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Concerns/Problems Experienced After Discharge from an Acute Care Setting: The Patient's Perspective

Karen R. Peper

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CONCERNS/PROBLEMS EXPERIENCED AFTER DISCHARGE FROM AN
ACUTE CARE SETTING: THE PATIENT'S PERSPECTIVE

By

Karen R. Peper

A THESIS

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ABSTRACT

CONCERNS/PROBLEMS EXPERIENCED AFTER DISCHARGE FROM AN ACUTE CARE SETTING: THE PATIENT'S PERSPECTIVE

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Karen R. Peper

The purpose of this study was to examine the discharge planning process in terms of concerns that patients experience after discharge from an acute care setting. Betty Neuman's Health Care Systems Model was the conceptual framework. Aspects of secondary prevention were used to classify the concerns as either a lack of resources or a reaction to a stressor.

The sample (n = 146) consisted of medical and surgical patients, 18 years or older hospitalized at a community hospital for at least 24 hours. The patients were contacted by phone three days after discharge to complete an interview regarding concerns they might have experienced after discharge. Information regarding length of stay and diagnosis was collected from the patient's medical record.

Data were analyzed descriptively. Data revealed that patients do experience some concerns after discharge. The top four categories of concerns were: physiological concerns (wound care and comfort), medication, activity, and diet. The data indicated that the patients primarily lacked resources. Most often this was a lack of information.

The findings support the need for the discharge planning process. Further research is needed to investigate the importance of individualizing information based on the adult learner's style of learning and needs at time of discharge. Other research might also be needed to investigate the effect of age on the discharge process.

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CHAPTER I

INTRODUCTION

Recent changes in government regulations and hospital reimbursement practices have increased the importance of early, effective discharge planning. These changes include the advent of prospective reimbursement and the Diagnostic Related Group classification system (DRGs). As a result, hospitals are increasing their commitment to cost containment measures, and patients are being discharged from the hospital earlier when they are possibly less ready for discharge. This puts increasing pressure on the health-care team, especially nurses, to determine patient readiness for discharge and to use this information in planning discharge care. Several researchers have examined these problems in the recent years and have identified various problem areas that need to be addressed in the discharge preparation of patients.

Arenth and Mamon (1985) compared nurse assessment of patient needs at time of discharge with patient assessment of needs three days after discharge. The study examined whether nurses, patients and their families collaborated sufficiently in assessing ability to manage daily living activities and in determining patients' needs for various aids. The authors found discrepancies in some areas such as

exercise/ambulation, disease process, sites for infection, and diet/nutrition between the nurse's assessment of client abilities and needs on discharge and the client's perception of needs.

Nicklin (1986) studied the types of problems encountered at home by cardiac surgery patients and their families after discharge using a telephone callback system. The study revealed that cardiopulmonary, gastrointestinal, or medication concerns are those that arise most frequently after discharge. The study noted that 40% of the concerns arose within the first week at home. Some of these potential postdischarge problems could be emphasized in a predischARGE class.

These studies support the need for discharge planning. While the responsibility for discharge planning rests on the shoulders of professional nurses, it may be honored more in theory than practice. Several reasons may be given for this neglect, including lack of time due to workloads, the assumption that someone else will do the necessary discharge planning, or the notion that a relative residing with the patient knows about the needed care (Clemons, 1984; Slevin, 1986; Corkery, 1989). Discharge planning may be pushed to the bottom of the list of priorities by lack of time and lack of special education. The discharge planning process should be evaluated to identify any shortcomings in the system and provide information for their correction.

Discharge planning is designed to be oriented specifically to patient preparation for the transition from the clinical to the home setting. Like admission teaching, the learning that occurs just before discharge is usually complicated by high levels of anxiety and is focused largely on knowledge and attitudes rather than on skills. When care must be continued at home, the teaching of care procedures should begin well in advance of discharge in order to help learners develop complex skills (Corkery, 1989). Discharge teaching should focus on what the patient can expect the course of his recovery to be and how to manage the nursing resources available to him for follow-up care and consultation.

A nursing conceptual framework that supports discharge teaching is the Betty Neuman Health-Care Systems Model. The model is an open system of stress and reactions. Stressors are problems or conditions that penetrate the normal line of defense. These can be intra, inter, or extrapersonal in nature. Reactions occur in the system as a result of the instability caused by penetration of the stressor. The model suggests that nursing intervention may be at the primary, secondary, or tertiary prevention level. Primary intervention includes activities initiated before or after an encounter with a stressor. This activity helps to decrease the possibility of an encounter with a stressor and to strengthen the flexibility of the line of defense in the

presence of a stressor. Secondary intervention will be the focus of this study. Secondary intervention includes activities initiated after the stressor has penetrated the flexible line of defense and the client has not been able to deal with the stressor effectively. The intervention attempts to strengthen the normal line of defense in the presence of a stressor. For this study, the client leaving the hospital and returning home are the stressors. Psychoeducational preparation is the secondary intervention that is expected to raise the patients' line of defense at the time of discharge. Interventions at the tertiary level of prevention aim to strengthen the lines of resistance and maintain the client's stability.

The following questions will be addressed in this study in order to gather information regarding what concerns/problems that patients encounter when discharged from an acute care setting.

What concerns/problems did patients experience at home within 3 days after discharge from an acute care setting?

What does the patient believe could have been done during discharge teaching to alleviate these concerns/problems?

What is the effect of age on the types of concerns/problems patients experience at home following discharge from an acute care setting?

The purpose of this study will be to examine what types of concerns/problems patients encounter at home after being discharged from an acute care setting. The benefits of discharge planning have been documented in the literature. The focus of this study will be on the improvement of discharge teaching based on the concerns expressed/experienced by patients.

CHAPTER II

REVIEW OF THE LITERATURE

Conceptual Framework

The Betty Neuman Health-Care Systems Model (Neuman, 1982) provided the framework for this study. Neuman's conceptual model of nursing is a particularly applicable framework to assist in the evaluation of the concerns/problems clients experience within 3 days after being discharged from an acute care setting. This study will indicate how Betty Neuman's conceptual model can be used in designing, implementing and teaching the discharge planning process effectively not only to the nurse who delivers it but also in the delivery of holistic nursing care. Knowles's theory on adult learning needs contributed additional conceptualization about adults' need to be independent, self-directed, and interested in learning about an experience.

Betty Neuman Health-Care Systems Model

Neuman identified the Health-Care Systems model (Figure 1) as a total person approach to client problems. The central focus of this model is the individual's relationship to stress, reaction to stressors, and factors of reconstitution. Individuals are viewed as composites of physiological, psychological, developmental, and

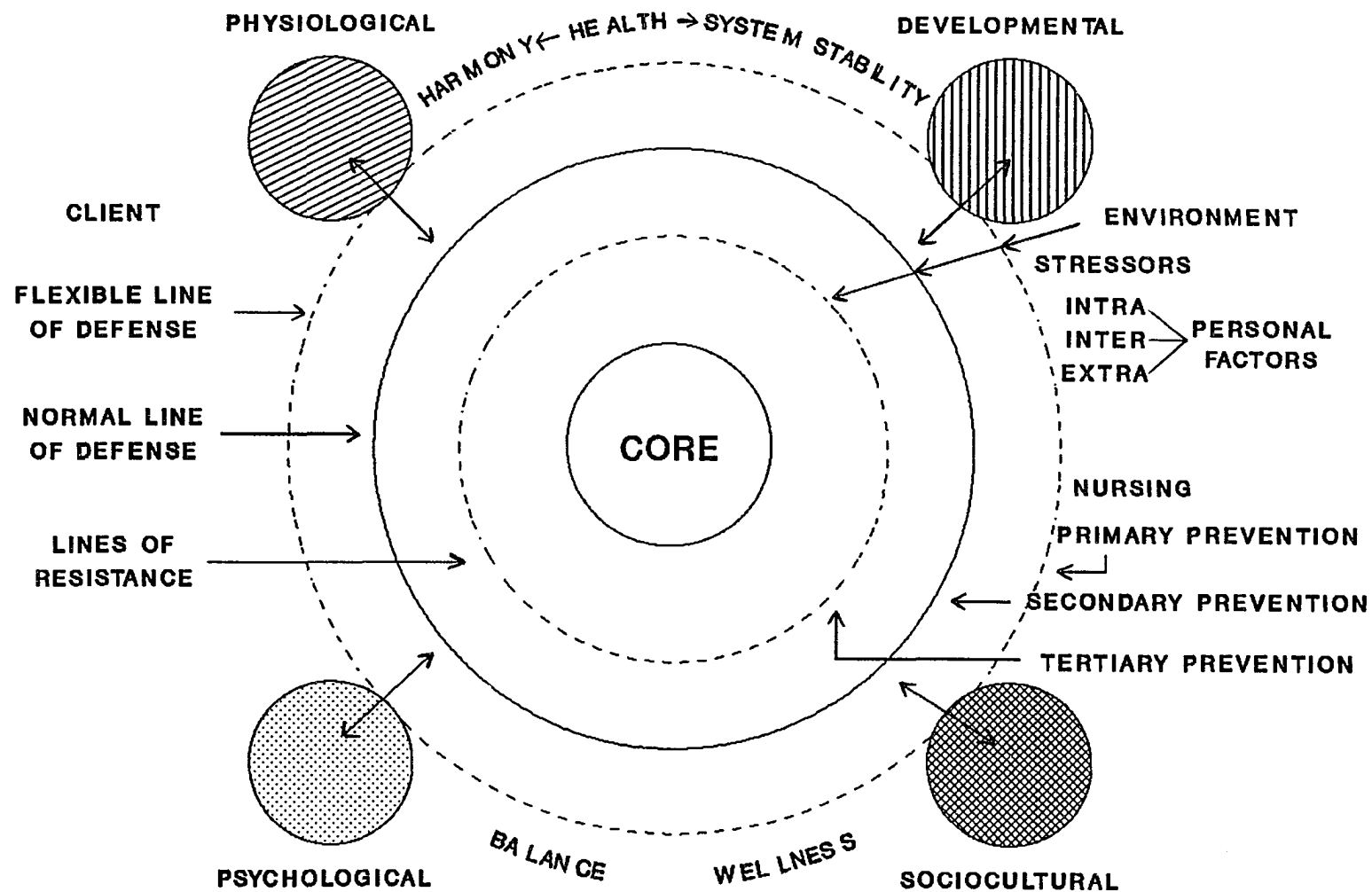


Figure 1

NEUMAN SYSTEMS MODEL (adapted from Neuman, 1982, Miranda, 1987, Buchanan, 1987, and Ross, Bourbonnais, & Carroll, 1987)

sociocultural variables who are open systems in dynamic interaction with their environment. The model is designed to provide an organizing framework to understand the client's connections with the environment and to intervene appropriately through preventive, corrective, and rehabilitative measures (Buchanan, 1987).

Four concepts are inherent in any model of nursing: person or client, environment, health, and nursing. According to Neuman, the person is a client system. The total person is an open system model of two components -- stress and the reaction to stress. Clients are always in a state of dynamic equilibrium with the environment, adjusting themselves or the environment to maintain an optimal degree of harmony between their internal and external environments. The total person's central core of survival factors is protected first from stressors by a flexible line of defense (Neuman, 1982).

Neuman (1982) describes the flexible line of defense (Figure 1) as a dynamic, rapidly changing, protective buffer that prevents stressors from penetrating the second barrier, the normal line of defense when the environment is actively stressful. It may also function as a filter to the environment offering support and serving as a positive force to facilitate growth and development. According to Ross and Helmer (1988) rest and activity patterns, level of energy and fatigue, mood swings, lifestyle changes, and role

changes are incorporated in the flexible line of defense of the individual. Offering the maximum potential for change, the flexible line of defense can be extended or solidified by the use of health-promoting and protective behaviors (Ross & Helmer, 1988). The model focuses on the stressful environmental context, while recognizing that it is not possible or even desirable to remove all stressors. The model assumes that stress is inevitable and essential in life (Buchanan, 1987).

The normal line of defense (Figure 1) is the person's second barrier to stressors or his or her steady state (Neuman, 1982). Representative of what a person has become over time the normal line of defense refers to the individual's usual state of equilibrium and includes intelligence, life-style, problem-solving and coping patterns, level of development, and usual physiologic functioning. Normal lines of defense protect the individual, and represent a state of wellness and the usual level of adaptation. These normal lines of defense include physiological, psychological, sociocultural, and developmental variables (Kilchenstein, 1984). The continuous interaction among these four variables produces a cumulative effect that acts on the flexible line of defense and reduces its buffering capabilities. The normal line of defense then can become weakened and is ultimately

penetrated by any, a combination of, or all of the stressors.

Stressors affect the system (individual) as they cross the flexible line of defense and penetrate the normal line of defense. Stressors are problems or conditions that penetrate the normal line of defense, and are intra-, inter-, or extrapersonal in nature. Reactions are the system's instability caused by penetration of the stressor (Khalil & Ali, 1989). Stressors may be classified as either noxious or beneficial.

The client may be subjected to stressors at any time. The nurse enters the client system by using the collaborative decision-making process to assess, with the client, the potential for and the presence and sources of stressors. Together, the nurse and client determine the appropriate points for intervention. The theoretical view of the client facilitates the application of the process. The process is an open system with a series of circular, dynamic components that interact as a whole (Buchanan, 1987). The process facilitates the nurse's interaction with the client along the health-illness continuum. This continuum is considered to be phases related to the client's health and includes high-level wellness, wellness-stress, coping-distress, dysfunction-illness, and death as end state (Figure 2). The nurse intervenes with the client, applying primary prevention strategies to wellness-stress,

CONTINUUM

Phases related to the Client's Health

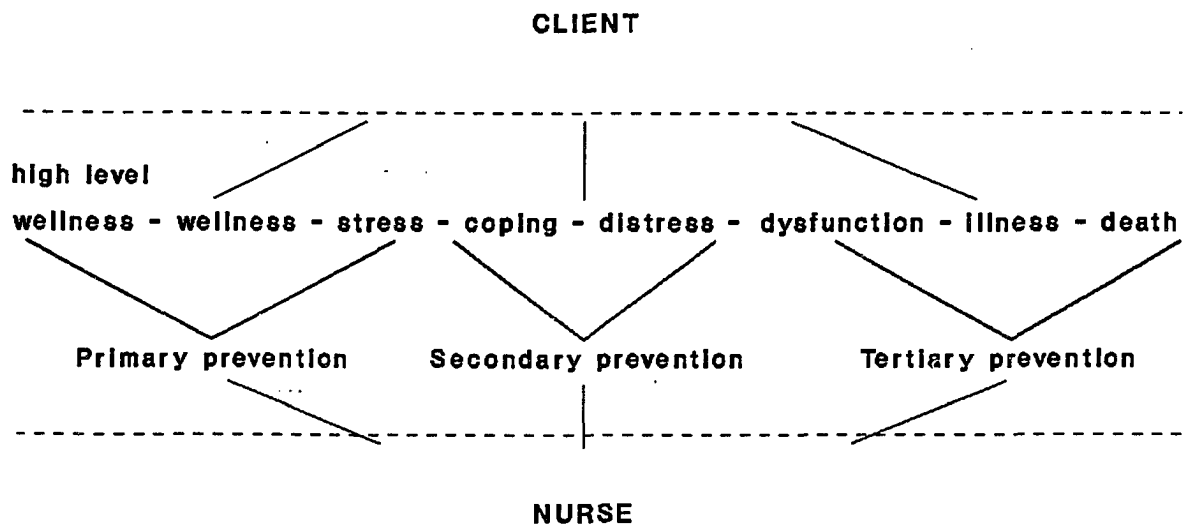


Figure 2

(Adapted from Neuman, 1982, and Buchanan, 1987)

secondary prevention strategies to coping-distress, and tertiary prevention strategies to dysfunction-illness (Buchanan, 1987). The continuum demonstrates that it is possible to consider the application of these three levels of prevention in providing health care. The nurse's emphasis on health care is preventive, implies active involvement of the interdisciplinary health team, and places the client, as participating member, at the center of the activity.

Nursing interventions can begin at any point at which a stressor is suspected or identified. Interventions are directed at maintaining, attaining or regaining a state of wellness. The subsystems of individual, stress, and nurse dynamically interact within the mega system of the Neuman Model (Lowry, 1988). Intervention takes place on three levels. At the primary level of prevention, a nurse can intervene before or after a reaction has occurred, whether a known risk or hazard is present or suspected (Hoch, 1987). General knowledge is applied to identify and allay the potential risk factors associated with stressors. The goal of primary prevention is to prevent or minimize penetration of the normal, healthy line of defense or to strengthen the flexible line of defense to decrease the effects of the stressors. Intervention at the secondary level of prevention attempts to strengthen the normal line of defense (Ross & Helmer, 1988). This assumes that the

stressors have penetrated the flexible line of defense and that the client has not been able to deal with the stressors effectively. Interventions at the tertiary level of prevention aim to strengthen the lines of resistance and maintain the client's stability. When these interventions fail in their goal, the death of the client becomes imminent (Ross & Helmer, 1988). When a stressor such as surgery or illness penetrates a client's flexible line of defense, causing instability of the system, secondary prevention, such as the discharge planning process is necessary in assisting the client to reconstitute and/or strengthen his adaptive mechanisms. For this study, the client leaving the hospital and returning to his own environment was identified as the stressor. Discharge teaching was considered to be secondary prevention which was the focus of this study.

Prevention is a basic principle that is essential to the health of the family, aggregates, and the community. It is a fundamental goal in any health care setting and more important, in community health settings (Buchanan, 1987). Secondary prevention is used as an intervention after a reaction has occurred. Secondary prevention involves the optimal use of the individual's external and internal resources in an attempt to stabilize or strengthen the flexible lines of defense to reduce the reaction.

Nursing care, whether aimed at preventing disease or treating it, begins with a thorough and complete data base.

The client is the primary source of data. Data on the particular relationship between insufficient resources and reactions to stressors are derived primarily from the perceptions of the individual. Effective treatment of the whole person cannot be offered with just an assessment of the client's physical system but must always include an assessment of all the variables. The client does not want just treatment of a single disease factor but asks for recognition and help with the other multiple causes and effects of the disease, not all of which are physiologic in nature.

A major source of stress (anxiety) at the time of discharge is the patient's uncertainty about the degree to which he will be physically able and expected by others to play his normal "well" role with its full share of responsibilities and tasks (Neuman, 1982). Many clients have the responsibilities of financial burdens associated with hospitalizations or the financial concerns related to their inability to work during their period of recuperation. Clients regardless of their age dread losing control of their normal functioning ability and fear illness and disabilities. One of the best ways to help clients regain their health and maintain or even strengthen their reserves is by continuing to nurture the vigorous spirit within, while caring for their ill body.

When discharged the client will be facing the frustration of still being "sick" and unable to function normally. It is important that the nurse in her teaching include clarification about the patient's role and limitations both with him and with his support group. Each individual assessed, will have a different profile of physiological changes. Understanding these changes will help interpret findings and select the interventions most likely to help restore or maintain a client's functions during the discharge process. Discharge teaching will, at least in part, be directed toward helping the client learn how and in what circumstances to seek professional help or consultation. The client should leave the hospital aware of what to look for and how to handle medication side effects and complications during recovery as well as with a plan for regularly scheduled medical follow-up to help reduce the chance of further stressors from occurring. The discharge plan shall include nursing measures that will facilitate the medical care prescribed and restore, maintain, or promote the patient's well-being. As appropriate, such measures should include intrapersonal, interpersonal, and extrapersonal resources. Secondary prevention through the provision of information (intrapersonal) has the potential to raise one's lines of defense as indicated by the report of physiologic, psychological, and behavioral reactions to stressors.

Environment is the aggregate of physiologic, psychologic, sociocultural, and developmental conditions that affect the health of the client. Although not explicitly stated, one can infer that Neuman views the environment as a compilation of stress factors; that is, tension-producing stimuli that have the potential to cause disequilibrium (Buchanan, 1987). Stressors as well as reactions to them are inter-, intra-, and extra-individual. Interpersonal and extrapersonal factors comprise the external environment, and intrapersonal factors comprise the internal environment. The ability of stressors to penetrate an individual and the degrees of potential disequilibrium resulting are dependent on (1) each person's own level of resistance, (2) the strength of the stressor, (3) the number of stressors interacting with the person, and (4) the duration of interaction between the person and stressor (Ross & Helmer, 1988).

Neuman (1982) appears to use the terms health, wellness, harmony and stability almost synonymously. She defines health or wellness as "the condition in which all parts or subparts (variables) are in harmony with the whole person" (Neuman, 1982, p. 9). She further suggests that any disharmony that exists within the system reduces the state of wellness of that system (Ross & Helmer, 1988). Health is a relative rather than an absolute concept, it involves not just the individual, but the family, aggregates, and the

community. While not explicitly describing ill health, Neuman refers to wellness states and optimal wellness, and conversely to reduced states of wellness in varying degrees. This suggests that she views health and illness on a continuum rather than as a dichotomy (Ross & Helmer, 1988).

Health relates to a dynamic exchange between client and environment. Health is defined as the capacity of the client to adapt, maintain balance, and function effectively within the given environment. It includes not only the physiologic condition, but the psychologic, sociocultural, and developmental dimensions of the client and is viewed as occurring on the health-illness continuum. The client moves back and forth to different reference points on the continuum contingent on the ability to maintain balance. Stressors in the internal or external environment create an interaction-adjustment process in the individual. Any stressor is potentially capable of causing disequilibrium in the individual resulting in illness. When a client fails to maintain balance, illness results (Buchanan, 1987).

Systems thinking provides for holistic approaches toward clients and helps in sorting out large amounts of data. Avoiding fragmentation and handling all aspects of the patient system in an inter-related manner were vital concepts which flowed from this model. It is thought that a Neuman guided nursing practice will be cost effective in

that the comprehensive, holistic approach contributes to the development of patient-specific discharge planning and to care that is valued by both the nurse and the patient.

Malcolm Knowles - Adult Learning Theory

One of the most daunting and sometimes difficult tasks of the nurse is to set a climate for learning. Clients are motivated to learn when their physical and emotional comfort are satisfied and when they can actively participate in defining their own needs and goals. Discharge planning demands both varied and specific teaching modalities for each individual client. Malcolm Knowles (1984) states that the adult learner sees himself as producer or doer and derives self-esteem from his contribution. Learning episodes need to capitalize on the learner's experience to be effective. The adult learner has a need to be perceived by others as self-directing according to Knowles. Self-directed learning is defined as a process in which individuals take the initiative in designing learning experiences, diagnosing needs, locating resources, and evaluating learning (Brookfield, 1986).

The adult learner responds in an environment that is informal and friendly, where he is known by name and valued as an individual. Knowles (1984) identifies that adult learners are motivated to learn when they recognize a gap between what they know and what they want to know. During the discharge planning process, assessment of the client and

family will provide information about where the client stands with respect to the knowledge, attitudes, and skills important to self-care.

Neuman's theory also refers to the adult learner (client) as an active participant in his care. Neuman (1982) suggests that the primary goal of nursing is to promote, monitor, and maintain the client's health so that the client can function effectively in the given environment. Since the client is an active participant in self-care, and since the focus is on the client's interaction with the environment, the goal of nursing is viewed in terms of immediacy (short-term) and continuity (long-term). Goal setting is an activity whereby the nurse contracts with the client for what he wants to accomplish. The readiness of the client and his family to learn is especially important to consider. Psychological variables are learned behavioral responses. They include past experiences, learning, problem solving, perception, and defense mechanisms (Buchanan, 1987). Buchanan (1987) states that these factors encompass human behavior and decisions that affect health, such as stress and lifestyle. Lifestyle changes for a client may be related to a new diagnosis of an illness or disease. Nonuse of cigarettes for a vascular client or one who has lung disease. Prevention and control of alcohol and drug abuse and obesity.

Clients' ability to participate in the discharge planning process is influenced by their degree of physical discomfort, denial, grieving, and dependency needs. Physiologic variables encompass the biologic factors of human ecology that may affect the internal processes that maintain life and that have a direct influence on the health of the client (Buchanan, 1987). At no time should the nurse force her own goals on the client and his family. She should instead try to meet them on their own ground, encourage whatever participation she can, and consider ways to support and reinforce strengths.

Sociocultural variables include all health-related factors that are external to the human body and that relate to the welfare of human beings as members of society. They may be factors over which individuals have little control, but over which the community may have a greater degree of control (Buchanan, 1987). According to Buchanan (1987) this includes the client's actions and conduct to values, social norms, role performance, support system, group pressures, participation, and exchange. Exchange applies to a family needing financial assistance after an extended illness or hospitalization. The family may turn to social services or other financial assistance programs.

Client education is a process of influencing behavior, rather than simply supplying information. Developmental variables are internal and community characteristics that

pertain to technology and the process of growth and differentiation, and that may affect the client's health (Buchanan, 1987). According to Buchanan (1987) these include information systems, specialized knowledge and skills. Discussing the disease process to the affected client, will help the client to assist in the intervention process.

Knowles believes that adults tend to have a problem-centered orientation to learning. The adult, comes into an educational activity largely because he is experiencing some inadequacy in coping with current life problems. He wants to apply tomorrow what he learns today, so his time perspective is one of immediacy of application. Therefore, he enters into education with a problem-centered orientation to learning (Cross, 1981).

Review of Research Literature

Discharge planning research has received considerable impetus since the implementation of the new health care reimbursement scheme, Diagnostic Related Group classification system (DRGs). The research literature identifies numerous discharge planning variables, primarily in the acute care setting. For the purpose of this study the discharge planning literature was reviewed by organizing the research into the domain of concerns/problems related to the discharge planning process from the client's perspective. The review is divided into two major sections,

the discharge planning process and evaluating the results of the process. Nine articles were found: Arenth and Mamon (1985), Grady, Cisar, and Ryan (1988), Nicklin (1986), Johnson (1989), Glazer-Waldman, Hall, and Weiner (1984), Schaefer, Anderson, and Simms (1990), Jairath, Campbell, Ahmad, and Chung (1990), Naylor (1990), and Underwood et al. (1987). These articles reviewed the discharge planning process from different perspectives. The articles were categorized using Neuman's conceptualization. Many of the articles could have been classified into one or more categories. Research relevant to each area will be presented and discussed. The summary will integrate the research to provide a context for the present study.

Discharge Planning Process

Discharge planning includes all professional activities that prepare the client and family for the transition from hospital to home. The activities of discharge planning include assessment of the client's and/or family's adjustment to and treatment of his disease (Smeltzer & Flores, 1986). It also may include determination of need for referrals to community agencies or placement in appropriate facilities. Discharge planning encourages clients and their families to cope with the effects of their illness or injury. Discharge planning guides the client toward a style of living which promotes continual growth toward as much independence as the client's condition permits. The advent

of prospective reimbursement and DRGs brought discharge planning to the forefront (Corkery, 1989). With the ascent of the DRG system, which went into effect on October 1, 1983, discharge planning is not only important to the client in terms of implementing the most beneficial post-hospital care plan, but it is also vitally important to the hospital in terms of finance. The timely formulation and execution of discharge plans is essential for the client and the hospital (Clemons, 1984). With the ever-increasing commitment to cost containment measures, there is a need to provide careful planning for the client who will spend less time in the acute care facility and more time convalescing at home. Clients are being discharged from the hospital earlier, and they are possibly less ready for discharge.

Arenth and Mamon (1985) conducted a study that compared nurse assessment of client needs at time of discharge with client assessment of needs three days after discharge. Clients were chosen from the Johns Hopkins Oncology Center. Over a four-month intake period total of 56 clients met their study criteria. Nurses who had participated in the clients' care were also recruited for the study. Data were obtained from three sources: the medical record, a structured patient telephone interview three days after discharge and a second client interview three weeks after discharge.

Arenth and Mamon (1985) state that discharge planning should primarily ensure that clients who need further care have a program which follows through on the gains from hospitalization. Furthermore, they commented that concern over health care costs has made health care professionals increasingly aware that thorough preparations for supporting care at home can facilitate utilizing hospital beds in the most appropriate manner. Recent changes in government regulations and hospital reimbursement practices have increased the importance of early, effective discharge planning. Discharge planning should arrange for a continuity of care from hospital to home or extended care facility, and at the same time, should prevent unnecessary delay in discharge by advanced planning. Early detection of the elements which provide continuity of care for the client will need to be identified within 24 to 48 hours of the client's admission time to meet the goals of (1) the client's post-hospital discharge plan and, (2) the hospital's bottom line in regard to finance (Clemons, 1984).

Clausen (1984) identified that discharge planning encompassed a much broader scope of activity than just client placement. She stated that discharge planning blends nursing management of the clients' physical conditions, together with their psychological adjustment to changes in their health. This process expands beyond the hospital's walls to home and community. Besides teaching necessary

skills, this process guides clients, their families, or interested agencies to those community resources that can aid them.

Concerns/Problems

Review of the literature revealed that while many articles have extolled the value of discharge planning programs, there have been few studies to evaluate their efficacy. Review of the research available revealed a variety of concerns experienced by clients after discharge. Clients expressed concerns after discharge regarding medications, diet/nutrition, extended mobility capabilities (exercise/ambulation and stairs), wound management, information about treatments and disease process, psychological effects of illness, and non-nursing activities, i.e., transportation, housekeeping, shopping, meal preparation, dressing, and bathing (Schaefer, Anderson, & Simms, 1990).

Underwood et al. (1987) conducted a study to assess the client's evaluation of discharge teaching. The study was done on a medical-surgical unit, using a combination of techniques to obtain the sample. The sample consisted of 80 individuals. The study revealed that 81.3% of the clients indicated that they felt they had been well prepared for discharge. They did not perceive that nurses could have done anything to better prepare them. Subjects did say a phone call by their primary nurse would be moderately to

extremely helpful (71%). The time preferred for this call would be the second to third day following discharge. Generally fewer than 20% of the clients interviewed had concerns in any given area in the week following discharge. The greatest number of concerns recorded were in the area of activity. Of the subjects discharged, 21% of them had some type of restriction in this area and reported a concern. Medication was the second most prevalent area in which concerns were expressed (16.3%), diet third (8.8%), and dressing changes fourth (5%).

Though complexity of needs may vary, discharge planning proceeds on the assumption that every client has some particular need after discharge which must be addressed. While one client may require only the reinforcement of activity restrictions, another may need to be referred for home health care (interpersonal), special home equipment (extrapersonal) and instruction (intrapersonal) in a special diet. Recognizing a problem or a potential problem early in hospitalization is the key to good discharge planning. Ideally, discharge planning should assess a variety of health-related needs and fill them by organizing available social support and community resources. The discharge planning process in order to be an effective treatment of the whole person cannot be offered with just an assessment of the client's physical (physiological) systems

but must always include an assessment of the psychological, and behavioral systems as well.

Resources

Intrapersonal. Intrapersonal resources include information about specific items. Examples are dietary information, instructions for dressing changes, or discharge instructions. Grady, Cisar, and Ryan (1988) conducted a study with 100 adult cardiac surgical clients to determine their perceptions of the importance and adequacy of preparation regarding preoperative and postoperative information. The study was conducted at a large Midwest university medical center. Selection was on a volunteer basis. Clients were approached between the fifth and tenth postoperative day when their clinical condition stabilized. At that time they completed the predischARGE questionnaire. The client completed the postdischarge questionnaire, during a return visit to the outpatient clinic one to 4 weeks after discharge.

The predischARGE questionnaire consisted of eight questions, which focused on an explanation of preoperative preparation, the surgical procedure, routine equipment, coughing and deep breathing exercises, the ICU environment, and an overview of the postoperative period. The postdischarge questionnaire, consisted of 17 questions pertaining to general categories of self-care instructions, exercise programs, activity limitations, and knowledge of

cardiac risk factors. The clients were asked to state their perceptions regarding importance of items, adequacy of preoperative teaching, and adequacy of discharge teaching. Of the 17 questions on the postdischarge questionnaire, clients ranked only one item, exercising at home, in the top third of all items for both importance and adequacy of preparedness. Clients also indicated that medication side effects, whom to contact with medication questions, and diet planning were highly important, but all three items fell in the lowest third of the ranking in terms of the client's preparedness. Limitations regarding sexual activity and potential emotional changes were ranked in the lower third for both importance and preparedness. Clients stated that they were well prepared regarding limitations for lifting, driving, and resting, the purpose of medications, and formal exercise programs, but these items were not highly important to clients.

Nicklin (1986) noted the types of problems encountered at home by clients having cardiac surgery and their families after discharge using a telephone callback system. Nicklin (1986) concluded that since not all problems can be anticipated before discharge, supplementary means of obtaining information and guidance was indicated. After discharge, alternative ways for the client and family to obtain advice and knowledge are essential to ensure that the quality of care received while in the hospital is not

negated by the inappropriate management of problems after discharge. The client needs to be able to seek out appropriate medical information when back in his own environment.

Johnson (1989) conducted a descriptive study of 50 pairs of nurses and their clients. She addressed whether or not aged clients (66 to 91) and their nurses recognized the importance of discharge planning. Nurses and clients answered a questionnaire rating discharge planning. The data were collected from a nonrandom sample of 50 pairs of aged clients and their nurses on two medical units. The results revealed obvious disagreement. Forty of the fifty clients rated every item as "very important" and 10 rated all the items as "extremely important". By contrast, none of the nurses rated any item as "extremely important" or even "very important".

The clients in this study expressed a very strong need for discharge planning. They wished to learn about their medications, diet, treatments, and exercise (Johnson, 1989). They were concerned about being referred to appropriate health care providers. The clients also placed high priority on including their families in discharge planning. In view of the client's responses, it is even more alarming to discover that the nurses in this study failed to recognize the importance of discharge planning activities to their clients.

Glazer-Waldman, Hall, and Weiner (1984) conducted a study of client's reading ability in relation to educational materials used for discharge purposes. The sample consisted of 100 subjects, selected on the basis of availability for testing. The subjects were asked to volunteer. The test used was the Comprehension Subtest of the Gates-MacGinitie Reading Test, Level E, Form 1 (MacGinitie, 1978). Level E, Form 1 tests 7th through 10th grade reading levels, but has a grade equivalent chart from 3rd through 12th grades. Only 40% of the sample could read at the 6th-grade level. The results of this investigation suggest that client education in the public sector cannot be undertaken as an incidental aspect of a client's medical regimen if it is to be of any use. The population needs multi-modal teaching constructed with clients' cognitive styles in mind. Limitations of this study were non-random sample and the use of a single institution for data gathering.

Interpersonal and Extrapersonal. Interpersonal resources refer to the people within the community. While extrapersonal resources include equipment and supplies available to the patient. Arenth and Mamon's (1985) study indicated that in some areas the assessment of the client's ability to manage daily living activities and the need for various aids were lacking. Nurses, clients and their families were not collaborating sufficiently in these areas

to determine specific needs. Accuracy and agreement might improve if patients and families had means to clarify activities of daily living (ADL) competence and equipment usefulness for both themselves and their nurses.

While the literature suggests that several factors may limit the effectiveness of educational interventions, the research to support this is limited. Short lengths of stay reduce the amount of information that can be presented to, and assimilated by, clients during hospitalization. Cognitive impairments associated with anesthesia, aging, and sensory deprivation may affect comprehension (Jairath, Campbell, Ahmad, & Chung, 1990). Client anxiety (psychological), perceived susceptibility, and fatigue (physiological) may limit receptivity to educational interventions. Other factors affecting educational readiness of the client might be: intelligence, literacy, ability to comprehend, or socioeconomic/cultural factors. Additional factors that may be involved are ethnicity, religious beliefs, health values, family roles and relationships, support structures, financial concerns, and home environment (Jairath, Campbell, Ahmad, & Chung, 1990).

Reactions to Stressors

Physiologic. Physiologic reactions are physical symptoms that the patient experiences in response to a stressor. Examples are pain, nausea, and weakness. Nicklin's (1986) study consisted of analyzing 217 telephone

calls made to the hospital over a six month period by discharged patients. It was estimated that 90% of all calls were actually recorded. The summary of information for each call was recorded on a sheet of paper that was divided into columns: date, time, client's name, individual who called, date of discharge, discharge diagnosis, summary of call, and advice given. Nicklin's study revealed that 40% of the concerns arose within the first week at home. Problems were categorized by symptoms. Cardiopulmonary (31.3%), medication (14.7%), and gastrointestinal (13.4%) concerns are those that arose most frequently. The cardiopulmonary (arrhythmias or palpitations) concerns were frequently severe, necessitating referral to an emergency room or a doctor. Concerns regarding medications were quite varied and included dosage, directions, and types. The study results indicated that additional medication education (intrapersonal) seemed necessary for the medical patients. Constipation, diarrhea, and nausea were the gastrointestinal problems seen most often. Nicklin suggested that an appropriate way to deal with these potential postdischarge problems could be to emphasize the material at a predischarge surgery class.

Arenth and Mamon (1985) conducted a study where clients reported on their current needs regarding physical (physiological), emotional (psychological), social, and financial functioning, and stated whether each need was met

or not. The sample of clients and sample of nurses ranked these items from least to most important. The study showed there were very low levels of disagreement between nurses and clients for eating (3%), personal hygiene (9%), and dressing (11%). Bed/chair transferring (23%) and bathing (28%) showed significant disagreement between nurses and clients (Arenth & Mamon, 1985). Patients evaluated their capabilities of walking and using stairs. Their opinions varied dramatically with the nurses at a level of disagreement: 16% for walking and 36% for stairs. Nurses and clients disagreed about stairs more than any other ADL item and in the highest relative proportion. The level of disagreement was found to be the highest in the instructional (intrapersonal) areas of exercise/ambulation (53%), followed by instruction in the disease process and sites for infection (33%) for each. The level of non-agreement for diet/nutrition was much lower 22% (Arenth & Mamon, 1985). Unlike the other educational areas, the dietitian's instruction in diet/nutrition is reinforced by nursing. Clients are more likely to recall this information than those which take place as an integral part of various nursing activities.

Psychological. Psychological reactions are the distress and/or anxiety that the patients experience in relation to a stressor they encounter. Several factors have been identified that need to be present for the client to

perceive himself as ready to be discharged from the hospital. These factors include client perception that his strength and energy are increasing, his emotions are returning to normal, he is independent in his activities of daily living, his wound is healing, his pain is decreasing, and his doctor assures him it is safe to leave the hospital (Schaefer, Anderson, & Simms, 1990). The literature suggests that the client's perception of readiness as a major factor to be considered during discharge planning.

Schaefer, Anderson, and Simms (1990) conducted a study investigating perceptions of readiness for discharge and the need for at-home, family, and community resources among persons aged 65 years and older. A questionnaire developed by Anderson and Smith (1984) was used for data collection. The predischARGE self-administered questionnaire (distributed 1 to 3 days prior to discharge) was given to the subjects who had consented to participate. The second questionnaire was given to the subjects at discharge with instructions to complete it 10 to 12 days after discharge. On the ninth day after discharge, a phone call was made to remind the subject to fill out the questionnaire and mail it back in the self-addressed stamped envelope. Forty-five cardiac or abdominal surgical clients age 65 years and older were invited to participate in the study. The actual sample consisted of 25 subjects. The majority of their subjects

(96%) anticipating discharge thought they were ready for discharge.

The subjects were asked questions related to what assistance would be needed at home. The following items were addressed: bathing, dressing, shopping, meal preparation, taking medications, wound care, dressing care, exercise, transportation, and housekeeping. Five activities were identified as problem areas by at least 50% of the sample before discharge. These activities included transportation (96%), housekeeping (95.8%), shopping (88%), meal preparation (84%), and wound care (50%). The study noted there were seven activities identified as problem areas by at least 50% of the their sample after discharge. These activities included the five mentioned previously and bathing and taking medication. Postdischarge needs for assistance with bathing, medications, housekeeping, shopping, meal preparation, and transportation were documented and noted by these authors to be predominantly non-nursing activities.

Several non-nursing activities were identified by these authors as important to the clients during discharge planning. These activities included: assistance with bathing, housekeeping, shopping, meal preparation, and transportation. These authors (Schaefer, Anderson & Simms) noted that the largest segment of home care needs is

housekeeping services and unskilled care according to this study.

Nicklin's (1986) findings relative to psychological variables indicated that even if the individual receives the appropriate amount of information before discharge, it is impossible for him to recall everything that was explained. Regardless of the quality of the in-hospital teaching program, it is impossible to anticipate and advise the clients and families about all the problems and concerns that might arise. Some information will not be retained after discharge because of high anxiety levels coupled with the tremendous amount of new information given to the client during hospitalization. Reinforcement and follow-up are important to continued motivation but not available with all discharge planning.

The literature does not specifically mention any behavioral actions taken by patients in reaction to stressors that they come in contact with. Behavioral reactions are actions that the patients take in relation to a stressor they encounter.

Age and Discharge Teaching

There is some evidence that age may be a factor in readiness for discharge. Jairath, Campbell, Ahmad, and Chung (1990) investigated elderly unilateral cataract extraction clients' knowledge regarding post-discharge recovery and safe and appropriate health-care practices

during early convalescence. The sample consisted of 20 subjects who ranged in age from 66 to 82 years. Eighty percent of the subjects were women. Client knowledge, measured by the Modified Knowledge Test (MKT), was determined prior to surgery, prior to discharge, and post-discharge. The clients exhibited high scores (92-100%) prior to surgery, suggesting that most knowledge was acquired before admission to the hospital. Scores less than 100% prior to surgery indicated that some knowledge deficits existed. Statistically significant improvement was noted on scores from prior to surgery to discharge. Lack of significant changes in scores from prior to discharge to post-discharge suggest that acquired knowledge did not decay appreciably. Replication of the study using a larger, non-convenience sample is warranted. Replicating the study in multiple institutions is also important.

Naylor (1990) conducted a study examining the effects of a comprehensive discharge planning protocol implemented by a gerontological nurse specialist as compared to the hospital's general discharge planning procedure. Using the comprehensive discharge planning protocol for the elderly implemented by a nurse specialist, Naylor (1990) reported a significantly reduced length of stay for subjects in the experimental group as compared with the control group.

Johnson and Fethke (1985) investigated the postdischarge outcomes of 101 elderly clients discharged

from a tertiary care setting to home. The study revealed that 30 individuals were readmitted to the hospital within the first 6 weeks after discharge. The rehospitalization rates for elderly clients found in other studies ranged from 22% to 37%; these rates were reported for periods ranging from 6 weeks to 1 year after initial hospitalization (Naylor, 1990).

Multiple readmissions intensify the complex interplay between physical, psychological, and social factors affecting the clients and caregivers. Readmissions are not only emotionally difficult for clients and their caregivers to handle, but also increase the risk of elderly persons becoming confused, disoriented, and less able to manage essential posthospital adjustments (Naylor, 1990). In addition, hospital readmissions are very costly. When compared to an elderly client's first hospitalization, the rehospitalization costs ranged from 24% to 55% higher. Thus in both human and economic terms, the costs of rehospitalization are tremendous (Naylor, 1990).

Age is not used as a criterion for discharge teaching. The literature reveals that younger clients with acute illnesses did not always receive referrals or adequate discharge teaching and they were more likely to need the information on activity and follow-up (Corkery, 1989). Younger clients suffering from acute periods of illness have

special discharge planning needs that may not be met because they are overlooked.

Evaluation of the Process

Each person is an individual and will recover at his or her own rate. So rules cannot be laid down, general guidelines can be given. Ideally, discharge planning should assess a variety of health-related needs and assist the client to use available social support and community resources as needed.

No research has been published at this time related to the evaluation of the discharge planning process. This is unfortunate because, a well-monitored program will discharge clients confident that they and their families can cope at home with those health problems which must still be managed (Arenth & Mamon, 1985). Evaluating the process would identify any shortcomings in the system and provide information for their correction.

Summary

In summary the literature revealed that discharge planning has been studied from various perspectives. The studies in these areas have been inconclusive and have not been replicated. The studies reviewed were limited because the data obtained were not generalizable beyond the convenience samples reported. The clients were not a random sample of all discharged surgical and medical clients. The samples were not necessarily representative of the total

population. Many of the sample sizes were small and possibly atypical. They did not cover all possible diagnoses. The studies were limited by the use of a single institution for data collection. No studies differentiated the learning needs by age and sex.

Although most studies support discharge instructions, the content and manner in which the instruction is presented vary from study to study, as do the type and magnitude of favorable outcomes. Health education offers individuals some control over the direction their disease/illness will take. It presents choices for the individual and nurtures the development of an understanding of the illness process. This researcher will investigate and summarize the types of concerns/problems experienced by clients three days after discharge from an acute care setting. The following questions will be addressed:

What concerns/problems did patients experience at home within 3 days after discharge from an acute care setting?

What does the patient believe could have been done during discharge teaching to alleviate these concerns/problems?

What is the effect of age on the types of concerns/problems patients experience at home following discharge from an acute care setting?

Definition of Terms

Based on the preceding review of literature and conceptual framework, the terms in this study are defined as follows:

Stressor is "any problem, condition, etc., capable of causing instability of the system by penetration of the normal line of defense; intra-, inter, extrapersonal in nature" (Neuman, 1982). In this study the stressor is the client's hospitalization and being released from the hospital to return home (Neuman, 1982; and Buchanan, 1987).

Secondary prevention relates to symptomatology, appropriate ranking of intervention priorities, and treatment. Secondary prevention provides for stabilizing and minimizing destructive reactions to crisis situations. Interventions are initiated after an encounter with a stressor; and includes early case-finding and treatment of symptoms following a reaction to a stressor. Secondary interventions are initiated after a specific stressor has been encountered by the system. Since clients may experience fear and anxiety associated with plans to be discharged from the hospital, discharge teaching is the secondary intervention evaluated in this study (Neuman, 1982; and Mirenda, 1986).

Intrapersonal Resource is knowledge about specific items.

Interpersonal Resources are the people within the community.

Extrapersonal Resources are the equipment & supplies available to the patient.

Flexible line of defense is the set of immediate responses to a stressor that a person has developed. These responses are modified by current hormone levels and the amount of sleep a person has (i.e., equilibrium).

Normal line of defense is a "state of wellness; adaptational state over time which is considered 'normal' for the individual" (Neuman, 1982, p. 137).

Lines of resistance are internal sets of resistance factors, which attempt to stabilize and return the person to the normal line of defense should a stressor break through (Mirenda, 1986).

Physiological Reactions are physical symptoms that the patients experience in reaction to a stressor.

Psychological Reactions are the distress and/or anxiety that the patients experience in relation to a stressor they encounter.

Behavioral Reactions are actions that the patients takes in relation to a stressor they encounter.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe the methodology for the study. Included is a description of the design, setting, sample, instruments, and procedure.

Design

The design for this study was a descriptive survey. Recent research has identified the structures and processes of effective discharge planning; therefore, it is important to describe the variables associated with positive outcomes of discharge planning. This design allowed the investigator to examine the concerns/problems experienced at home within 3 days after discharge and what during the discharge process helped or might have assisted adjustment.

Descriptive studies are relatively simple to conduct and are the most basic studies that can be done. Descriptive studies literally look for ways to categorize, classify or conceptualize situations. A well-formulated research question is required along with a defined study population and some clearly delineated measures of the phenomenon of interest (Williamson, 1981).

The researcher used the method of interviewing for data collection in this study. This method was chosen because it is a convenient method for collecting large amounts of

information quickly. There is usually a higher return rate, with a low rate of refusal to be interviewed.

Interviews can also be used to question people who do not write as fluently as they speak (Murphy & Dineen, 1975; and Riley, 1989). Interviewers can use probes (additional prompting questions) if the subject provides little information or seems hesitant. Interviewers may get more relevant and more informal information using this method of data collection. Interviews are generally more personal, therefore, respondents may have lower confidence in the anonymity. The interview for this study began with an introduction in which the purpose of the study was explained and the fact that the data would be kept confidential.

A special version of the interview is the telephone interview. This was used to collect the data for this study. This involved asking questions over the telephone instead of face to face. The guidelines for handling telephone interviews are essentially the same as those for face-to-face interviews, although additional effort usually is required to build rapport over the telephone. In both cases, the interviewer should strive to make the interview a pleasant and satisfying experience in which respondents are made to feel as though the information they are providing is important (Polit & Hungler, 1987). Interviewers must be trained for telephone interviews and an interview schedule/format must be developed. The format is used so

the information received is related to actual patient concerns and not biased by leading questions.

Study setting and sample

The research study evaluating the patient's perception of his discharge teaching was conducted on a 35 bed medical-surgical unit in a 345 bed urban medical center. Prior to any data collection the researcher submitted proposals for the protection of the rights of human subjects to two institutional review committees at both Grand Valley State University and at the study institution. Once approval from both of these committees was acquired the researcher conducted a pilot study. Following this procedure the researcher obtained a convenience sample for the research study.

Selection of the sample for this study was on a nonrandom volunteer basis. All patients who were eligible for discharge from the medical-surgical unit during the time period of June 9, 1991, through July 14, 1991, and who met the criteria, were asked to participate in the research study. Patients who were discharged to a nursing home or an extended care facility were eliminated from the list of possible participants for the study. All patients who met the following criteria were asked to participate in the research study. Patients who: 1) were in the hospital for at least 24 hours; 2) were 18 years of age or older; 3) were alert and oriented at time of discharge (or a significant

other); 4) were able to read and speak the English language; 5) were able to respond to questions; 6) were able to recall recent events; and 7) were able to be reached by telephone post-discharge.

Instrument

Instrument Description

The instrument used in this study was designed by the investigator because no existing tool could be found to measure the desired information. A previous research study in which the researcher participated (Underwood et al., 1987) assisted with the development of the tool. The tool was intended to evaluate whether patients have concerns/problems regarding care during early convalescence after being discharged from an acute care setting. The tool was used to collect information about the services provided to the patient pre-discharge and patient satisfaction with the process of discharge teaching.

The discharge preparation questionnaire (Appendix A) consists of a total of 92 questions. The tool was used as a telephone interview guide for the discharged subject. The interview took approximately 15 minutes to complete. The questions began broadly and narrowed down in the final questions, aiming to elicit information which had not been included in earlier questions. The first seven questions dealt with patient demographic information. Questions 8-82 were part of another researcher's study (Lawton, 1992)

investigating patients' perceptions of their discharge preparation. This information was gathered from the same sample group, but was not analyzed by this researcher. This researcher analyzed data from questions 83-92. Questions 83-85 included both closed-ended and open-ended questions. The questions pertained to general concerns/problems related to diet, medications, activity, equipment/supplies, treatments/procedures, community resources/referrals, or to other things not mentioned. They referred to a 3-day worksheet (Appendix B) that was sent home with the patient. This form was developed to help the patient keep a record of concerns/problems encountered during their early convalescence at home. The checklist had headings for first day, second day, and third day after discharge. After each heading were listed the top 6 problem areas noted from the literature review, followed by a space for the subject to note other details not covered previously. This made it convenient for the patient to keep a record of any concerns/problems. The patient was requested to have the 3-day worksheet with them during the telephone interview to help them focus on information required in the interview.

The first question (#83) was a closed-ended question and asked the patient if he checked anything on the 72 hour checklist for the first day. If the patient answered "no", the researcher went to the next question, if he answered "yes", the patient was asked to specify and comment. When

the patient was asked to specify and comment, this was a type of open-ended question. Probes of diet, medications, activity, equipment/supplies, treatments/procedures, community resources/referrals, or other were used as needed from the checklist to elicit information. The second (#84) and third (#85) question of the tool used the same format as question number one. Question 86, also a closed-ended question, was developed to address any other concerns/problems not covered by the checklist or the researcher. This question used the same format as the first three questions, if the answer was "no", the next question was asked, if the answer was "yes", the subject was asked to specify and comment.

The remainder of the questions for the tool were closed-ended questions that required a yes/no response. Whenever the answer was "yes", the subject was requested to comment. Question 87 asked the patient if he could identify what was most helpful about his discharge preparation. Question 89 asked the patient if he would change anything regarding his discharge preparation. Question 91 asked if there was anything the patient thought the nurse could have done to make their discharge easier. Question 92 was developed in the attempt to note if there were any discrepancies between the answers related to the worksheet and the last three questions. The researcher used question 93 to clarify or elicit more information.

Demographic information including gender, age, length of stay in the hospital, day of the week discharge, and diagnosis/operation was collected from the patient and from the hospital chart. Specific information regarding the patient's education level was collected from the patient after consent was obtained to participate in the study and prior to discharge. Chart audit for the remainder of the demographics needed for the tool (Appendix A) occurred after speaking with the patient and also on the day of discharge. The researcher also recorded the patient's name, his/her significant other, phone number where he/she could be reached, time the phone call was to be made, second option for the time of phone call, admission date, and discharge date. This information would be later destroyed and would not be used when giving the study results.

Validity

The validity of an instrument refers to the degree to which the instrument measures what it is intended to measure. Only content validity was established for this tool. Content validity is the ability of the instrument to adequately represent the domain of content being considered. Careful review of the literature will assist in identifying the most important and obvious meanings or facets of the concept necessary for the development of the instrument (Williamson, 1981). For this study the concept of discharge teaching was identified not as a single concept but rather

as a multidimensional concept including such aspects as diet, medicine, activity, equipment/supplies, treatments/procedures, community resources/referrals, etc. Theoretical concepts such as insufficient resources and reactions to stressors were also used in analyzing the data. Thus, a series of items can be constructed to measure each of the substrata within the domain of discharge teaching. The measuring instrument can show content validity to the degree that items sampled from the domain of content are representative of all strata and that items tap the subtleties of meaning within each of the strata (Williamson, 1981). Content validity was established for this tool by submitting the questionnaire to three experts in nursing and research. Suggestions were made to improve the tool and were incorporated before the study began. The three experts agreed that the tool would assist the researcher to gather the appropriate information.

Reliability

Reliability refers to the concept of consistency or repeatability. The reliability of an instrument, refers to the degree to which the instrument can be depended upon to yield consistent results upon repeated applications (Williamson, 1981). For this study reliability was measured using interrater reliability (equivalence).

In the interview form of instrumentation, there is a human factor in eliciting and recording the information.

This can be a problem if multiple interviewers are involved, because differences in their behavior can confound the data (Williamson, 1981). The individual interviewers should try to be as consistent as possible over the course of the study. Another potential problem with interviews is the process of recording responses. The interviewers recorded the responses directly on the discharge questionnaire tool.

The researcher conducted a pre-test (pilot study) of the instrument with the other investigator who was collecting the data and established interrater reliability. Each researcher called three different pilot patients and recorded their comments and compared them with the other researcher who was listening to the same conversation and recording the patient's answers. During this practice session the instrument was assessed for any problems. No problems were encountered with the instrument. The researchers followed a telephone script (Appendix C) to avoid any variations in the way the instrument was administered. The researcher had three experts in nursing and research compare the investigators answers. The examiners agreed that the answers were consistent. This established interrater reliability.

Procedure

Initial approach

All patients located on the medical-surgical unit who met the study criteria mentioned previously were approached

by the researcher prior to discharge. Individuals were asked to participate in a study that would examine how well they thought they were prepared for taking care of themselves at home after discharge from the hospital. The researcher explained the purpose and method of the study. A structured script (Appendix D) was used in obtaining consent for participation in the study. This did help to control precisely the content of speech and behavior of the two researchers. The patients were assured that confidentiality would be maintained and that they may withdraw from the study at any time. After the study was explained, patients who agreed to participate in the study were given two consent forms to sign (Appendix E). One copy of the consent form was given to the patient to take home, the other copy remained with the researcher. A copy of the 3-day worksheet (Appendix B) and instructions on its use were given to the patient at this time.

Gathering data

The researcher collected information about the patient's educational level after the informed consent was obtained. Patients who declined to be in the study were thanked for their time and the researcher departed.

The data were obtained from two sources: the medical record and a structured patient telephone interview conducted three days after discharge. Following the patient's agreement to participate in the study the

researcher collected demographic information from the hospital chart. Data on length of hospitalization was collected through chart audit at time of patient's discharge.

Phone call

Each patient was contacted by telephone three days after discharge. Patients were dropped from the study after four unsuccessful attempts were made to contact them, or if they verbalized their refusal to participate in the study. The telephone interview was implemented by one of two graduate students from Grand Valley State University who were conducting the study. The researcher followed the structured telephone interview script (Appendix C). The researcher began the interview by introducing herself. A short introductory statement was used to begin the interview. This was used to put the patient at ease and helped the patient understand what the researcher was concerned about and why. To refresh the patient's memory the researcher reviewed the sample material given during the hospital interview. The researcher then began to ask questions from the discharge questionnaire. The interview was designed to explore the patient's initial transition from the hospital to community.

CHAPTER IV

PRESENTATION OF FINDINGS

This chapter consists of two sections: sample description and data related to each of the research questions.

Description of the Sample

One hundred and fifty-eight patients who met the study criteria were discharged from the medical-surgical unit during the period of June 9, 1991, through July 14, 1991. Four of the patients discharged did not wish to take part in the study, three were missed and five could not be reached by phone after their discharge. Telephone interviews were obtained with the remaining 146 patients during the five week period. This gave a response rate of 92% of the original 158 subjects who were asked to participate.

Data were obtained from two sources: the medical record and a structured patient telephone interview three days after discharge. The medical record and patient provided demographic information. Demographic data included the following: sex, age, educational level, length of stay, day of discharge, diagnosis, and if the patient had been previously hospitalized. Table 1 and Figure 3 present the demographic data for the patient sample. The sample ranged

Table 1

Patient Demographic Data

N = 146

n

%

Sex of Patient

Male	74	50.7 %
Female	72	49.3 %

Age of Patient

Under 20	3	2.1 %
20-29	8	5.6 %
30-39	17	11.8 %
40-49	24	16.6 %
50-59	16	11.1 %
60-69	38	26.1 %
70-79	31	21.2 %
80-89	8	5.5 %
90-99	1	.7 %

Educational Level

Less than 9th grade	16	11 %
9-12 grade	26	17.8 %
High school graduate	83	56.8 %
Associate degree	7	4.8 %
Bachelor's degree	8	5.5 %
Graduate school	6	4.1 %

Number
of
Patients

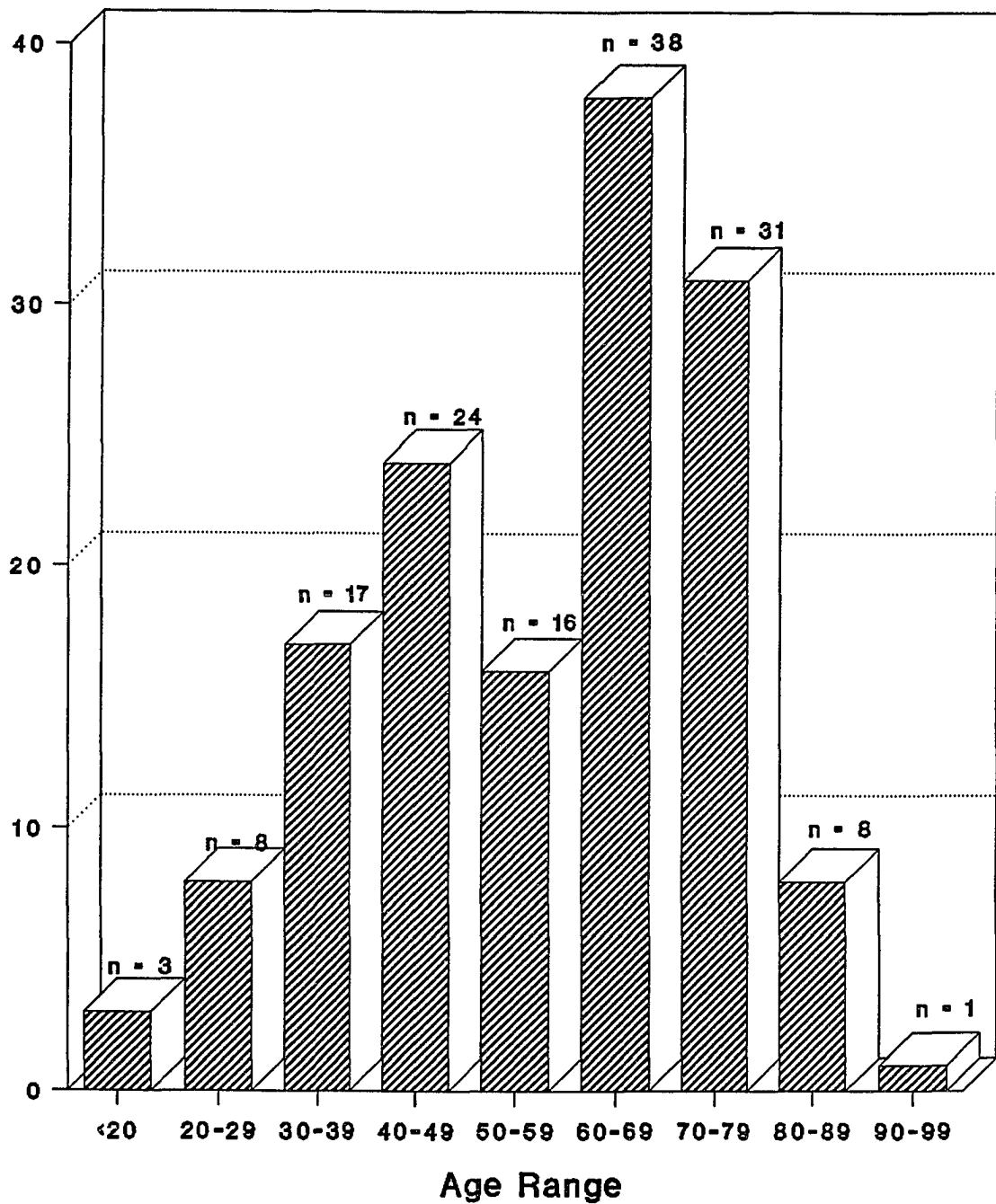


Figure 3. Age range of sample.

in age from 18 to 95 years ($M = 56.9$, $SD = 17.3$). The typical subject had a high school education (56.8%), stayed in the hospital from 1-7 days (79.4%) and had previously been hospitalized (93.2%). A list of 95 different diagnoses and operations was recorded as part of the patients' demographic data (Appendix F).

A little over half of the sample ($n=82$, 56.2%) gave narrative responses related to their discharge preparation. Table 2 displays demographic data for those patients who gave narrative responses (Group 1) and those patients who did not (Group 2). The two groups were similar. Group 1 when compared to the entire sample population was also similar.

Concerns/Problems

In investigating the concerns expressed by the patients related to their discharge process, Neuman's conceptualization of secondary prevention was used as the theoretical framework. Discharge teaching was considered to be a secondary prevention which was aimed at: increasing resources to stabilize the person and strengthening the internal line of resistance to decrease the reaction to a stressor (Neuman, 1982). The data were analyzed looking at concerns expressed as either insufficient resources or a reaction to stressors. The concerns expressed were not mutually exclusive to one specific grouping or heading.

Table 2

Comparison of Demographic Information of Patients who gave Narrative Responses (Group 1) and Patients who did not (Group 2)

N = 146	Group 1		Group 2	
	n = 82	%	n = 64	%
<hr/>				
Sex of Patient				
Male	40	48.8 %	34	53.1 %
Female	42	51.2 %	30	46.9 %
Age of Patient				
Under 20	3	3.7 %	0	---
20-29	4	4.9 %	4	6.3 %
30-39	12	14.6 %	5	7.8 %
40-49	15	18.3 %	9	14.1 %
50-59	7	8.5 %	9	14.1 %
60-69	22	26.8 %	16	25.0 %
70-79	14	17.1 %	17	26.6 %
80-89	4	4.9 %	4	6.3 %
90-99	1	1.2 %	0	---
Education Level				
Less than 9th grade	7	8.5 %	9	14.1 %
9-12 grade	14	17.1 %	12	18.8 %
High school	49	59.8 %	34	53.1 %
Associate degree	2	2.4 %	4	6.3 %
Bachelor's degree	7	8.5 %	2	3.1 %
Graduate school	3	3.7 %	3	4.7 %
Length of Stay				
1-7 days	66	80.1 %	50	78.1 %
8-14 days	11	13.4 %	10	15.6 %
15-21 days	2	2.4 %	2	3.1 %
22-28 days	3	3.7 %	0	---
29-35 days	0	---	2	3.1 %
Previous Hospitalization				
Yes	80	95.2 %	58	90.6 %
No	4	4.9 %	6	9.4 %

Insufficient resources was divided into three subparts: intrapersonal, interpersonal, and extrapersonal. Intrapersonal relates to lack of information. Interpersonal relates to insufficient people or resources within the community. Extrapersonal relates to lack of equipment and/or supplies. Reaction to stressors was divided into three subparts: physiological, psychological, and behavioral. Physiological are the physical symptoms felt by the patient related to the stressor they are experiencing. Psychological refers to the distress or anxiety felt by the patient regarding the stressor. Behavioral relates to the action the patient does regarding the stressor.

Research question #1 asked, What concerns/problems did patients experience at home within 3 days after discharge from an acute care setting? The researcher in a general way was examining the discharge teaching process that was being used. The patients were given a 3 Day Worksheet (Appendix B) to assist them in recording any concerns experienced the first three days after discharge. The Worksheet consisted of seven categories: diet, medication, activity, equipment/supplies, treatments/procedures, community resources/referrals, and other. These seven categories contained the top areas of concerns expressed by patients according to the literature. The researcher used these categories to examine the concerns expressed by patients to determine whether they were related to

insufficient resources or a reaction to a stressor (Table 3).

Resources

Secondary prevention can be conceptualized as a mode for facilitating an integrative process (discharge teaching) that is necessary to attain/maintain stability of the patient system. In order to assess the patient's total situation or condition at any point, it is necessary to know the relationship among internal factors, factors between the patient and his environment, as well as peripheral factors which are affecting the patient or could affect him. The researcher when reviewing the concerns patients had after discharge from the hospital that pertained to resources, specifically looked at intrapersonal, interpersonal and extrapersonal. Concerns that reflected the patient's lack of knowledge were classified as intrapersonal resources. Concerns that reflected lack of support from the community were classified as interpersonal. Concerns that reflected lack of supplies or equipment were classified as extrapersonal.

Intrapersonal. When reviewing the comments made by patients about concerns they had after discharge from the hospital, seventeen related to intrapersonal resources. Many patients expressed their desire for more information regarding their specific situation. The comments given referred to the following categories: medications, diet,

Table 3

Concerns Identified by Patients

	Intrapersonal n = 17	Resources Interpersonal n = 2	Extrapolational n = 3	Physiological n = 13	Reactions to Stressors Psychological n = 7	Behavioral n = 9	Total
Diet	4	-	-	1	1	-	5
Medications	4	-	-	3	1	2	10
Activity	4	-	-	4	-	-	7
Equipment/ Supplies	-	-	3	-	-	-	3
Treatments/ Procedures	1	-	-	1	-	-	2
Community Resources/ Referrals	-	2	-	-	1	-	3
Other	4	-	-	6	4	7	21

**** Respondents may have indicated more than one concern.**

activity, other, and treatments/procedures. Four patients expressed their need for further information related to their medications. Patients had difficulties with how and when to take their new medications. For example one patient commented, "Do I resume my old medications, or just take the new medications? Do these new medications replace the old medications." Another patient commented about this same type of concern. The patient stated, "I wondered if I still needed to take the other medications as before?" One patient was uncertain about several medications. The patient stated, "The medication was not made clear to me. I have medications from 3 different doctors, do the new ones replace them? There are many confusing schedules." One patient expressed concern regarding a medication they received while in the hospital. The patient stated, "I had diarrhea while I was in the hospital and they gave me Immodium. Now I haven't had any stools for a few days. No one mentioned this information to me."

Four patients mentioned difficulties they had related to lack of information about diet. The patients expressed their confusion about what type of diet they should be following. For instance one patient commented, "The nurse said they would send me some information on my diet and they haven't." Another patient made the comment, "I had been on low cholesterol pre-admission, no one told me what diet to follow at home." One patient did receive some information

but needed additional information. This patient stated, "They sent a small sample menu home with me. I am not sure what else I can fix." One patient commented regarding his appetite. The patient stated, "I forgot that your appetite decreased after surgery, no one mentioned this to me. I had open heart surgery before, so now I remember."

Four patients made comments related to their desire for more information regarding activity. Most of these patients were concerned with specifically how much activity they could or should do. For example one patient stated, "I'm not sure how strictly I have to follow the regime." Another patient commented, "I want to increase my activity and I'm not sure what to do." One patient expressed his desire to know exactly how much activity he should do. The patient stated, "I would appreciate some guidance as to how much activity is too much. Some idea would help." One patient commented on how unprepared he felt for the weakness he was experiencing. The patient stated, "No one alerted me to the general weakness I would feel. The smallest tasks tire me out."

Under the category other four patients commented on areas in which they wanted more information. For instance a patient indicated the need for information in relation to a drain. The patient stated, "No one told me it might get blocked up, it started draining at the insertion site. Should I be stripping it?" One patient stated, "I started

my menstrual period 10 days early, no one mentioned to me that this might occur." A patient who had a mastectomy commented, "I would have appreciated information in advance about wardrobe. This would have been helpful." Another patient commented on some physiological experiences that were occurring but related it to lack of information she received. The patient commented, "I was very weak and my foot was swollen. My leg was also stiff, I probably needed some range of motion exercises or something. They did some preparation for this but not to the degree in which it happened."

One patient expressed his desire for more information regarding treatments/procedures. This patient commented about his concern whether he was to be doing a dressing change at home. The patient stated, "I can not remember if I was supposed to change the dressing over the old drain site, no one told me."

Interpersonal. Interpersonal resources were indicated by two patient's comments regarding concerns they experienced at home. Community Resources/Referrals was mentioned by these two patients as an area they experienced concerns with during their first three days after discharge. The patients commented on community services that were not arranged for them at an appropriate time and frustration they felt. For instance one patient who had a mastectomy commented, "The mastectomy nurse never saw me while I was in

the hospital. I didn't know what exercises I should be doing." Another patient was concerned because she was given no information about possible community resources that were available to her. The patient stated, "I would have liked to know what's available to us when problems arise."

Extrapersonal. Extrapersonal resources were indicated by three patient's comments regarding concerns they experienced at home. **Equipment/Supplies** was cited by these three patients as an area of concern. The patients commented on supplies or equipment that were sent home with them. For example one patient that was sent home with a dressing change stated, "I got through only one dressing change with the supplies I was sent home with." Another patient that was sent home with a drain, discussed the collection device she was sent home with. The patient stated, "The device to measure the drainage is too large. It starts at 30cc, there should be smaller containers available." A family member mentioned how when she got her mother home she had to arrange for a walker for her. The subject stated, "I ended up getting her a walker because she was unable to get around. I do not feel we should have had to anticipate this."

Reaction to Stressors

Physiological. Concerns expressed related to physiological reactions were usually expressed as physical symptoms they experienced in reaction to the stressor.

Thirteen patients commented on physiological reactions they experienced regarding concerns they experienced at home. The comments given pertained to the following categories: medications, activity, treatments/procedures, and other.

Three patients expressed physiological symptoms they experienced related to medications they were taking. For example one patient commented, "I can't take the pain medication that I was given because it causes me to have wild dreams." Another patient commented they experienced side effects of Calan. This patient did not specify what side effects they experienced. A family member commented regarding breathing difficulties her mother had because of medication problems. The subject stated, "My mother had to be off her breathing medication while she was in the hospital, so her blood levels were low when we got her home. She became very short of breath after being home and we had to call the doctor to get medication for her." This statement could be categorized both here in physiological and in behavioral for their response of contacting the doctor.

Under the category "other" six patients commented on different types of physiological experiences that occurred to them. One patient who was a diabetic commented on the difficulties she had regulating her sugar levels. The patient stated, "My sugars are running at a high of 315 and a low of 130." In this category of other was classified

some general comments given regarding comfort levels. For example five patients made comments about pain and comfort levels. One patient stated, "I am having cramping in my left leg and I was in the hospital for my right leg." One patient discussed the advertisement she had seen for her surgery that stated little or no pain. The patient stated, "I thought the TV advertisement said the laser surgery would be alot less pain. I have a lot of pain." Another patient commented regarding discomfort he had with his incision. The patient stated, "I had five wires in my incision when I went home. They pulled alot after a few days home and this created pain I was not having before." One patient specifically discussed pain she was having in her head. She stated, "I have had severe pain in my head since surgery. I was somewhat alarmed about this at first. It is getting better." Another patient discussed her comfort level in relation to her home situation. The patient stated, "I am not very comfortable in my own bed. The bed is very tall and it is hard to get into it. I have to lay flat, I am not able to adjust the head of the bed like when I was in the hospital. It is uncomfortable. Also my dog jumped up on my lap and it caused pressure on my incision."

Three patients commented on physiological symptoms they were experiencing during activity. Patients commented on the weakness they were experiencing with activity. For example one patient stated, "No one alerted me to the

general weakness I would feel. The smallest tasks tire me out." Another patient mentioned, "I notice I have alot of weakness and sweat easily with activity." One patient commented on normal activities that he was surprised he would have difficulty with. The patient stated, "I was surprised I had difficulty sleeping the first couple of nights. It was also difficult to move and breath. I think it was related to gas."

One patient commented on physiological symptoms she was experiencing related to a procedure that was done while in the hospital. The patient stated, "I was catheterized while I was in the hospital and since I have been home I have to strain sometimes. It seems better today."

Behavioral. Behavioral reactions to stressors were indicated by nine patient's comments made regarding concerns they experienced at home. Seven patients under the category **other** discussed problems that occurred for which they called their doctor. Many of these comments relate to a physiological symptom that the patient experienced and a lack of information. The patients responded to the stressor by contacting their doctor. For example one patient stated, "I called my doctor last night because my leg swelled alot and I had more pain. The doctor told me to stay off the leg and elevate it. It is better today. I wish they would have told me about this." Another subject commented, "My son had breathing difficulties, related to swelling in his face and

nose. I did not know what to do so I called the doctor's office." One patient discussed a problem they had in the hospital and when they were home they had the same problem again. The patient stated, "I had an IV site infiltrate while I was in the hospital and the nurses put topical antibiotics on it while I was in the hospital. After I was home it got worse. I called the doctor yesterday, and he is having me do soaks to the site now." A few patients discussed swelling that they were experiencing. For instance one patient stated, "I went to the doctor yesterday because my right leg was very swollen compared to my left leg and I had blood spots on my feet." Another patient stated, "I had swelling in my incision area and I called the doctor to discuss the swelling." One patient contacted his doctor in response to information he received in his discharge instructions. The patient stated, "I called the doctor yesterday because my left foot was cold and the discharge sheet said to call if that happened. It is ok today." Another patient commented about problems she experienced with her intestinal tract. The patient stated, "I had bowel obstruction or blockage and I went to the doctor."

Under the category of medication two patients commented they called the doctor's office regarding a problem with their medication. For instance one patient stated, "I had a problem with bowel blockage. I called the doctor's office,

I didn't know what I could take." A family member mentioned her mother being short of breath. While she was in the hospital she was off her breathing medication and now her blood levels were low. The member stated, "My mother became very short of breath at home and we had to call the doctor to get medication for her. She is better now."

Psychological. Psychological reactions to stressors were indicated by seven patients' comments. One patient commented on concerns he had related to new medication. The patient stated, "I was concerned how I would react to the new medication. No problems experienced."

One patient expressed distress related to his diet. The patient stated, "I forgot that your appetite decreased after surgery, no one mentioned this."

One patient commented on concerns she experienced with community resources/referrals. The patient stated, "I thought the nurse was coming to my house and no one has showed up to see me."

Four patients commented on concerns they experienced under the category other. This category contained a variety of comments. One patient stated, "I live alone and my sister was gone until Monday (4 days). I almost passed out at the drug store, I was dizzy. I felt it was from too much activity in one day." One patient was concerned about family problems. The patient stated, "My son and his family moved in with me. My son is looking for a job. Now I have

seven people living here and it messes up my routine." One patient was concerned about another surgery he would soon be scheduled to have done. The patient stated, "I am concerned about another surgery I need to have scheduled. I need to have my other carotid surgery done." One patient commented on the drainage she was experiencing from her incision. The patient stated, "I had alot more drainage from my incision then I expected."

Patient's Evaluation of Teaching Interventions

Research question #2 asked, What does the patient believe could have been done during discharge teaching to alleviate these concerns/problems? The researcher asked the questions what was most helpful and least helpful regarding their discharge preparation. The question about what was most helpful validates the effectiveness of the interventions used during the discharge process. The question regarding what was least helpful indicates the stressors which might have been prevented or anticipated and would decrease the patient's reaction.

Most Helpful

The subjects were asked if there was one thing they thought was most helpful regarding the discharge preparation they received. Forty-six patients commented on this question. Table 4 lists the items these patients stated were most helpful to them. In secondary prevention (discharge preparation) interventions are used to reduce the

Table 4

Items Listed Most Helpful in Discharge Preparation

N = 46

	n	%
Nurse & Instructions	21	46 %
Discharge Instructions	6	13 %
Medication Instructions	4	9 %
Discharge Instructions and Medication Instructions	3	7 %
Doctor	3	7 %
Home services / VNA	2	4 %
Follow-up call	1	2 %
Comments	6	13 %

degree of reaction to stressors. The interventions used may be classified as those actions which assist the patient to increase resources to stabilize themselves or actions that strengthen the internal line of defense against stressors.

Most patient's comments dealt with the mobilizing of resources, specifically information (intrapersonal) they received related to their discharge, medications, or from their doctor. Two patients commented on community resources that they felt were most helpful.

Intrapersonal. The greatest number of patients (n = 21) listed nurse and instructions as the one thing most helpful to them regarding discharge preparation. Comments were made regarding the support and information provided to the patient to assist him in adapting to his individual situation. The following are just a few of the comments made by patients: "The nurse discharging my father was very helpful." "The nurse was helpful she called my family in Elkhart so they could come and pick me up. Discharge instruction sheet very helpful." "The nurse was very helpful with instructions, they were very complete." "The way the nurses treated me and taught me not to be anxious and good instructions upon discharge." "One nurse did a wonderful discharge instruction sheet and the medication print-out was great. I had one side effect, but had learned about it on the sheet so it was no concern."

Eight of the 21 patients listed just the nurse as the most helpful. Two patients were specific and listed the mastectomy and colostomy nurse as most helpful. The following are a few of the comments that were made: "The nurse showed my wife how to do the dressing change, this was very helpful." "The nurse was very kind and she asked if I had any questions." "The nurse was very thorough." "The nurse discharging my father was very helpful." "The staff did a marvelous job, just working with me."

Six patients listed the discharge instructions they received as most helpful. Comments were made on how complete and thorough the instructions were. Patients stated how helpful it was to have their discharge instructions written out for them to take home. Patients commented on the information they received in their discharge instructions about their activity, limitations, diet information and specifics about their individual care. The following are comments made by the patients: "Discharge instructions were wonderful. Complete review of all medications, explained everything on discharge sheet thoroughly." "The information about watching my incision for any infection and taking my temperature." "How to take care of my incision and keeping it clean. How to watch for infection." "How they explained my limitations and what I could do. The diet information was very helpful." Many patients liked the information given to them regarding

incision care, watching for infection, their limitations, and what activities they could do.

Information about medication was expressed by four patients as the item most helpful in their discharge preparation. Patients commented how helpful the computer print out sheet on their medication was for them. The following are comments made by patients: "The computer read-out on medication was very helpful." "The print out sheet of the medication I was sent home on, was very helpful." "The computer sheet on medication was very helpful to understand what I was taking." "The computer print-out of medications was wonderful."

Information about discharge instructions and medication instructions was listed by three patients as the most helpful. The following are comments made by these patients, "The discharge instructions were wonderful. Complete review of all medications, explained everything on discharge sheet thoroughly." "The computer print-out of medications was wonderful. Yellow discharge sheet also." "The discharge instruction sheet and medication print-out were both helpful."

Three patients expressed their delight regarding their doctor giving them their discharge instructions before they went home. The patients specifically listed their doctor and the instructions he gave at the time of their discharge as very helpful to them. Patients commented how they felt

it was helpful for them to hear their doctor explain what they could and could not do at home and why. Some of the comments made by patients are as follows: "My doctor was very good in explaining what to look for and what to do if it happened. I was very comfortable." "My doctor's input about disease, etc., and what to do at home to deal with it." "My doctor was good."

Interpersonal. Some patients listed a specific type of special service that was arranged for them while being in the hospital as the item most helpful. Visiting Nurses Association and home services were two that were mentioned. One patient stated that knowing he was going to receive a follow-up phone call was most helpful to them.

Six patients made general comments that did not specifically fit into one category. The following are those comments: "I was well informed." "It was very complete." "Everything was good." "It was very nice and thorough." "I liked the quickness in getting out." "They called my wife so I could go home."

Least Helpful

The patients were asked if there was anything they would like to change regarding their discharge preparation. This information was interpreted as what they felt was least helpful to them. Thirty-one patients made comments regarding this topic (Table 5). The items listed by these

Table 5

Items Requested to be Changed Regarding Discharge Preparation

N = 31

	n	%
Doctor	8	26 %
Actual discharge process	8	26 %
Escort	6	19 %
Discharge instructions	5	16 %
Medication instructions	3	10 %
Diet information	2	7 %
Social services	1	3 %

patients are stressors which might have been prevented if anticipated.

Interpersonal. Eight patients identified different areas pertaining to their doctor and his behavior they would like changed. Some patients expressed their desire to have their doctor notify them more in advance when they would be going home so they could make arrangements with their families. The following are comments made by these patients: "The doctor told me the day before that I was going home, but on the day of discharge I waited all day for him to write the order." "The doctor told me I could go home the next day between 10 and 11 and he never showed up until 1:45 pm." "I had to wait for my doctor for the discharge order." One family member stated "I would have liked 10 minutes to talk with the doctor just to have some questions answered." "I would like to know more ahead by the doctor when you're going home so ride and arrangements can be made in advance." "I would have liked a little more notice about going home."

Extrapersonal. The actual discharge process was selected by patients as something they would like changed. Patients made comments regarding their desire to leave the hospital faster after receiving their discharge order from their doctor. Patients stated the following: "I would like to speed up the process alittle. We waited 2 hours after the doctor signed the papers to leave the hospital." "I

waited 45 minutes for personal items to be removed from the safe." "I would like to leave a little quicker." "I was confused about whether I could release myself. I did not know you needed an escort. My ride was waiting at the door, and the nurse would not let me go down alone and she could not take me."

Patients also expressed their unhappiness related to the long time they had to wait for an escort to leave the hospital. The following comments were made by patients: "We waited 40 minutes for a wheelchair. Then I went to the nurse's desk and no one seemed to want to help me. Someone said they would check. We waited another 10 minutes then we left without the wheelchair." "I had alot of flowers and we had to carry them down, a cart would have been nice." "It seemed like I waited a long time for the wheelchair once I was released to go home." "Transport slow." "On the weekend we waited quite a long time to get an escort to discharge me. I realize they are always short on the weekend, so it's no problem."

Another important aspect that patients would like changed regarding their discharge preparation was related to the discharge information they received. Some patients felt that their discharge instructions were lacking in information. The patients felt that they needed more information regarding activity, equipment/supplies they were sent home with, and their recovery period. The following

are comments made by patients: "I would like better, more complete instructions." "I would have liked complete information on drain (bulb) kinking, stripping, where drain is located, and should you sleep on operated side."

"Explain more thoroughly what you may experience at home. Example don't lift 10 pounds they say, but you get the same strain getting out of bed and twisting is equal to lifting. So I wondered if I was over-doing it sometimes but wasn't sure."

Patients stated that some of the information they received about their medication was too complex. Although some patients mentioned how helpful they felt the print-out sheets on the medications were, other patients felt this was too much information for them. They wanted simpler information. The following were comments made by some patients: "Medication instructions were too much information for a novice. Would like to know what the medication is for and when to take it." "The medication instructions are a major concern." "Medications, old and new ones, which ones I should take, not clarified."

Diet information that some patients received was identified as not clear. Patients commented that they were not sure what diet they were suppose to be following at home. The following are comments made by these patients: "The diet instructions were a concern, not sure if I am to

be on the same diet." "I am allergic to milk, but that doesn't mean I don't eat any foods that have milk in them."

Social services/referrals was an area requested to be changed by one patient. This patient felt that more time should have been spent assessing her situation. The patient stated, "That visiting nurses for a young single mother with four children would have been helpful. Or they should have seen if I needed, meals on wheels. Social services visited me, but they were not thorough. With a situation like mine she should have dug deeper."

Nurse

The researcher asked if there was anything else the nurse could have done which would have made the patient's discharge easier. This final question asked the respondents for any recommendations they could make regarding the care the nurse gave them. This question brought responses from only six patients. Responses varied and some were related to areas over which the nurse has no control. The following are the comments made by the patients: "If possible when doctor would be here to discharge me." "Review procedures for the last few days with family members would have been helpful." "Had to wait after ride to be discharged because nurse was too busy to get things in order." "Nurses have too much paper work. The empathy is not there. They can't do for people what they should. Too busy." "Need clarity of the written word. Doctor mentions low cholesterol diet

nothing written down. Walk 3-5 miles, wondered a day, a hour or a week. Carbon copy not very clear to read." One patient made the following comment about the nurse taking care of her and her last day at the hospital, "Day of discharge doctor said home when off shots. Nurse on days was 'witch' would not give me shots, made me take pills. Pills did not work so she called doctor and got a different pill, that worked and I went home."

Relationship of Age to Concerns/Problems.

Research question #3 asked, What is the effect of age on the types of concerns/problems patients experience at home following discharge from an acute care setting? The researcher divided the subjects who expressed concerns into two age groups: Group 1 (18-59) and Group 2 (60 and older).

A total of 36 patients answered questions regarding concerns experienced during the first three days after discharge. Figure 4 shows a bar graph for these patients. In Group 1 (18-59) there are 14 patients (39%). In Group 2 (60 and older) there are 22 patients (61%). In the total sample 46% (n=67) of the patients were 18-59; 54% (n=79) were aged 60 and older. This sub sample is similar to the total sample.

Group 2 being a larger percentage (61% vs. 39%) suggests older patients do have a greater number of concerns after discharge at least in this sample. Table 6 displays the number of subjects who expressed concerns with the

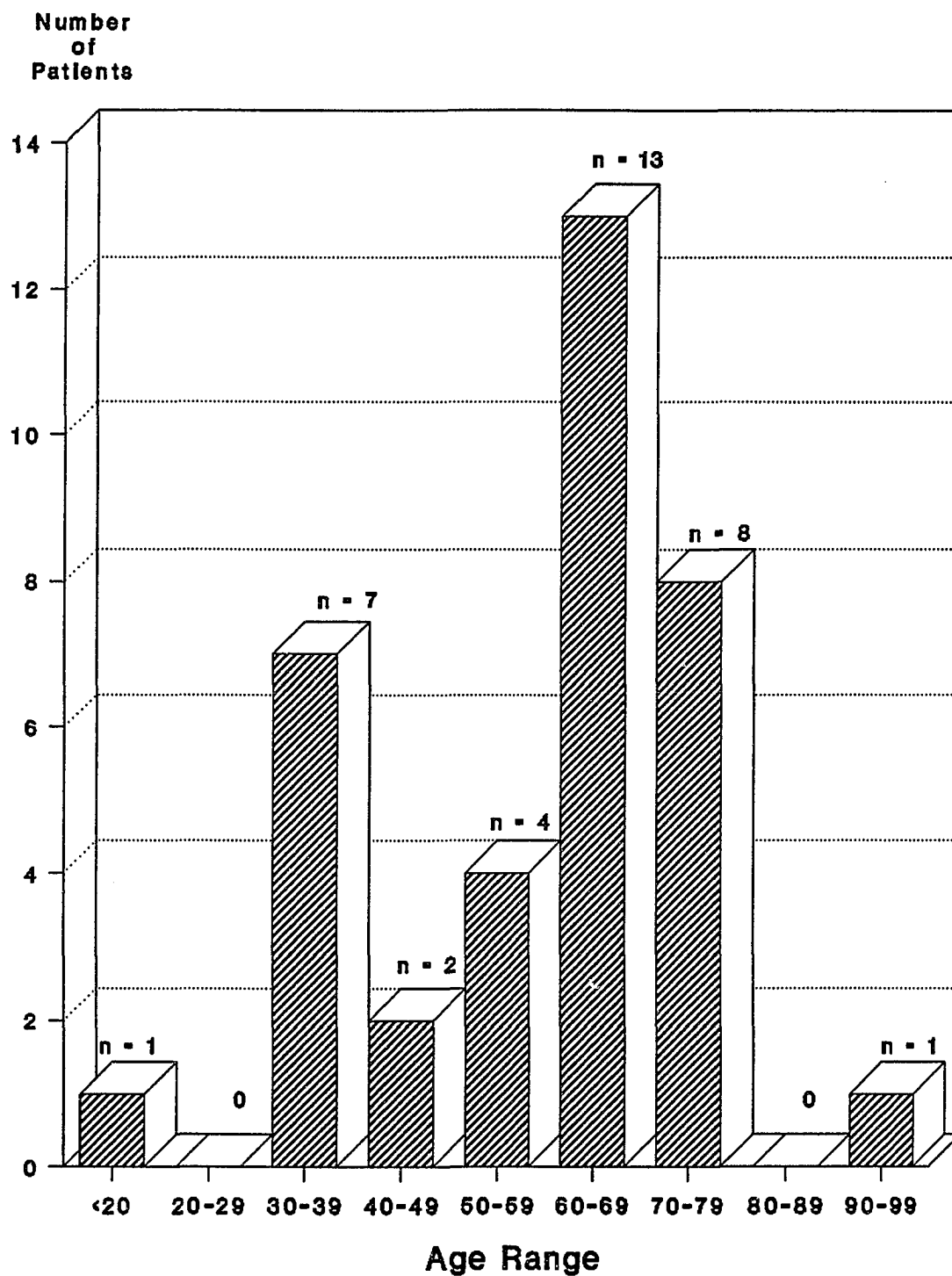


Figure 4. Age range of patients who expressed concerns

categories listed. In looking at Table 6, the data collected does indicate that Group 2 (60 and older) had more concerns with medication, activity, and diet than Group 1 (18-59). Under the category of other, Group 1 (18-59) had 12 subjects that expressed a concern compared to Group 2 (60 and older) that had eight subjects. This category encompasses many items so no generalization can be made. Table 7 classifies the concerns expressed as either related to insufficient resources or a reaction to a stressor. The classifications are also divided by age into Group 1 (18-59) and Group 2 (60 and older). In looking at Table 7 the only notable information that is indicated is that Group 2 (60 and older) had more physiological reactions to stressors. Both groups had difficulties with lack of information (intrapersonal). The information displayed in these tables does not give a strong argument that patients who are 60 years and older have consistently more concerns after discharge than their younger counterparts.

Table 6

Concerns/Problems Identified by Age Groups

	Group 1 (18-59) n = 21	Group 2 (60 and older) n = 28
Diet	1	4
Medications	2	7
Activity	2	5
Equipments/Supplies	1	2
Treatments/Procedures	1	1
Community Resources/ Referrals	2	1
Other	12	8

**Respondents may have indicated more than one concern/problem.

Table 7

**Concerns Identified by Patients Comparing
Group 1 (18–59) and Group 2 (60 and up)**

	Group 1 (18–59 years)	Group 2 (60 years and up)	Total
Resources			
Intrapersonal	9	8	17
Interpersonal	2	–	2
Extrapersonal	2	1	3
Reaction to Stressors			
Physiological	4	9	13
Psychological	5	2	7
Behavioral	5	4	9

CHAPTER V

DISCUSSION

This chapter contains interpretations of the findings in Chapter 4. Discussions of recommendations for further research, implications for nursing, comparisons to previous research and conclusions will be expressed. The chapter concludes with a summary.

The purpose of this study was to examine concerns that patients experienced at home 3 days after discharge. In studying the concerns that patients experienced, the researcher looked at three specific questions. Research Question #1 was "What concerns/problems did patients experience at home within three days after discharge from an acute care setting?" Research Question #2 was "What does the patient believe could have been done during discharge teaching to alleviate these concerns/problems?" Research Question #3 was "What is the effect of age on the types of concerns/problems patients experience at home following discharge from an acute care setting?" The researcher used Betty Neuman's Conceptual Framework and The Adult Learning Theory to assist in reviewing the data.

Research Findings

Concerns/Problems

In reviewing data the researcher found there was not one particular item nor a large percentage of patients that expressed a specific concern. The data revealed that 36 (24.7%) patients expressed some type of a concern or problem during the first three days after discharge. The top four categories listed were other (n = 21), medication (n = 10), activity (n = 7) and diet (n = 5). Under the category of other, the top two areas that were listed most often dealt with wound care (incisions or drain sites) and comfort level (headaches, pain, stiffness, or weakness).

Literature does support these findings of medication, activity, diet, wound care, and comfort level as areas of concern expressed by patients. The literature does not however, strongly support any of these areas as an area identified by a large number of patients.

The researcher anticipated that by identifying the concerns expressed by patients and categorizing them as to either insufficient resources or a reaction to a stressor could provide a focus for collaborative planning. Data revealed that the concerns expressed by patients (n = 17) were mostly related to insufficient resources, specifically intrapersonal, i.e., information. Patients stated concerns related to lack of information regarding diet, medication, activity, and other. The second area of concerns identified

by patients (n = 13) dealt with physiological (physical) symptoms experienced which related to reactions to stressors. Patients stated they experienced physical symptoms in the following classifications: medications, activity, treatments/procedures, and other. The third area of concerns identified by patients (n = 9) dealt with behavioral reactions to stressors. Patients expressed the actions that were taken when they experienced a stressor. All the behavioral reactions to stressors entailed contacting their doctor. The fourth area of concerns identified by patients (n = 7) related to psychological symptoms being experienced by the patients in reaction to stressors. Patients expressed distress and anxiety they felt related to stressors they experienced after discharge.

The classifications of concerns into insufficient resources or reactions to stressors were helpful in examining the data and at looking at different aspects of the data. Neuman's model was helpful in collecting and examining data. The classifications assisted the researcher in looking at the data holistically.

Most Helpful

Subjects expressed many things as most helpful in their discharge teaching. The researcher found there were a variety of responses. Subjects' comments dealt with the mobilizing of resources, specifically information (intrapersonal). The items they listed the highest were the

nurse/instructions (n = 21) and the discharge instructions (n = 6) alone. Medication instructions (n = 4) were listed as the third most helpful.

Least Helpful

Subjects identified things they were unhappy about related to their hospitalization as the least helpful. These items did not necessarily relate to their discharge teaching process. Patients (n = 8) expressed a desire to know when their doctor would discharge them more in advance. The patients (n = 8) also expressed a wide variety of changes they would like to see in the actual discharge process. These were, specifically how long the process takes and waiting to be escorted (n = 6) from the hospital.

Discharge instructions were listed by a few patients (n = 5) as an item they felt needed to be changed (or least helpful). Patients stated that they thought their discharge instructions were lacking information (intrapersonal). Some patients specifically listed medication information (n = 3) they received as too complex and dietary information as unclear.

The researcher in examining data collected regarding most helpful and least helpful noted discrepancies between subjects. One subject listed an item (medication instructions) as most helpful and another patient listed the same item (medication instruction too complex) as least helpful. The researcher looked at the educational level of

the patients who thought the medication instructions were good (n = 4) and those patients that thought the instructions were too complex (n = 2). No relationship emerged due to the small number of responses.

Nursing

Subjects, when asked to identify what nurses could do to make their discharge easier, offered a variety of suggestions. Six patients (4%) expressed varying responses to this question. Many of the things listed the nurse has no control over. Among those activities over which the nurse has control the following were mentioned. A couple subjects mentioned reviewing their care for the last few days with a family member prior to discharge, clarity of the written word (discharge instructions), and being specific on the discharge instructions.

Age

The data collected indicated that Group 2 (60 and older) had more concerns with medication, activity, and diet than Group 1 (18-59). Under the category of 'other', Group 1 (18-59) had 12 subjects that expressed a concern compared to Group 2 (60 and older) having 8 subjects. This category encompasses many items so no generalization could be made. The concerns were classified as either related to insufficient resources or a reaction to a stressor. Group 2 (60 and older) had more physiological reactions to stressors than Group 1. Both groups had difficulties with information

(intrapersonal). The data collected does not give a strong argument that older patient have more concerns than younger patients. There is limited research in this area to support or refute that age affects the types of concerns that patients experience after discharge.

Future Direction

The process of discharge planning should be regularly assessed to make sure the purposes are being accomplished. Identification of each patient's individual learning needs, and instruction aimed at meeting those specific needs, would consider distinctive characteristics of the patient-learner. A discharge planning process of this nature would be congruent with the nursing process and Betty Neuman's Health-Care Systems Model. It is based on an initial assessment and followed by analysis of the patient's needs (holistic view), planning and implementation of the instruction, and evaluation of the teaching's effectiveness.

A discharge planning process based on individual patient-learner's needs would, by addressing the specific needs of the individual, have a greater positive effect on post-discharge outcomes. The patients' cognitive level should also be addressed when developing his or her discharge plans. A good area for future research is discharge teaching based on the patient's cognitive level, motivation, and their education. Discharge information might need to be developed at two or three different

educational levels, based on the different needs of patients. For example the computer printed sheets on medication might be more helpful if the information could be delivered at the 3rd grade, 9th grade, and 12th grade level. Then, depending on the educational level of the patient, the appropriate information can be given.

Patient education should be structured as well as individualized in a setting of prospective reimbursement in which length of hospital stay is shortened. Hospital teaching methods should be examined so that patient learning is individualized and available at a time when the patient is ready to learn. In addition, by focusing on each patient's specific needs greater consistency in the effectiveness of discharge instructions could be expected.

This study revealed that patients do experience some concerns after discharge from the hospital. The concerns may be related to lack of information or a new problem that arises once they are home. When problems arise at home for which advice is required, there appears to be a need for different types of information to be available to the patient and family during the early convalescent phase.

This research supports the need for discharge teaching. Some information may not be retained after discharge because of the high anxiety levels coupled with tremendous amounts of new information given to the patient during

hospitalization. Reinforcement and follow-up may be important for the patient to accomplish his learning.

Literature and this research suggest that medication, diet, activity, and wound care are areas that patients develop problems with after discharge. Some concerns may be anticipated and coping strategies can be provided in advance. Others cannot be foreseen. After discharge, alternative ways for the patient and family to obtain advice and knowledge may be helpful to ensure that the quality of the care received while in the hospital is not negated by the inappropriate management of problems after discharge.

The data collected from the comments expressed regarding concerns experienced the first three days at home dealt mostly with a lack of information. Literature does support that patients have expressed the desire for more thorough information that they can understand. The researcher did not specifically ask the patients whether they received any information related to the concern they expressed. The patient might have received information but were unable to understand due to the way the information was taught to them or their cognitive level.

Data revealed that patients' have concerns with integrating old and new items in their lives. For example subjects stated their confusion regarding old and new medications. They were unsure which medications they were to take. Subjects also mentioned confusion related to their

diets. They were not sure whether to follow diets they were previous to their hospitalization or if there was a new diet. This would be a good area for future research.

An important nursing implication derived from this study is the need for nurses to identify what information patients perceive to be important in education programs to prepare them for what they want and need to know. Neuman's model of secondary prevention is important in this respect. Nurses can assess their patients from the aspects of whether their patients have sufficient resources at the time of discharge and assist their patients in strengthening their internal line of resistance to stressors.

Recommendations for Further Study

Limitations of research

The research study was limited by the use of a single study institution and a volunteer sample versus a random sample. The results of the study therefore can only be compared to a similar-type study. The study requires replication for substantiation of results.

A need exists for further investigations with larger and more diverse samples. Replication of the study using another sample group on another type of unit would be advised. Further research would be suggested at large medical centers and teaching hospitals. Concerns that patients experience at home after discharge need to be

identified so that they can be emphasized in nursing practice and nursing education.

Recommendations for Future Research

The system of telephone callback as described in this study may be one important way to provide patient feedback, to identify patient learning needs, and to reinforce predischARGE education. No specific problems arose using this type of data collection. All the conversations were less than 20 minutes in duration. Most conversations lasted approximately 10 minutes. None of the patients became too tired during the questioning. However, five patients were unable to be reached by phone after discharge. Four attempts each were made to contact these patients.

The tool (Discharge Preparation Questionnaire) used in this study appears long and tedious at first glance. It may even give the appearance that data are fragmented under the different sections. The researcher found that it provides a view of patients' systems interacting. It truly directs an assessment of the 'total' person related to their discharge teaching process.

The researcher believes that, based on the data collection experiences and the findings, evidence exists that the Discharge Preparation Questionnaire may be a functional, easy to administer tool to assess and track patient's knowledge about their discharge preparation during the early convalescent period. In future studies the

researcher would recommend not sending the 3-day worksheet home with the patients. From information gathered the majority of the patients did not use the worksheet. The researcher would recommend using the 3-day worksheet during the telephone interview with the probes to gather additional information.

The researcher would also recommend further investigation into statements made by patients regarding items they felt were most helpful or least helpful. This was an area in which the researcher found discrepancies. Different patients would list an item as most helpful and another patient would list this same item as least helpful. In questioning patients about specifics in the future the researcher may be able to discern what information patients believe is needed regarding their discharge teaching.

Future areas for research include examination of the importance of information learned and adequacy of preparation, because the need for information may change as recovery progresses. The researcher would also recommend replicating this study making the phone calls at 3, 7, and 14 days and comparing the information. Further differentiation of learning needs by age and sex may also assist a nurse to better individualize education. It would also be beneficial to differentiate learning needs of family members, especially, if they are the primary care giver.

Nursing may need to reorient the care of patients toward greater teaching or enlist the help of nurse educators whose primary responsibility is patient education. Pretesting and periodic posttesting would be necessary at first to ensure that the material taught was actually being absorbed and to find which teaching techniques were most effective.

Further research is needed to determine if Betty Neuman's Health Care Systems Model is applicable for examining the discharge planning process in other hospital settings. The use of the Neuman Model may give a framework for organizing effective nursing services and for evaluating decisions within the context of the hospital system.

Implications for Nursing

Nurse Involvement

Successful discharge planning blends the observations, counsel, and skill of many health care disciplines. Its dynamic, changeable demands on many disciplines, therefore, require a responsible central coordinator for each client. This person must be in a position to observe the situation over a period of time, as well as to collect and sort pertinent information among those who should be drawn into formulating and executing the client's plan. Literature indicates that such coordinators should appropriately be nurses, particularly, staff nurses who has most continually

followed a given client through his hospitalization (Corkery, 1989).

In this era of DRGs and cost containment, where there is tremendous pressure to discharge clients from the hospital quickly, in poorer states of health and in more acute stages of illness, perhaps the staff nurses' most important role is in discharge planning. Staff nurses can and should be actively involved in the discharge planning process so that the transition from hospital to home is a safe, non-threatening, anxiety-free experience for both the client and the nurse. Discharge planning carries forward the process, which began at the bedside, of restoring the client to well being. It strengthens both family and community ability to cope with clients' changing conditions. With instruction and guidance, bedside nurses can realize the satisfaction which comes from tending this vital strand in a comprehensive network of care.

Health team members must evaluate the post-hospitalization requirements of their clients as early during the hospital stay as possible. The staff nurse is the member of the health care team closest to the client, the person who sees the client 24 hours a day, they are in the best position to identify clients with discharge planning needs. It is important to emphasize to nurses that their knowledge of client needs put them in the best position to identify which clients are most likely to

require discharge planning. The nurses' assessment of the client is crucial to formulating a valid, realistic plan. From the information they gain from client and family, and from their nursing assessments, the nurses must select and organize those elements which will present a concise yet thorough picture of the client. Centering discharge planning on staff nurses' functions is most effective when correlated with primary nursing or when each client is assigned to an RN who has ultimate responsibility for the discharge plan (Clausen, 1984). The primary nurse can assess her clients on a day to day basis for continuing care needs. A specific, consistent time set aside weekly when resource personnel from continuing care are available to the primary nurse to assist in the discharge planning is helpful (LaMontagne & McKeehan, 1975).

The nurse should ensure that prior to discharge, clients acquire basic knowledge about their illness, recovery, and safe, appropriate health-care practices during early convalescence. A variety of strategies need to be implemented at the point of delivery of care to accommodate teaching. Every available minute of contact must count. By establishing multiple points of educational content, initiated at different times, and with various methodologies, the nurse can accomplish the mission of client education with clientele at different developmental levels. Several methods should be used to

amplify, clarify, and verify essential pieces of information at different times of contact. Discharge planning begins with the admission assessment and needs to be part of every nursing contact (Johnson, 1989).

The client's resources must be assessed for the ability to meet the identified needs appropriately. This puts increasing pressure on the nurse to determine the client's readiness for discharge and to use this information in planning discharge care. Nurses will need to identify if the patient lacks any resources they might need at home and assist them in strengthening their internal lines of resistance to the stressor of leaving the hospital. Nurses will need to assess the client's mental and emotional status, functional abilities and disabilities (such as degree of independence in transfers, ambulation, eating, and toileting) and self-care deficits. These are the key elements in assessing the need for posthospital care (Corkery, 1989). The care that is planned should reflect the client's values, give credence to needs occurring outside the immediate health care domain, and incorporate resources that exist in other settings. Above all, nurses must demonstrate that they are ready, willing, and able to ease the client's way by forging the links that ensure comfort and support for both client and family as they undertake the task of providing care to the client in the home setting.

Patient and Family Involvement

Discharge teaching should equip clients and families with some decision-making abilities to assess problems and seek the assistance of appropriate health professionals. Clients must be willing to make the transition from dependence on the health care system to one of self-responsibility and confidence about decision-making in matters of health. After discharge, alternative ways for clients and families to obtain advice and knowledge are essential to ensure that the quality of the care received while in the hospital is not negated by the inappropriate management of problems after discharge. Some of the concerns can be anticipated and coping strategies provided in advance. Others cannot be foreseen. A health problem of an individual affects the entire family. When illness occurs, the spouse and other family members play a key role in the patient's recovery and rehabilitation. It is essential that they are involved in his care and receive information and reassurance as required.

Individuals have needs for varying amounts of information, and a multitude of factors influence their ability to retain what is taught. Anxiety and depression may cloud learning ability. Medications may also play an interference role. Some authors have shown age to be a factor in the problems that patients experience after discharge, this research study did not support or refute

this idea. Of all the age groups, the elderly show the greatest diversity. Over a lifetime the combined effects of genetic inheritance, health habits, medical history, lifestyle, socio-cultural background, and environment intensify the differences among individuals. Given such variety, defining "normal aging changes" is not easy.

Naylor (1990) states hospitalized elderly are at high risk for poor postdischarge outcomes because of decreased ability to adapt to physical and emotional stress. Although this age cohort usually needs more assistance after discharge for a longer period of time than the general population, this group is least likely to have essential support systems.

Summary

The results of this investigation suggest to this researcher that patient education in the hospital sector cannot be undertaken as an incidental aspect of a patient's medical regimen if it is to be of any use. This population needs multi-modal teaching constructed with patient's cognitive styles in mind.

It can be seen from the findings of this study that while some people manage very well when they first go home, others do experience difficulties which could be removed, or at least alleviated, by giving fuller information before discharge. Time and again the responses by patients

indicated how they desired more information regarding diet, activity, medication or some information related to their discharge from the hospital.

APPENDIX A

Discharge Preparation Questionnaire

APPENDIX A

DISCHARGE PREPARATION QUESTIONNAIRE

Phone call completed: yes _____
no _____, comments _____

Patient's name: _____ Significant other: _____

Phone number : _____

Date of phone call: _____

Time of phone call: _____. Second option: _____

Admission date: _____. Discharge date: _____

Id# _____ (1-3)

1. Gender: (1)Male _____, (2)Female _____. (4)

2. Age: _____ in years. (5-7)

3. Length of stay _____ in days. (8-10)

4. Day discharged (1)Sunday____, (2)Monday____, (3)Tuesday____, (11)
(4)Wednesday____, (5)Thursday____, (6)Friday____, (7) Saturday____.

5. Diagnosis/Operation: _____. (12-13)

6. Any previous hospitalizations (1)yes _____ (2)no _____ (14)

7. Highest level of education completed: (15)

- (1) Less than 9th grade
- (2) 9-12 grade
- (3) High school graduate
- (4) Two year associate degree
- (5) Four year bachelor degree
- (6) Graduate school

Id# _____
Next I would like to ask some questions related to the 3 day
worksheet that you were given before you left the hospital.
Do you have the worksheet in front of you?

83. Have you checked anything on the list for day #1?

(1)yes_____ (2)no_____ (4)

if yes - please specify and comment:

diet:_____ (5)

medications:_____ (6)

activity:_____ (7)

equipment/supplies:_____ (8)

treatments/procedures:_____ (9)

community resources/referrals:_____ (10)

other:_____ (11)

84. Have you checked anything on the list for day #2?

(1)yes_____ (2)no_____ (12)

if yes - please specify and comment:

diet:_____ (13)

medications:_____ (14)

activity:_____ (15)

equipment/supplies:_____ (16)

treatmenst/procedures:_____ (17)

community resources/referrals:_____ (18)

other:_____ (19)

85. Have you checked anything on the list for day #3?

(1)yes_____ (2)no_____ (20)

if yes - please specify and comment:

diet:_____ (21)

medications:_____ (22)

activity:_____ (23)

equipment/supplies:_____ (24)

treatments/procedures:_____ (25)

community resources/referrals:_____ (26)

other:_____ (27)

86. Did you experience any concerns/problems in these first 3 days following your discharge that I have not covered on the checklist?

(1)yes_____ (2)no_____ (28)

if yes - please specify and comment:

87. Was there one thing you can identify that was most helpful about the discharge preparation you received?

(1)yes_____ (2)no_____ (29)
(Go to #89)

88. Describe this one thing that was most helpful regarding the discharge preparation you received.

Comments:

89. Is there anything you would like to change regarding the discharge preparation you received?

(1)yes_____ (2)no_____ (30)
(Go to #91)

90. Describe what you would like to change, regarding the discharge preparation you received.

Comments:

91. Is there anything else the nurse could have done for you which would have made your discharge easier?

(1)yes_____ (2)no_____ (31)

if yes - please specify and comment:

(Note to interviewer if subject listed anything in questions 83-85, but does not mention anything for question 89 or 91, use probes from questions 83-85 to elicit information)

92. What about _____? What could the nurse have done to help with _____ ?

APPENDIX B

3 Day Worksheet

APPENDIX B

3 DAY WORKSHEET

Instructions: Use this sheet to make any notes that you feel would be important information.

FIRST DAY:

Diet: _____

Medications: _____

Activity: _____

Equipment/Supplies: _____

Treatments/Procedures: _____

Community resources/Referrals: _____

Other: _____

SECOND DAY:

Diet: _____

Medications: _____

Activity: _____

Equipment/Supplies: _____

Treatments/Procedures: _____

Community resources/Referrals: _____

Other: _____

THIRD DAY:

Diet: _____

Medications: _____

Activity: _____

Equipment/Supplies: _____

Treatments/Procedures: _____

Community resources/Referrals: _____

Other: _____

APPENDIX C

Telephone Script

APPENDIX C

TELEPHONE SCRIPT

Hello

My name is (researcher's name) from Borgess Medical Center.

May I speak with (Mr., Mrs., Ms.---) , please.
 (Mr., Mrs., Ms. ---) , this is (researcher's name) , the graduate student from Grand Valley State that spoke with you before discharge from Borgess. I am calling to ask you about your feelings on how well you were prepared for discharge.

Is this a convenient time for you to talk with me?

If No - What would be a more convenient time for you and I will call you back?

(Patient's answer). I will call you back around (time) .
Thank you. Good-bye.

If Yes - I handed you a response card and a 3 day worksheet before discharge, do you have those handy?

If No - I will hold the line while you go and get it.

If Lost - I will hold the line while you get pencil and paper so you may write the response choices down. *(Read choices)*

If Yes - *(go on)*

Please remember that your honesty is important and your answers will remain confidential. If at any time you feel to tired to continue please let me know. *(If patient indicates they are too tired to continue, ask the patient if a return call to complete the questions could be made at a later time that day)*.

I'll begin with question #1.....
(Continue through each question)

I want to thank you for your participation in this discharge preparation study. The results of the study will be used to improve the discharge preparation for future patients on 3NE.

Good-bye.

APPENDIX D

Script for obtaining study consent

APPENDIX D

SCRIPT FOR OBTAINING STUDY CONSENT

Hello (patient's name)

My name is (researcher's name) . I am a registered nurse and currently a graduate student in the Grand Valley State masters program. I have a special interest in the discharge preparation of patients. As part of my graduate work I am conducting a study that will help determine how well patients feel they were prepared for taking care of themselves at home after discharge from the hospital. Borgess Medical Center has given me permission to contact each patient discharged from this unit for participation in this study.

Your participation is voluntary and would involve a telephone call 3 days after discharge. I will ask questions regarding your discharge preparation. This will take less than 20 minutes of your time. The information provided would be valuable for nursing to assist future patients in a smooth transition home.

Your honest opinions are important; therefore, your responses will remain confidential. Reports of this study will be reported in group fashion and will not identify you in any way. You will be free to withdraw from this study at any time.

Would you be willing to participate in this study by agreeing to a telephone interview after discharge?

If No - Thank you for your time and consideration.

If Yes - Thank you. I will need to obtain written permission for this phone call. Please review this consent form. Do you have any questions? (Answer questions and obtain signature)

I will need a phone number where you can be reached following discharge. Also a second contact number would be helpful in case your plans change following discharge. (Phone numbers to be recorded on telephone questionnaire)

What time of day would you prefer to be called?
Is there a second time that would also be convenient for you?
(Times to be recorded on telephone questionnaire)

Have you had previous hospitalizations in any hospital at all?
(Record response on telephone questionnaire).

A piece of information that will help to analyze these data is education. What is the highest level of education that you have completed? 1. Junior high level or less; 2. High school graduate; 3. Two year associate degree; 4. Four year bachelor's degree; 5. Graduate school. (Educational level to be recorded on telephone questionnaire)

(Hand patient index card which contains the possible response choices). This card contains a sample of the choices you will need to make in answering some of the questions you will be asked. Please place this card by your telephone for the day of our scheduled call.

(Hand patient 3 day worksheet). This is a worksheet. Each day following discharge until my telephone call, please make any notes that you feel would be important to assist you in answering questions about your discharge preparation.

Thank you again for your willingness to participate.
(The researcher will then go to the record to obtain the demographic information listed on the telephone questionnaire)

APPENDIX E

Consent Form

APPENDIX E

CONSENT FORM

I voluntarily agree to participate in a nursing research study that will evaluate how well prepared I felt I was for discharge. The researcher has permission to review medical records pertaining to my hospitalization.

I understand the researcher will telephone my home on the third day after discharge and I will be asked questions about my discharge experience. The interview will take less than 20 minutes. The information provided will be valuable for nursing to assist future patients in a smooth transition to home. There will be no direct benefits to me.

I further understand that:

1. Information I provide (from the interview and medical record) will remain confidential. I have been assured that reports of this study will not identify me in any way.
2. I am free to withdraw at any time by informing the researcher, and withdrawal from the study will not affect my discharge plans or future care in any way.
3. No risk, discomfort, or additional expenses will result from my participation. If any problems are identified during the study, I understand that the researcher will not intervene but will recommend the appropriate referral.
4. Data collectors for this study are graduate students from Grand Valley State University. Any questions I have about the study will be answered by contacting either Linda Lawton or Karen Peper at 383-7143.

I acknowledge that I have read and understand the above information and I agree to participate in this study.

Date

Participant's Signature

Researcher's Signature

APPENDIX F

Demographics - #5 Diagnosis/Operation

APPENDIX F

DEMOGRAPHICS - #5 Diagnosis/Operation (12-13)

1. PID
2. Pneumonitis
3. Femoral popliteal bypass
4. Chole -laser
5. Mastectomy
6. Carotid endarterectomy
7. D & C
8. Subtotal nasal septal resection
9. Incisional hernia repair
10. Greenfield filter insertion
11. Dislocated shoulder
12. Diverticulitis
13. Urokinase infusion
14. Bilateral interstitial infiltrate
15. Amputation of 2nd, 3rd, 4th toes
16. Hickman catheter placement
17. Infected mastectomy incision
18. First rib resection
19. Arteriogram
20. Aorto bi-femoral bypass
21. Bilateral breast reduction
22. Bilateral vein stripping
23. Bowel obstruction - no surgery
24. Abdominal pain
25. Billroth II
26. Exploratory Lap.
27. Submandible abscess
28. Bowel resection
29. PTA
30. R/O sepsis, persistant vomiting
31. Debridement buttock wound with closure
32. Debridement and closure of pressure sore ischeium
33. Peritonitis - HIV+
34. Appendectomy
35. MVA - Right thoracotomy (right hemopneumothorax) also mandibular fixation (placement of arch bars)
36. Orthostatic Hypertension/Diabetes
37. Chole with complications
38. Chole - Regular
39. Esophageal carcinoma - exp. lap., lysis of adhesions, mobilization of stomach, pyloroplasty, right thoracotomy, esophagectomy, and esophagogastrostomy.
40. Ileostomy and debridement and closure of pressure sore
41. Laparoscopy
42. TAH and right ovarian biopsy
43. Transmetatarsal amp.

44. Breast construction and breast reconst.
45. Mastectomy with simple reconst.
46. Bilateral renal artery bypass with left saphenous vein
47. Repair of achilles tendon
48. Carotid axillary bypass
49. Take down loop ileostomy
50. Wide excision of squamous cell cancer of right buttock
51. Femoral to posterior tibial bypass
52. Right leg infection - status post heart surgery
53. Exp. thigh fistula, bypass femoral to tibial artery
54. Sigmoidoscopy and coccygectomy
55. Right carotid endart. and laser assisted angioplasty right femoral artery with balloon dilatation, dilatation of peroneal artery
56. Left carotid endart. and left femoral popliteal bypass
57. AAA - abdominal aortic aneurysm
58. Rectal bleeding
59. Coxsackie Viral infection
60. Laparotomy, gastric immobilization, pyeloroplasty; right thoracotomy, esophagectomy
61. Right lower lobe of liver biopsy, abdominal perineal resection
62. Right oophrectomy with partial left oophrectomy incidental appy, excision ganglion right hand
63. Right innominate artery endarterectomy
64. Laser angioplasty
65. Sigmoidoscopy and hemorrhoidectomy
66. Exp. lap., sigmoid colectomy and colostomy
67. STSG
68. Diarrhea secondary to mds - dehydration - orthostatic decrease B/P
69. N & V, hx., of irritable bowel
70. Dehydration & fever - + C. diff.
71. Viral meningitis
72. Hemorrhoidectomy
73. Bilateral L4 and L5 discectomy
74. Thrombectomy fem-pop bypass, sequential bypass pop-tib
75. Infected stasis ulcer
76. Post traumatic syncope
77. Right thyroid lobectomy
78. Side and back pain
79. Femoral - femoral bypass
80. Anterior colporrhapy and enterocele repair
81. Revision of AKA stump
82. Right lower lobe pneumonia and renal failure
83. Exp. of right iliac artery; evacuation of right retroperitoneal hematoma
84. Popliteal embolectomy with endarterectomy
85. Mono strep-tonsillitis
86. Ligation of left politeal aneurysm and F-P bypass
87. Resection of right femoral pseudoaneurysm

88. Repair of right inguinal hernia with mesh; repair bladder laceration
89. Reduction of incarcerated hernia; exploration and abd. lavage
90. Exp. lap.; right hemi-colectomy
91. Severe cornea erosion
92. R/O meningitis
93. Bilateral balloon argon laser angioplasty of the common iliac arteries, thrombectomy of the common and superficial artery on the right, thromboendarterectomy of external iliac and common superficial on the left.
94. Exam under anesthesia; sigmoidoscopy, inc. and drainage of ischiorectal abscess.
95. Maxillary Laforte I osteotomy mandibular sagittal split osteotomy; mandibular horizontal sliding osteotomy.

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