcing needle through posterior wall
	After entering wall, insert needle into lumen of vein for a distance of 1/8" to 1/2".	To anchor needle in vein
14. Anchor needle and tubing to arm.	Place adhesive strip on hub of needle to fix needle firmly in place, if necessary.	To prevent needle from pulling out of vein
15. Cover venipuncture site.	With dry sterile sponge.	For donor's and recipient's safety
16. Release and adjust clamp on tubing.	Release very gradually. Prevent spurting blood against glass.	To prevent donor reaction
	Regulate flow of blood so that collection is approximately 100 cc. blood per minute (or 5-7 minutes for 500 cc. donation).	To prevent clotting of blood To prevent hemolysis
17. Instruct donor.	To open and close fist approximately 15-18 times per minute, or every time donor breathes.	To aid in venous distention To give the donor something to do
18. Agitate blood bottle.	Gently with circular motion at rate of once every 100 cc. of blood flow.	To mix blood thoroughly with anticoagulant To prevent clotting and hemolysis
19. Observe donor throughout procedure.	Note color, attitude, perspiration, respiration, and any other objective symptoms.	To observe early signs of reaction and to begin treatment as promptly as possible *
20. Stop flow of blood when desired quantity has been collected.	Close clamp tightly. Do *not* remove needle from vein.	To maintain completely closed system To collect laboratory samples

*If the donor shows symptoms of a reaction, the withdrawal of blood should be discontinued and treatment for the reaction should be instituted. (See Section VI, p. 3.)

What	How	Why
21. Withdraw needle from collection bottle.	Place bottle upright on donor bed. Avoid pulling on tubing or on needle in vein.	To prevent breaking the bottle To prevent displacing needle from vein
22. Fill pilot tube.	Insert bottle needle into pilot-tube stopper. Reopen clamp slowly. Collect 7 cc. of blood. Close clamp tightly. Remove needle from pilot-tube stopper.	For use by administering agency for analysis and cross-matching before giving blood to recipient
23. Collect blood for grouping, Rh-typing, and serology.	Collect 7 cc. of blood in plain test tube.	For laboratory tests at center
24. Release tourniquet. Remove handgripper.	Release gently.	To prevent injury to vein
25. Remove needle from vein.	Gently remove adhesive strip from hub of needle. Apply gentle pressure with gauze-protected fingers over site of venipuncture. Remove needle carefully by pulling it in a steady motion from vein. Place gauze sponge over puncture.	For donor's comfort To prevent hematoma To prevent injury to vein and tissue For donor's comfort
26. Apply pressure to site of venipuncture.	Have donor extend arm vertically, applying steady pressure with fingers of other hand over gauze-covered puncture site. Arm should be kept elevated for 1-2 minutes.	To prevent hematoma at puncture site
27. Discard used donor set.	Place used set in paper towel. Have volunteer remove it to utility room or workspace for disposal.	For neatness of donor room
28. Check whole-blood numbers on all records.	Be certain that numbers are accurate. See that all labels are properly attached.	To ensure accurate identification For recipient's safety

What	How	Why
29. Apply dry sterile dressing to venipuncture site.	Inspect site for bleeding or hematoma. Remove any iodine remaining on skin with an applicator dipped in 70% alcohol. Apply dressing (elastic adhesive compress type) securely. Instruct donor to leave dressing in place 4-6 hours.	For donor's safety To prevent infection; to prevent seepage of blood into tissues
30. Continue to observe donor.	Have donor rest for 10-15 minutes. (For last few minutes of rest, donor should be in sitting position.) Nurse or volunteer in constant attendance.	To lessen possibilities of a reaction To protect donor
31. Complete donor registration card.	Fill in necessary information regarding amount of blood withdrawn. If reaction has occurred, note this on donor card. If no reaction has occurred, leave space blank. Sign card in space provided.	For medical record and statistical purposes To be filled in later in case of reaction in canteen
32. Give final preparation to bottle top. (May be done by custodian.)	Using sterile applicator saturated with 70% alcohol, wipe off bottle stopper, beginning in middle and working outward in slightly overlapping circles to outer edge. Using same applicator (or a second one, if first has become stained with blood), wipe out inside of clean dust-cap, starting in middle of cap, in procedure as above, including inner sides of cap. Place cap on bottle top.	To ensure relative cleanliness of bottle top
33. Gently invert bottle of blood several times before placing bottle with pilot tube attached in refrigerator or cooling unit.	Grasp with both hands, one at top and one at bottom of bottle.	To mix blood thoroughly with anticoagulant to prevent clotting
34. Transfer donor card and second tube to designated place.		For safety of records and equipment To keep donor table neat
35. Escort donor from donor room.		To protect donor from injury in case of reaction

APPENDIX B

OBSERVER RECORDING FORMAT

OBSERVER RECORDING FORMAT

Date:
Donor No:
M - F
Age:
Occupation:
First Visit Yes No

Begun:
Ended:
Nurse No.
Bed No.*

*This entry was designed specifically as a convenience for systematizing the observer's recordings while they were being recorded initially in shorthand. This item was not intended to be subjected to data analysis.

APPENDIX C

OBSERVATION TRANSCRIPTION FORMAT

OBSERVATION TRANSCRIPTION Date:

Donor No. ____	Sex: Male Female	Duration ____ Minutes
In _____ PM	Age: ____ Group ____	Nurse No. ____
Out _____ AM	First Visit: Yes No	Occupation:

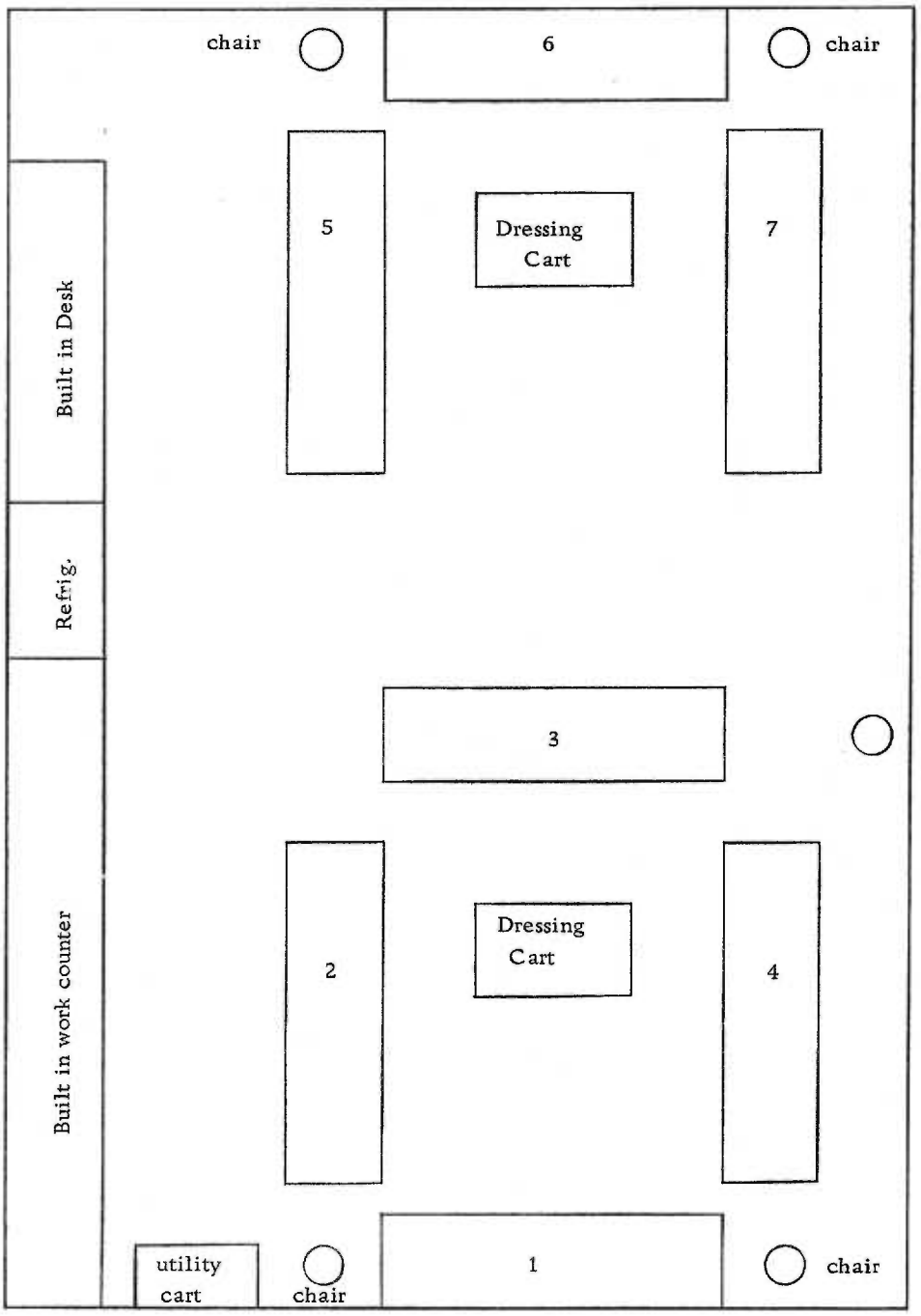
Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.									
II.									
III.									

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

APPENDIX D

DIAGRAM OF DONOR ROOM

DONOR ROOM


chair
6
chair
5
Dressing Cart
7
Built in Desk
Refrig.
3
Built in work counter
2
Dressing Cart
4
utility cart
chair
1
chair

APPENDIX E

INSTRUCTIONS TO PANEL MEMBERS

INSTRUCTIONS TO PANEL MEMBERS

Attached are 43 transcriptions of shorthand recordings of portions of communication which transpired between donor and nurse during venipuncture at the Red Cross Blood Center.

Only those portions of communication that merited consideration as being related to teaching opportunities was recorded. Portions of conversations deemed relevant and essential for performance of the procedure and/or diversionary in nature, were not recorded and are indicated by asterisks in the transcriptions.

The questions for which this study seeks answers are:

1. How often do teaching opportunities occur while a nurse is performing venipuncture procedure in a blood center donor room?

2. What is the nature of the information that donors seek?

3. What is the extent of commonality of subject matter in the teaching opportunities that do occur?

4. Is there any difference between the subject matter that is sought by a first-time donor and a repeat donor?

5. Do teaching opportunities occur which are not noticed or are not followed up by the nurse?

Before reading the transcripts, please:

1. Review the outline of the venipuncture procedure as established by the American National Red Cross Blood Program Nursing Manual. (Copy attached.)

2. Review the assumptions, limitations and definitions for this study. (Copies attached.)

Read each transcription. Determine whether you think a teaching opportunity occurred. Check the appropriate response in the teaching opportunity column. If, in your opinion a teaching opportunity did occur, check which of the specific subject matter categories is MOST appropriate. If more than one teaching incident arose in a

single donor-nurse interaction, place the figure one in the category appropriate for the first incident, and the figure two for the second incident, and the figure three for the third incident. Should you judge the teaching content was not in the categories listed, please check "Other" and specify a category which you think would be more appropriate.

Your Panel Member No. is _____. Please make your entries on the line that corresponds to your number. Thank you.

Alida E. Kneisel

APPENDIX F

MASTER TABULATION OF OBSERVER DATA

MASTER TABULATION OF OBSERVER DATA

	Classification of Observation			Sex		Age		First Visit			Nurse
	Complete		Incom-								
No.	Teaching	No Teaching	plete	M	F	Group	Occupation	Yes	No	Time	No.
1	x			x		I	Machinist		x	12	1
2		x		x		I	Truck Driver		x	15	2
3	x			x		IV	Mechanic		x	24	1
4		x		x		IV	Lab. Tech.		x	13	1
5			x	x		IV	Warehouse		x	13	2
6	x			x		III	Salesman		x	13	1
7			x		x	IV	Clerk		x	35	1
8		x		x		II	Clerk		x	14	1
9			x	x		III	Salesman		x	13	1
10			x	x		I	Warehouse		x	13	1
11	x			x		I	Company Rep.		x	16	2
12		x		x		III	Firefighter		x	12	1
13	x			x		III	Truck Driver		x	14	1
14		x		x		IV	Lab. Tech.		x	15	2
15		x		x		I	Salesman		x	16	1
16	x			x		I	Pattern Maker	x		21	1
17	x			x		III	Teacher		x	18	4
18	x			x		III	Estimator		x	17	5
19		x			x	III	Housewife		x	19	5
20	x				x	I	Steno. Clerk	x		21	6
21			x		x	II	Printer	x		25	6
22		x			x	IV	Housewife		x	24	6
23		x		x		IV	Mer. Specialist		x	19	6
24			x	x		I	Clerk	x		30	6
25	x			x		I	Fireman		x	27	6
26		x		x		III	Counselor		x	14	6
27	x			x		III	Tow Motor operator	x		14	8
28	x			x		III	Salesman		x	14	8
29		x		x		IV	Metal Worker		x	13	7
30	x			x		II	Draftsman		x	14	7
31	x			x		III	Salesman	x		18	7
32	x			x		III	Machinist		x	14	7
33		x			x	I	Housewife	x		20	7
34		x		x		I	Drapery Installer		x	23	3
35	x			x		I	Dist. Ass't	x		17	8
36		x		x		II	Draftsman		x	11	7
37	x				x	III	Housewife		x	30	7
38		x		x		III	Ironworker		x	17	8
39		x			x	III	Housewife		x	17	7
40	x				x	II	Homemaker	x		15	7
41	x				x	III	Housewife		x	15	9
42			x	x		I	Linotype op.		x	11	9
43			x	x		I	Assemblyman		x	20	9
44		x		x		II	Office Mgr.		x	10	10

MASTER TABULATION (Continued)

No.	Classification of Observation: Complete: Teaching	Complete: No Teaching	Incomplete	Sex: M	Sex: F	Age Group	Occupation	First Visit: Yes	First Visit: No	Time	Nurse No.
45		x		x		IV	Garage Owner		x	9	10
46	x			x		IV	Teacher		x	12	11
47	x			x		III	Minister		x	11	11
48	x				x	II	Housewife		x	13	11
49	x			x		IV	Plumber		x	12	11
50		x		x		II	Mgr. Data Processing		x	13	11
51			x	x		I	College Std.		x	11	9
52	x			x		II	Engineer		x	12	9
53		x		x		III	Accounting Exec		x	19	3
54		x		x		IV	Radio Announcer		x	14	11
55		x		x		IV	Truck Driver	x		12	12
56		x		x		III	Paper Mill Wrk.		x	13	3
57			x		x	II	Home Engr.		x	18	12
58	x			x		II	Auditor		x	15	11
59		x		x		III	Policeman		x	15	3
60	x			x		III	Postman		x	15	11
61		x		x		IV	Foreman		x	10	3
62	x			x		IV	Army Tech.		x	15	3
63		x		x		III	Army Tech.		x	16	11
64	x			x		III	Purchasing		x	11	11
65	x			x		I	Furniture Wrk.		x	17	11
66		x		x		II	Off-Bearer		x	16	11
67		x		x		I	Laborer	x		18	11
68		x		x		II	Parts Man		x	12	11
69		x			x	IV	Housewife		x	18	11
70	x			x		III	President Plating Co.		x	16	11
71		x			x	III	Clk-Typist		x	18	12
72			x	x		II	Designer		x	17	13
73			x		x	I	Housewife		x	13	12
74		x		x		I	Gen'l Mgr.		x	16	4
75		x			x	III	Saleslady		x	16	6
76		x		x		IV	Locksmith		x	13	11
77			x		x	II	Housewife		x	20	6
78	x			x		IV	Traffic Mgr.		x	12	6
79		x			x	I	Caseworker		x	25	6
80		x		x		III	Controller		x	15	4
81		x		x		IV	Truck Driver		x	15	6
82	x			x		I	Maintenance Worker	x		28	6
83	x			x		III	Engineer		x	16	4
84	x			x		II	Sales Mgr.		x	19	4
85		x			x	IV	Housewife		x	20	4
86	x			x		II	Salesman		x	14	14
87	x			x		I	Laborer	x		15	14
88		x			x	IV	Housewife		x	13	14

MASTER TABULATION (Continued)

	Classification of Observation							First Visit			
	Complete		Incom-			Age					Nurse
No.	Teaching	No Teaching	plete	M	F	Group	Occupation	Yes	No	Time	No.
89	x			x		II	Longshoreman		x	12	14
90	x			x		II	Draftsman	x		15	11
91			x	x		II	Elec. Engr.		x	19	1
92		x			x	II	Homemaker		x	14	15
93	x			x		III	Pres. Mfg. Co.		x	12	1
94	x				x	III	Housewife	x		14	1
95		x		x		II	Furnace Man		x	13	15
96	x			x		III	Soil Scientist		x	10	1
97		x		x		II	Accountant		x	15	1
98		x		x		III	Gen'l Mgr.		x	13	15
99	x			x		I	Gen'l Mgr.		x	13	1
100	x			x		IV	Geologist		x	15	15
Total	43	43	14	78	22			15	85		

Notes: Time indicates total number of minutes donor was in donor room.

Age Groups:	Age Range	Total
I	18-28	23
II	29-39	23
III	40-49	32
IV	50-59	22

Observations No.	1-16	were made on	5- 2-67
	17-40		5- 3-67
	41-52		5- 8-67
	53-73		5- 9-67
	74-89		5-10-67
	90-100		5-16-67

APPENDIX G

MASTER TABULATION OF TEACHING CONTENT IDENTIFICATION AND CATEGORIZATION DATA

MASTER TABULATION OF TEACHING CONTENT IDENTIFICATION AND CATEGORIZATION DATA BY PANEL

No.	Panel Member Number	Teaching Opportunity: Follow-up Yes	Follow-up Omitted	No	Category of Teaching Content: A	B	C	D	E	Number of Teaching Incidents in Each Interaction
	I		x						(x)	1
1	II		x						(x)	1
	III		x						(x)	1
	I	x							x	1
3	II	x							x	1
	III	x							x	1
	I			x						0
6	II			x						0
	III		x				(x)			1
	I	x					x		x	2
11	II	x					x		x	2
	III	x					x			1
	I	x							x	1
13	II	x							x	1
	III	x	x*				(x)		x	2
	I	x					x			1
(16)	II	x			x					1
	III	x			x					1
	I	x					x			1
17	II	x					x			1
	III	x					x			1

Note: (x) in Category Column indicates teaching opportunity in that category was not followed up.

*Panel Member III designated one incident in "Follow-up Omitted" in addition to a teaching incident.

Code for "CATEGORY OF TEACHING CONTENT"
A - Personal Health
B - Red Cross Programs
C - Physiology and/or Chemistry of Blood
D - Public (Community) Health
E - Mechanics of Procedure

□ Indicates variance in panel identification of teaching opportunity

◯ Indicates first-time donor

MASTER TABULATION OF TEACHING CONTENT IDENTIFICATION (Continued)

No.	Panel Member Number	Teaching Opportunity			Category of Teaching Content					Number of Teaching Incidents in Each Interaction
		Yes	Follow-up Omitted	No	A	B	C	D	E	
	I	x							x	1
18	II	x							x	1
	III			x						0
	I	x			x				x	2
20	II	x			x		x			2
	III	x			x		x			2
	I	x					x		x	2
25	II	x			x				x	2
	III	x			x				x	2
	I	x					x			1
27	II	x			x					1
	III	x			x					1
	I	x					x			1
28	II	x					x			1
	III	x					x			1
	I	x							x	1
30	II	x							x	1
	III	x							x	1
	I	x					x		x	2
31	II	x			x				x	2
	III	x			x					1
	I	x							x	1
32	II	x							x	1
	III	x							x	1
	I	x			x				x	2
35	II	x			x				x	2
	III	x							x	1
	I	x							x	1
37	II	x							x	1
	III	x							x	1
	I	x							x	1
40	II		x		(x)					1
	III			x						0

MASTER TABULATION OF TEACHING CONTENT IDENTIFICATION (Continued)

No.	Panel Member Number	Teaching Opportunity Follow-up Yes	Omitted	No	Category of Teaching Content A	B	C	D	E	Number of Teaching Incidents in Each Interaction
	I	x							x	1
41	II	x							x	1
	III	x							x	1
	I	x				x		x		2
46	II	x				x		x		2
	III	x						x		1
	I	x				x			x	2
47	II	x				x			x	2
	III	x				x				1
	I	x							x	1
48	II	x							x	1
	III			x						0
	I	x				x	x			2
49	II	x				x	x			2
	III	x					x			1
	I	x							x	1
52	II		x						(x)	1
	III		x						(x)	1
	I	x							x	1
58	II	x			x					1
	III	x			x					1
	I	x							x	1
60	II	x							x	1
	III	x							x	1
	I	x							x	1
62	II	x							x	1
	III			x						0
	I	x			x					1
64	II		x		(x)					1
	III			x						0
	I	x							x	1
65	II	x			x		x			2
	III	x			x		x			2

MASTER TABULATION OF TEACHING CONTENT IDENTIFICATION (Continued)

No.	Panel Member Number	Teaching Opportunity Follow-up Yes	Teaching Opportunity Follow-up No	Category of Teaching Content A	B	C	D	E	Number of Teaching Incidents in Each Interaction
	I		x						0
70	II		x	(x)					1
	III		x	(x)					1
	I	x		x				x	2
78	II	x		x					1
	III	x		x					1
	I	x		x					1
82	II	x		x	x				2
	III	x		x	x				2
	I	x						x	1
83	II	x						x	1
	III	x						x	1
	I	x			x	x			2
84	II	x			x	x			2
	III	x			x	x			2
	I	x						x	1
86	II	x						x	1
	III	x						x	1
	I	x			x	x		x	3
87	II	x			x	x			2
	III	x			x	x			2
	I	x			x			x	2
89	II	x			x			x	2
	III	x			x				1
	I	x						x	1
90	II	x						x	1
	III	x						x	1
	I	x			x			x	2
93	II	x			x			x	2
	III	x			x				1
	I	x						x	1
94	II	x						x	1
	III		x						0
	I	x						x	1
96	II	x						x	1
	III	x						x	1

MASTER TABULATION OF TEACHING CONTENT IDENTIFICATION (Continued)

No.	Panel Member Number	Teaching Opportunity: Yes	Follow-up: Omitted	Follow-up: No	Category of Teaching Content: A	B	C	D	E	Number of Teaching Incidents in Each Interaction
	I	x					x		x	2
99	II	x					x		x	2
	III	x					x			1
	I	x							x	1
100	II	x							x	1
	III			x						0

APPENDIX H

REPRESENTATIVE SAMPLES OF OBSERVER TRANSCRIPTIONS

Sample No. 1 - Lack of Consensus as to Whether a Teaching Opportunity Had Occurred.

OBSERVATION TRANSCRIPTION Date: 5-9-67

Donor No. 64	Sex: (Male) Female	Duration 11 Minutes
In 1:11 PM	Age 40 Group III	Nurse No. 11
Out 1:22 AM	First Visit: Yes (No)	Occupation: Purchasing

Nurse was busy terminating venipuncture on two other donors whose venipunctures had finished almost simultaneously. Nurse laid bag of blood on stool beside one donor and moved to other donor to clamp tubing. Donor No. 64 is sitting on side of bed observing the actions of the nurse with the other two donors. Donor No. 64's eyes focus on bag of blood lying on stool. Nurse glances over her shoulder, as she is clamping the tubing, and looks at Donor No. 64, who has dropped his head and is supporting it with his hand, elbow propped on knee. Nurse lays down bag of blood she is clamping and moves quickly to bedside of Donor No. 64.

Nurse: Here, let's swing around and lie down. Close your eyes and relax a minute.

Nurse returns to bedside of donor whose bag she was clamping and proceeds to finish quickly the processing--glancing frequently at Donor No. 64 who is lying quietly with eyes closed, arm across forehead. Nurse returns to bedside of Donor No. 64 and silently observes him.

Nurse: How do you feel now?

Donor: (Attempts to sit up. Falls back on bed.) I'm all right. I'm all right.

Nurse with hand on wrist of donor, looking at donor's face

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X			1					
II.		X							
III.			X	1					

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 1 OBSERVATION TRANSCRIPTION (Continued)

Nurse: Just lie still. You'll feel better in a minute. I think we'll let you go home and come another day--but first I'll have the doctor come in to see you.

Nurse turns to volunteer standing by and asks her to summon the doctor. Continues to observe donor.

Donor: (Looking up at nurse) I'm all right.

Doctor joins nurse at bedside and talks with donor who attempts unsuccessfully to raise up. Nurse gently helps him ease back down. Doctor talks with donor. Nurse returns to previous donor, glancing over shoulder frequently at doctor and Donor No. 64. (As nurse did not participate in conversation between doctor and donor, conversation was not recorded)

Doctor turns to nurse after conversation with donor

Doctor: I think we'd better let him go home and not give blood today. Let him rest a minute.

Doctor leaves room. Donor continues to lie quietly, nurse checking him frequently as she cares for other donors.

Nurse: Would you like some orange juice? (Without waiting for a reply from donor) We'll get you some juice. (Turning to volunteer) Go get some juice for us.

Nurse stands by bedside, holding donor's wrist and looks at donor. Volunteer returns with a paper cup of juice.

Nurse: You want to sit up and drink this juice? Refreshment helps some. (Assists donor into sitting position with legs dangling over edge of bed.)

Donor: I'm O. K. I'm O. K. (Takes cup, sips slowly, raises eyes above rim of cup and slowly looks around room.)

Nurse: You're looking better. Your color's coming back. I'm afraid your having to wait while I finished up those two donors was hard on you. I should have had you lie down as soon as you came in the room.

Sample No. 1 OBSERVATION TRANSCRIPTION (Continued)

Donor: (Hanging head) I'm sorry. I'm o. k. now. (Raises head up and straightens shoulders. Looks around room again.)

Nurse: Did that juice help? That should give you some strength.

Donor: (Shifting body, begins to ease himself down from the bed) I'm ready now.

Nurse: Wait a minute--let me get you a footstool. (Reaches for a footstool, places it in position and assists donor to a standing position. Supports patient by the elbow.)

Donor turns and pulls away from nurse's support and starts walking toward foot of bed.

Nurse: Wait a minute. I want someone to go with you. (Motions for volunteer escort.)

Nurse: (Addressing escort) Take him into the recovery room and let him rest there for a little while before you take him into the canteen. Stay with him there.

Nurse: (Addressing donor) When you get into the canteen, drink some more juice. It'll pep you up. You'd better wait a little while before you come back in to give blood. You feel o. k. now?

Donor nods head and leaves room accompanied by escort.

Sample No. 2 - Panel Consensus for Teaching Opportunity Not Followed up.

OBSERVATION TRANSCRIPTION Date: 5-2-67

Donor No. 1	Sex: (Male) Female	Duration 12 Minutes
In 12:07 PM	Age 22 Group I	Nurse No. 1
Out 12:19 PM	First Visit: Yes (No)	Occupation: Machinist

* * * * *

Blood Center was introducing a new type plastic bag for blood collection. At the time needle was to be removed from vein of donor, two of the volunteer aides and two other nurses gathered around the donor's bed and discussed the bag.

Nurse No. 1 to Nurse No. 2: No, I want to try it.

Nurse No. 1 (Proceeds to clamp tubing, saying to those gathered around) That's where we clamp it.

Donor raises up, leans over the bed to observe activity. Donor's interest is not noticed by nurse doing the clamping, nor by other personnel.

Clamping completed and blood handed to volunteer aide for final preparation before storage. The donor lies back down. Group dissolves and the nurse completes procedure as specified. Remainder of conversation pertinent to procedure or desultory in nature.

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.			X					1	
II.			X					1	
III.			X					1	

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 3 - Panel Agreement that Teaching Opportunity Had Occurred, but Variance as to Whether It Was Followed up.

OBSERVATION TRANSCRIPTION Date: 5-8-67

Donor No. 52	Sex: (Male) Female	Duration 12 Minutes
In 3:31 PM	Age 34 Group II	Nurse No. 9
Out 3:43 PM	First Visit: Yes (No)	Occupation: Engineer

* * * * *

Nurse snaps stop-watch at beginning of venipuncture.

Donor: Do you have to do it under five minutes or you reject it?

Nurse: No.... (rather vaguely, as though preoccupied.)

Donor: Is there a set time you have to get it in, or do they just want to know how long it takes?

Nurse: Within a certain time limit they use it for certain things.

* * * * *

Member Number	Teaching Opportunity Yes	No	Not Followed Up	Teaching Category A	B	C	D	E	F
I.	X							1	
II.			X					1	
III.			X					1	

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 4 - Two Teaching Incidents within One Interaction

OBSERVATION TRANSCRIPTION Date: 5-10-67

Donor No. 84	Sex: (Male) Female	Duration 19 Minutes
In 3:13 PM	Age 32 Group II	Nurse No. 4
Out 3:32 PM	First Visit: Yes (No)	Occupation: Sales Manager

* * * * *

Donor: What's that red thing on her shoulder? (Indicating Red Cross insignia on uniform of nurse working nearby.)

Nurse: Oh that! That's the Red Cross badge. (Looking down and indicating) And this pin is for nurses. The volunteers have a different one. (Turns and asks a nearby volunteer if she has a pin and motions her over to donor's bedside to show him the pin.)

* * * * *

Donor: What is the percent of B positive?

Nurse: Can't tell you exactly. There are more 0's, next is A's and then B's. AB's are the rarest.

Donor: What is the Rh factor?

Nurse: It's a special sub-category. Eighty-five percent of the people are positive and 15% are negative. If your wife is negative and the husband is positive (pause). It's an Rh factor that they discovered only affects women if they get pregnant and if the husband is positive and the wife is negative. Sometimes, but not always, if the baby is positive, while

Member Number	Teaching Opportunity Yes	No	Not Followed Up	Teaching Category A	B	C	D	E	F
I.	X				1	2			
II.	X				1	2			
III.	X				1	2			

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 4 - OBSERVATION TRANSCRIPTION (Continued)

the wife is pregnant some of the antibodies that are formed can cause trouble later. Never any problem with the first baby, but can get complicated in some cases on other pregnancies....(pause) and oh yes, you're positive, so you have to give your blood to a positive person.

Sample No. 5 - Panel Consensus for Teaching Categorization.

OBSERVATION TRANSCRIPTION Date: 5-16-67

Donor No. 96 Sex: (Male) Female Duration 10 Minutes
In 1:26 PM Age 49 Group III Nurse No. 1
Out 1:36 PM First Visit: Yes (No) Occupation: Soil Scientist

Desultory conversation about weather and occupation as nurse is doing procedure. As she adjusts stop-watch

Donor: How long will it take?

Nurse: Probably take you 5 or 6 minutes. That's about average. Did you give in a plastic bag the last time?

Donor: Bottle

Nurse: Bottles go a little faster usually. (Looks down at bag) Don't know though. This may fool us--you're perking right along.

Donor: What's the watch say?

Nurse: Three minutes

Donor: How much more to go?

Nurse: You're about half way. (Nurse puts watch in donor's hand so he can watch it, then turns to check another donor)

Returns to bedside when bag is full.

Nurse: Stop the watch. (Removes bag from scale. Looking at watch and addressing donor) How'd you do?

Donor: Five minutes and 11 seconds.

Nurse: How 'bout that--right on time.

* * * * *

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X							1	
II.	X							1	
III.	X							1	

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 6 - Panel Consensus for Teaching Categorization.

OBSERVATION TRANSCRIPTION Date: 5-3-67

Donor No. 17	Sex: (Male) Female	Duration 18 Minutes
In 1:55 PM	Age 42 Group III	Nurse No. 4
Out 2:13 PM	First Visit: Yes (No)	Occupation: Teacher

* * * * *

While nurse is examining arm for visibility of vein

Donor: Last time I had a bruise where the needle goes in the vein. What causes that?

Nurse: Sometimes you nick the vein when you go into it. It can't be helped. We hate when it happens. But sometimes it just can't be avoided. When it does happen, it usually goes away in a couple of days.

* * * * *

While nurse is loosening tourniquet for patient's comfort

Donor: How many people have negative blood?

Nurse: There are about 15% of the population that are negative.

Donor: I knew there weren't very many. I know it's very low and they needed it. That's why they called me in, I guess.

* * * * *

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X					1			
II.	X					1			
III.	X					1			

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 7 - Difference in Categorization of Teaching by Panel Members.

OBSERVATION TRANSCRIPTION Date: 5-3-67

Donor No. 27	Sex: (Male) Female	Duration 14 Minutes
In 4:55 PM	Age 40 Group III	Nurse No. 8
Out 5:09 PM	First Visit: (Yes) No	Occupation: Tow Motor Operator

Activity proceeded as outline, with instructional and desultory conversation. At completion of venipuncture

Nurse: Drink lots of liquids for the next couple of days.

Donor: Why?

Nurse: Fluids help your body replace what's been taken out here.

* * * * *

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X					1			
II.	X			1					
III.	X			1					

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 8 - Example of Teaching Incident in Category A.

OBSERVATION TRANSCRIPTION Date: 5-3-67

Donor No. 20 Sex: Male (Female) Duration 21 Minutes
In 3:14 PM Age 20 Group I Nurse No. 6
Out 3:35 PM First Visit: (Yes) No Occupation: Clerk Stenographer

---

Nurse: (Checking donor's card) This is your first visit? (Pause) That's always the hardest.

Checking arm vein, conversing as she works

Nurse: Did you have your lunch today?

Donor: Uh huh.

Nurse: That's good. It's always better that way. Lie there and listen to the music and relax. It's like sticking a pillow if you relax--like a board if you don't. (As she is inserting needle,) I will tell you whatwe do, then you won't be so excited. (Explains in detail about the tourniquet, handgripper and other details) Relax and listen to the music. Breathe normally. Relax.

After insertion of needle, nurse continues conversing in a reassuring and desultory manner. After withdrawal of the needle

Donor: When will I know what kind of blood I have?

Nurse: In about a week or ten days, you'll get a card from us, showing when you donated and what your blood type is. Bring the card in with you when you come back in. Now, you just lie there and rest awhile.

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X			2				1	
II.	X			1		2			
III.	X			1		2			

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 8 OBSERVATION TRANSCRIPTION (Continued)

Donor: (Gazes around room and then focuses on adjoining bed where a friend is also donating.) Connie fainted when she came here. Wonder why?

Nurse: Fainting is rare if you eat your lunch. That's why I asked you about your lunch when you came in.

Donor: Connie never eats anything. She's watching her weight.

Nurse: When you don't eat, your blood sugar gets low and you get weak. Then when anything different or unusual happens you're more likely to feel faint. The same thing could happen if you went to the dentist or anything like that. The important thing is not to skip meals.

Donor: I'm glad I had my lunch

* * * * *

Sample No. 9 - Example of Teaching Incident in Category A.

OBSERVATION TRANSCRIPTION Date: 5-10-67

Donor No. 82	Sex: (Male) Female	Duration 28 Minutes
In 2:12 PM	Age 24 Group I	Nurse No. 6
Out 2:40 PM	First Visit: (Yes) No	Occupation: Maintenance Worker

Nurse: (Checking donor's card) I see it's your first time. Did you have lunch?

Donor: I had a hot dog.

Nurse: What did you have for breakfast?

Donor: I didn't have breakfast.

Nurse: No breakfast?

Donor: Did have a donut with my coffee break.

Nurse: Guess that's not too bad then. (Turns from donor to terminate venipuncture on donor in adjoining bed.)

* * * * *

When nurse returns to bedside, she checks venipuncture site, while blood is flowing. Nurse signals for supervisor to come to bedside. Supervisor comes and inspects site of venipuncture.

Supervisor: It's in the vein all right. (Turns to face donor.) She might have nicked a small surface one. You might have a black and blue mark there for a couple of days. (Supervisor then leaves cubicle.)

Member Number	Teaching Opportunity Yes	No	Not Followed Up	Teaching Category A	B	C	D	E	F
I.	X			1					
II.	X			1	2				
III.	X			1	2				

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 9 OBSERVATION TRANSCRIPTIONS(Continued)

* * * * *

Nurse: (Looking at venipuncture site after removal of needle) If it is painful, put a little ice on it tonight. That should help. (Pause) Be sure and drink lots of liquids for the next couple of days.

Donor: Does that include beer? I'm going to a party tonight and will probably have 3 or 4 drinks.

Nurse: Don't over-imbibe. It might affect you a little different from usual. Be sure to drink lots of water.

Donor: Sure. When can I give again?

Nurse: In about two months, but not more than five times a year. Don't feel you have to come right back in 8 weeks. Just be sure and come back.

Sample No. 10 - Example of Teaching Incident in Category B.

OBSERVATION TRANSCRIPTION Date: 5-16-67

Donor No. 93	Sex: (Male) Female	Duration 12 Minutes
In 1:02 PM	Age 48 Group III	Nurse No. 1
Out 1:14 PM	First Visit: Yes (No)	Occupation: President Manufacturing Co.

* * * * *

Donor: What's the stop watch for?

Nurse: Sometimes they use it for special things. We have to put the exact time it takes for the bag to fill.

* * * * *

Donor: My wife's been wondering about doing some volunteer work. Who should she see?

Nurse: Have her call the office of the volunteers here in this building--upstairs.

Donor: What do they do?

Nurse: Oh, all kinds of things--like work here in this room helping us; out front where you filled out your card. Then there's the Motor Corp. They take people to clinics and make emergency runs with blood. Upstairs they make things--like booties for the hospitals. And they fix boxes for Viet Nam. And there's the bloodmobiles. Volunteers help out on them. She could call and they'll tell her more about it and what she could do.

* * * * *

Member Number	Teaching Opportunity Yes	No	Not Followed Up	Teaching Category A	B	C	D	E	F
I.	X				2			1	
II.	X				2			1	
III.	X				1				

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 11 - Example of Teaching Incident in Category B.

OBSERVATION TRANSCRIPTION Date: 5-10-67

Donor No. 87	Sex: (Male) Female	Duration 15 Minutes
In 4:15 PM	Age 26 Group I	Nurse No. 14
Out 4:30 PM	First Visit: (Yes) No	Occupation: Laborer

Nurse: So this is your first time. (Finishes checking card and lays it on bed beside donor.) We'll go easy on you.

Donor: The guys at work were giving me a bad time. Tried to scare me.

Nurse: They always do for your first time. Why, you'll find out it's nothing at all and you'll be coming back for more. (Working as she talks) If everybody was giving you such a bad time at work, what made you come in?

Donor: My mother's in the hospital. She took three pints.

Nurse: Like I said, this is going so smooth, you'll be coming back in. You can donate every eight weeks, but no more than 5 times a year. You'll get a card in about 10 days through the mail. It'll tell you your type and give you a record of when and how often you donate. (Finishes stabilizing needle in vein) That's all there is to it. Now, all you have to do is lie there and relax.

Donor: How long will it take me?

Nurse: On the average of 5 to 7 minutes. (There were no other donors in the cubicle at the time, so nurse draws up a stool and sits beside donor and converses as she observes.) Had

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X				2	3		1	
II.	X				1	2			
III.	X				1	2			

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 11 - OBSERVATION TRANSCRIPTION (Continued)

the fellows that teased you donated blood?

Donor: One had--in the service. They were all just trying to scare me and give me a rough time.

Nurse: You'll have to go back and tell them it wasn't bad at all and they should come and give some. It could be credited for your mother.

Donor: (Indicates bed across the room in another cubicle) That's my brother over there giving now.

Conversation continues about donor's family, work and place of employment.

* * * * *

Donor: Do you get paid for doing this?

Nurse: I do. I'm mercenary (Laughs). No seriously, some of us are regular paid staff, some of us are part-time staff, but many of them are volunteers. Most of the nurses out in the other room are volunteers and all of the women in blue are volunteers.

Donor: How long is blood good for?

Nurse: It can be used as whole blood for 21 days. After that they can break it down and use it for special things. None of it is wasted. This blood you're giving won't go directly to your mother. She's already had hers. This is a replacement.

Donor: Yeah. I know.

Nurse: There, now you're finished. Wasn't bad at all was it?

Sample No. 12 - Example of Teaching Incident in Category C.

OBSERVATION TRANSCRIPTION Date: 5-16-67

Donor No. 99	Sex: (Male) Female	Duration 13 Minutes
In 1:38 PM	Age 28 Group I	Nurse No. 1
Out 1:41 PM	First Visit: Yes (No)	Occupation: General Manager

Nurse: (Checking card) You're AB positive. (Examining arm for vein) Glad to see you. We need your type for special orders for heart surgery.

Donor: How rare is AB positive?

Nurse: About 4 percent of the population have AB blood and about 85 percent have positive. That figures out to about 3 percent. It's the most rare type so far as types go.

* * * * *

Donor: Does pumping and squeezing speed it up?

Nurse: It increases circulation and does speed it up a little.

* * * * *

Member Number	Teaching Opportunity Yes	No	Not Followed Up	Teaching Category A	B	C	D	E	F
I.	X					1		2	
II.	X					1		2	
III.	X					1			

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 13 - Example of Teaching Incident in Category C.

OBSERVATION TRANSCRIPTION Date: 5-2-67

Donor No. 11 Sex: (Male) Female Duration 16 Minutes
In 2:31 PM Age 24 Group I Nurse No. 2
Out 2:47 PM First Visit: Yes (No) Occupation: Company Representative

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Nurse lays watch down by donor's head on bed.

Donor: Is there some sort of record for time?

Nurse: You mean like "the 400-mile" or something?

Donor: Somebody said they gave a pint in 35 seconds.

Nurse: Oh no! That couldn't be! The average is 5 to 7 minutes.

Donor: I figured he was stringin' me. (Jokingly) Of course, the guy was 12 foot tall--would that have anything to do with it?

Nurse: (Laughs)

Donor: Just how rare is my blood?

Nurse: (Looks at card, answers hesitantly) It's about the fourth rarest. (Proceeds with activity, instructing donor as she works. As nurse is stabilizing needle in vein)

Donor: What time is it exactly?

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X					2		1	
II.	X					2		1	
III.	X					1			

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 13 - OBSERVATION TRANSCRIPTION (Continued)

Nurse: 2:39

Donor: How many seconds?

Nurse: And 25 seconds.

Nurse leaves bedside to care for another donor. When she returns to the bedside

Donor: You say the fourth most common?

Nurse: Just a minute, I want to check that. (Attracts attention of nurse in cubicle with her, and signifies she is going to leave room. Returns after a brief absence and goes to donor's bedside.)

Nurse: Eighty-five percent are positive, 15% negative, 45 are 0, 40 are A, 10 to 11 are B. About 4% are AB--rounded off.

Donor: If there's only 4 out of 100, and there are 100,000... (voice trails off)... (then resumes speaking)... that makes me sorta rare--if I should ever need blood... (voice trails off again for a second)... I worry about things like that.

Nurse: You'll have to come in more often, then there'll be more of your type blood available. (Pause) Did they call you?

Donor: Yes

* * * * *

Donor: What time is it?

Nurse: Fifteen seconds after 15 'til.

Donor: That's... (Pauses, then thoughtfully proceeds) five minutes and 50 seconds.

* * * * *

As donor is preparing to leave donor room

Donor: How do you find out how the patient comes out?

Sample No. 13 - OBSERVATION TRANSCRIPTION (Continued)

Nurse: You mean, lives or dies?

Donor: Yes

Nurse: You want to find out for sure--seriously?

Donor: Uh huh.

Nurse: Well that's sorta confidential. Don't think there's any way you can find that out.

Sample No. 14 - Example of Teaching Incident in Category D.

OBSERVATION TRANSCRIPTION Date: 5-8-67

Donor No. 46	Sex: (Male) Female	Duration 12 Minutes
In 2:32 PM	Age 57 Group IV	Nurse No. 11
Out 2:44 PM	First Visit: Yes (No)	Occupation: Teacher

* * * * *

Donor: Do they ever draw fresh blood?

Nurse: We draw fresh blood here.

Donor: I mean donor and patient together.

Nurse: Oh, no.

Donor: Are there any hospital banks around Portland?

Nurse: No. They get it all through the Red Cross. There's a new commercial blood center down town that's just opened up. They draw the blood, take out the plasma and then give the red cells back. None of it will be sold locally. They're not in competition with the Red Cross.

Donor: They use that just for blood fractions, then?

Nurse: I suppose so.

* * * * *

Member Number	Teaching Opportunity Yes	No	Not Followed Up	Teaching Category A	B	C	D	E	F
I.	X				1		2		
II.	X				1		2		
III.	X						1		

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 15 - Example of Teaching Incident in Category E

OBSERVATION TRANSCRIPTION Date: 5-3-67

Donor No. 32	Sex: (Male) Female	Duration 14 Minutes
In 5:32 PM	Age 49 Group III	Nurse No. 7
Out 5:46 PM	First Visit: Yes (No)	Occupation: Machinist

Nurse: (Glancing at card) It's been a couple of years since you gave.

Donor: I've been away the last 3 or 4 times the unit's been out here. I missed 'em.

Nurse: It's nice you came in now.

Donor: I had to come. I'm donating this for someone.

* * * * *

Donor: Is that a new kind of bottle, now?

Nurse: Bag, that is. (Looking down toward bag) Have you not given in a bag before? These take a little longer, is the only difference you'll notice.

Donor: How' we doin'?

Nurse: Fine--you're about three quarters of the way. (Tilts bag gently to agitate) This goes by weight. It shuts itself off by itself.

Donor: It does?

Member Number	Teaching Opportunity Yes	No	Not Followed Up	Teaching Category A	B	C	D	E	F
I.	X							1	
II.	X							1	
III.	X							1	

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 15- OBSERVATION TRANSCRIPTION (Continued)

Nurse: See the scale over there. (Points to scale attached to adjoining bed.) When the bag's full, it goes down and shuts off by itself.

Donor: You say it shuts itself off?

Nurse: (Walks to adjoining bed and indicates) Yes. See the tubing runs through here and when its full it shuts off right here.

Donor: So you can't give any extra?

Nurse: That's right.

* * * * *

Sample No. 16 - Example of Teaching Incident in Category E.

OBSERVATION TRANSCRIPTION Date:5-10-67

Donor No. 86	Sex: (Male) Female	Duration 14 Minutes
In 3:56 PM	Age 33 Group II	Nurse No. 14
Out 4:10 PM	First Visit: Yes (No)	Occupation: Salesman

* * * * *

Nurse: Is this the first time you've donated in a plastic?

Donor: No. Doesn't glass ones pull it out a little faster?

Nurse: Yes. There's a vacuum in the glass bottles. Plastic is by gravity. Plastic is supposed to be better--more like vein wall.

Donor shifts conversation to siphoning gas.

* * * * *

Nurse: (As she lifts bag from rack) These are on a scale. They have an automatic shut-off. That's why they rearranged the beds in here. They (the plastics) take about a minute longer.

Donor: (Watching nurse as she clamps tubing) If this is on a weight deal, you're wasting all that in the tube.

Nurse: Oh, no. (Continues procedure, showing donor and telling him what she is doing as she does it.) I use this to fill these two test tubes. Then the rest of it in the tubing they use in the lab for some of the tests--so we don't waste any of it.

* * * * *

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X							1	
II.	X							1	
III.	X							1	

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 17 - Example of Repeat Donor's Question about Plastic Bags.

OBSERVATION TRANSCRIPTION Date: 5-3-67

Donor No. 30	Sex: (Male) Female	Duration 14 Minutes
In 5:15 PM	Age 34 Group II	Nurse No. 7
Out 5:29 PM	First Visit: Yes (No)	Occupation: Draftsman

* * * * *

Donor: Have you just started using plastic bags lately?

Nurse: Yes. Used to be just for special orders. Now we use them for all the blood.

Donor: Guess you don't have to worry too much about breakage then.

Nurse: Yes, and there are many more advantages besides that. They're easier to store and lighter in total weight.

* * * * *

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X							1	
II.	X							1	
III.	X							1	

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 18 - Example of Repeat Donor's Question about Scales.

OBSERVATION TRANSCRIPTION Date: 5-9-67

Donor No. 65	Sex: (Male) Female	Duration 17 Minutes
In 1:16 PM	Age 24 Group I	Nurse No. 11
Out 1:33 PM	First Visit: Yes (No)	Occupation: Furniture Worker

* * * * *

Donor: What happened to him? (Indicating donor who had just been assisted from donor room.)

Nurse: He got a little woozie. (Pause) That's why I stretched you out. Can't have you all passing out. We'd never get enough blood.

Nurse proceeds with arm preparation, instructing as she works.

Donor: Hey, you all short on AB neg?

Nurse: That's the rare type. It's always harder to get.

Donor gazes around cubicle, while nurse is at dressing cart, cleansing stopper on plastic bag)

Donor: Hey! What's that? (Looking over at adjoining bed with scale suspended.)

Nurse: (Looking over shoulder in direction donor is pointing) It's a scale. Each one has a different weight. In the plastic bags we go by weight.

* * * * *

Member Number	Teaching Opportunity			Teaching Category					
	Yes	No	Not Followed Up	A	B	C	D	E	F
I.	X							1	
II.	X			1		2			
III.	X			1		2			

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

Sample No. 19 - Example of Incident (Deemed Ineligible for Content Analysis), in Which Two Panel Members Judged that Teaching Opportunity Had Occurred which was Not Followed Up.

OBSERVATION TRANSCRIPTION Date: 5-9-67

Donor No. 70	Sex: (Male) Female	Duration 16 Minutes
In 1:45 PM	Age 47 Group III	Nurse No. 11
Out 2:01 PM	First Visit: Yes (No)	Occupation: President Plating Co.

Donor dozing as nurse approaches bedside to begin venipuncture procedure.

Nurse: Hey, you're taking a nap.

Donor: I took an equanil a little while ago.

Nurse: (Looks at entry on card) Oh, you broke your collar bone--January 28th.

Donor: Yeah, and it still bothers me some. Break any bone, but a collar bone, I say.

Nurse: You're right. I broke mine in a car accident once. A greenstick fracture. Still has a lump.

Donor: I still have pain. (Pause) I guess it's mostly muscles.

Nurse: Takes a while to get over it. It has a tendency to get stiff easy.

* * * * *

Member Number	Teaching Opportunity Yes	No	Not Followed Up	Teaching Category A	B	C	D	E	F
I.		X							
II.			X	1					
III.			X	1					

A. Personal Health
B. Red Cross Programs
C. Physiology and/or Chemistry of Blood
D. Public Health
E. Mechanics of Procedure
F. Other (Specify)

AN ABSTRACT OF THE THESIS OF

Alida E. Kneisel

for the Master of Science in Nursing

Date of receiving this degree: June 6, 1968

Title: A Study of Incidental Teaching Opportunities that Occur During Venipuncture Activity

APPROVED: [redacted]

Lucile Gregerson, Associate Professor
(in charge of thesis)

The Problem

One of the primary problems that exists in trying to determine the scope and nature of nursing, is the difficulty of differentiating between the extent and proportion of the overt and covert aspects of nurse-patient interaction. Numerous studies and surveys have been conducted concerning nursing activities, functions, patient classification systems and qualitative aspects of nursing. In arriving at conclusions, most of the quantitative type studies have, at some point in the investigation, made arbitrary subjective decisions for categorizing nursing activities on the basis of the most obvious aspect of what was being done at the time of the study. Methodological designs seldom include techniques for discriminating between primary and secondary (or underlying) activities.

Studies that concentrate on qualitative aspects and covert factors in nursing practice, have generally chosen to focus on measuring the effects of nursing care by collecting opinions, such as critical incidents, or upon evaluating patient welfare in terms of behavioral or biological changes. However, it remains questionable as to whether there is yet a clear distillation of what constitutes quality nursing care.

It has long been recognized that the nurse has a definite teaching responsibility in relation to disease prevention and the preservation of health. As with functional studies, however, those concerned

with teaching, tend to examine teaching as a separate and discrete primary component of nursing care, rather than as a spontaneous or coincidental aspect of nursing care situations.

Traditionally, because nursing is predominantly concerned with care of the sick, studies have been conducted within the framework of illness. However, inasmuch as wellness is what nursing is striving toward, facts are needed that are relevant to the nurse-patient interactions that occur along the entire health continuum. Findings elicited from analyses of interactions wherein the nursing needs are relatively minimal may result in establishment of guidelines that may ultimately lead to more precise definition and clarification of some of the components that are basic to nursing practice theory.

This study was undertaken for the purpose of extracting a single covert, but identifiable secondary and recurrent aspect of one distinct nursing activity, from that primary nursing activity and subjecting that underlying component to examination and analysis. Focus of the study was on identifying and analyzing the extent and frequency of incidental and spontaneous teaching opportunities that occurred while a nurse was performing the venipuncture procedure at a Red Cross blood center. Answers were sought to the following specific questions:

1. How often do teaching opportunities occur while a nurse is performing venipuncture procedure in a blood center?

2. What is the nature of the information that donors seek?

3. What is the extent of commonality of subject matter in the teaching opportunities that do occur?

4. Is there any difference between the subject matter that is sought by a first-time donor and a repeat donor?

5. Do teaching opportunities occur which are not noticed or are not followed up by the nurse?

Description of the Procedure

Data were collected by a non-participant nurse-observer who recorded portions of communication between a donor and nurse while a blood donation was being given. Only those communications that merited consideration as being teaching opportunities were recorded. Observer attention was directed toward donor initiated conversation with particular focus on questions asked by the donor.

On six separate occasions, a total of 100 donor-nurse interactions was observed. Fifteen nurses participated in these interactions observed. The average duration of the interactions was fifteen minutes. Transcriptions were made of the teaching related communication that transpired during 43 of the 86 completed observations. These 43 transcriptions were submitted to a panel of three nurse-educators who, working independently, identified the specific teaching incidents that had occurred and categorized these incidents as to

subject matter content.

Findings

Teaching related communication occurred in 50 percent of the completed nurse-donor interactions observed during the study period. Forty-nine specific teaching incidents were judged to have occurred during the 34 interactions that were considered eligible for the content analysis phase of the study.

The teaching content analysis, predicated on five predetermined teaching categories revealed that 43 percent, nearly one-half, of the teaching opportunity incidents were related to mechanics of the venipuncture procedure. Personal health was the focus of communication for 20 percent of the teaching. Nineteen percent of the questions were relative to physiology and chemistry of the blood. Red Cross Programs accounted for 16 percent of the incidents. Only two percent of the incidents were concerned with public health.

First-time donors' questions centered around personal health (46 percent), while repeat donors were most concerned with mechanics of the procedure (50 percent). Differences in subject matter of concern to both first-time and repeat donors in the other four categories were not remarkable.

The panel members consensually identified only two incidents out of the 49 teaching incidents in which it was determined that

teaching opportunities had occurred which were not noticed or were not followed up by the nurse.

Conclusions

The conclusions drawn from the study findings as they relate specifically to the study questions were:

1. "How often do teaching opportunities occur while a nurse is performing venipuncture procedure in a blood center?"

In answer to this question, it may be concluded that teaching opportunities occur frequently during the brief period of time while a nurse is performing a venipuncture procedure in a blood center.

2. "What is the nature of the information that donors seek?"

3. "What is the extent of commonality of subject matter in the teaching opportunities that do occur?"

The data analysis revealed that the findings relevant to these two questions were closely related. Therefore, conclusions for these two questions are presented as a composite. A primary concern of the donors studied was in learning more about what is happening while venipuncture procedure activities are transpiring. Interest in information concerning personal health, Red Cross Programs and physiology and chemistry of the blood seemed of approximately equal importance to all the donors. Little interest was manifested in acquiring information about public health matters.

4. "Is there any difference between the subject matter that is sought by a first-time donor and a repeat donor?"

There was a marked difference in the primary teaching category for which first-time donors sought information as compared to repeat donors. First-time donors' questions centered around personal health, while repeat donors were more concerned with mechanics of the procedure. Differences in subject matter of concern to both first-time and repeat donors in the other four categories were not remarkable.

5. "Do teaching opportunities occur which are not noticed or are not followed up by the nurse?"

It was concluded by the investigator that this question, as phrased, was not definitive enough. Hence, no conclusive answer could be given to this question, other than to state that teaching opportunities did occur that were overlooked or neglected.

Certain other broad conclusions emerged from the analysis of the data, but should, nevertheless, be viewed in terms of that data. The selection of the Blood Center for the study setting was purposive. In this study setting, other than those needs associated with the technical aspects of the venipuncture itself, the physical nursing needs of a donor are relatively minimal and transitory.

The broad conclusions derived from analysis of the study data were as follows:

1. Even in brief contacts with well persons, the nurse in

carrying out her function, has opportunity for teaching. Further study, however, would be needed to determine if this is characteristic of other contacts or is unique to the Blood Center setting.

2. Nurses in this study seemed to recognize and capitalize on opportunities for teaching, even though the scope of interaction necessarily was small and the time brief.

3. Well individuals did seek health information when a nurse was in attendance and teaching may be more than just an "incidental" component of care.

4. Individuals involved in a nursing activity were interested in learning specific details about the procedure. This conclusion tends to coincide with the findings (as reported in Nursing Research, Spring 1964) of Mary E. Meyers' study: "The Effect of Types of Communication on Patients' Reactions to Stress." In that study, it was concluded that less tension is created when a patient is given specific information concerning a procedure.

5. It was possible to extract from the communication that transpired during a procedure, portions of that communication that underlie the mainstream of the essential communication theme.

Based on the findings and conclusions of this study, the following recommendations for further study were made:

1. That a study be done to evaluate the communication and teaching skills of nurses in relation to outcomes of learning that

may result from teaching opportunities that transpire spontaneously.

2. That a study be done of incidental teaching opportunities that arise during venipuncture procedure in other settings.

3. That a study similar to this study be conducted in which refinements are incorporated into the design. Such modifications as use of more than one observer; use of mechanical recording devices such as tape-recorders and motion pictures; and possibly the addition of some form of questionnaire for the participants in the study, designed to elicit motivational factors.

4. That a study be done of some other well-defined nursing activity, to ascertain the possibilities of extracting some one covert aspect, other than teaching, from the primary nursing activity.