# THE EFFECTIVENESS OF THE USE OF A PATIENT-COMPLETED QUESTIONNAIRE PRIOR TO THE NURSING ADMISSION INTERVIEW

by

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ABSTRACT

The study was designed to compare two methods of collecting patient admission data. Data were compared for completeness, number of patient problems identified, and number of nursing interventions listed in their plan of care.

The sample consisted of 21 newly admitted, adult medical-surgical patients. Aspinall's patient-completed questionnaire was used prior to the nursing interview for the 11 experimental subjects. The control group was interviewed by the nurse using Aspinall's questionnaire as a guide to the inquiry.

Data were collected from the nursing admission note and scored using Aspinall's 21 key questions.

The use of the patient-competed questionnaire prior to the nursing interview resulted in a more complete data base. Seven sets of conceptual subscales were generated from the completeness analysis. There was a consistently upward trend on all the means of the subscales for the experimental group.

Data did not support the use of the patient-completed questionnaire prior to the nursing admission interview as a method of identifying more patient problems

or the listing of more nursing intervention in their plan of care.

# CHAPTER 1

## INTRODUCTION

The nature of health care and the demands for delivery of care have changed radically in the past two decades. Scientific advances in the treatment of chronic illness, and new discoveries in technology that facilitate the successful treatment of acute illness, have created an increased demand for better qualified health care providers and for new and improved health facilities.

The nature of services offered by hospitals has changed. Improved techniques in the diagnosis and treatment of disease and a more confident use of health agencies by the public has led to the growth of medical centers. This increased use and proliferation of services is rapidly making health care this nation's largest industry.

In view of these developments, it is obvious that the health care system must practice many of the techniques of big business (Carter et al., 1976). Time and cost studies, evaluation of effectiveness, and measured outcomes are all economic realities of the health industry. The nursing profession is recognizing these problems, is affected by them, and is reacting to them.

Solutions for these increased demands are being sought in a number of ways in nursing. The use of the concept of the nursing process (Yura and Walsh, 1973), the establishment of standards of nursing care (Carter et al., 1976), development of methods of quality assurance (Zimmer, 1974), and use of the nursing audit system (Phaneuf, 1966) are major areas under investigation to meet present health care demands.

There is an increased awareness among individual nurse clinicians of the responsibility to provide care that meets a standard of excellence but which, at the same time, is effective and economical in terms of cost to the patient. Clinicians are responding to their increased responsibility but need new methods and tools to function more effectively. One area of concern to the clinician is the concept of the admission nursing interview to collect data regarding the patient's individual nursing needs. It is universally approved that the effectiveness of nursing care rests on the accuracy and completeness of the data base, but there is little agreement and research on which tools or methods of accomplishing assessment are most efficient and effective. This investigator believes that in order to assure that clinicians will make professional assessments the emphasis of research now must be on more effective tools to collect data.

## Statement of the Problem

This study sought to answer the following question: Will a patient-completed questionnaire used prior to the nursing history interview with newly admitted adults to a medical-surgical hospital unit be an effective tool for identifying individual patient needs?

## Significance of the Problem

Much has been written within the last decade of the need for nurses to institute a systematic approach to the determination and assessment of patients' individual needs as well as to develop a meaningful plan of care. Smith (1968, p. 2384) observed that, although in many cases good nursing care did exist, it tended to be "hit or miss," and that this phenomenon was due mainly to ". . . the lack of a system of nursing practice--the lack of a method for practice." Langner (1973) states that traditionally assessment has been made by the individual nurse's observations, which may or may not have been passed on to colleagues. Aspinall (1975) found that patient interviews by the professional nurse were often superficial. She also found that although interviewing guides have been reproduced in the literature they were rarely used by the nurse practicing in the hospital. Information that was collected was poorly organized and incompletely recorded.

Other factors contributing to the discrepancy between the ideal, effective assessment; and reality, incomplete effective assessment, have been cited by McPhetridge (1968) and Aspinall (1975). They see these as: the growing numbers of patients with shorter hospital stays and nurses finding it impossible to find 20 to 30 minutes required to interview a patient adequately, greater nurse participation in more and more complex plans of medical care, and responsibility for larger numbers of auxiliary personnel. In light of these opinions, the relevance of investigating a more effective system of assessing the patient's needs becomes apparent as one means of achieving a professional standard of nursing care.

## The Purpose of the Study

The purpose of this study was to compare two methods of collecting data from patients admitted to a medical-surgical hospital unit. One group of patients answered the Aspinall patient-completed questionnaire and then had a follow-up interview by the nurse focusing on the problems generated from their questionnaire responses. The second group of patients received a structured interview by the nurse using the Aspinall questionnaire as a guide to the inquiry. The data were compared for completeness, number of patient problems identified, and number of nursing interventions listed in their plan of care.

## Definition of Terms

The following terms were defined to provide clarity in this study.

1. Nursing history: A collection of information which (1) identifies the patient's perceptions and expectations related to his illness, hospitalization, and care; and (2) furnishes clues to the patient's ability to meet his personal needs and to cope with problems he faces (McPhetridge, 1968).
2. Patient needs: Sustenal imperatives of protection, nurturance, and stimulation; the necessary prerequisites to maintaining healthy behavior (Grubbs, 1974).
3. Nursing diagnosis: An evaluation, within the framework of current knowledge, of the individual's condition as a total human being, including physical, physiological, and behavioral aspects (Bonney and Rothberg, 1963, p. 45).
4. Nursing care: Assisting and promoting "adaptation whenever stimuli along the health-illness continuum are making unusual demands" (Roy, 1970, p. 45).
5. Follow-up interview: The interview conducted by the nurse after reading the patient's completed questionnaire. The focus of this interview is on problems generated from the patients' written responses on their questionnaires.

6. Structured interview: The interview conducted by the nurse using the questions from Aspinall's patient-completed questionnaire as a guide.

## Limitations of the Study

This study was limited by the following factors:

1. The sample consisted of 21 hospitalized general medical-surgical patients in one hospital in the Southwest.
2. The sample was limited to patients who were: mentally alert; in no immediate distress; could speak, understand, read, and write English.
3. The subjects' attitudes toward completing questionnaires influenced the amount and the quality of information obtained.
4. The completeness of the data base, the number of patient problems identified, and the number of interventions listed were limited to the perceptual and communication skills of the interviewing nurse.

## Conceptual Framework

Man is a biopsychosocial being who is in constant interaction with a changing environment. These changes act as a stimulus to the human organism. Man responds to the stimulus through biological, pyschological, and social innate and acquired mechanisms. The process of man's response to environmental stimulus is adaptation (Roy, 1970).

Man must adapt to one inevitable dimension of his life, that of health and illness. It is this focus of man's life which is of concern to nursing. Roy (1970) states the goal of nursing as supporting and promoting patient adaptation.

Nurses promote man's adaptation by the use of the nursing process. This process encompasses a series of activities in which each action is dependent on the previous one. It begins with the collection of data concerning the identification of the patient's adaptive behaviors and the recognition of his position on a health-illness continuum. The process progresses through the analysis of the data for the derivation of the nursing diagnoses that serve as a basis for formulating goals and implementing a plan for care that will assist the patient to goal attainment. Since the effectiveness of the nursing care in meeting the patient's adaptive needs rests on the accuracy and completeness of the data base, the importance of this initial step in the nursing process is evident.

This investigation is concerned with the assessment of man's adaptive needs. This assessment utilizes both objective data and subjective reports from the patient. The patient is the one who does the adapting to reach the goal of nursing care. He is the doer of the action. However, since it is the nurse's role to support and promote adaptation the nurse becomes the agent as she assesses and

intervenes to elicit the positive response from the patient. In effect, the patient is the agent of adaptation, but the nurse is the agent which provides the input making adaptation possible (Roy and Riehl, 1974).

Orlando (1961, p. 31) calls any information pertaining to a patient which the nurse acquires "observations." She states that observations per se are only possible manifestations of a need. They must be shared and explored with the patient in order to ascertain and meet the patient's needs or to find out that he is not in need.

Throughout making observations, the nurse experiences perceptions, thoughts, and feelings about that which she is observing (Orlando, 1961). On the other hand, the patient is also experiencing perceptions regarding himself, the health-illness aspect of his life, and the health care environment he finds himself in. Perception itself is a highly complex concept involving all of the senses to provide an awareness of objects, persons, and situations. Mitchell (1973, p. 116) states that "actions having the greatest probability of success are those which consider the patient-client's perception of the situation and are compatible with the beliefs, values, and attitudes which have shaped those perceptions."

This concept of an observation (perception, studied reactions to the perception, and exploration of both with the patient) differs from the traditional

connotation of an observation. The nurse's acceptance of this concept will effect better nursing care because the needs of the patient will be accurately identified.

This concept of observation is also basic to the investigation of a method of assessing patient needs. Since assessment involves techniques for getting to know the patient, the need for a tool which will facilitate bringing forth information relevant to providing effective and appropriate care is apparent.

Nursing, unlike the professions of law, engineering, and medicine, has not developed a precise method of determining when nursing intervention is needed (McCain, 1965). According to McCain, nursing as it is taught and practiced is primarily intuitive. She and others such as Abdellah et al. (1960, Bonney and Rothberg (1963), Smith (1968), and Wesseling (1972) have suggested other approaches to effect a more accurate and systematic assessment of a patient's individual needs. As yet few of these approaches have been widely integrated into clinical practice.

## Hypothesis

The use of the patient-completed questionnaire prior to the nursing interview will result in: (1) a more complete data base, (2) identification of more patient problems, and (3) the listing of more nursing interventions in the plan of care than in the structured interview.

## Assumptions of the Study

1. Accurate and systematic assessment of a patient's individual needs is a prerequisite in planning nursing care.
2. Interview guides have been reproduced in the literature but are rarely used by the nurse practicing in the hospital.
3. Information obtained by the nurse is often randomly organized and incompletely recorded and communicated to the rest of the health team.

# CHAPTER 2

## REVIEW OF LITERATURE

The review of the literature related to the collection of a nursing data base focused on the traditional interview, the development of nursing assessment guides, and the use of nursing history questionnaires.

### The Traditional Interview

Mahoney, Verdisco, and Shortridge (1976, p. 13) defined an interview as "a formal, oral exchange of information and feelings, through which data are obtained. It is similar to conversation in that both involve the spoken word, and different from conversation in that the interview is formal while conversation is informal." Bernstein, Bernstein, and Dana (1974, p. 108) summarized the goals of a successful medical interview. They are to establish a positive relationship with a patient, to elicit information about his condition, to permit observation of his behavior. They felt these can be achieved by permitting the patient to talk freely in the presence of an empathic listener.

Bernstein et al. believe that the most effective interview is the open interview. They claim that a patient "will give all the information we are seeking, if he can be helped to tell his story in his own way in an open manner."

They thought "nurses frequently ask questions about specific time and place of events in order to provide details for themselves. These questions not only divert the patient, but may be irrelevant . . . questions can guide the flow of information but cannot produce it" (Bernstein et al., 1974, p. 108).

Mahoney et al. (1976) also proposed that the personal nature of the interview can hinder as well as facilitate communication. They felt a climate conducive to sharing information is essential to the interview. They stated that the nurse may either verbally or nonverbally, either consciously or unconsciously, demonstrate that she is neither interested in nor sensitive to what the patient is saying. Mahoney et al. further stated that the nurse may remind the patient of someone from the past with whom he has had conflict; his present reactions may be based on those past experiences. Also, because of the face-to-face contact, the patient may feel uncomfortable about divulging personal information for fear of reprisal or rejection. These writers also stated that the interview can be time-consuming for both the patient and the interviewer.

Seemingly, the usefulness of the open interview depends on the nurse's ability to organize, remember, and record the pertinent information the patient is relating to her.

## The Development of Nursing Assessment Guides

One of the first nursing assessment guides was developed by Williams (1960). She designed an instrument to measure a patient's ability to meet his own needs. Dziak (1958) established the reliability of Williams' tool by testing it with eight pairs of nurses on eight hospital units rating a total of 241 patients. The results obtained a positive correlation of .85.

In an effort to develop a nursing staffing pattern for a selected sample of patients in a public nursing home, Bonney and Rothberg (1963) developed a nursing evaluation form. The purpose of this form was to assist in the identification and measurement of the nursing needs of this type of patient. This tool is lengthy and requires a considerable period of time for completion.

A method for determining when nursing intervention is needed was developed by McCain (1965). Her guide is designed to serve as a basis for making a nursing diagnosis, planning and evaluating nursing therapy, and writing nursing orders. This detailed guide is largely unstructured in that the nurse is free to determine what specific information should be collected under each of 13 functional areas. The guide has not been subjected to a test for reliability.

Manthey (1967) expressed concern that information about the patient is randomly collected by the nursing staff. In an effort to improve this situation, she developed a guide for the team leader to use in interviewing the patient on admission.

Smith (1968) found that although getting to know the patient provides valuable data on which to base nursing care, a guide for conducting the interview was also needed. She found that when nurses followed her interview guide they were able to collect information relevant to nursing problems concisely and systematically in a 10 to 20 minute admission interview.

A detailed nursing history form developed by McPhetridge (1968) gives the nurse suggested wording of questions to ask the patient. The format of the history is divided into four parts: patient perceptions and expectations, basic needs, additional information, and the nurse's impressions and suggestions. From the data, the nurse summarizes the significant findings and from this summary develops a plan for the individual's nursing care. When this form was tested by baccalaureate students, the time required for the interview ranged from 20 to 60 minutes with an average of 25 minutes.

Hamdi and Hutelmyer (1970) developed an assessment tool for the identification of nursing care problems of the diabetic patient which required an average of 21 minutes

when used by baccalaureate students. The tool was found to increase identification of valid patient problems and the underlying reasons for the problems.

Marshall and Feeney (1972) developed an assessment tool to be used in admission of patients to a mental hospital and compared it with an intuitive intake interview. They found the structured assessment tool was both effective and more efficient than the intuitive interview in that it yielded about twice the information in approximately half the time.

Nursing History Questionnaire

Wesseling (1972) computerized the admission questionnaire, with the nurse asking the questions as they appeared from the computer on a video terminal screen and typing the patient's responses on the teletypewriter keyboard. Use of this approach produced a practical and well organized system of gathering information and made it possible to interview and plan for each individual patient within a reasonable period of time. The computer program provided comprehensive and factual content of value in the quality of nursing care.

Another study employing the use of the computer was conducted by Taylor and Johnson (1974) for the U. S. Department of Health, Education, and Welfare. They also were investigating nursing assessment and found that by

employing computer technology and the logic of information science, patient information was reported with ease and a substantial reduction in staff time. Retrieval rapidity for immediate use, greater pertinence, and conciseness in format also contributed to more effective planning of dynamic patient care.

Mahoney et al. (1976) concluded that the printed form can save time both for the patient and the interviewer. They claimed it allowed the patient to proceed at his own pace. They also felt the printed form may lend objectivity or impersonality which the patient may feel makes it easier for him to reveal personal matters--he fears no immediate reaction. Hall (1972) also found that patients using his outpatient medical questionnaire often were willing to give information in writing which they were reluctant to impart face-to-face.

The use of a patient-completed questionnaire as a data collection tool has been developed and tested by Aspinall (1975). Her study consisted of 30 newly admitted patients to a Veterans Administration Hospital where a comparison was made of the effectiveness of a patient-completed paper and pencil questionnaire with the unstructured nursing interview in obtaining the admission history. Data were compared for accuracy and nursing time required. The nurses made significantly more errors of omission in their interviews than the patients made in

completing the questionnaire. The nurse spend an average of 11.5 minutes on her interview while the investigator used an average of 0.9 minute to explain the reason for the questionnaire to the patient and obtain his consent to its completion. The findings were discussed as a means of providing an accurate, systematic, recorded data base for planning nursing care. The author concluded that the nursing history should help the nurse recognize patients' problems, so that the interview time can be used to explore problem areas in greater depth instead of routine questioning.

Most studies which relied on the traditional interview method for assessment established the need for a nursing history tool. However, with the recent emphasis on efficiency and effectiveness of the system of health care delivery and time consumed in interviewing other innovations had to be researched. The development of approaches such as the use of a paper-and-pencil or a computer-generated questionnaire to obtain the medical history were found to be solutions to problems of efficiency and productivity.

# CHAPTER 3

## RESEARCH METHODOLOGY

The following topics are presented in this chapter: design of the study, human rights, the setting, inter-rater training, sample population, data collection, data collection instruments, and the method of data analysis.

### Design of the Study

The study followed an experimental model utilizing two methods of collecting nursing assessment data. The independent variable was the use of an assessment tool, a patient-completed questionnaire, and placement of nurse-patient interview. The dependent variables were the completeness of the data base, the number of patient problems identified, and number of nursing interventions planned.

The extraneous variables which were assessed on each subject included: age, sex, employment, education, and hospital service (medical or surgical). This provided information concerning the sample population.

This study consisted of collecting nursing assessment data by two methods: (1) a patient-completed questionnaire plus a follow-up nursing interview and (2) a structured nursing interview using Aspinall's patient-completed questionnaire as a guide.

## Human Rights

The proposal for this study was reviewed by the Human Subjects Committee and approved administratively. Permission to conduct the investigation was obtained through the nursing department of the hospital and the nursing supervisor of the study unit. The subjects were told the purpose of the study and what was required of each participant. They were given the right to refuse to participate in the study and were informed that they could withdraw from the study without prejudice. Subjects were also advised of the costs, benefits, demands, and risks of the study. A written consent of each subject was obtained utilizing the respective forms (control, Form 1 or experimental, Form 2) shown in Appendix B.

## Setting

The setting was an adult medical-surgical unit of a southwestern general hospital. During the study all patients admitted to this unit between 6:00 a.m. and 10:00 p.m. had their names entered on a consecutively numbered log. Every third name (patient) was included in the study for the first seven patients. The unit experienced a decrease in patient census making it necessary for the investigator to use every second patient for the remainder of the study. The even-numbered patients were the

experimental group and the odd-numbered patients were the control group.

The Experimental Group

The subject was given the questionnaire to complete in his room. The nurse read the patient's answers on the questionnaire and then conducted a follow-up interview of the patient focusing on the problems generated from the patient's responses on the questionnaire. The nurse then entered her assessment on the patient's record in the form of an admission note.

The Control Group

The patients in the control group were interviewed by the nurse using Aspinall's patient-completed questionnaire as a guide; that is, the nurse asked the patients the questions and she in turn wrote their responses. An assessment was entered on the patient's record in the form of an admission note.

## Inter-Rater Training

Five full-time registered nurses working on this hospital unit consented (see Appendix A) to participate in the study. An experimental and control simulated training session was conducted. The experimental situation consisted of reading a patient-completed questionnaire filled out by the investigator, interviewing the investigator, and

writing up a mock admission note. The control simulation was accomplished by the use of a volunteer which the nurses interviewed using the patient-completed questionnaire as a guide to their questioning. They also wrote up an admission note for this phase of the simulation. The evaluation of the training period did not indicate that further training or adjustement were necessary.

## Sample Population

The sample for this study included 21 systematically selected, newly admitted, adult medical-surgical hospitalized patients. There were 10 in the control group and 11 in the experimental. The study consisted of those patients who consented to participate (see Appendix B). All 21 subjects met the following criteria:

1. Either sex and who were 18 to 80 years old.
2. Mentally alert and were in no immediate distress.
3. Patients who spoke, understood, read, and wrote English.

## Data Collection

The investigator examined the nurses' admission assessment notes to collect the dependent variable data. She scored the completeness of the data recorded using Aspinall's 21 key questions (see Appendix D). The investigator then counted the number of patient problems

identified by the nurse entered in the admission note and also the number of listed nursing interventions.

## Data Collection Instruments

Two instruments were used for data collection in this study. Permission to use these instruments was approved and granted by Aspinall of Long Beach, California. The two instruments were: Aspinall's patient-completed questionnaire and the 21 key questions taken from the nursing history questionnaire.

### The Patient-Completed Nursing History Questionnaire

The first instrument, the patient-completed nursing history questionnaire (see Appendix C) was developed by Aspinall in 1975. It was designed to be easily understood by the patient and to elicit accurate responses from him. The purpose of the questionnaire was to obtain physical, psychic, and social data necessary for planning nursing care. Aspinall used a committee of three clinical nurse specialists and a psychologist to agree and rule on the wording and the selection of 34 questions to establish content validity. The three clinical nurse specialists had five or more years of experience post-masters--one in medicine, one in surgery, and one in psychiatry. The questions were selected after reviewing nursing history

interview forms and from areas found pertinent by specialists in their own experience.

The questionnaire was then tested for reliability on three patients. The patients were asked to complete the questionnaire twice with 24-48 hours intervening. There was 100 per cent agreement, as the patients made no changes in their answers on the second testing. The questionnaires from these initial three patients were checked with their charts for accuracy. No discrepancies were found.

### The 21 Key Questions Taken from Nursing History Questionnaire

Aspinall's committee of three clinical nurse specialists selected 21 key questions from the 34 on the patient-completed questionnaire that covered pertinent information other investigators (Manthey, 1967; McPhetridge, 1968; Smith, 1968) included in their interviewing guides Aspinall stated that the other 13 questions supplied useful and helpful but not essential information (Aspinall, 1975).

## Data Analysis

The data were coded and submitted for computer analysis. Four areas of the data were analyzed: characteristics of the sample, data related to the measurement tool, data related to the hypothesis, and data related to the study nurses.

The characteristics of the sample were analyzed by frequency distributions. The frequency distributions reported the number of subjects and percentages by age, sex, education, employment, and hospital service (medical or surgical).

The measurement tool rated the completeness of the data base. A score of one point was given for each time the data base included one of the 21 key questions. Correlation coefficients were computed to determine the relationship among the 21 key questions. A correlation matrix was used with a factor analysis performed to explore the data-reduction possibilities by constructing a set of subscales.

Data related to the hypothesis were: completeness of the data base, the number of patient problems, and the number of nursing interventions planned, analyzed by frequency distributions. The data were further analyzed with the use of the t test. A significance level of $p < .05$ was accepted in this study.

Data related to the study nurses were examined by the use of frequency distributions to determine their individual participation by number and percentage.

# CHAPTER 4

## PRESENTATION AND ANALYSIS OF DATA

This study was designed to answer the question: Will a patient-completed questionnaire used prior to the nursing history interview with newly admitted adults to a medical-surgical hospital unit be an effective tool for identifying individual patient needs? This chapter presents the findings and statistical analysis of the data collected.

### Characteristics of the Sample

The sample consisted of 21 medical-surgical patients, who met the criteria of the study and consented to participate in the study. The sample consisted of 10 subjects in the control group and 11 in the experimental. The subjects were from one general hospital in the southwestern United States.

Forty-three per cent of the subjects were males and 57 per cent were females. The average age of the subjects was 48.6 with a range of 22 to 79 years. The distribution of subjects by sex and age is given in Table 1. In years, the educational mean of subjects was 12.19 years with a range of 8 to 16 years. Forty-eight per cent were non-employed with 52 per cent employed. The distribution of

Table 1. Distribution of Subjects by Sex and Age

| Distribution | Number of Subjects | Per Cent |
|---|---|---|
| Sex: | | |
| Female | 12 | 57 |
| Male | 9 | 43 |
| Total | 21 | 100 |
| Age: | | |
| 21-30 | 4 | 19 |
| 31-40 | 2 | 10 |
| 41-50 | 3 | 14 |
| 51-60 | 8 | 38 |
| 61-70 | 3 | 14 |
| 71-80 | 1 | 5 |
| Total | 21 | 100 |

subjects by education and employment status is presented in Table 2. Thirteen subjects were on the medical service of the hospital and eight were surgical patients. The distribution of subjects by medical or surgical service is given in Table 3.

## Findings Related to the Measurement Tool

The data were examined in terms of the total amount of knowledge and in terms of the subscales. The measurement tool, Aspinall's 21 key questions, utilized in this study, rated the completeness of the data base. A score of one point was given for each time the data base included

Table 2. Distribution of Subjects by Education and Employment Status

| Distribution | Number of Subjects | Per Cent |
|---|---|---|
| Education: | | |
| Grade School | 1 | 5 |
| High School | 18 | 85 |
| College | 2 | 10 |
| Total | 21 | 100 |
| Occupation: | | |
| Employed | 11 | 52 |
| Nonemployed | 10 | 48 |
| Total | 21 | 100 |

Table 3. Distribution of Subjects by Medical or Surgical Service

| Service | Number of Subjects | Per Cent |
|---|---|---|
| Medical | 13 | 62 |
| Surgical | 8 | 38 |
| Total | 21 | 100 |

one of the 21 key questions. The investigator then totaled the number of points giving each subject a 21 key question score. This score was used as an indicator of data base completeness; that is, completeness by total 21 key questions and completeness by subscale.

In order to construct the subscale, a correlation matrix was used with a factor analysis performed to explore the data-reduction possibilities by constructing a set of subscales on the basis of the correlations exhibited in the data to determine the common groups among the 21 key questions. Table 4 presents the factor analysis coefficients for the measurement tool. Using a varimax rotated factor matrix after rotation with Kaiser normalization, seven sets of correlated questions were generated suggesting seven conceptual dimensions among the 21 key questions.

On the basis of the data in Table 4, the following sets of key questions were correlated: 12, 13, and 14; 15, 18, and 19; 3 and 4; 10 and 11; 8 and 9; 6 and 20; and 7; indicating seven subscales. The seven subscales were theoretically labeled:

1. Habits of bodily functions--bowel (12), urination (13), and sleeping patterns (14).
2. Contributing problems--skin lesions (15), worries (18), and other health problems (19).
3. Occupational profile--occupation (3) and date of last employment (4).

Table 4. Factor Analysis Coefficients for Measurement Tool

| Key Questions | Factors | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | -.121 | .134 | .698* | -.163 | .323 | .347 | -.237 |
| 4 | -.117 | -.070 | .826* | .041 | -.174 | -.129 | .005 |
| 5 | .193 | .295 | .487 | .506 | -.095 | .143 | .408 |
| 6 | -.028 | .042 | .200 | .170 | -.075 | .811* | .237 |
| 7 | .002 | -.037 | -.067 | -.085 | .056 | .350 | .827* |
| 8 | -.107 | .246 | .155 | -.176 | .791* | -.284 | .294 |
| 9 | -.120 | -.217 | -.118 | .060 | .891* | .116 | -.128 |
| 10 | .076 | -.003 | .027 | .863* | -.050 | .030 | -.075 |
| 11 | .027 | -.052 | -.072 | .747* | .002 | .166 | .020 |
| 12 | .950* | .026 | .006 | .045 | -.150 | -.000 | -.135 |
| 13 | .895* | .179 | -.148 | .020 | -.087 | .115 | -.015 |
| 14 | .758* | -.265 | .091 | .182 | .004 | -.073 | .314 |
| 15 | .051 | .703* | -.180 | .188 | -.081 | .162 | -.232 |
| 16 | .350 | .206 | -.235 | .086 | .055 | .187 | .404 |
| 17 | -.000 | .000 | .000 | .000 | -.000 | .000 | -.000 |
| 18 | -.115 | .794* | .105 | -.231 | -.024 | .197 | .071 |
| 19 | .008 | .724* | .128 | .038 | -.021 | -.261 | .414 |
| 20 | .123 | .313 | -.242 | .249 | -.006 | .597* | .227 |
| 21 | .321 | .466 | .440 | -.059 | .340 | .280 | -.100 |

*Indicates sets of correlated questions .500 and above.

4. Smoking and alcohol history--smoking (10) and alcohol (11).
5. Assistance needs--help with eating (8) and help with walking, bathing, and dressing (9).
6. Priority attention index--allergies (6) and need for help with pressing problem or a special request (20).
7. Nutritional status--diet (7).

## Findings Related to the Hypothesis

The hypothesis of this study stated that the use of the patient-completed questionnaire prior to the nursing interview would result in: (1) a more complete data base, (2) identification of more patient problems, and (3) the listing of more nursing interventions in the plan of care than in the structured interview

The range of possible scores for the completeness of the data base as measured by the 21 key questions was 1 through 21. The range of scores for subjects in both groups was 5 through 17. The frequency distribution of scores of the completeness of the data base is presented in Table 5.

The control group had a mean score of 9.30 and a standard deviation of 2.54 on the key questions variable. The mean score of the experimental group was 13.45 with a

Table 5. Distribution of Scores for the 21 Key Questions

| Score | Absolute Frequency | Per Cent Relative Frequency |
|---|---|---|
| 5 | 1 | 4.8 |
| 6 | 1 | 4.8 |
| 7 | 1 | 4.8 |
| 8 | 2 | 9.5 |
| 10 | 3 | 14.3 |
| 11 | 1 | 4.8 |
| 12 | 3 | 14.3 |
| 13 | 3 | 14.3 |
| 14 | 1 | 4.8 |
| 15 | 4 | 19.0 |
| 17 | 1 | 4.8 |
| Total | 21 | 100.0 |

standard deviation of 2.62. The t test analysis was performed and the data can be seen in Table 6.

On the basis of the findings presented in Table 6, the data supported the first part of the hypothesis which stated that the use of the patient-completed questionnaire prior to the nursing interview would result in a more complete data base as measured by the 21 key questions.

The data were examined in terms of the seven subscales to see which sets of questions were responsible for the variance in the behavior of the 21 key questions.

Table 6. The t Test for Difference Between the Means for Completeness of the Data Base

| Group | Mean | Standard Deviation | t Value | Probability Level |
|---|---|---|---|---|
| Control | 9.30 | 2.54 | -3.69 | .002 |
| Experimental | 13.45 | 2.62 | | |

Table 7 presents the t tests which were performed on the means of the subscales to determine whether there was a significant difference between the two study groups.

The results indicate that there was a consistently upward trend on all the means for the experimental group with all the subscales. In addition, the contributing problems subscale was statistically significant ($p < .004$) and the priority attention index subscale was close to significance ($p < .091$).

The range of scores for the number of patient problems identified was 1 through 5 with a mean of 3.14 and a standard deviation of 1.06 for both groups. The frequency distribution of scores for the number of patient problems identified is shown in Table 8. The mean for the control group was 3.10 with a standard deviation of 1.28. The experimental group had a mean of 3.18 and a standard

Table 7. The t Test* for Difference Between the Means of Subscales

| Subscale | Group | Mean | Standard Deviation | t Value | Probability Level |
|---|---|---|---|---|---|
| Habits of bodily functions | C | .500 | .478 | -1.20 | .245 |
| | E | .727 | .389 | | |
| Contributing problems | C | .400 | .344 | -3.31 | .004* |
| | E | .818 | .229 | | |
| Occupational profile | C | .300 | .422 | -.85 | .408 |
| | E | .454 | .416 | | |
| Smoking and alcohol history | C | .800 | .258 | -.59 | .560 |
| | E | .863 | .234 | | |
| Assistance needs | C | .250 | .354 | -.38 | .711 |
| | E | .318 | .462 | | |
| Priority attention index | C | .450 | .369 | -1.78 | .091* |
| | E | .727 | .344 | | |
| Nutritional status | C | .500 | .527 | -1.56 | .135 |
| | E | .818 | .405 | | |

*Significance level set at $p \leq .05$.

C = control group; E = experimental group.

Table 8. Frequency Distribution of Scores for Number of Patient Problems Identified

| Score | Absolute Frequency | Relative Frequency Per Cent |
|---|---|---|
| 1 | 1 | 4.8 |
| 2 | 6 | 28.6 |
| 3 | 4 | 19.0 |
| 4 | 9 | 42.9 |
| 5 | 1 | 4.8 |
| Total | 21 | 100.0 |

deviation of .87. The t test analysis for this portion of the data is given in Table 9.

Table 9. The t Test for Difference Between the Means of Number of Patient Problems Identified

| Group | Mean | Standard Deviation | t Test Value | Probability Level |
|---|---|---|---|---|
| Control | 3.10 | 1.28 | -.17 | .868 |
| Experimental | 3.18 | .87 | | |

On the basis of the findings presented in Table 9, the data did not support the second part of the hypothesis which stated that the use of the patient-completed questionnaire prior to the nursing interview would result in more patient problems identified.

The range of scores for the number of nursing interventions listed in the plan of care was 2 through 8 with a mean of 4.33 and a standard deviation of 1.75. The frequency distribution of scores for the number of nursing interventions listed is presented in Table 10. The control group had a mean of 4.20 and a standard deviation of 1.75. The mean for the experimental group was 4.45 with a

Table 10. Distribution of Scores for Number of Nursing Interventions Listed

| Score | Absolute Frequency | Per Cent Relative Frequency |
|---|---|---|
| 2 | 2 | 9.5 |
| 3 | 6 | 28.6 |
| 4 | 6 | 28.6 |
| 5 | 1 | 4.8 |
| 6 | 4 | 19.0 |
| 8 | 2 | 9.5 |
| Total | 21 | 100.0 |

standard deviation of 1.80. The t test analysis for this, the third part of the hypothesis, can be seen in Table 11.

On the basis of the findings presented in Table 11 the data did not support the third and final portion of the hypothesis which stated that the use of the patient-completed questionnaire prior to the nursing interview would result in the listing of more nursing interventions in the nursing care plan.

## Findings Related to Registered Nurse Participants

The range of number of subject admission interviews conducted by the nurses in the study was 2 through 8. The frequency distribution of the number of subject

Table 11. The t Test for Difference Between the Means of the Number of Nursing Interventions Listed

| Group | Mean | Standard Deviation | t Value | Probability Level |
|---|---|---|---|---|
| Control | 4.20 | 1.75 | -.33 | .747 |
| Experimental | 4.45 | 1.80 | | |

interviews conducted by each nurse participant is shown in Table 12. On the basis of the findings shown in Table 12, nurse E conducted 38 per cent of the subject admission interviews and nurses A and B conducted two interviews each or 9.5 per cent each of the total 21 sample subjects.

## Summary of Major Findings

The major findings of this study are summarized in the following statements:

1. The data supported the first part of the hypothesis that the use of the patient-completed questionnaire prior to the nursing interview did result in a more complete data base.

Table 12. Distribution of Registered Nurse Participants by Number of Subject Admission Interviews Conducted

| Nurse | Absolute Frequency | Relative Frequency Per Cent |
|---|---|---|
| A | 2 | 9.5 |
| B | 2 | 9.5 |
| D | 4 | 19.0 |
| C | 5 | 23.8 |
| E | 8 | 38.1 |
| Total | 21 | 100.0 |

2. Seven sets of subscales were generated from the analysis of the 21 key questions.
3. There was a consistently upward trend on all the means of the subscales for the experimental group.
4. The contributing problems subscale was statistically significant ($p < .004$) and the priority attention index subscale was close to significance ($p < .091$).
5. The data did not support the second and third parts of the hypothesis that the use of the patient-completed questionnaire prior to the nursing interview would result in the identification of

more patient problems and the listing of more nursing interventions.

# CHAPTER 5

## DISCUSSION OF FINDINGS AND RECOMMENDATIONS

This chapter presents the findings of this research study as they relate to the theoretical framework and literature review. A discussion of field problems encountered during the data collection period is included. Implications and recommendations for future study are made.

An attempt to measure the effectiveness of one method of assessing man's adaptive needs on the health-illness continuum was made in the study. By utilizing Aspinall's (1975) patient-completed questionnaire and the 21 key question measurement tool, data were collected to describe this process and relate it to seven conceptual subscales. The findings support the hypothesis that the use of the questionnaire does effect a more complete data base.

The experimental group had consistently higher scores on the conceptual subscales. Of particular significance was the assessment of the subject's adaptive needs concerning contributing problems and perceptions of his priority attention index.

## Findings in Relation to the Literature Review

This study compared two methods of data collection. One group of subjects answered the patient-completed questionnaire and then had a follow-up nursing interview. The second group of subjects received a structured interview by the nurse using the questionnaire as a guide. Aspinall (1975) compared the effectiveness of the use of the patient-completed questionnaire with the unstructured interview.

Aspinall compared the data for accuracy and nursing time required. She found that nursing made more errors omission in an unstructured interview than the patient made in completing the questionnaire ($p < .001$). The nurse spent an average of 11.5 minutes on her interview while Aspinall used an average of 0.9 minutes to explain the reason for the questionnaire to the patient and obtain his consent to its completion. This investigator measured the completeness of the data base and found it to be significantly effective ($p < .002$). The number of patient problems identified and the number of nursing interventions listed were also measured and means were found slightly higher but did not reach significance.

The variable of time was not measured in this study, but the economy of nursing time was of interest to the investigator. The reports of the study nurses stated

that they felt the use of the patient-completed questionnaire prior to their interview did effect an overall saving in nursing time. The nurses claimed they had more time to discuss problem areas, clarify misconceptions related to illnesses or treatments because time did not have to be spent in routine questioning.

McCain (1965), Manthey (1967), and Smith (1968) developed guides to assist the nurse in interviewing. They all concluded that guides do help to collect information relevant to nursing problems in a concise and systematic manner. The nurses in this study also confirmed that the questionnaire gave them the security of covering essential components of the data base.

Hamdi and Hutelmyer (1970) developed an assessment tool for the identification of nursing problems of the patient with diabetes. Their tool was found to increase the identification of valid patient problems and the underlying reasons for the problem. The patient-completed questionnaire did not identify significantly more patient problems. Contrasting these two studies suggests the possibility of the need for more detailed questions for specific presenting symptomatology.

Wesseling (1972) and Taylor and Johnson (1974) computerized the admission questionnaire and reported that the use of this approach also effected completeness and a saving of nursing time. The cost of employing computer

technology is prohibitive in many health settings. The cost of using the patient-completed questionnaire to increase nursing assessment effectiveness may be a more reasonable alternative.

## Field Problems Encountered During the Study

Several problems occurred during this study which could have influenced the findings. The hospital unit in which the study was conducted experienced a marked decline in patient census during the data collection period. The study was changed from a random sample of every third admission to a systematized sample of every second. The constraint of time forced the investigator to use a sample of 21 rather than the intended 30 subjects.

Patient admissions on this unit are often conducted by the licensed practical nurses. The study was limited to registered nurses and, at times, this placed an added burden on them when the census was high, staffing was decreased, or the priority of other activities of the unit demanded their attention.

In addition, the unit was instituting the use of a new and more complex kardex at this time. The nurse was required to list a considerable amount of new admission data. The added stress of working with two new assessment tools may have affected the nursing interview itself or the inclusiveness of the admission note.

Another problem encountered was the uneven distribution of the number of subjects interviewed by the study nurses. One nurse conducted 38 per cent of the admission interviews. This factor suggests the possibility of some bias in the data.

## Implications

The findings on the seven conceptual subscales are significant and have an eigenvalue range of 3.45 to 1.13. These seven factors did account for 77 per cent of the explained variance in the behavior of the 21 key questions.

The contributing problems subscale reaching a $p < .004$ and the priority attention index subscale approaching significance have some meaningful implications. This investigator feels that the questions inquiring about worries and pressing problems are the elements affecting the difference in these two subscales.

One explanation for the relationship of the subscales to the completeness of the data base may be in some hierarchical ordering of information. Seemingly, completeness is achieved when the nurse has spent some time getting to know the patient by assessing less sensitive areas of data collection. It is then appropriate to approach those areas which contribute to the presenting problem; e.g., anxiety related to asthma, gastric pathology, or the diagnosis of cancer. By the same token, pressing problems

are more easily disclosed when time has been spent establishing trust and rapport.

These conclusions are supported by comments the study nurses reported to the investigator. They felt comfortable using the questionnaire in their interviews. They liked the fact that the patient having filled out the questionnaire was aware of what areas were to be covered and were being asked of all subjects in the study. The nurses felt that this facilitated them in leading into sensitive areas such as alcohol history, expected visitors, likes and dislikes, worries, frustration and angry reactions, pressing problems, and help from others after discharge.

Subjects' reactions were favorable for the most part. Two patients declined to participate in the study. Some wrote brief responses to the questions and others were meticulous in completing it. Some subjects expressed verbal approval of the use of the questionnaire. One gentleman stated he was not aware that nursing was so interested in the patient's welfare.

## Recommendations

On the basis of the data and findings presented in this study, the following recommendations for future study were made:

1. The study should be replicated using a larger randomized sample.
2. A Study should be designed to test the general relationship of the seven conceptual subscales to the completeness of the data base.
3. A study should be designed to measure indicators of the quality of the content of the data base.
4. The relationship between nursing time spent in interviewing and the completeness of the data base, number of patient problems identified and/or number of nursing interventions listed may be other areas for investigation.

# CHAPTER 6

## SUMMARY AND CONCLUSIONS

The purpose of this study was to compare two methods of collecting data from patients admitted to a medical-surgical hospital unit. One group of patients answered the Aspinall patient-completed questionnaire and then had a follow-up interview by the nurse. The second group of patients received a structured interview by the nurse using the Aspinall questionnaire as a guide to the inquiry. The data were compared for completeness, number of patient problems identified, and number of nursing interventions listed in their plan of care.

The framework for the study was man's adaptation to the health-illness dimension of his life and nurses' role in supporting and promoting patient adaptation through the nursing process. The effectiveness of meeting the patient's adaptation needs rests on the accuracy and completeness of the data base. The importance of assessment as the initial step in the nursing process is evident.

The review of literature consisted of discussion and studies related to the collection of a nursing data base. The traditional interview was examined, the

development of nursing assessment guides was traced, as was the use of nursing history questionnaires.

The total sample consisted of 21 newly admitted, adult medical-surgical hospitalized patients. There were 10 in the control group and 11 in the experimental.

The investigator examined the nurses' admission notes to collect the data. She scored the completeness of the data recorded using Aspinall's 21 key questions. The number of patient problems identified by the nurse and the number of nursing interventions listed in the plan of care were also scored. Data were submitted to the computer for analysis and reported in table form.

The data supported the first part of the hypothesis that the use of the patient-completed questionnaire prior to the nursing interview would result in a more complete data base. The t test analysis of the difference between the means of the two groups was statistically significant ($p < .002$).

Seven sets of conceptual subscales were generated from the completeness analysis. There was a consistently upward trend on all the means of the subscales for the experimental group. The contributing problems subscale was statistically significant ($p < .044$) and the priority attention index subscale was close to significance ($p < .091$).

The data did not support the second and third parts of the hypothesis that the use of the patient-completed questionnaire prior to the nursing interview would result in the identification of more patient problems and listing of more nursing interventions.

The investigator concluded that the use of the patient-completed questionnaire used prior to the nursing interview will assist the nurse in effecting a more complete data base. The findings on the conceptual sub-scales seem to indicate that completeness is achieved when the nurse spends some time getting to know the patient by assessing less sensitive areas and then is able to approach those areas which may contribute to the presenting problem. These findings also indicate that openness in disclosing pressing problems can be achieved when time is spent establishing trust and rapport.

Comments made by the registered nurse participants suggest that the use of the patient-completed questionnaire prior to their interview did save time in routine questioning. They felt it was an advantage also because the patient was prepared for the areas the nurse would be covering and were aware that these questions were asked of all subjects in the study. In addition, the nurses stated the questionnaire also assisted them in assessing sensitive areas of data collection.

Subjects' reactions were favorable for the most part. The manner in which they responded in writing provided additional information about the patient.

The investigator recommends replication of this study with a larger randomized sample. She further recommends additional study to test the general relationship of the seven conceptual subscales to the completeness of the data base. The saving of nursing time may be another variable for future study.

APPENDIX A

REGISTERED NURSE CONSENT FORM

I understand that Rita M. McInnis, a graduate nursing student at The University of Arizona, is conducting a research study of the effectiveness of using a patient-completed questionnaire prior to the nursing interview in the collection of admission data. I am being asked to participate in the study in two ways: (1) the experimental group--I will read the questionnaire completed by the patient; I will then conduct by nursing history interview followed by an admission note on the patient's chart; (2) the control group--I will interview the patient using Aspinall's questionnaire as a guide to data collection and then enter an admission note on the patient's chart.

It is my understanding that the study will be conducted on the hospital unit where I am working and will not involve additional time beyond my scheduled hours. My participation should not take any longer, and perhaps less time, than if I proceeded in the usual admission procedure required by my hospital unit. No further involvement will be expected of me.

I understand that I will not be identified by name and that the information that I contribute will be discreetly and ethically handled so that no reflection is made on me personally. My participation in this project will result in no medical legal risks, public embarrassment or invasion of privacy. The results of the study will be made available to me by the investigator upon request. Should I decide I do not wish to participate, or I do consent but wish to withdraw from the study later, I may do so with no change in relationship to my place of employment.

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I have read the above consent. The nature, demands, risks, and benefits of the project have been explained to me. I understand that I may ask questions and that I am free to withdraw from the project at any time without ill will.

Subject's Signature_____ Date_____

Investigator's Signature (as witness)_____ Date

APPENDIX B

SUBJECT CONSENT FORMS

Form 1

I understand that I am to be included in a study on the effectiveness of a patient-completed nursing history questionnaire.

I will complete a 34-item questionnaire relating to my health and illness. This will take approximately 20 minutes to complete.

There are no risks or cost involved. One of the benefits of this study will be to help nurses determine if this method of gathering patient information is effective.

If you decide not to participate in the study, it will not change your relationship with any doctor or nurse, nor will it affect the quality of your care or treatment in any way.

All information and my identity will remain confidential at all times.

---

I have read the above "Subject's Consent." The nature, demands, risks, and benefits of this project have been explained to me. I understand that I may ask questions and that I am free to withdraw from the project at any time without ill will.

Subject's Signature _____ Date _____

Investigator's Signature _____ Date _____

Form 2

I understand that I am to be included in a study on the effectiveness of a patient-completed nursing history questionnaire.

I will be interviewed by the nurse using the questionnaire as a guide to her inquiry concerning my health and illness. This will take approximately 15 to 30 minutes.

There are no risks or cost involved. One of the benefits of this study will be to help nurses determine if this method of gathering patient information is effective.

If I decide not to participate in this study, it will not change my relationship with any doctor or nurse, nor will it affect the quality of my care or treatment in any way.

All information and my identity will remain confidential at all times.

---

I have read the above "Subject's Consent." The nature, demands, risks, and benefits of this project have been explained to me. I understand that I may ask questions and that I am free to withdraw from the project at any time without ill will.

Subject's Signature_____Date_____

Investigator's Signature _____Date_____

APPENDIX C

NURSING HISTORY QUESTIONNAIRE

Dear_____

We are asking you to answer the following questions so that we can plan your nursing care more effectively. If you do not understand a question, write "do not understand" instead of attempting to answer the question. Thank you for helping us.

If the questionnaire is completed by other than the patient himself, please indicate person responsible_____.

1. What health problem led you to come to the hospital at this time?

2. How long have you had this problem?

3. What do you know about your illness?

4. What does the doctor plan to do for you?

5. How long do you expect to be in the hospital?

6. While you are in the hospital, do you expect to have anyone visit you?

7. Have you ever been hospitalized before? Yes___ No___

   If yes, where was the most recent hospitalization?

   _____

   When?_____

   For what purpose?_____

   If you had more than one hospital admission before this one, briefly state reason(s):

8. What is your occupation?_____

9. What was the date of your last employment? _____

10. Do you expect to return to a job at a certain time?
Yes___ No___

If yes, when?_____

11. Has your illness affected your family or your usual way of life? Yes____ No____

If yes, explain how.

12. Have you been taking medication or treatments before your admission to the hospital? Yes___ No___

If yes, what is the drug or treatments?

13. Are there any drugs or foods you cannot take?
Yes___ No___
If yes, what is the drug or foods?_____
What happens when you take them?

14. Do you have any food restrictions? Yes____ No____
If yes explain the food restriction or type of diet.

15. What is your usual eating pattern?

Number of meals_____
Between mean snacks_____
Kinds and amounts of fluids_____

16. Do you need help when you eat? Yes___ No___

17. Do you need help with walking, bathing, or dressing?
Yes___ No___
If yes, explain what help is needed.

18. In the past 3 months, has your weight changed more than 5 lbs? Yes___ No___
If yes, check appropriately:

Lost weight____ gained weight____
Approximately how much?

19. Do you have any difficulty with your breathing?
Yes___ No___
Do you use more than one pillow at night? Yes__ No__

Do you smoke? Yes___ No___

If yes, check kind: Cigarettes ___
Pipe ___
Other ___
If cigarettes, how many? 1 pack/day or less___
1-2 packs/day ___
2-3 packs/day ___
3 or more packs/day___

20. Do you partake of alcoholic beverages? Yes___ No___
If yes, what kind?_____
How much?_____

21. Do you have any problems with your bowels? Yes__ No__
If yes, check problems and explain:

Constipation_____
Diarrhea_____
Bleeding with or following bowel movement _____
Other_____

22. Do you have any trouble passing your urine? Yes__No__
If yes, check problem and explain:

Urgency_____
Frequency_____
Burning_____
Hesitancy_____
Dribbling_____
Other_____

Do you have to get up at night to urinate? Yes__ No__

23. Do you have any trouble sleeping? Yes__ No__
If yes, what helps you?

24. Do you have any ulcers, scratches, sores, or lesions on your skin? Yes___ No___
If yes, describe type and location.

25. Do you have any likes or dislikes you feel will affect you while you are in the hospital? Yes__ No__
If yes, describe:

26. Do you have any religious practices you would like us to honor? Yes__ No__
If yes, please explain:

27. What do you normally do for recreation or to pass time?
List your special interests or hobbies:

28. What things worry you at this time?

29. How do you usually react when you become angry or frustrated?

30. Do you have other health problems besides the problem for which you are presently being admitted?
Yes___ No___
If yes, please describe:

31. Do you have any pressing problems or special requests the nurse could help you with so that your stay in the hospital will be easier? Yes___ No___
If yes, please describe:

32. Do you have someone able to care for you when you are discharged if you should need help? Yes__ No__

33. Do you have a doctor to go to after you are discharged? Yes__ No__

34. Please check all of the following special aids that you use:

Contact lens __
Eye glasses __
Hearing aid __
Braces __
Dentures __
Crutches __
Cane __
Wheelchair __
Other __
No aids used __

## APPENDIX D

### 21 KEY QUESTIONS PERTINENT TO COMPLETENESS OF DATA BASE

1. What health problem led the patient to come to the hospital at this time?

2. Has the patient ever been hospitalized before?
   Where was the most recent?
   When?
   Why?
   If more than one admission before this one, briefly state reason(s).

3. What is the patient's occupation?

4. What was the date of the patient's last employment?

5. What medication or treatments has he been taking before his admission to the hospital?

6. Are there any drug or food allergies?
   What kind of reactions does he have?

7. Does he have any food restrictions?
   Please explain food restricted or type of diet.

8. Does he need help when he eats?

9. Does he need help with walking, bathing, or dressing?

10. Does he smoke?
    What kind?
    How many?

11. Does he partake of alcoholic beverages?
    What kind?
    How much?

12. What kind of problems does he have with his bowels?
    What relieves the problem.

13. What kind of problem does he have passing his urine?

14. Does he have any trouble sleeping?
What helps him?

15. Please describe type and location of any ulcers, scratches, sores, or lesions on his skin.

16. Please describe if he has any likes or dislikes he feels will affect him while he is in the hospital.

17. What does he do for recreation or to pass time?
His interests and hobbies.

18. What things worry him at this time?

19. Please describe if he has any other health problems besides the problem for which he is presently being admitted.

20. Please describe if he has any pressing problem or special requests the nurse could help him with so that his stay in the hospital will be easier.

21. Does he have someone able to care for him when he is discharged if he should need help?

## APPENDIX E

## BIOGRAPHICAL FORM

Code No. _____

Age_____

Sex_____

Occupation _____

Medical Diagnosis_____

21 K.Q._____

# P.P._____

# N.I._____

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