A STUDY COMPARING THE EFFECTIVENESS OF ORAL DISCHARGE ADVICE GIVEN TO TWENTY-FIVE PATIENTS WITH WRITTEN ADVICE GIVEN TO TWENTY PATIENTS

Submitted by

Nancy Lee Ray, B. S.

A THESIS

Presented to the University of Oregon School of Nursing

and to the Graduate Council of the

University of Oregon Medical School

in Partial Fulfillment of the

Requirements for the Degree of

Master of Science

June 8, 1967

APPROVED:

[redacted]

Lucille Gregerson, Associate Professor and Thesis Adviser.

[redacted]

Chairman: Graduate Council.

This Study was Supported

by a

United States Public Health

Service Grant NT-35-C9

TABLE OF CONTENTS

CHAPTER Page

LIST OF TABLES

TABLES (Continued) Page

TABLE (Continued) Page

ACKNOWLEDGMENTS

The writer wishes to express her sincere appreciation to those who contributed to the investigation and completion of this study, to Miss Lucile Gregerson, thesis adviser, for her understanding, guidance and encouragement during the development of this study. Special appreciation is extended to the writer's family, especially Rod and Vicki, for their patience and understanding.

n. r.

CHAPTER I

INTRODUCTION

STATEMENT OF THE PROBLEM

What information do patients need and want when discharged from the hospital? What discharge advice is given? What does the patient think should be given? How does anyone know what information has been given to the patient. Would some form on which advice is recorded serve to answer these questions?

The current concern of Public Health Nurses regarding the impact of Medicare has resulted in extensive study of methods to expedite services to the public. The use of a form such as is proposed in this study could be a valuable reference for those nurses when making post-hospitalization calls to the patient in his home.

Communication between institutions is an acknowledged problem in providing continuity of care. A discharge instruction form might also be of value to convalescent hospital personnel when receiving a patient from a general hospital.

Nursing educators and nursing personnel supervisors might find a form helpful in carrying out the acknowledged nursing responsibility in health education and in satisfying

the patient's needs for information.

For the past several years, there has been much discussion regarding "patient-centered care" and "continuity of care". The increasing interest in nursing research which turns to the patients for information has been encouraged by leaders in the profession. Research has been undertaken with the aim of determining the patients' needs when leaving the hospital. The oft-quoted research reports by Abdellah and Levine[2,3] and by Lesser and Keane[20] offer proof that information regarding care is listed as highly important by the patient. Other surveys which asked patients to rate services during hospitalization, indicate lack of adequate instructions about post-hospitalization care have been and still are, major criticisms.[7,10,37,39] No study was found in the literature that compared methods of discharge instructions. This study was an attempt to explore the effect of written discharge information on the number of questions about their care that patients have after leaving the hospital.

PURPOSES OF THE STUDY

The primary purpose of this study was to explore the effect of written discharge information on the number of questions patients have regarding their care following hospitalization. Specifically, the study was undertaken to prove or disprove the following hypothesis:

> Written discharge instructions do not lessen the number of questions a patient has regarding his care during the immediate post-hospitalization period.

It was further proposed to assess the relationship(s) of six predetermined background variables to:

1. the number of patients reporting questions following discharge

2. the number of patients who asked questions regarding their care before discharge.

The variables were: (1) age, (2) sex, (3) educational level, (4) prior hospitalization, (5) prior hospitalization for the present condition, and (6) length of hospitalization. It was hypothesized that:

1. A relationship exists between age and having questions after discharge from a hospital.
2. A relationship exists between age and asking questions regarding post-hospitalization care.
3. A relationship exists between sex and having questions after discharge from a hospital.
4. A relationship exists between sex and asking questions regarding post-hospitalization care.
5. A relationship exists between educational level and having questions following discharge from a hospital.
6. A relationship exists between educational level and asking questions regarding post-hospitalization care.
7. A relationship exists between prior-hospitalization and having questions following discharge from the hospital.
8. A relationship exists between prior-hospitalization and asking questions regarding post-hospitalization care.
9. A relationship exists between prior-hospitalization for the present condition and having questions following discharge from a hospital.
10. A relationship exists between prior-hospitalization for the present condition and asking questions

regarding care.

11. A relationship exists between length of hospitalization and having questions following discharge from a hospital.

12. A relationship exists between length of hospitalization and asking questions regarding post-hospitalization care.

LIMITATIONS

This study includes only the information obtained by use of an interview guide (appendix D) with the sample population. The findings are dependent necessarily upon the sensitivity, reliability and validity of the measuring instrument. Further limitations with regard to the sample population were:

1. age over twenty-one years
2. medical or surgical diagnosis
3. discharged from the participating hospital during one of the two designated study weeks.
4. willingness to be interviewed.

No attempt was made to gain strict control over extraneous variables. No attempt was made in this study to determine who the patients felt should be responsible for providing the instructions for care following hospitalization.

ASSUMPTIONS

For the purposes of this study it was assumed that:

1. Patients have questions concerning care following discharge from the hospital that could be answered by use

of a printed instruction form.

2. The sample patient populations were not significantly different from the total patient population. In other words, patients over the age of twenty-one who happened to be discharged during the selected weeks did not differ significantly from patients discharged during any other similar length of time.

It was further assumed that:

1. The patients included in the study would be mentally and physically able to understand and answer the questions included in the interview guide and would answer them honestly.

2. The doctors and/or nurses who participated in the study would be conscientious in completing the form and in giving it to the experimental group of patients at the time of their discharge.

JUSTIFICATION FOR THE STUDY

The over-all needs of patients during hospitalization have been the subject of various studies.[2,3,7,39] Other studies have focused on needs following discharge.[20,21,37] The review of the literature disclosed that marked interest has been shown in research in an effort to improve patient care through education. The indications are, however, that there is a need for further study in the area of discharge instruction. No systematic study was found reported in the literature that evaluated methods of discharge instruction.

Heidgerken wrote: "What are the nursing needs of people? Can they be determined just by studying nurses, doctors, or any personnel in the nursing situation? Do we need also to go to the patient to try to learn what he thinks his needs are?"(14) In this study, patients were interviewed in an attempt to determine the effect of written discharge instructions on the number of questions patients have after discharge from a hospital.

STEPS OF THE STUDY

The steps in the development of this study were as follows:

1. A general survey of the literature was conducted to ascertain the need for the study. Related studies were sought to discover what methods for providing discharge information have been tested. Correspondence to others engaged in research in the general area of discharge information yielded supporting evidence.

2. Unstructured interviews were undertaken with patients, Public Health Nurses, hospital staff nurses, nursing instructors, student nurses, doctors and their office nurses to determine the need for the study.

3. The purpose and scope of the study were formulated.

4. The limitations and assumptions were determined.

5. The proposed discharge instruction form Suggestions for Care at Home, was constructed. (appendix C)

6. The interview guide was devised as the data collecting tool. (appendix D)

7. A pilot study was conducted utilizing one doctor's patients. Due to the pressures on the doctor's time, it was decided that nurses in the hospital setting instead of doctors as originally planned would fill out the form for the actual study.

8. The Director of Nursing Service of a private hospital was contacted with the request that the study be done in that setting. Permission was requested from the Executive Board. (appendix A) The population criteria were revised in accordance with their request. (appendix B)

9. The sample weeks were designated. Names, addresses, and telephone numbers were obtained from the hospital charts of those discharged patients who met the study criteria.

10. Telephone calls were made to the patients; a convenient time was set for as close as possible to one week following discharge; the interviews were completed and information gained was recorded on the interview guide.

11. The findings were tabulated (appendix E) and interpreted. Tables were constructed from the data.

12. The findings were summarized, conclusions drawn and recommendations made for further studies.

PRESENTATION OF THE STUDY

This study is presented in four chapters. Chapter One has presented an introduction to the broad problem, defined the purpose of this study, and described the plan for procedure.

Chapter Two presents a review of the literature and related studies. Chapter Three presents the procedure used in the study, analysis and interpretation of the findings.

Chapter Four presents a summary of the study, findings of the study, conclusions drawn from the findings, and recommendations for further study.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature disclosed that marked interest has been shown in research in an effort to provide continuity of patient care, and to improve patient care through patient education. The over-all needs of patients during hospitalization have been the subject of various studies. Other studies have focused on needs following discharge.

The "Patient's Bill of Rights" states succinctly:

> The patient has a right to expect:
>
> That, within the limits determined by his doctor, the patient and his family will be taught about his illness so that the patient can help himself, and his family can understand and help him.
>
> That plans will be made with him and his family, or if neccessary for him, so that, if possible, continuing nursing and other necessary services will be available to him throughout the period of his need. These plans will involve the use of all appropriate personal and community resources.(29)

The review of the literature for the study was divided into three major areas:

1. informational needs of the patient
2. factors in patient education
3. role of the nurse in assisting the patient on discharge

NEEDS OF THE PATIENT

Field[11] stated: "Discharge may represent a threat. It is a well known fact that the patient may react with fear, anxiety, and resistance to the prospect of leaving the protection of the hospital." The author cited the need for information as one of the patient's major concerns. The role of the family and the need for interpretation of the patient's illness and care were discussed. These social and psychological implications have received increasing attention in the literature and studies. Dichter's[7] extensive study reflected many feelings of insecurity and fear suffered by the hospitalized patient. In Mauksch and Tagliacozzo's[25] opinion, the hospital's social system is the cause of dependency manifestations on the patient's part. Wooden[40] agreed with this accusation by condemning the "de-individualization and de-humanization" of hospital patients. He maintains routine and rigid policy that force the patient to conform are incompatible with the theory of patient-centered care.

Various studies have gone to the patients in an attempt to identify their needs. A number of these have stressed informational needs. Wilder's [39] report on a survey conducted by the American Hospital Association included the fact that scores on instructions about post-hospitalization care were very low at some hospitals and very high at others.

The study conducted by Lesser and Keane[20] in an

obstetrical department resulted in the following findings:

1. Mothers who ask questions are more likely to have their needs met than those who are reluctant to ask about things.

2. An inexperienced patient is often unable to anticipate a need that she will have later.

3. Patients' informational needs are met under certain conditions:

   a. when a source for obtaining information exists
   b. when the patient utilizes it
   c. when information is offered to a patient who is willing and able to accept it.

The second largest group of unfulfilled needs reported in the 9000 patient study conducted by Abdellah and Levine[2] was related to informational needs. A typical statement cited was: "I have confidence in my nurses and doctors, but they just won't take time to explain my illness or treatment." The second part of their study[3] was an attempt to identify factors affecting patients' opinions. The data showed younger patients reported more unfulfilled needs, males seemed a little more satisfied than females, and single patients were a little less satisfied than married ones, but this was also influenced by age.

Miller[26] utilized the Abdellah-Levine Patient-Personnel Check lists for her Master's thesis study and reported in

her findings that patients in small hospitals were somewhat more satisfied with their nursing care than patients in the large hospital included in the study. She found patients in both sized hospitals were dissatisfied with the same events that Abdellah and Levine reported, including informational needs.

Two Master's studies conducted by graduate students at the University of Washington School of Nursing in recent years investigated patients' needs and patients' requests. McNeil[24] recorded reasons the signal light was turned on by hospitalized patients. Not surprisingly the largest category of requests was elimination needs. Of 147 signals investigated, three reasons were in connection with information. One of these was for discharge information. Treseler[37] reported the largest number of requests in her study fell in the categories of information, verbalization, and environmental control. In addition her data showed:

1. Women were freer than men in making requests.

2. Younger patients (16-25) had the most requests per patient.

3. If there was a prior hospitalization, there were more requests.

The need for information following discharge from the hospital extends to other health care facilities. A Nursing Homes Study Sub-committee[28] found referral data both from hospitals and physicains to be most inadequate

and were not usable as tools for understanding and planning for patient care.

A study in England reported by McGhee[23] suggests patients' need for information is universal. Patients interviewed regarding their attitude toward nursing care reported information about after care during convalescence to be a major concern.

PATIENT EDUCATION

It is known that the patient who is included in planning for his care is more likely to cooperate with that care. Snyder[34] stated: "It is generally agreed that discharge planning is primarily the responsibility of the doctor." The problem of communication between health personnel and patients is recognized by many authors. Pratt, et al[31] studied the level of medical information among patients. Doctors thought 82 per cent of the test information should be known by ordinary laymen. The patients tested knew only 55 per cent. This study also found only one-third of the patients in the study asked any questions on any visit to the doctor. Spiegel[35] found 51 per cent of the 450 patients interviewed in their study asked no questions for various stated reasons.

A 1952 article in the Journal of the American Medical Association by Dowling[8] reported 19 per cent of the internists' time was devoted to patient education.

Leach[19] interviewed eighty surgical patients and

reported in her findings that six (6.25 per cent) of the patients had no pre-operative instruction, seventy-four (92.5 per cent) received less than fifty per cent instructions, and only six (7.5 per cent) received instruction on fifty per cent or more of the items on her check list.

Howland's[17] study revealed printed information used by doctors for diabetic patients was largely ineffective because the vocabulary was not understood by the patient. Perception of written health information was studied by Mohammed[27] with the finding that 42 per cent of the 300 patients tested were "unable to profit from material written at a fourth grade level or above." She recommended "individual and group instruction, with the use of carefully selected audio-visual materials and simpler and briefer printed instructions." A replication, using the tool of Mohammed's study, was conducted by Weigand.[38] She found 36 per cent of the sample population profited little from the written material. She emphasized the influence of background variables on the patients' comprehension of written information and recommended evaluation of the characteristics of the population for whom the material is intended.

Suggestions for written instructions at discharge are common in the literature. In a manual discussing rehabilitation, Allgire[4] presents the following discussion:

> There should be definite planning for discharge so that the patient and his family have no apprehensions. Most apprehensions

> about chronic disabilities and the apathy toward them are due to the lack of understanding of what can be done and how to do it. All home care procedures and the community resources that will serve the patient after he goes home should be in writing, explained to the family, and given to them before the patient leaves the hospital.

A report of discharge planning for a home care plan in California states:[16]

> "A folder is made up for the persons to be instructed in caring for the patients at home. It contains copies of instructions for nursing care procedures."

Many specialists in obstetrics, pediatrics and surgery have devised printed instructions in an attempt to alleviate their patient's anxiety and unnecessary questions. Unfortunately, no studies were found that evaluated the result of this type of individualized information. Oelwein,[30] in studying the knowledge heart disease patients have about their conditions, found the patients questioned reported pamphlets, books, radio, television second only to their doctors as the sources most frequently used to learn about their condition and adjustment to it. Kariel[18] supported this finding in her study of factors which influence the obtaining of information by primiparas. Pamphlets, books magazines were the most common source of information next to the doctor.

ROLE OF THE NURSE

Text books used in the education of students in nursing stress the recognized teaching opportunity present when a

patient is discharged from the hospital. Nursing instructors acknowledge the nurse's responsibility in patient education. Harmer and Henderson[13] reflected the following warning in their textbook:

> "Nurses and doctors sometimes give the patient and his family the impression that they take more interest in getting the patient over the critical stage of illness than in helping him to become independent during the convalescence and in giving him the guidance that prevents recurrence."

McClain and Gragg[22] pointed out that patients must understand their instruction. They state:

> "The nurse must interpret these directions to the patient and emphasize the importance of following them. She may need to explain doctors' orders to the family, and if necessary may write out special directions for the patient or relative. Final instructions may include diet, treatments, medications, exercises, and return visit. It is better to write out these directions."

Frequent references to the role of the nurse as interpreter were made in the interview study by Ferguson.[10] The "consumers" interviewed also described the nurse as liason between patient and physician. Chase[5] reported 59 per cent of the fifty-six general duty nurses she interviewed felt acting "as liason between the patient and doctor" was an appropriate function of the nurse, but only 38 per cent reported they were doing this in practice. 79.5 per cent of these nurses stated "assisting in patient education and rehabilitation" was an appropriate function and 40 per cent reported doing this in practice. 82 per cent of the fifty-six nurses agreed with the statement:

"Recognizes the need for and participates in the interpretation of treatment to the patient" as a function appropriate for the general duty nurse. 40 per cent reported fulfilling this function in their practice.

Wooden[40] discussed patient needs and service requirements. He identified the major responsibility of health personnel as aiding the patient in anyway necessary to return to a state of productive living. He particularly emphasized reduction of anxiety and insecurity by offering needed instruction.

Teaching patients self care was identified in Gorham's study[12] as being an important staff nurse's function. Supplying needed information was found to have a marked effect on patients' outlook and morale.

An exploratory study by Hewitt[15] of problems expressed by three discharged medical patients indicated areas in which patients may need support from the nurse:

1. It would be advantageous for the nurse to spend more time with the patient following his discharge confirmation.
2. A need seemed to be indicated to provide nursing personnel with opportunities to develop a broader understanding of behavior changes as related to the phases of illness.
3. The patients' responses to the home visit indicated a need for public health nurse referral.

Communication is emphasized in the literature as an important role of the nurse. Many studies stem from this broad area. Schindler[32] reported, for the 94 nurses in

her questionaire study, the ability to identify responses relative to the giving of information differed significantly from their statements of effective communication practices in this area of nurse-patient communication.

Dye[9] stressed the fact that patients often feel they should not question their doctors and nurses about their care. Lesser and Keane[20] stated: "Often the inexperienced patient is unable to anticipate a need that he will have later." Abdellah and Levine[3] reported: "Because patients are sensitive to how they should act in a stress situation, they may not express their real needs directly." Dichter[7] agreed since he found that the patient expresses his basic insecurity through complaints about noise, food, and not enough attention from personnel.

There is general recognition in the literature of the nurse's responsibility in identifying the patient's needs, overt and covert, and instigating measures to satisfy these needs. This is the basis of patient-centered nursing care and continuity of care.

REVIEW OF RELATED STUDIES

Although the patient's need for discharge instruction has been acknowledged in the literature, no systematic study was found that compared methods of discharge instruction, or evaluated printed discharge information.

At Henry Ford Hospital in Detroit, Michigan, a unique

discharge instruction sheet entitled "Life at Home"[33] was designed in 1958 to fulfill what personnel felt was a definite need. Correspondence with the hospital elicited the information that the form is currently being used very little despite the fact that patients in the past showed interest in it. There was no systematic evaluative study regarding results of the use of the form.

An extensive study at the two-hundred-fifty bed Beverly Hospital, in Beverly, Massachusetts, was undertaken in 1963.[21,35,36] The Medical Foundation of Boston and the Central North Shore United Fund furnished financial backing for the study. Four-hundred-fifty patients were interviewed over an eight month period on the day of their discharge to determine what questions patients have that go unasked or unanswered upon discharge. The survey team categorized the questions patients reported into the following areas, in order of volume: "activity, diagnosis, reasons why they did not ask, symptoms, suggestions, treatments, prognosis, medicines, operations, personal care, diet, problems, nursing care and nurses, miscellaneous, finances, marital relations, tests."[21]

A major finding presented in this study was that "capabilities of other members of the medical team were not being fully utilized in discharge instructing." An additional pertinent finding was: "51 per cent of the 450 patients asked no questions apparently because of fear, age, religion,

trust in the physician, knowing their diagnosis, or not knowing what to ask, how to ask, or whom to ask."

Recommendations made by the survey team were:

1. A place within the hospital where patients could call for information.
2. Exchange, among physicians, of their individual discharge instructions,... and some common basic discharge instructions for patients...
3. A search for new methods of teaching patients, pictorially and verbally....
4. Interchange of ideas and problems with community agencies for patient education.
5. Comparison and evaluation of discharge information to patients in other institutions.

This study culminated in the construction of a "Checklist for Patients' Discharge Instruction", now a part of the patient's chart. As of May, 1966, the check list was "being evaluated"[21] with no findings as yet reported.

SUMMARY

In view of the emphasis on continuity of care, the literature and related studies regarding informational needs of the patient when leaving the hospital were surveyed and have been presented in this chapter. The emphasis in research conducted in this area seems to be in identification of the patient's needs. The over-all needs of patients during hospitalization have been the subject of various studies. Other studies have focused on needs following discharge. There is general recognition of the importance of understanding the patient and the influence of illness

upon him. Communication, health education, and identification of the patient's unexpressed needs are cited by various authors as important aspects in the role of the nurse in preparing the patient for discharge.

Studies regarding patient's comprehension of written health information warn that the population to be reached must be studied carefully. Other studies determined that patients often do not ask questions regarding care after hospitalization. No systematic study was found in reviewing the literature that compared methods of discharge instruction.

CHAPTER III

REPORT OF THE STUDY

PURPOSE OF THE STUDY

This study was undertaken for the purpose of obtaining information from recently discharged patients from a selected hospital to prove or disprove the following null hypothesis:

> Written discharge instructions do not lessen the number of questions a patient has regarding his care during the immediate post-hospitalization period.

Background variables were identified and comparisons made to assess their influence(s) on the number of patients who asked questions before discharge, and on the number of patients who had questions regarding their care after leaving the hospital. The pre-determined background variables were: (1) age, (2) sex, (3) educational level, (4) prior hospitalization, (5) prior hospitalization for the present condition, and (6) length of hospitalization. These hypotheses were constructed regarding the variables:

1. A relationship exists between age and having questions after discharge from a hospital.
2. A relationship exists between age and asking questions regarding post-hospitalization care.
3. A relationship exists between sex and having questions after discharge from a hospital.
4. A relationship exists between sex and asking questions regarding post-hospitalization care.

5. A relationship exists between educational level and having questions following discharge from a hospital.

6. A relationship exists between educational level and asking questions regarding post-hospitalization care.

7. A relationship exists between prior-hospitalization and having questions following discharge from a hospital.

8, A relationship exists between prior-hospitalization and asking questions regarding post-hospitalization care.

9. A relationship exists between prior-hospitalization for the present condition and having questions following discharge.

10. A relationship exists between prior-hospitalization for the present condition and asking questions regarding care.

11. A relationship exists between length of hospitalization and having questions following discharge from a hospital.

12. A relationship exists between length of hospitalization and asking questions regarding post-hospitalization care.

DESIGN OF THE STUDY

The study was a partial experiment, since a natural setting, i.e., the patient's home, was used; some control was exercised over the assignment of the patient group that was exposed to the independent variable. Although strict randomization of the sample, and control of extraneous variables was not attempted, full recognition of the limitations of this design hopefully enhances the validity of the data analysis.(1)

The independent variable tested was the written discharge instruction form, Suggestions for Care at Home (appendix C). There was control of this variable in the sense that the time the form was given to the patients was designated as

a specific week. The dependent variable was the number of questions, as reported by the patients interviewed, regarding care during the week following discharge.

It was anticipated that other items of interest would emerge during evaluation of the data.

PROCEDURE FOR SOLUTION

The primary source of data was the information obtained by an interview guide.(appendix D) The population interviewed was comprised of forty-five recently discharged adult medical-surgical patients from the designated hospital. The interviewees' names and the participating hospital were kept anonymous.

The variables within the population included the patients' age, sex, education, prior hospitalization, prior hospitalization for the present condition, and length of hospitalization.

The secondary source of data was a review of the related literature pertaining to discharge instruction and the needs of the patient in this area.

A sample of the instrument used in collection of the data will be found in appendix D. The interview guide questions were divided into three parts. The first part elicited background information.

In the second part the patients were asked seventeen questions. The first eight items dealt with areas in which

patients often need instruction. Most of the items were self explanatory, but examples were offered for clarification during the interview. For example, to question 5, "Did you have a question regarding activity?", the interviewer added "such as 'May I lift? Drive a car? Climb stairs?'"

The next four items (9,10,11,12) were concerned with verbal discharge instruction received and who offered this instruction.

Question 13 sought information regarding how many patients asked questions regarding their care at home. If questions were asked, the next item (14) queried whether answers were understood.

Items 15 and 16 were modified for each group. For the control group they read:

15. Did you receive any written instructions?

16. Would written instructions have been helpful to you?

On interview guide #2 for the Experimental Group, the questions read:

15. Did you use the written instructions?

16. Were the written instructions of help?

The last question (17) asked the patients to estimate the number of questions they had in any area, regarding their care during the week following their discharge from the hospital.

Finally, in Part III, the patients were asked for any

comments they had that might be of help to others in the first week following hospitalization.

The tool, Suggestions for Care at Home (appendix C), was constructed in an attempt to provide answers to as many of the questions as possible that a patient might have after leaving the hospital. Suitability of terminology for patients was one major criterion in constructing the form.(27,38)

The discharge form and interview guides were submitted to a group of experienced nurses for critical analysis. Revisions were made and a pilot study of ten patients was undertaken to validate the instruments.

The study was developed according to the steps described in Chapter I. Administrative permission was gained from the Director of Nursing and Executive Board of the selected hospital to interview patients discharged from the hospital during two succeeding weeks. Two consecutive weeks were chosen that were convenient for the hospital personnel who participated in the study. The Suggestions for Care at Home form was supplied and explained to the personnel. The list of patients who met the criteria as described in Chapter I was obtained. Hospital records were graciously supplied by the Records' Librarian. Addresses and telephone ~bers were secured for the patients discharged during ~ated time.

RESULTS OF THE STUDY

the first week there were forty-three patients

discharged who met the criteria for the study. These constituted the control group. Forty patients, discharged during the second week, received the discharge instruction form. These made up the experimental group. Table 1 presents the percentage of the population gained for the study.

Table 1. Number of Patients Discharged and Number and Per Cent of Patients Interviewed in the Control and Experimental Groups.

Groups	Number Discharged	Number Interviewed	Per Cent Interviewed
Control group.....	43	25	58.1
Experimental group...	40	20	50
Total.....	83	45	54.2

Therefore, fifty-four per cent of those who met criteria for the study was gained.

Since interviews were conducted in the patient's home, it was necessary to contact each patient by telephone in order to set an appointment time. Eleven patients could not be reached by phone. This included three with no telephones in their homes. One attempt was made to find them at home. No other follow up was done. The remaining seven were called at various times of day without result until 10 days had elapsed following their discharge date. They then became ineligible for participation.

Five patients were found to be out of town. Four had

been hospitalized while on vacation and had returned to their homes. One patient had left on a vacation trip. Four patients had been readmitted to the hospital. Three had been transferred to nursing homes.

Only two patients in the control group and one in the experimental group were not at home at the agreed upon appointment time. No follow up was attempted. Five patients contacted by telephone refused to participate in the study. Three could not be convinced the investigator was not "selling something." Two stated simply they were not interested. Three patients in the experimental group under the age of 21 had been given the discharge form. These patients were not contacted since they did not meet the criteria for participation in the study. Two of them were obstetrical patients, another factor which made them ineligible. Four patients in the experimental group stated they had left the discharge form at the hospital. Appointments were not made with them. One patient had been admitted to the hospital following a suicide attempt. It was decided to drop this patient from the study. Table 2 portrays the reasons patients in the two groups were not included in the study.

Table 2. Reasons Interviews Were Not Conducted for Eighteen Patients in Control Group and Twenty in Experimental Group.

Reasons Patients were not Interviewed	Number in Control Group	Number in Experimental Group
Admitted to Nursing Home.....	1	2
Left form at hospital.....	0	4
Not contacted.....	1	0
Not home at time of appointment.	2	1
Out of town.....	3	2
Readmitted to the hospital.....	2	2
Refused to participate.....	4	1
Unable to reach by phone.....	5	6
Total.....	18	20

PART I

BACKGROUND INFORMATION

Forty-five patients participated in the study; twenty-five in the control group and twenty in the experimental group. Part I of the data collecting device sought general information regarding the background variables. The results were as follows:

1. Age: The age range for the population interviewed was 21-78 years. The median age was 41 years. The range and median age for the control group was 22-78 years and 41.5 years respectively. The experimental group age range was 21-74 years with a median age of 40.5. Table 3 presents the

data obtained from Part I, Question 1. of the Interview guide.

Table 3. Distribution by Age of the 45 Patients in the Control and Experimental Group.

Age:	Control Group		Experimental Group		Total	
	No.	%	No.	%	No.	%
21-29.....	7	28	6	30	13	28.9
30-39.....	7	28	5	25	12	26.7
40-49.....	5	20	4	20	9	20.0
50-59.....	2	8	3	15	5	11.0
60-69.....	3	12	1	5	4	8.9
over 70.....	1	4	1	5	2	4.5
Total..	25	100	20	100	45	100.0
Range..	22-78		21-74		21-78	
Mean...	41.5		40.5		41	

Source: Item1, Background Information, Appendix D.

2. Sex: Nineteen (42.2 per cent) men and twenty-six (57.8 per cent) women were interviewed during the study. The distribution by sex in the two groups is depicted in Table 4.

Table 4. Distribution by Sex of the 45 Patients in the Control and Experimental Group.

Sex:	Control Group		Experimental Group		Total	
	No.	%	No.	%	No.	%
Male.....	11	44	8	40	19	42.2
Female.....	14	56	12	60	26	57.8
Total..	25	100	20	100	45	100.0

Source: Item 2, Background Information, Appendix D.

3. Education: The highest educational level was reported by a man in the control group who was a college graduate in his fourth year of Theological School. A woman, also in the control group reported two years of graduate work. The range in education level for the control group was 6th grade to fourth year graduate work. The educational level range in the experimental group was 9th grade to first year of college. The mean educational levels for the two groups were: control, 11.8 years, and experimental, 11.6 years. The composite educational range was 6th grade to 8th year college. The mean was 11.7 years. Table 5 presents educational level distribution for the two groups.

Table 5. Distribution by Educational Level of the 45 Patients in the Control and Experimental Groups.

Educational Level	Control Group		Experimental Group		Total	
	No.	%	No.	%	No.	%
Grade School....	4	16	0	0	4	8.9
High School.....	13	52	17	85	30	66.7
College.....	8	32	3	15	11	24.4
Total...	25	100	20	100	45	100.0
Range...	6th grade to 4th year graduate work		9th grade to 1st year college		6th grade to 4th year graduate work	
Mean....	11.8 grade		11.6 grade		11.7 grade	

Source: Item 3, Background Information, Appendix D.

4. and 5. Prior Hospitalization and prior hospitalization for the present condition: Of the forty-five patients interviewed, thirty-eight (84.4 per cent) had been hospitalized before. Twenty-one (84 per cent) of the control group and seventeen (85 per cent) of the experimental group reported having been hospitalized before. Patients reporting prior hospitalization for the present condition numbered ten (22.2 per cent), seven (25 per cent)in the control group and three (15 per cent) in the experimental group. The number and per cent of patients' responses regarding prior hospitalization and prior hospitalization for the present condition are shown in Table 6.

Table 6. Distribution of 45 Patients Reporting Prior Hospitalization and Prior Hospitalization for the Present Condition

Hospitalization	Control Group		Experimental Group		Total	
	No.	%	No.	%	No.	%
Prior Hospitalization.....	21	84	17	85	38	84.4
No Prior Hospitalization.	4	16	3	15	7	15.6
Total...	25	100	20	100	45	100.0
Prior Hospitalization-Present Condition.....	7	28	3	15	10	22.2
No Prior Hospitalization-Present Condition..	18	72	17	85	35	77.8
Total...	25	100	20	100	45	100.0

Source: Item 4 and 5, Background Information, Appendix D.

6. Length of hospitalization: There were twenty-six (57.8 per cent) of the forty-five patients interviewed who reported the length of their recent hospitalization to be less than one week. Seventeen (68 per cent) control group patients and nine (45 per cent) experimental group patients had been hospitalized less than one week. Seven (28 per cent) control group patients and nine (45 per cent) patients in the experimental group stated they had been in the hospital one to two weeks, for a total of sixteen (35.6 per cent) of the forty-five patients interviewed. Only one (4 per cent)

patient in the control group and two (10 per cent) in the experimental group, therefore three (6.6 per cent) of the forty-five participants were hospitalized 2-3 weeks. No patients reported hospitalization longer than three weeks. Table 7 presents these data.

Table 7. Distribution of 45 Patients by Length of Hospitalization.

Length of Hospitalization	Control Group		Experimental Group		Total	
	No.	%	No.	%	No.	%
Less than one week.....	17	68	9	45	26	57.8
1-2 weeks.....	7	28	9	45	16	35.6
2-3 weeks.....	1	4	2	10	3	6.6
3-4 weeks.....	0	0	0	0	0	0.0
longer than 4 weeks.....	0	0	0	0	0	0.0
Total...	25	100	20	100	45	100.0

Source: Item 6, Part I, Background Information, Interview Guide.

In summary, the background variables for the two groups are presented in Table 8.

Table 8. Distribution of Background Variables of the Control Group and Experimental Group for the 45 Patients Interviewed.

Background Variable	Control Group		Experimental Group		Total	
	No.	%	No.	%	No.	%
1. Age: 21-29.....	7	28	6	30	13	28.9
30-39.....	7	28	5	25	12	26.7
40-49.....	5	20	4	20	9	20.0
50-59.....	2	8	3	15	5	11.0
60-69.....	3	12	1	5	4	8.9
over 70.....	1	4	1	5	2	4.5
Total.....	25	100	20	100	45	100.0
2. Sex: Male.....	11	44	8	40	19	42.2
Female.....	14	56	12	60	26	57.8
Total.....	25	100	20	100	45	100.0
3. Education:						
grade.....	4	16	0	0	4	8.9
high.....	13	52	17	85	30	66.7
college.....	8	32	3	15	11	24.4
Total.....	25	100	20	100	45	100.0
4. Prior hospitalization.....	21	84	17	85	38	84.4
No prior hospitalization.....	4	16	3	15	7	15.6
Total.....	25	100	20	100	45	100.0
5. Prior hospitalization-same condition.....	7	28	3	15	10	22.2
No prior hospitalization-same condition.....	18	72	17	85	35	77.8
Total.....	25	100	20	100	45	100.0
6. Length of Hospitalization:						
less than week..	17	68	9	45	26	57.8
1-2 weeks.....	7	28	9	45	16	35.6
2-3 weeks.....	1	4	2	10	3	6.6
3-4 weeks.....	0	0	0	0	0	0.0
longer.....	0	0	0	0	0	0.0
Total.....	25	100	20	100	45	100.0

Source: Part I, Background Information, Interview Guide.

PART II

TABULATION OF PATIENTS' ANSWERS

A. CONTROL GROUP

The control group of 25 patients was interviewed approximately one week after discharge from the hospital. Interview Guide #1 (appendix D) was used in addition to the Background Information check list. This group received discharge instruction by existing methods. Thirteen (52 per cent) patients had questions since discharge (Question 1). Eight (32 per cent) had called their doctor during the week regarding questions (Question 2).

Items 3-7 identified general areas of questions regarding: medicine, 6 (14 per cent); treatments, 2 (8 per cent); activity, 3 (12 per cent); personal care, 3 (12 per cent); diet, 3 (12 per cent).

Only one (4 per cent) patient of the twenty-five had a question regarding when to see the doctor again (Question 8).

Nineteen (86 per cent) patients stated they received oral instruction upon discharge. The source of instruction (Question 10-12) was identified as: doctor, 18 (72 per cent); nurses, 3 (12 per cent); other staff members (dietician and physical therapist) 2 (8 per cent).

Twelve (48 per cent) patients stated they asked questions of personnel regarding their care at home (Question 13). All patients who asked questions reported they understood the answers. (Question 14).

Only one (4 per cent) of the 25 patients in the control group reported receiving written instruction (Question 15). These were instructions regarding medication.

Ten (40 per cent) of the patients felt written information might have been helpful (Question 16). Of the other fifteen (60 per cent), 12 commented their illness was not severe enough to warrant written instructions. Others stated verbal instructions were adequate.

In Question 17 the 13 patients who had questions after discharge estimated they had a total of 32 questions during their first week at home. Table 9 presents these data.

Table 9. Distribution of Answers to Interview Guide Questions by the 25 Patients in the Control Group

Question *	Control Group N = 25			
	Yes	%	No	%
1. Questions	13	52	12	48
2. Called doctor	8	32	17	68
3. Medicine	6	24	19	76
4. Treatments	2	8	23	92
5. Activity	3	12	22	88
6. Personal care	3	12	22	88
7. Diet	3	12	22	88
8. See doctor	1	4	24	96
9. Oral instructions	19	76	6	24
10. From doctor	18	72	7	28
11. From nurse	3	12	22	88
12. Others	2	8	23	92
13. Ask questions	12	48	13	52
14. Understand	12	--	--	--
15. Written instructions	1	4	24	96
16. Helpful	10	40	15	60
17. Total number of questions estimated by Control group patients during week since discharge from the hospital: 32				

*For complete text of questions see Part II, Interview Guide, Appendix D.

Source: Part II, Interview Guide, Appendix D.

B. EXPERIMENTAL GROUP

The experimental group of twenty patients was discharged with the Suggestions for Care at Home form as filled out by the nurse. This group of patients was interviewed approximately one week after leaving the hospital. Interview Guide #2 (appendix D) was used with the Background Information check list to obtain the data for this group. Thirteen (65 per cent) of the twenty patients stated they had questions during the first week at home (Question 1). Nine (45 per cent) stated they called the doctor regarding a question (Question 2).

General areas of questions (Questions 3-7) reported were: medicine, 5 (25 per cent); treatments, 3 (15 per cent); activity, 3 (15 per cent); diet, 2 (10 per cent). No patient had a question regarding personal care.

Three (15 per cent) of the twenty patients interviewed had a question about when to see the doctor again (Question 8).

Seventeen (85 per cent) of the experimental group patients received oral instruction (Question 9). The source of instruction (Questions 10-12) was listed as: doctor, 16 (80 per cent); nurses, 11 (55 per cent); other staff members, 2 (10 per cent).

Thirteen (65 per cent) patients reported they asked questions of personnel regarding their post-hospitalization care (Question 13). Answers to their questions were clear and easily understood (Question 14).

Question 15 determined that all the patients in the experimental group had received the Suggestions for Care at Home

form and were able to produce it at the time of the interview. An assumption of the study was that personnel would be conscientious in completing the form. It was found that seven of the forms were to some degree incomplete. Of the 13 (65 per cent) patients who received completed forms, twelve reported the form was of help to them (Question 16). One had not referred to the form. Of the seven (35 per cent) who received incomplete forms none felt it would have been helpful. Comments were to the effect that oral instructions were adequate.

In answer to Question 17, the 13 patients who had questions estimated they had a total of 19 questions during the week following discharge. Table 10 presents the tabulation of the experimental group patients' answers to the Interview Guide questions.

Table 10. Distribution of Answers to Interview Guide Questions by the 20 Patients in the Experimental Group.

Question*	Experimental Group N = 20			
	Yes	%	No	%
1. Questions	13	65	7	35
2. Called doctor	9	45	11	55
3. Medicine	5	25	15	75
4. Treatments	3	15	17	85
5. Activity	3	15	17	85
6. Personal Care	0	0	20	100
7. Diet	2	10	18	90
8. See doctor	3	15	17	85
9. Oral instructions	17	85	3	15
10. From doctor	16	80	4	20
11. From nurse	11	55	9	45
12. Others	2	10	18	90
13. Ask questions	13	65	7	35
14. Understand	13	--	--	--
15. Written instructions	20	100	0	0
16. Helpful	13	65	7	35
17. Total number of questions estimated by Experimental group patients during week since discharge from hospital: 19				

*For complete text of questions see Part II, Interview Guide, Appendix D.
Source: Part II, Interview Guide, Appendix D.

C. BOTH GROUPS

Of the forty-five patients interviewed, twenty-six (57.8 per cent) stated they had questions after discharge, (Question 1). This finding supports that included in unpublished tabulations[36] of the study reported by Linehan[21] and Spiegel[35] wherein 49 per cent of the 450 patients they interviewed had questions at time of discharge.

In answer to Question 2, seventeen (65.4 per cent) of the twenty-six patients who had questions called the

doctor for answers. 61.3 per cent of the 450 patients in the Spiegel[36] data reported they would telephone their physicians if they had a question after leaving the hospital.

Questions 3-7 elicited the number of patients who had questions in the following areas: regarding medicines, 11 patients (24.4 per cent); regarding treatments, 5 patients (11.1 per cent); regarding activity, 6 patients (13.3 per cent); regarding personal care, 3 patients (6.6 per cent); and 5 patients (11.1 per cent) had questions regarding their diet. Linehan[21] reported 17 categories of patients' responses according to volume. These areas included the ones listed in the present study. No further comparison could be made.

Only 4 (8.9 per cent) patients interviewed for this study had a question regarding when to see their doctor again.

Thirty-six (80 per cent) of the 45 patients reported they received oral discharge instructions (Question 9). Questions 10-12 established the source(s) of oral instruction to be; doctor, 34 (75.6 per cent); nurse, 14 (31.1 per cent); others, 4 (8.9 per cent). Abdellah[2] reported 36 per cent of the 9000 patients who participated in her study checked on the questionnaire; "My nurse explained my care to me." The finding of this study, although small in number, supports the larger study.

Twenty (44.4 per cent) of the participants reported they did not ask questions regarding their care at home. (Question 13). This finding supports that reported by

Linehan: "Fifty-one percent of the patients had no questions apparently because of fear, age, religion, trust in the physician... not knowing what to ask, how to ask, or whom to ask."[21] Other studies stressed reticence on the part of the patient to ask questions.[7, 20, 31]

All of the twenty-five patients who asked questions stated they understood the answers. This area was investigated in the interviews reported by Linehan:[21] Patients desire "simplicity in the answers given, less medical terminology."

Question 15 determined 21 (46.6 per cent) of the 45 patients interviewed received written instructions. The twenty patients in the experimental group received the Suggestions for Care at Home form. One patient in the control group reported she received written directions regarding medication. In answer to Question 16, twenty-three (51.5 per cent) patients reported written instructions would be helpful (control group) or were helpful (experimental group).

Of the 45 patients interviewed, nineteen reported they had no questions during the week following discharge. Twenty-six reported a total of fifty-one questions during the week since discharge from the hospital (Question 17).

Table 11 presents the summary of these data.

Table 11. Distribution of Answers to Interview Guide Questions by the 45 Patients Interviewed.

Question*	Control Group N = 25				Experimental Group N = 20				Total N = 45			
	Yes	%	No	%	Yes	%	No	%	Yes	%	No	%
1. Question.....	13	52	12	48	13	65	7	35	26	57.8	19	42.2
2. Called Dr....	8	32	17	68	9	45	11	55	17	37.8	28	62.2
3. Medicine.....	6	24	19	76	5	25	15	75	11	24.4	34	75.6
4. Treatments...	2	8	23	92	3	15	17	85	5	11.1	40	88.9
5. Activity.....	3	12	22	88	3	15	17	85	6	13.3	39	86.7
6. Personal Care	3	12	22	88	0	0	20	100	3	6.6	42	93.4
7. Diet.....	3	12	22	88	2	10	18	90	5	11.1	40	88.9
8. See Doctor...	1	4	24	96	3	15	17	85	4	8.9	41	91.1
9. Oral instr...	19	86	6	24	17	85	3	15	36	80.0	9	20.0
10. From doctor..	18	72	7	28	16	80	4	20	34	75.6	11	24.4
11. From nurse...	3	12	22	88	11	55	9	45	14	31.1	31	68.9
12. Others.....	2	8	23	92	2	10	18	90	4	8.9	41	91.1
13. Ask questions	12	48	13	52	13	65	7	35	25	55.6	20	44.4
14. Understand...	12	--	--	--	13	--	--	--	25	55.6	--	----
15. Written instr	1	4	24	96	20	100	--	--	21	46.6	24	53.4
16. Helpful.....	10	40	15	60	13	65	7	35	23	51.1	22	48.9
17. Number of questions estimated by groups during week since discharge from hospital.....	32				19				51			

*For complete text of questions see Part II, Interview Guide, Appendix D.

Source: Part II, Interview Guide, Appendix D.

PART III

INTERVIEW GUIDE - PATIENTS' COMMENTS

Patients' comments were elicited regarding what they thought might be helpful for other patients during the first week at home following hospitalization. These comments are paraphrased as accurately as possible from the interviews.

Twelve of the forty-five patients made reference to following instructions such as:

"Follow your doctor's instructions."

"Take it easy when the doctor says to take it easy!"

"Do everything the doctor says and you won't get in trouble."

Eighteen referred to questions after discharge in statements such as:

"If you have a question, call your doctor. No sense worrying and wondering."

"Get expert advice: don't ask your relatives."

"Ask questions before you leave the hospital."

Two suggestions had religious connotations:

"Trust in the Lord!"

"Have Faith and you'll recover."

One elderly lady stated:

"Just do what comes naturally. If you're tired, rest. If you're hurting, cry. If you're worried, call your doctor. If you need help, ask your family and friends to help you."

Twelve patients had no comments.

During the course of the interviews, many of the patients offered unsolicited comments about their care, their doctor and the hospital. In general the comments were highly favorable. These unsolicited comments may partially support Miller's[26] finding that patients in small hospitals were somewhat more satisfied with their care than patients in large hospitals.

ANALYSIS AND INTERPRETATION OF DATA

To facilitate comparisons, the age and education data were sub-grouped into two categories; under 40 and over 40, and below-college and college-and-above. Length of hospitalization was also condensed to less than a week and more than a week. Table 12 presents a summary of these data in the sub-groups.

Table 12. Sub-groupings of 45 Patients According to Age, Educational Level, Length of Hospitalization.

Sub-group	Control		Experimental		Total	
	No.	%	No.	%	No.	%
1. Age: Under 40..	14	56	11	55	25	55.6
Over 40...	11	44	9	45	20	44.4
Total.....	25	100	20	100	45	100.0
2. Education:						
Below college...	17	68	17	85	34	75.6
College.....	8	32	3	15	11	24.4
Total.....	25	100	20	100	45	100.0
3. Length of Hospitalization:						
less than week..	17	68	9	45	26	57.8
more than week..	8	32	11	55	19	42.2
Total.....	25	100	20	100	45	100.0

Source: Items 1, 2, 6, Part I, Interview Guide (Appendix D).

The chi-square test was used to determine whether any of the differences between the two groups were statistically

significant. The null hypothesis was rejected at $P<0.05$. The simplified method for a 2 x 2 table was used. Since $N = <100$, Yates' correction was employed. The formula used was:(6)

$$X^2 = \frac{N\left[(BC) - (AD) - \frac{N}{2}\right]2}{(A+C)\ (B+D)\ (A+B)\ (C+D)}$$

Each letter stands for one cell in the table, as shown below in Table 13, using the data from Item 1, Interview Guide, Part I (Appendix D).

Table 13. Sample Table for the Computation of Chi-square to Determine if Statistically Significant Differences Exist between Control and Experimental Groups According to Age.

Age:(a)	Number of Patients					
	Control		Experimental		Total	
Under 40.....	A	14	B	11	A+B	25
Over 40.....	C	11	D	9	C+D	20
Total..	A+C	25	B+D	20	N=45	

(a) For complete text of item, see Part I, Interview Guide, (Appendix D)

The figures given above were substituted into the formula:

$$X^2 = \frac{45\left[(14)\ (9) - (11)\ (11) - \frac{45}{2}\right]^2}{(25)\ (20)\ (25)\ (20)} = 0.136$$

The critical value of chi-square at $P<0.05$ for a 2x2 table, which has one degree of freedom, is 3.84 (Appendix F). The value obtained for the above data was below the chosen level of significance. The probability that the difference between the two groups is due to chance is thus greater than 5 out of 100.

This computation was done for each of the background variables in Part I of the Interview Guide. Table 14 gives the value of chi-square for each of the variables to determine any significant difference between the two groups.

Table 14. Value of Chi-square for Each Item on the Interview Guide, Part I, Background Variables.

Background Variable[a]	Value of Chi-square
1. Age.....	0.136
2. Sex.....	0.329
3. Education.....	0.940
4. Prior hospitalization.....	0.103
5. Prior hospitalization for same condition.....	1.969
6. Length of hospitalization.	3.445

[a]For complete Background Information Items see Appendix D.

None of the chi-squares was significant at the 0.05 level. Therefore the null hypothesis:

> There is no significant difference between the background variables of the control group patients and the experimental patients.

was accepted and it can be inferred the two groups were samples of the same population thereby supporting an assumption made for the study.

The chi-square computation was done for each of the questions in Part II of the Interview Guide to determine any significant difference between the two groups' answers.

Table 15 presents the value of chi-square for the questions.

Table 15. Value of Chi-square for Each Question On Interview Guide, Part II.

Questions	Value of Chi-square
1. Questions.....	0.329
2. Call doctor.....	0.342
3. Medicine.....	0.072
4. Treatments.....	0.703
5. Activity.....	0.216
6. Personal care.....	1.607
7. Diet.....	0.703
8. See doctor.....	0.580
9. Oral.....	0.141
10. From doctor.....	0.737
11. From nurse.....	7.684 b/
12. From others.....	0.857
13. Ask.....	0.703
14. Understand.....	..... c/
15. Written.....	..... c/
16. Helpful.....	1.869
17. Number of questions....	..... c/

a/ For complete text of the questions see Part II, Interview Guide, Appendix D. .

b/ Difference between the two groups is significant ($P<.05$).

c/ Questions 14, 15, and 17, by their nature, could not s be analyzed by Chi-square (see Appendix D).

Statistical analysis resulted in the rejection of the null hypothesis:

> There is no significant difference in the reponses of the two groups to the questions included in the interview guide.

Question 11, "Was verbal instruction given by a nurse in the hospital?", resulted in a statistically significant difference

between the responses of the two groups. The experimental group of twenty patients reported nurses gave them verbal instructions as they gave them the Suggestions for Care at Home form, or answered questions the patients thought of after looking at the form.

INFLUENCE OF BACKGROUND VARIABLES

Two of the questions in the Interview Guide, Part II, were designed to establish whether the discharged patients had informational needs and whether they asked questions to fulfill their need for information. These questions were: 1. "Have you had any questions concerning your care after leaving the hospital?", and, 13. "Did you ask questions regarding your post-hospitalization care?"

Because other studies have reported that various background variables influence the amount of informational needs and how patients fulfill these needs, the variables investigated in this study were compared to the designated questions. Because of the small number of patients participating in this study, the meaning of the influence(s) of these background variables cannot be generalized. Comparison of the variables to Questions 1 and 13 follow:

1. Age: Fifteen (29.4 per cent) of the twenty-six patients who had questions (Question 1) were under 40; eleven (24.4 per cent) were over 40. Table 16. presents the data comparing age to number of patients in the two groups.

Table 16. Distribution by Age of 45 Patients in Two Groups Who Did or Did Not Have Questions After Discharge from the Hospital.

Question 1*	Control N=25				Experimental N=20				Total N=45			
	Under 40		Over 40		Under 40		Over 40		Under 40		Over 40	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who had questions.....	8	32	5	20	7	35	6	30	15	29.4	11	24.4
No. who did not have questions...	6	24	6	24	4	20	3	15	10	22.2	9	20.0
Total.....	14	56	11	44	11	55	9	45	25	55.6	20	44.4

Chi-square = 0.411 df = 1 P>0.05

*See Appendix D, Part II for complete text of Question 1.
Source: Item 1, Part I, and Question 1, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant relationship between the age groups who report questions regarding care after discharge.

was accepted, and for the patients in this study there was no significant difference in the number reporting questions in the two age groups. Although the difference was not significant, the slight difference (5 per cent) may infer support of Abdellah and Levine's[3] finding that the younger age group had more unfulfilled needs.

Twenty-five (55.6 per cent) patients reported they asked questions (Question 13) regarding their care before they left the hospital. Twenty-five (55.6 per cent) of the forty-five patients interviewed, were under age 40. Twenty (44.4 per cent)

were over 40. Thirteen (28.9 per cent) of the twenty-five patients under 40 asked questions. Twelve (26.65 per cent) below age 40, did not ask questions. Twelve (26.65 per cent) over age 40 asked questions, eight (17.8 per cent) over 40 did not. Table 17 presents the comparison of age to asking questions.

Table 17. Distribution by Age of 45 Patients in Two Groups Who Asked or Did Not Ask Questions Before Discharge.

Question 13*	Control N = 25				Experimental N=20				Total N = 45			
	Under 40		Over 40		Under 40		Over 40		Under 40		Over 40	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who asked questions.....	8	32	4	16	5	25	8	40	13	28.9	12	26.65
No. who did not ask questions....	6	24	7	28	6	30	1	5	12	26.65	8	17.8
Total.....	14	56	11	44	11	55	9	45	25	55.6	20	44.4

Chi-square = 0.055 df = 1 P>0.05

*See Appendix D for complete text of Question 1, Part II.
Source: Item 1, Part I, and Question 1, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant relationship between age and asking questions before discharge regarding care at home.

was accepted, and for the patients in this study there was no relationship between age and asking questions. Although the difference was not significant, the slight difference (2.3 per cent) may infer support of Treseler's[37] finding

that the younger age had more requests for information.

2. Sex: Of the forty-five patients interviewed for this study, seven (15.6 per cent) males had questions and nineteen (42.2 per cent) females had questions regarding their care during the week following their discharge. These data are presented in Table 18.

Table 18. Distribution by Sex of 45 Patients in Two Groups Who Had or Did Not Have Questions After Discharge from the Hospital.

Question 1*	Control N=25				Experimental N=20				Total Sample N=45			
	Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who had questions.....	4	16	9	36	3	15	10	50	7	15.6	19	42.2
No. who did not have questions..	7	28	5	20	5	25	2	10	12	26.6	7	15.6
Total.....	11	44	14	56	8	40	12	60	19	42.2	26	57.8

Chi-square = 5.478 df = 1 $P<0.05$

*See Appendix D, Part II, for complete text of Question 1.
Source: Item 2, Part I, and Question 1, Part II, Interview Guide, Appendix D.

Therefore, there was a significant difference and the null hypothesis:

> There is no significant relationship between sex and having questions after discharge.

was rejected, and for the patients in this study there was a significant relationship between the sexes in the number who reported questions during the immediate post-hospitalization period. A larger percentage of female patients interviewed in this study reported they had questions than did the male patients. Leach,[19] in her study to determine amount of pre-

operative instruction, after finding male patients were less well instructed questioned: "Are men more stoic because of our culture and less apt to display doubt or apprehension?"

Twenty-five (55.5 per cent) of the forty-five patients interviewed reported they asked questions (Question 13). Fourteen (31.1 per cent) of the twenty-six female patients in the study and eleven (24.4 per cent) of the nineteen males interviewed stated they asked questions regarding post-hospitalization care. Table 19 presents the data relating sex to asking questions.

Table 19. Distribution by Sex of 45 Patients in Two Groups Who Did or Did Not Ask Questions Before Discharge from the Hospital.

Question 13*	Control N=25				Experimental N=20				Total Sample N=45			
	Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who asked questions.....	6	24	6	24	5	25	8	40	11	24.4	14	31.1
No. who did not ask questions...	7	20	8	32	3	15	4	20	8	17.8	12	26.7
Total.....	11	44	14	56	8	40	12	60	19	42.2	26	57.8

Chi-square = 0.329 df = 1 P>0.05

*See Appendix D for complete text of Question 13.
Source: Item 2, Part I, and Question 13, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant relationship between sex and asking questions before discharge regarding care at home.

was accepted, and for the patients in this study there was no significant relationship between sex and asking questions. Although the difference was not significant the slight difference (6.7 per cent) may infer support of the finding Treseler[37] reported that women make more requests than men.

3. Education: Of the forty-five patients interviewed, twenty-six (57.6 per cent) gave an estimate of one or more questions since discharge (Question 1). Seventeen (37.8 per cent) of the participants reported education below college level and nine (20 per cent) reported college or above. Table 20 presents these data.

Table 20. Distribution by Educational Level of 45 Patients in Two Groups Who Did or Did Not Have Questions After Discharge from the Hospital.

Question 1*	Control N=25				Experimental N=20				Total Sample N=45			
	Below College		Above College		Below College		Above College		Below College		Above College	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who had questions.....	6	24	7	28	11	55	2	10	17	37.8	9	20.0
No. who did not have questions..	11	44	1	4	6	30	1	5	17	37.8	2	4.4
Total.....	17	68	8	32	17	85	3	15	34	75.6	11	24.4

Chi-square = 2.512 df = 1 P>0.05

*See Appendix D for complete text of Question 1.
Source: Item 3, Part I, and Question I, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and

the null hypothesis:

> There is no significant relationship between educational level and having questions after discharge.

was accepted, and for the patients interviewed for this study there was no significant difference in the number reporting questions and their educational level.

Of the 45 patients interviewed, thirty-four (75.6 per cent) reported less than college education and eleven (24.4 per cent) reported college or above. Twenty-five patients stated they asked questions. Sixteen (35.6 per cent) of the thirty-four patients in the below college sub-group reported they asked questions. Eighteen (40 per cent) did not ask questions. Of the eleven patients in the college and above group, nine (20 per cent) asked questions and two (4.4 per cent) did not. Table 21 portrays these data.

Table 21. Distribution by Educational Level of 45 Patients in Two Groups Who Did or Did Not Ask Questions Before Discharge from the Hospital.

Question 13*	Control N=25				Experimental N=20				Total Sample N=45			
	Below College		Above College		Below College		Above College		Below College		Above College	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who asked questions.....	4	16	8	32	12	60	1	5	16	35.6	9	20.0
No. who did not ask questions..	13	52	0	0	5	25	2	10	18	40.0	2	4.4
Total.....	17	68	8	32	17	85	3	15	34	75.6	11	24.4

Chi-square = 2.785 df = 1 P>0.05

*See Appendix D, Part II, for complete text of Question 13.
Source: Item 3, Part I, and Question 13, Part II, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant relationship between educational level and asking questions before discharge regarding care at home.

was accepted, and for the patients in this study there was no significant difference in the number who asked questions according to their educational level.

4. Prior Hospitalization: Of the forty-five patients interviewed, twenty-three (51.1 per cent) reported prior hospitalization and that they had questions; fifteen (33.3 per cent) with prior hospitalization did not have questions. Table 22 is a summary of these data.

Table 22. Distribution of 45 Patients Who Reported Prior Hospitalization Who Had or Did Not Have Questions After Discharge from the Hospital.

Question 1*	Control N=25				Experimental N=20				Total Sample N=45			
	Prior Hosp.		No Prior Hosp.		Prior Hosp.		No Prior Hosp.		Prior Hosp.		No Prior Hosp.	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who had questions.....	12	48	1	4	11	55	2	10	23	51.1	3	6.7
No. who did not have questions..	9	36	3	12	6	30	1	5	15	33.3	4	8.9
Total.....	21	84	4	16	17	85	3	15	38	84.4	7	15.6

Chi-square = 1.347 df = 1 P>0.05

*See Appendix D, Part II, for complete text of Question 1.
Source: Item 4, Part I, and Question 1, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant relationship between prior hospitalization and having questions after discharge.

was accepted, and for the patients interviewed for this study there was no significant difference in the number with prior hospitalization who reported questions.

Of the forty-five patients, thirty-eight (84.4 per cent) had been hospitalized previously. Seven (15.6 per cent) reported no prior hospitalization. Twenty (44.4 per cent) of the thirty-eight patients who had been hospitalized before reported they had asked questions, and eighteen (40 per cent) did not ask questions. Of the seven patients with no prior hospitalization, five (11.1 per cent) asked questions, two (4.5 per cent) did not. Table 23 presents these data.

Table 23. Distribution of 45 Patients in Two Groups Reporting Prior Hospitalization Who Did or Did Not Ask Questions Before Discharge from the Hospital.

Question 13*	Control N=25				Experimental N=20				Total Sample N=45			
	Prior		No Prior		Prior		No Prior		Prior		No Prior	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who asked questions.....	9	36	3	12	11	55	2	10	20	44.4	5	11.1
No. who did not ask questions.	12	48	1	4	6	30	1	5	18	40.0	2	4.5
Total.....	21	84	4	16	17	85	3	15	38	84.4	7	15.6

Chi-square N = 0.256 df = 1 P>0.05

*See Appendix D, Part II, for complete text of Question 13.
Source: Item 4, Part I, and Question 13, Part II, Interview Guide. Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant relationship between prior hospitalization and asking questions before discharge regarding care at home.

was accepted, and for the patients in this study there was no

significant difference in the number with prior hospitalization who asked questions. Although the difference was not significant, the difference (33.3 per cent) may infer support of the Treseler[37] finding that prior hospitalization resulted in more requests for information.

5. Prior hospitalization for the present condition: Of the forty-five patients interviewed, six (13.3 per cent) with prior hospitalization for the same condition reported they had questions, and four (8.9 per cent) had no questions. This information is shown on Table 24.

Table 24. Distribution of 45 Patients in Two Groups Reporting Prior Hospitalization for Present Condition Who Had or Did Not Have Questions After Discharge from the Hospital.

Question 1*	Control N=25				Experimental N=20				Total N=45			
	Prior Present Cond.		No Prior Present Cond.		Prior Present Cond.		No Prior Present Cond.		Prior Present Cond.		No Prior Present Cond.	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who had questions.....	5	20	8	32	1	5	12	60	6	13.3	20	44.5
No. who did not have questions..	2	8	10	40	2	10	5	25	4	8.9	15	33.3
Total.....	7	28	18	72	3	15	17	85	10	22.2	35	77.8

Chi-square = .274 df = 1 P>0.05

*See Appendix D, Part II, for complete text of Question 1.
Source: Item 5, Part I, and Question 1, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant relationship between prior hospitalization for the present condition and having questions after discharge.

was accepted, and for the patients in this study there was no significant relationship between prior hospitalization for the present condition and having questions after discharge from the hospital.

Only ten (23.3 per cent) of the forty-five patients interviewed reported prior hospitalization for the present condition. Six (13.3 per cent) hospitalized previously for the present condition stated they asked questions. Four (8.9 per cent) did not ask questions. Of the thirty-five (77.8 per cent) patients not hospitalized previously for the same condition, nineteen (42.2 per cent) asked questions, sixteen (35.6 per cent) did not. Table 25 presents these data.

Table 25. Distribution of 45 Patients in Two Groups Reporting Prior Hospitalization for Present Condition Who Asked or Did Not Ask Questions Before Discharge from the Hospital.

Question 13*	Control N=25				Experimental N=20				Total N=45			
	Prior Present Cond.		No Prior Present Cond.		Prior Present Cond.		No Prior Present Cond.		Prior Present Cond.		No Prior Present Cond.	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who asked questions.....	4	16	8	32	2	10	11	55	6	13.3	19	42.2
No. who did not ask questions....	3	12	10	40	1	5	6	30	4	8.9	16	35.6
Total.....	7	28	18	72	3	15	17	85	10	23.2	35	77.8

Chi-square = 0.464 df = 1 P>0.05

*See Appendix D, Part II, for complete text of Question 13.
Source: Item 4, Part I, and Question 13, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant relationship between prior hospitalization for the present condition and asking questions regarding care after discharge.

was accepted, and for the patients in this study there was no significant difference between prior hospitalization for the present condition and asking questions.

6. Length of hospitalization: Table 26 presents the number of patients who had questions and the length of the patients' hospitalization. Of the twenty-six (57.8 per cent) patients who were hospitalized less than a week, fifteen (33.3 per cent) had questions, eleven (24.5 per cent) did not. Eleven (24.5 per cent) of the nineteen (42.2 per cent) hospitalized longer than one week had questions, eight (17.8 per cent) did not. Table 26 presents these data.

Table 26. Distribution by Length of Hospitalization of 45 Patients in Two Groups Who Had or Did Not Have Questions Following Discharge for the Hospital.

Question 1*	Control N=25				Experimental N=20				Total N=45			
	Less than one week		More than one week		Less than one week		More than one week		Less than one week		More than one week	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who had questions..	9	36	4	16	6	30	7	35	15	33.3	11	24.45
No. who did not have questions..	8	32	4	16	3	15	4	20	11	24.45	8	17.8
Total...	17	68	8	32	9	45	11	55	26	57.8	19	42.2

Chi-square = 0.085 df = 1 P>0.05

*See Appendix D, Part II, for complete text of Question 1.

Source: Item 6, Part I, and Question 1, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant difference between length of hospitalization and having questions after discharge.

was accepted, and for the patients in this study there was no significant difference in the number of patients who had questions and length of hospitalization.

Of the forty-five patients interviewed, twenty-six (57.8 per cent) were hospitalized less than a week and nineteen (42.2 per cent) more than a week. Sixteen (35.6 per cent) patients hospitalized less than a week asked questions, ten (22.2 per cent) did not. Table 27 shows the number of patients in the two groups who asked questions compared to the length of hospitalization.

Table 27. Distribution by Length of Hospitalization of 45 Patients in Two Groups Who Asked or Did Not Ask Questions Before Discharge from the Hospital.

Question 13 *	Control N=25				Experimental N=20				Total N=45			
	Less than one week		More than one week		Less than one week		More than one week		Less than one week		More than one week	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. who asked questions.....	9	36	3	12	7	35	6	30	16	35.6	9	20.0
No. who did not ask questions.	8	32	5	20	2	10	5	25	10	22.2	10	22.2
Total...	17	68	8	32	9	45	11	55	26	57.8	19	42.2

Chi-square = 1.540 df = 1 P>0.05

*See Appendix D, Part II for complete text of Question 13.

Source: Item 6, Part I, and Question 13, Part II, Interview Guide, Appendix D.

Therefore, there was no significant difference and the null hypothesis:

> There is no significant difference between length of hospitalization and asking questions before discharge regarding care at home.

was accepted, and for the patients in this study there was no significant difference between length of hospitalization and asking questions.

In summary, Table 28 shows the value of chi square for each background variable compared to the data for Questions 1 and 13, Interview Guide.

Table 28. Value of Chi-square for Comparison of Each Background Variable to Asking Questions Before Discharge and Having Questions Following Discharge from the Hospital.

Variable	Value of Chi-square	
	Question 1: Asking questions before discharge	Question 13: Having questions after discharge
Age	0.055	0.411
Sex	0.329	5.478 (a)
Educational level	2.785	2.512
Prior hospitalization	0.256	1.347
Prior hopitalization for present condition	0.464	0.274
Length of hospitalization	1.540	0.085

(a) Significant at $P<0.05$

Source: Part I, Background Variables Items and Part II, Questions 1 and 13, Interview Guide, Appendix D.

NUMBER OF ESTIMATED QUESTIONS

Question 17 of the Interview Guide (Appendix D) asked the patients interviewed to give their best estimate of the number of questions they had regarding their care during the week at home since discharge. The t test was used, since the sample was small, to determine the significance of the difference between the number of questions reported by the two groups. The raw score formula for t is:

$$t^2 = \frac{N_1 N_2 \left(\frac{\Sigma X_1}{N_1} - \frac{\Sigma X_2}{N_2}\right)^2}{\Sigma X_1{}^2 + \Sigma X_2{}^2 - \left[\frac{(\Sigma X_1)^2}{N_1} + \frac{(\Sigma X_2)^2}{N_2}\right]} \cdot \frac{N_1 + N_2 - 2}{N_1 + N_2}$$

where $df = N_1 + N_2 - 2$.

Table 29 presents the computation for the data from Question 17. (following page.)

Table 29. Question 17: Number of Questions Estimated by 45 Patients in Two Groups During the Week Following Discharge: Computation for t test.

Control Group N = 25			Experimental Group N = 20		
Patient No.	Number of Questions	Number of Questions^2	Patient No.	Number of Questions	Number of Questions^2
1	0	0	1	0	0
2	0	0	2	2	4
3	0	0	3	0	0
4	2	4	4	0	0
5	1	1	5	4	16
6	0	0	6	0	0
7	0	0	7	0	0
8	5	25	8	0	0
9	0	0	9	1	1
10	0	0	10	1	1
11	0	0	11	2	4
12	4	16	12	1	1
13	0	0	13	0	0
14	3	9	14	1	1
15	3	9	15	1	1
16	1	1	16	1	1
17	1	1	17	1	1
18	5	25	18	2	4
19	0	0	19	1	1
20	4	16	20	1	1
21	1	1		$\Sigma X_2 = 19$	$\Sigma X_2^2 = 37$
22	0	0			
23	1	1			
24	1	1			
25	0	0			
	$\Sigma X_1 = 32$	$\Sigma X_1^2 = 110$			

The figures were substituted into the t test formula:

$$t^2 = \frac{(25)\,(20)\left(\frac{32}{25} - \frac{19}{20}\right)^2}{(110)^2 + (37)^2 - \left[\frac{(32)^2}{25} + \frac{(19)^2}{20}\right]} \cdot \frac{25 + 20 - 2}{25 + 20}$$

$t^2 = 3.820$ $\quad t = 1.95$ $\quad df = 43$ $\quad P = < 0.05$

(Appendix F)

Therefore, there is a significant difference and the null hypothesis:

> Written discharge instructions do not lessen the number of questions a patient has regarding his care during the immediate post-hospitalization period.

was rejected. For the patients in this study the difference between the number of questions reported by the control group and the experimental group was significant. Therefore it can be inferred that the independent variable, Suggestions for Care at Home, lessened the number of questions (dependent variable) the experimental group had regarding their care during the immediate post-hospitalization period.

SUMMARY

The analysis of the data shows that for the patients in this study significant differences did exist between the number of questions reported by the two groups. Analysis of the interview guide data showed patients did have informational needs that were not met. Statistical analysis of the differences between the two groups answers resulted in little statistical difference. The single item that yielded a statistically significant difference was Question 11. The experimental group of patients reported nurses gave oral instructions as they gave the patients the Suggestions for Care at Home form, or answered questions the patients thought of after looking at the form.

The comparison of background variables to having questions and asking questions yielded only one significant

finding: A relationship exists between sex and having questions following discharge from the hospital. Female patients reported having more questions following discharge than did the male patients.

CHAPTER IV

SUMMARY OF THE STUDY

PURPOSE OF THE STUDY

The study was a partial experiment designed to obtain information from patient interviews to prove or disprove the following null hypothesis:

> Written discharge instructions do not lessen the number of questions a patient has regarding his care during the immediate post-hospitalization period.

In addition, hypotheses were tested regarding the influence(s) of the following background variables: (1) age, (2) sex, (3) educational level, (4) prior hospitalization, (5) prior hospitalization for the present condition, (6) length of hospitalization. These hypotheses were designed to determine the relationship of the variables to the data from Question 1 (having questions after discharge), and Question 13 (asking questions before discharge), on the Interview Guide (Appendix D).

In Chapter I the need for the study was supported by the fact that no systematic study was found in the literature that evaluated methods of discharge instruction.

Chapter II presented a review of the literature which was divided into three major areas:

1. Informational needs of the patient.
2. Factors in patient education.

3. Role of the nurse.

Chapter III presented the procedure of the study and results of the analysis of the data collected. The patients interviewed were those discharged from the participating hospital during two designated weeks. Appointments were made by phone for the interview in the patient's home one week following the discharge date. The patients discharged during the first week received existing methods of discharge instruction. The experimental group patients were given the Suggestions for Care at Home form designed for this study.

Although the findings of this study could not be conclusive, the following generalizations were inferred:

1. It was found that patients in the experimental group reported significantly fewer questions.

2. It also was found that patients do have questions regarding their care that are unasked and/or unanswered when discharged from the hospital.

3. Background variables compared to having questions following discharge and asking questions before discharge showed female patients had more questions than males after discharge. No other variable influence for the patients in this study was statistically significant.

4. Patients who received written instructions also reported significantly more oral instruction from nurses.

5. Patients in general were satisfied with oral instructions from their doctors.

CONCLUSIONS

On the basis of information obtained during interviews with forty-five patients approximately one week after their discharge from the hospital, no widespread generalizations can be made. These conclusions are limited to the data obtained from this study.

1. The major hypothesis of the study, that written discharge instructions lessen the patients' questions, was statistically proved for the patients in this study.

2. Patients included in this study were generally satisfied with oral instructions received from the doctor.

3. The evidence from this study seems to indicate that the proposed form was of value in promoting communication between the patients and the nurses, thereby meeting the informational needs of the patient. This finding was of interest and would seem to have implications for nurses.

4. Background variables identified in this study had little influence on whether or not patients asked questions regarding their care at home, or had questions after discharge from the hospital.

5. Written instructions can be an aid in providing continuity of care to patients at home.

6. Analysis of the data supported the findings of related studies regarding patients' needs for discharge information.

RECOMMENDATIONS FOR FURTHER STUDIES

Based on the findings of this study, it is recommended that the following studies be made:

1. A similar study, using the form Suggestions for Care at Home, be done with randomly selected control and experimental groups discharged from a large hospital involving a larger number of participants.

2. A similar study with a group of doctors using the discharge form and the doctors' office nurses tabulating the actual number of telephone calls received from the patients who had questions following their discharge from a hospital.

3. A study utilizing the form revised specifically for surgical patients, medical patients, or obstetrical patients.

4. A survey to determine who the patient feels should be responsible for discharge instruction.

5. A study utilizing tape recorded interviews to determine what individual questions patients have during the week following discharge.

BIBLIOGRAPHY

1. Abdellah, Faye G., and Eugene Levine, Better Patient Care Through Nursing Research. The Macmillan Company, New York, 1965.

2. Abdellah, Faye G., and Eugene Levine, "Polling Patients and Personnel. Part I. What Patients Say About Their Nursing Care," Hospitals (November 1, 1957), 31:61-64.

3. Abdellah, Faye G., and Eugene Levine, "Polling Patients and Personnel. Part II. What Factors Affect Patients' Opinions of Their Nursing Care," Hospitals (November 16, 1957), 31:61-64.

4. Allgire, Mildred J., and Ruth R. Denney, Nurses Can Give and Teach Rehabilitation. Springer Publishing Company, Inc., New York, 1960.

5. Chase, Georgann, The Opinion of Fifty-six General Duty Nurses in Six Hospitals Concerning Their Functions in Relation to Patient Care, Unpublished Master's Thesis. University of Oregon School of Nursing, 1959.

6. Croxton, Frederick E., Elementary Statistics with Applications in Medicine and the Biological Sciences. Dover Publications, Inc., New York, 1959.

7. Dichter, Ernest, "A Psychological Study of the Hospital-Patient Relationship: What the Patient Really Wants from the Hospital," Modern Hospital (September, 1954), 83:51-54, 136.

8. Dowling, Harry F., David Shakow, "Time Spent by Internists on Adult Education and Preventive Medicine," The Journal of the American Medical Association (June 14, 1952), 149:628-631.

9. Dye, Mary C., "Clarifying Patients' Communications," The American Journal of Nursing (August, 1963), 63:8:56-59.

10. Ferguson, Marion, and others, "What Does the Consumer Want," Nursing Outlook (November, 1954), 2:11:571-574.

11. Field, Minna, Patients are People. Columbia River Press, New York, 1953.

12. Gorham, William A., "Staff Nursing Behaviors Contributing to Patient Care and Improvement," Nursing Research (Spring, 1962), 11:2:68-79.

13. Harmer, Bertha, and Virginia Henderson, Textbook of the Principles and Practices of Nursing (Fifth Edition). The Macmillan Company, New York, 1955.

14. Heidgerken, Loretta, "Some Problems in Modern Nursing," Nursing Outlook (July, 1959), 7:8:396.

15. Hewitt, Helon Elizabeth, An Exploratory Study of Problems Expressed by a Selected Group of Discharged Medical Patients, Unpublished Master's Thesis. University of Washington, 1961.

16. Horner, Ada L., and Muriel Jennings, "Before Patients Go Home," The American Journal of Nursing (June, 1961), 61:6:62-63.

17. Howland, Daniel, The Development of a Methodology for the Evaluation of Patient Care. Report of the Systems Research Group of the Engineering Experiment Station, Ohio State University, 1961.

18. Kariel, Patricia Lells, A Study of Some Factors Which Influence the Obtaining of Information About Labor and Delivery By Two Groups of Primiparas, Unpublished Master's Thesis. University of Oregon School of Nursing, 1961.

19. Leach, Marilyn Anne, A Survey of Eighty Surgical Patients Regarding Their Preoperative Preparation in One Selected Hospital in Oregon, Unpublished Master's Thesis. University of Oregon School of Nursing, 1964.

20. Lesser, Marion S., and Vera R. Keane, Nurse-Patient Relationships in a Hospital Maternity Service. The C. V. Mosby Company, St. Louis, 1956.

21. Linehan, Dorothy T., "What Does the Patient Want to Know?," The American Journal of Nursing (May, 1966), 66:5:1066-1070.

22. McClain, M. Esther, and Shirley H. Gragg, Scientific Principles in Nursing (Fourth Edition). C. V. Mosby Company, St. Louis, 1962.

23. McGhee, Anne, The Patients' Attitude to Nursing Care. E. and S. Livingstone, Ltd., Edinburgh and London. 1961.

24. McNeil, Helen Josephine, A Study of Patients' Needs as Indicated Through Their Use of 147 Signal Lights, Unpublished Master's Thesis. University of Washington, 1961.

25. Mauksch, Hans O., and Daisy Tagliacozzo, The Patient's View of the Patient Role: Part I. Department of Patient Care Research, Presbyterian-St. Luke's Hospital, Chicago, March, 1962.

26. Miller, Alice Marie, A Comparison of Patient and Personnel Satisfaction With Nursing Care in One Large Hospital as Compared to Patient and Personnel Satisfaction with Nursing Care in Two Small Hospitals in Seattle, Unpublished Master's Thesis. University of Washington, 1961.

27. Mohammed, Mary F. B., "Patients' Understanding of Written Health Information," Nursing Research (Spring, 1964), 13:100-108.

28. Monroe County Chronic Illness Study, Care of Persons with Long-Term Illness in Nursing Homes, A Report of the Nursing Homes Study Subcommittee, Monroe County Board of Supervisors and the Council of Social Agencies, Rochester, New York, 1958.

29. National League for Nursing, Committee to Draft a Patient's Bill of Rights, "Patient's Bill of Rights," Nursing Outlook (June, 1959), 7:7:364.

30. Oelwein, Ruth Anne, A Study of the Knowledge of Selected Aspects of Heart Disease Possessed by Forty Post-Hospital Coronary Heart Disease Patients, Unpublished Master's Thesis. University of Washington, 1957.

31. Pratt, Lois, and other, "Physicians' Views on the Level of Medical Information Among Patients," American Journal of Public Health (October, 1957), 47:10:1277-1283.

32. Schindler, Doris L., A Study of Statements of Communication Practices and Identification of Types of Nurse-Patient Communication by Ninety-four Registered Nurses in Nine Selected Hospitals, Unpublished Master's Thesis. University of Oregon School of Nursing, 1966.

33. Schmidt, Ruth, "Life at Home," Nursing Outlook (June, 1958), 6:6:330-331.

34. Snyder, Lillian M., "The Merits of Discharge Planning in Shortening the Hospitalization of Free Patients," Maryland State Medical Journal (January, 1962) 11:1:10-17.

35. Spiegel, Allen D., "Educating Patients, Having Patience and Testing New Approaches," Medical Times (October, 1964), 92:10:969-974.

36. Spiegel, Allen D., Unpublished Tabulations of Raw Data from Research in Progress, The Medical Foundation, Boston, Massachusetts, 1966.

37. Treseler, Kathleen Morrison, An Exploratory Study of Unstated Patient Requests, Unpublished Master's Thesis. University of Washington, 1965.

38. Weigand, Evon K., The Influence of Pre-determined Factors on the Comprehension of Written Health Information of Selected Patients in a University Out-patient Clinic, Unpublished Master's Thesis. University of Oregon School of Nursing, 1966.

39. Wilder, Cecily A., "X-Raying Patient Opinion," Hospitals (January, 1952), 26:1:67-68.

40. Wooden, Howard E., "The Hospital's Purpose is the Patient, But-," Modern Hospital (January, 1959), 92:1:90-96.

APPENDICES

APPENDIX A

Letter to Executive Board of Hospital Utilized in the Study

Dr._____
Chairman, Executive Committee
_____Hospital
Portland, Oregon

Dear Dr._____

In partial fulfillment of requirements for a Master's degree at the University of Oregon School of Nursing, I plan to evaluate a written discharge information form. My hypothesis is that patients with written information to refer to after discharge from a hospital will have less questions than patients discharged with verbal instructions. I respectfully request the Committee's permission to interview a number of patients in their homes at their convenience.

The designated group of patients will be those over the age of 16, with a medical or surgical diagnosis, discharged during one seven day period. During the following week the discharge form will be filled out by the nurse (or doctor if he wished) and sent home with the patients. Each group of patients will be interviewed one week after the discharge date.

A copy of the interview guide and the discharge form are enclosed. Any suggestions or criticisms will be welcome. Any controversial questions will be deleted. The patients' names, diagnoses, ages, addresses and phone numbers will necessarily have to be obtained from the hospital record. The hospital, doctors, and patients will remain absolutely anonymous in the writing of the thesis.

Upon completion of the study, copies of the report will be placed in the library at the University of Oregon Medical School.

Yours sincerely,

Mrs. Ray is a regularly enrolled graduate student at the University of Oregon School of Nursing. We would appreciate any help you could give her in her study.

LUCILE GREGERSON
Thesis Adviser

APPENDIX B

Letter of Permission from the Participating Hospital (copy)

June 13, 1966

Mrs. Nancy Ray, R.N.

Portland, Oregon

Dear Mrs. Ray:

This is to inform you that the hospital and the Executive Committee of the medical staff of the hospital has concurred in your request for interview of patients following discharge. There are four provisos which I believe you will find reasonable. These are that all patients must be twenty-one years of age or over, that you shall obtain a consent form from the patient at each interview, that the information will be considered confidential to the degree that it is not made available to the lay press, and that you submit your draft or your thesis to the hospital for clearance prior to submission.

We will cooperate with you in every respect in carrying out this educational project. Please utilize _____, The Director of Nursing Services, as your contact person for working out details for conducting a thesis with the hospital.

Yours very truly,

Administrator

APPENDIX C

DISCHARGE FORM

SUGGESTIONS FOR CARE AT HOME

Name_____ Discharge date_____

Activity: Complete bed rest ☐ Restricted activity ☐

Up to bathroom ☐ No climbing stairs ☐

Rest periods ☐ No lifting ☐

Other:_____

Driving car: Yes ☐ No ☐

Diet: Regular ☐ Special Diet:_____

Fluids: Increase ☐ _____

Decrease ☐ _____

Medications: Name or prescription number_____ Amount_____ Time_____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Laxative:_____ _____ _____

Treatments: Change dressing ☐ _____

Other:_____

Follow up care: Appointment to see Dr.:_____

Call office for appointment:_____

Other:_____

BEST WISHES TO YOU !

APPENDIX D

INTERVIEW GUIDE FOR DATA COLLECTION

PART I: BACKGROUND INFORMATION

1. Age: 20-29 30-39 40-49 50-59 60-69 over 70

2. Sex: Male Female

3. Education: 5 6 7 8 (grade school) 9 10 11 12 (high school) 1 2 3 4 5 6 (college)

4. Have you been hospitalized before? Yes No

5. Have you been hospitalized for the present condition before? Yes No

6. Length of this hospitalization:

less than 1 week 1-2 weeks 2-3 weeks 3-4 weeks longer than month

APPENDIX D - PART II

INTERVIEW GUIDE #1

Control Group

		Yes	No
1.	During the past week, have you had questions concerning your care after leaving the hospital?	☐	☐
2.	During the past week, have you called your doctor or his office nurse regarding a question?	☐	☐
3.	Did you have a question regarding your medicine? (Time, amount, etc.)	☐	☐
4.	Did you have a question regarding your treatments? (Exercises, etc.)	☐	☐
5.	Did you have a question regarding activity? (Climbing stairs, etc.)	☐	☐
6.	Did you have a question regarding personal care? (Tub bath, etc.)	☐	☐
7.	Did you have a question regarding your diet?	☐	☐
8.	Did you have a question regarding when to see your doctor again?	☐	☐
9.	Did you receive any oral instructions when you left the hospital?	☐	☐
10.	Was oral instruction given by your doctor?	☐	☐
11.	Was oral instruction given by your nurse?	☐	☐
12.	Was oral instruction given by some other member of the staff?	☐	☐
13.	Did you ask questions regarding your post-hospitalization care?	☐	☐
14.	If so, did you understand the answers to your questions?	☐	☐
15.	Did you receive any written instructions for care after leaving the hospital?	☐	☐
16.	If not, would written instructions have been of help to you?	☐	☐
17.	Finally, would you give your best estimate of the number of questions you had during the past week regarding your care after leaving the hospital?	_____	

PART III

Please add any other comments you feel might be helpful in aiding others like yourself during the first week following hospitalization.

APPENDIX D - PART II

INTERVIEW GUIDE #2

Experimental Group

		Yes	No
1.	During the past week, have you had questions concerning your care after leaving the hospital?	☐	☐
2.	During the past week, have you called your doctor or his office nurse regarding a question?	☐	☐
3.	Did you have a question regarding your medicine? (Time, amount, etc.)	☐	☐
4.	Did you have a question regarding your treatments? (Exercises, etc.)	☐	☐
5.	Did you have a question regarding activity? (Climbing stairs, etc.)	☐	☐
6.	Did you have a question regarding personal care? (Tub bath, etc.)	☐	☐
7.	Did you have a question regarding your diet?	☐	☐
8.	Did you have a question regarding when to see your doctor again?	☐	☐
9.	Did you receive any oral instructions when you left the hospital?	☐	☐
10.	Was oral instruction given by your doctor?	☐	☐
11.	Was oral instruction given by a nurse in the hospital?	☐	☐
12.	Was oral instruction given by some other member of the staff?	☐	☐
13.	Did you ask questions regarding your post-hospitalization care?	☐	☐
14.	If so, did you understand the answers to your question?	☐	☐
15.	Did you use the written instructions for care you were given when you left the hospital?	☐	☐
16.	Do you feel the written instructions were a help to you this week?	☐	☐
17.	Finally, would you give your best estimate of the number of questions you had during the week following your discharge from the hospital?	_____	

PART III

Please add any other comments you feel might be helpful in aiding others like yourself during the first week following hospitalization.

APPENDIX E

RAW DATA

Background Variable	CONTROL GROUP N=25 Respondent Number												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Age: 20-29...							x	x		x			x
30-39...	x			x	x						x	x	
40-49...													
50-59...						x							
60-69...		x	x						x				
over 70.													
Sex: Male....			x		x		x	x	x	x			x
Female..	x	x		x		x					x	x	
Education:													
Grade...			x										
High....	x	x		x		x	x		x		x	x	x
College.					x			x		x			
Prior hosp...	Y	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y
Prior hosp.-same condition	N	N	N	N	Y	N	N	Y	N	N	Y	Y	Y
Length of hosp.	1-2	-1	1-2	-1	1-2	-1	-1	-1	-1	-1	-1	-1	1-2
1. Question...	N	N	N	Y	Y	N	N	Y	N	N	N	Y	N
2. Called Dr..	N	N	N	N	N	N	N	Y	N	N	N	N	N
3. Medicine...	N	N	N	N	N	N	N	Y	N	N	N	N	N
4. Treatments.	N	N	N	N	N	N	N	N	N	N	N	N	N
5. Activity...	N	N	N	N	N	N	N	Y	N	N	N	Y	N
6. Personal Care	N	N	N	Y	N	N	N	N	N	N	N	Y	N
7. Diet.....	N	N	N	N	N	N	N	N	N	N	N	N	N
8. See Dr.....	N	N	N	N	Y	N	N	N	N	N	N	N	N
9. Oral Instr.	Y	Y	Y	N	Y	N	Y	N	Y	Y	Y	N	Y
10. From Dr....	Y	Y	Y	N	Y	N	Y	N	Y	Y	Y	N	Y
11. From Nurse.	Y	N	N	N	N	N	N	N	N	Y	N	N	N
12. From Others	N	N	N	N	N	N	N	N	N	Y	N	N	N
13. Ask Questions	N	N	N	N	Y	N	Y	Y	Y	Y	N	Y	N
14. Understand.	-	-	-	-	Y	-	Y	Y	Y	Y	-	Y	N
15. Written Instr.	N	N	Y	N	N	N	N	N	N	N	N	N	N
16. Helpful....	Y	N	Y	N	Y	N	N	Y	N	N	N	Y	N
17. # of questions.	0	0	0	2	1	0	0	5	0	0	0	4	0

(Concluded on next page)

Control Group Raw Data (concluded)

Background Variable	Respondent Number											
	14	15	16	17	18	19	20	21	22	23	24	25
Age: 20-29.....									x	x	x	
30-39.....	x		x									
40-49.....		x		x	x	x	x					
50-59.....								x				
60-69.....												
over 70....												x
Sex: Male.....			x			x			x	x		
Female.....	x	x		x	x		x	x			x	x
Education:												
Grade.....		x				x						x
High.....			x		x			x	x			
College....	x			x			x			x	x	
Prior hosp.....	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Prior hosp.- same condition...	N	Y	N	N	Y	N	N	N	N	N	N	N
Length of hosp...	-1	-1	1-2	1-2	2-3	-1	-1	-1	-1	-1	-1	1-2
1. Questions....	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N
2. Called Dr....	Y	Y	Y	N	Y	N	Y	N	N	Y	Y	N
3. Medicine.....	N	Y	N	N	Y	N	Y	N	N	Y	Y	N
4. Treatments...	Y	N	N	Y	N	N	N	N	N	N	N	N
5. Activity.....	N	N	N	N	Y	N	N	N	N	N	N	N
6. Personal Care	N	N	N	N	N	N	Y	N	N	N	N	N
7. Diet.....	N	Y	N	N	Y	N	N	Y	N	N	N	N
8. See Dr.....	N	N	N	N	N	N	N	N	N	N	N	N
9. Oral Instr...	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y
10. From Doctor..	Y	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y
11. From Nurse...	N	N	N	N	Y	N	N	N	N	N	N	N
12. From Others..	N	N	N	N	N	N	N	N	N	Y	N	N
13. Ask Questions	Y	N	N	Y	Y	N	Y	N	N	Y	Y	N
14. Understand...	Y	-	-	Y	Y	-	Y	-	-	Y	Y	-
15. Written.....	N	N	N	N	N	N	N	N	N	N	N	N
16. Helpful.....	Y	Y	N	N	Y	N	Y	N	N	N	Y	N
17. # of questions	3	3	1	1	5	0	4	1	0	1	1	0

'RAW DATA

Background Variable	EXPERIMENTAL GROUP N=20 Respondent Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Age: 20-29....					x			x		x		x
30-39....	x		x				x					
40-49....		x		x							x	
50-59....						x			x			
60-69....												
over 70..												
Sex: Male.....			x	x	x	x	x					x
Female...	x	x						x	x	x	x	
Education:												
Grade....												
High.....	x		x	x	x	x	x		x	x	x	x
College..		x						x				
Prior hosp.....	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Prior hosp.- same condition..	Y	N	N	N	N	N	Y	N	N	N	N	N
Length of hosp..	2-3	-1	1-2	-1	-1	2-3	1-2	-1	-1	-1	1-2	-1
1. Questions....	N	Y	N	N	Y	N	N	N	Y	Y	Y	Y
2. Called Dr....	N	Y	N	N	Y	N	N	N	N	N	Y	Y
3. Medicine.....	N	N	N	N	Y	N	N	N	N	N	Y	N
4. Treatments...	N	N	N	N	N	N	N	N	N	Y	N	Y
5. Activity.....	N	N	N	N	Y	N	N	N	Y	N	N	N
6. Personal Care	N	N	N	N	N	N	N	N	N	N	N	N
7. Diet.....	N	N	N	N	Y	N	N	N	N	N	N	N
8. See Dr.....	N	N	N	N	Y	N	N	N	N	N	N	N
9. Oral Instr...	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y
10. From Doctor..	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y	Y
11. From Nurse...	Y	Y	Y	Y	N	N	Y	Y	N	N	Y	N
12. From Others..	N	N	N	N	N	N	N	N	Y	N	N	Y
13. Ask Questions	Y	Y	N	Y	Y	Y	N	N	Y	N	Y	Y
14. Understand...	Y	Y	-	Y	Y	Y	-	-	Y	-	Y	Y
15. Use Instr....	Y	Y	N	Y	N	Y	Y	Y	N	Y	Y	N
16. Helpful.....	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	N
17. # of Questions	0	2	0	0	4	0	0	0	1	1	2	0

(Concluded on next page)

Experimental Group Raw Data (concluded)

Background Variable	Respondent Number							
	13	14	15	16	17	18	19	20
Age: 20-29.....						x	x	
30-39.....		x			x			
40-49.....	x							
50-59.....				x				
60-69.....			x					
over 70....								x
Sex: Male.....	x					x		
Female.....		x	x	x	x		x	x
Education:								
Grade.....								
High.....	x	x	x	x	x		x	x
College....						x		
Prior hosp.....	N	Y	N	Y	Y	Y	N	Y
Prior hosp.- same condition...	N	N	N	N	N	N	N	Y
Length of hosp...	-1	1-2	1-2	1-2	1-2	1-2	-1	1-2
1. Questions.....	N	Y	Y	Y	Y	Y	Y	Y
2. Called Dr.....	N	Y	Y	Y	N	Y	Y	N
3. Medicine.....	N	N	Y	N	N	N	Y	Y
4. Treatments....	N	Y	N	N	N	N	N	N
5. Activity	N	N	N	N	N	Y	N	N
6. Personal Care.	N	N	N	N	N	N	N	N
7. Diet.....	N	N	N	N	N	Y	N	N
8. See Dr.....	N	N	N	N	Y	Y	N	N
9. Oral Instr....	Y	Y	Y	Y	Y	N	Y	Y
10. From Doctor...	Y	Y	Y	Y	Y	N	Y	Y
11. From Nurse....	Y	Y	N	Y	N	N	N	Y
12. From Others...	N	N	N	N	N	N	N	N
13. Ask Questions.	Y	Y	N	Y	N	N	Y	Y
14. Understand....	Y	Y	-	Y	-	-	Y	Y
15. Use Instr.....	Y	Y	Y	N	N	N	Y	Y
16. Helpful.....	Y	Y	Y	N	N	N	Y	Y
17. # of Questions.	0	1	1	1	1	2	1	1

N = No
Y = Yes

APPENDIX F

Abridged Table of Critical Values of X^2

df \ p	.05	.02	.01
1	3.84	5.41	6.64
2	5.99	7.82	9.21
3	7.82	9.84	11.34
4	9.49	11.67	13.28
5	11.07	13.39	15.09
6	12.59	15.03	16.81
7	14.07	16.62	18.47
8	15.51	18.17	20.09
9	16.92	19.68	21.67
10	18.31	21.16	23.21
15	24.99	28.26	30.58
20	31.41	35.02	37.57
25	37.65	41.57	44.31
30	43.77	47.96	50.89

df = (R-1) (C-1.) where R = # categories formed into rows, or # of rows C = columns.

APPENDIX F

Table of t

df \ p	.10	.05	.02	.01
1	6.314	12.706	31.821	63.657
2	2.920	4.303	6.965	9.925
3	2.353	3.182	4.541	5.841
4	2.132	2.776	3.747	4.604
5	2.015	2.571	3.365	4.032
6	1.943	2.447	3.143	3.707
7	1.895	2.365	2.998	3.499
8	1.860	2.306	2.896	3.355
9	1.833	2.262	2.821	3.250
10	1.812	2.228	2.764	3.169
11	1.796	2.201	2.718	3.106
12	1.782	2.179	2.681	3.055
13	1.771	2.160	2.650	3.012
14	1.761	2.145	2.624	2.977
15	1.753	2.131	2.602	2.947
16	1.746	2.120	2.583	2.921
17	1.740	2.110	2.567	2.898
18	1.734	2.101	2.552	2.878
19	1.729	2.093	2.539	2.861
20	1.725	2.086	2.528	2.845
21	1.721	2.080	2.518	2.831
22	1.717	2.074	2.508	2.819
23	1.714	2.069	2.500	2.807
24	1.711	2.064	2.492	2.797
25	1.708	2.060	2.485	2.787
26	1.706	2.056	2.479	2.779
27	1.703	2.052	2.473	2.771
28	1.701	2.048	2.467	2.763
29	1.669	2.045	2.462	2.756
30	1.697	2.042	2.457	2.750
	1.64485	1.95996	2.32635	2.57583

df \ p	.05	.01	df \ p	.05	.01
35	2.030	2.724	70	1.994	2.648
40	2.021	2.704	80	1.989	2.638
45	2.014	2.690	90	1.986	2.631
50	2.008	2.678	100	1.982	2.625
55	2.004	2.669	120	1.980	2.617
60	2.000	2.660			

Typed by Kathy Haydon

AN ABSTRACT OF THE THESIS OF

Nancy Ray

for the Master of Science in Nursing Education

Date of receiving this degree: June 8, 1967

Title: A Study Comparing the Effectiveness of Oral Discharge Advice Given to Twenty-five Patients with Written Advice Given to Twenty Patients.

Approved: [redacted]
Lucile Gregerson, Associate Professor in Charge of Thesis.

dealing with areas in which patients often need instruction; oral discharge instruction received and who offered this instruction; how many patients asked questions before discharge and whether answers to questions were easily understood; written discharge instructions received and whether they were, or would be helpful. The final question asked the patients to estimate the number of questions they had had during the week since discharge.

Chi-squares were done to test the significance of differences between the two groups. On the basis of the statistical analysis the null hypothesis was rejected, and for the patients in this study written discharge instructions given to the experimental group resulted in fewer questions regarding their care during the week following discharge from the hospital.

Comparisons were made to determine the influence of the background variables on (1) asking questions before discharge and (2) having questions during the post-hospitalization week.

SUMMARY OF RESULTS

On the basis of the information obtained through interviews, for the 45 patients in this study the following conclusions were drawn:

1. Patients in the experimental group who received written discharge instructions reported significantly fewer questions.

2. Patients were generally satisfied with oral instructions received from the doctor.

3. The discharge form used in this study was of value in promoting communication between the patients and the nurse.

4. Patients do have questions regarding their care after discharge from the hospital that are unasked and/or unanswered.

5. Background variables compared to (1) asking questions

before discharge, and (2) having questions following discharge from the hospital showed female patients had more questions than male patients after discharge.

RECOMMENDATIONS FOR FURTHER STUDIES

Based on the findings of this study, it is recommended that the following studies be made:

1. A similar study, using the form Suggestions for Care at Home, be done with randomly selected control and experimental groups discharged from a large hospital involving a larger number of participants.

2. A similar study with a group of doctors using the discharge form and the doctors' office nurses tabulating the actual number of telephone calls received from the patients who had questions following their discharge from a hospital.

3. A study utilizing the form revised specifically for surgical patients, medical patients, or obstetrical patients.

4. A survey to determine who the patients feel should be responsible for discharge instructions.

5. A study utilizing tape recorded interviews to determine what individual questions patients have during the week following discharge from a hospital.