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Attitudes among nurses toward self-care practices



**Author**
Kurzuk, Gladys,

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# Attitudes Among Nurses Toward Self-Care Practices

by

Gladys Kurzuk

THESIS

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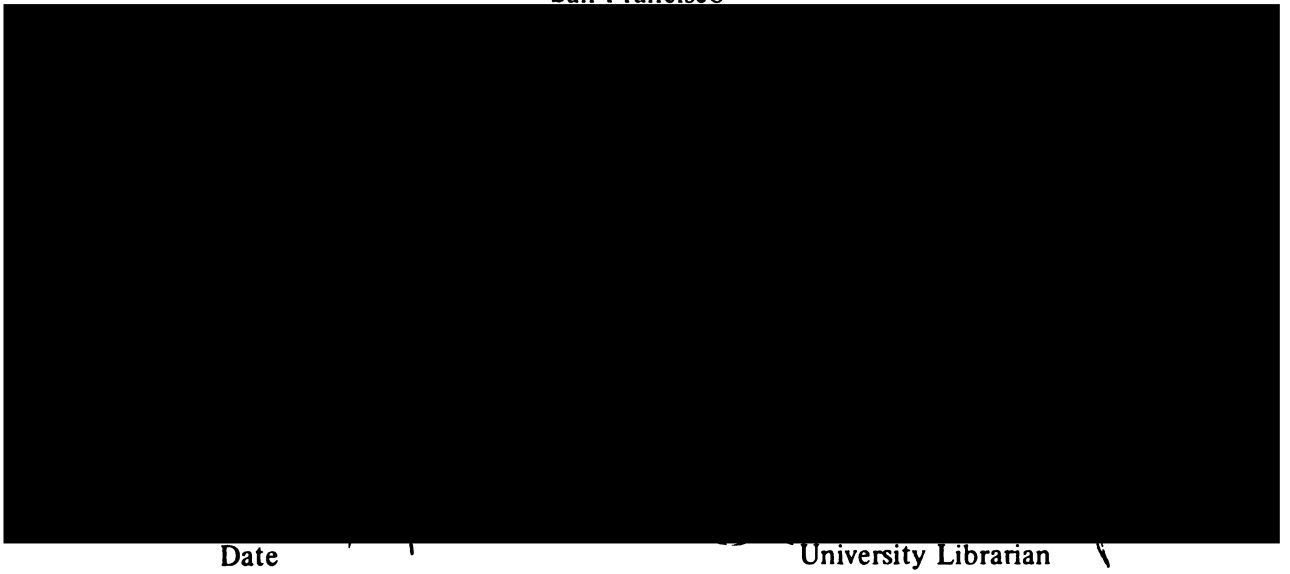

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## Abstract

Lay persons continue to assume more responsibility for their health care as indicated by the self-care movement. Despite the popularity of this movement, we have little information on the health professional and the consumer's attitudes toward self-care. Since nursing's focus is on health and health education, nurses are well-prepared to assist the consumer in participating in safe self-care practices. A study was conducted to determine whether nurses in an acute-care setting favored self-care. One hundred nurses at a large, urban, private, acute hospital were randomly selected and asked to complete a 13-item self-care attitude scale to determine the degree to which they favored self-care and to explore some of the correlates of the attitudes expressed. Nurses in general favored self-care practices. Those with the most favorable attitudes toward self-care had a baccalaureate degree and had health beliefs which reflect an internal locus of control. Those with less favorable attitudes toward self-care had a diploma education and believed health locus of control was external. No correlations were found between the nurses attitudes toward self-care in an acute-care setting and age, religious affiliation, area of practice, and philosophy of nursing.

## Summary

Self-care as an alternative to traditional health professional provider care is receiving increasing attention by both the consumer and health professional. Despite the popularity of the self-care movement, little information is available on the consumer and health professional's attitude toward self-care. Since nursing's focus is on health and health education, nurses are well-prepared to assist the consumer in participating in safe self-care practices, It is not known, however, whether the nurse's attitude supports the philosophy and principles of self-care practices, particularly the nurse in an acute care setting.

The purpose of the study was: 1) to describe the degree to which nurses in an acute-care setting favored self-care; 2) to explore some of the correlates of the attitudes expresses; 3) to compare the results with those obtained in the physician sample, as reported by Linn and Lewis (1979).

One hundred nurses at a large, West Coast, university hospital were randomly selected to particpate in the study;

fifty nurses each from specialty units and fifty from general medical-surgical units. The nurses were approached by the investigator and asked to participate in the study by filling out a two-part questionnaire. Part one consisted of a Likert-type self-care attitude scale that had been used by Linn and Lewis (1979). Part two consisted of a Likert-type health locus of control scale developed and validated by Wallston, et al. (1976).

It was found that in general the in an acute-care setting favored self-care. Those with the most favorable attitudes had a baccalaureate degree and had health beliefs which reflect an internal locus of control. Those with less favorable attitudes toward self-care had a diploma education and believed health locus of control was external. No correlations were found between the nurses' attitudes toward self-care in an acute-care setting and age, religious affiliation, area of practice, and philosophy of nursing.

In examining the nurses' beliefs about health locus of control, it was found that two factors affected their beliefs. Nurses 30 years or less believed that health locus of control was internal, while nurses 30 years and over believed that health locus of control was external.

The second factor affecting nurses' beliefs about health locus of control was education. The baccalaureate

and associate degree nurse believed that health locus of control was internal, whereas the diploma nurse believed that health locus of control was external.

The findings of this study suggest that education may have an influence on beliefs about self-care. In order to provide quality client care in self-care programs, it may prove beneficial to give priority to baccalaureate degree nurses in these programs. It may also prove benefical to program outcome if the nurse and client with similar beliefs about self-care are matched. Alternately, programs to educate the client or care giver to self-care may be a useful measure.

When comparing the scores of the self-care attitude scales between the nursing sample in this study with the scores of physicians in the Linn and Lewis study, the nurses's scores were generally higher than the physicians'. This suggests that nurses place more value on self-care practice than physicians. Similarities and differences in attitudes toward self-care were found between the nurses and physicians with regard to age, religion, and beliefs about health locus of control.

Research in the area of self-care is needed. Recommendations for future studies were made in the following areas: 1) health benefits of self-care, 2) cost-

effectiveness of self-care, 3) attitudes of health professionals and consumers to self-care.

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# CHAPTER ONE

## Introduction

### Statement of the Problem

Self-care in health is presently gaining attention from both the public and professional sectors. It is estimated that there are presently 500,000 self-help groups in this country with a membership of 15 million people (Ferguson, 1979). Medical equipment such as stethoscopes, sphygmomanometers, otoscopes and pregnancy test kits once utilized by physicians only are being sold over the counter. Classes and literature on self-care abound. Today, the average person knows more about health care than the physician did at the turn of the century (Norris, 1979).

This self-care movement has had a profound effect upon the delivery of health care. No longer does the client see herself/himself as a passive recipient of care who follows the health professional's advice and utilizes the care system, but rather the client is asking that he/she be an active participant "in identifying goals, seeking

clarification of data, evaluating options, selecting an option and implementing the course of action selected" (Chang, 1980, p. 47). This trend towards self-care has also seen the health-care professional relinquish much of her/his control over health care and has mandated that she/he stand accountable for her/his practice.

How are nurses reacting to this self-care movement? Literature addresses the area of nursing and self-care from a philosophical frame of reference. To date a systematic study on nurses' attitudes towards self-care practice is missing. Orem (1971), a nursing theorist, believes that the concept of self-care should be primary in the nurse's thinking and behavior. She believes that it is the responsibility of the nursing profession to assist man with self-care practices. She describes three types of self-care requisites: universal self-care requisites with an emphasis on needs such as air, fluids, food, elimination, interaction with others, and protection from hazards; developmental self-care requisites that relate to either the developmental process or to occurrences of deleterious conditions that affect human development; and health deviation care needs that arise from illness, injury, or disease. The nurse assesses the client's capability with regard to skills, knowledge, and motivation, and assists him with decisions in maintaining self-care activities in

order to sustain life and health, to recover from disease and/or injury, or to cope with their effects. (Orem's theory of self-care will be described in greater detail in Chapter Three).

Norris (1979) believes that nurses have always been interested in health promotion and disease prevention, both of which support the philosophy of self-care, and she believes that nurses are well-prepared in the roles of educator, motivator, facilitator, and client advocate to support the self-care movement. Although Norris (1979) sees nurses as supporting self-care practices she also says that nurses must stop "dictating and exhorting" and begin seeing their clients as "intelligent and powerful" individuals capable of assuming responsibility for their care (p. 489). Does the nurse's attitude support the philosophy and principle of self-care practice? Does the nurse in an acute-care setting have a favorable attitude towards self-care practices?

## Purpose of the Study

The topic of health professionals' attitudes toward self-care was recently addressed by Linn and Lewis (1979), who conducted an exploratory study to obtain information on physician attitudes towards self-care practices. They felt

that the area warranted investigation because self-care was frequently practiced in collaboration with the physician and that many people still looked to the physician for answers to health problems. They found that physicians with the most favorable attitudes towards self-care practices were most likely to come from a Jewish background, to be under 46 years old, to have health beliefs that reflect an internal locus of control, and to be in group practice.

The physician population is predominantly male (in Linn and Lewis's study, 95%), and the focus of their education is upon disease diagnosis and cure. Nursing is predominantly a female profession with an educational focus on health promotion and disease prevention. Because of these two basic differences, it is not possible to generalize from the Linn and Lewis study to the nursing profession. To discover nurses' attitudes towards self-care practices and to compare nurses' attitudes with physicians' attitudes, a replication was conducted. Further, as the investigator was particularly interested in the beliefs of the nurses in acute-care, only that setting was used.

The purpose of the study was: 1) to describe the degree to which nurses in an acute-care setting favor self-care; 2) to explore some of the correlates of the attitudes

expressed; 3) to compare the results with those obtained in the physician population, as reported by Linn and Lewis (1979).

## Significance of the Study

As previously mentioned, to date a systematic study on nurses' attitudes towards self-care practice has not been conducted. The investigator wished to obtain information that could perhaps provide a better understanding of nursing and self-care practices and that could be useful for program planning for nurses.

## Study Questions

The variables that Linn and Lewis (1979) used in their study--age, religion, specialty, and health beliefs (locus of control)--were examined. In addition, two other variables were examined: education and organization of nursing (primary nursing or team nursing). Setting was not considered because the study was limited to an acute-care setting.

The study attempted to answer the following questions with regard to attitudes among nurses toward self-care practices:

1) Are younger nurses, below the age of 46 years, more

likely to score higher on the self-care attitude scale than nurses above the age of 46?

2) Are nurses with a Jewish background more likely to score higher on the self-care attitude scale than nurses from a Catholic or Protestant affiliation?

3) Are nurses from specialty areas--Cardiac Intensive Care, Coronary Care, Oncology, Renal Dialysis, Dermatology--more likely to score higher on the self-care attitude scale than nurses from medical-/surgical units?

4) Are nurses who have health beliefs which reflect an internal locus of control more likely to score higher on the self-care attitude scale than nurses who have health beliefs which reflect an external locus of control?

5) Are nurses with a baccaulaureate more likely to score higher on the self-care attitude scale than nurses with an associate degree or diploma?

6) Are nurses who practice primary nursing more likely to score higher on the self-care attitudes scale than nurses practicing team nursing?

## Hypothesis

The following hypotheses were tested:

1) Positive attitudes toward self-care are more likely

to be expressed by younger nurses than older nurses.

2) Nurses from a Jewish religious background are more likely to express positive attitudes toward self-care than those from Protestant and, to a lesser extent, Catholic backgrounds.
3) Nurses from specialty areas are more likely to express positive attitudes towards self-care than those from general medical-surgical areas.
4) Nurses with high internal locus of control scores are more likely to express positive attitudes towards self-care than those with high external control scores.
5) Nurses with a baccalaureate degree are more likely to express positive attitudes to self-care than those with an associate degree or diploma.
6) Nurses who practice primary nursing are more likely to express positive attitudes to self-care than nurses who practice team nursing.

## Definition of Terms

Self-care: the practice or activities that individuals personally initiate and perform on their own behalf in maintaining life, health, and well-being (Orem, 1971). Roles in self-care will include health promotion,

disease prevention, participation in acute-care treatments, and maintenance of chronic diseases.

Primary nursing: the nursing care of a specific patient is under the continuous guidance of one professional nurse from admission through discharge (Wobbe, 1978). The primary nurse plans the care and collaborates with physicians and other persons as appropriate to provide continuity and coordination of care.

Team nursing: a method of providing professionally supervised, individualized health care for each patient. The team leader is delegated the responsibility of providing, with her team members, the nursing care for a predetermined number of patents. The team consists of a team leader, a professional person, and member or members who may be professional or non-professional (Wobbe, 1978).

Specialty areas: those units where nurses care for patients with diseases primarily of one system, e.g., renal dialysis, or one type of disease, e.g., oncology.

# CHAPTER TWO

## Review of the Literature

Self-care as a supplement to traditional health professional provider care is receiving increasing attention. Self-care recognizes the right of the individual to exercise control over his/her own health status and it is potentially less expensive. Despite the growing interest in self-care, research in this area is limited. The aspects of self-care most frequently studied are: the lay public's participation in self-care, health benefits, and cost-effectiveness of self-care, and the attitudes of the consumer and the health professional toward self-care practices. Following is a review of the research to date.

### Self-Care--Lay Public Participation

Dunnell and Cartwright (1972) conducted a survey of 686 households to determine the occupants' participation in self-medication for various common illnesses. During the two-week period prior to the interview, 91% of the adults reported symptoms, but only 16% had consulted a doctor duing that time, and 28% of the adults had not consulted

their general practitioner during the previous twelve-month period. The most common symptoms experienced were headaches, coughs, catarrh or phlegm, aches or pains in the muscles or joints, backache and nerves, and depression or irritability. Self-medication was a frequent form of action to relieve the symptoms with four-fifths of the adults participating in this behavior. Self-prescribed medications outnumbered prescribed ones by two to one.

The study has problems with validity as only seventy-one percent of the subjects selected for the study responded to the questionnaire, and it was not determined how the non-respondents differed from the respondents. Would the results would have been different had all the selected subjects participated?

Elliot-Binns (1973) randomly selected 1000 patients visiting a doctor and found that 960 practiced self-treatment prior to the visit, either with or without the advice of another lay person. Of the advice received from relatives, the most favorable was from wives; mother-in-laws and mothers gave the least favorable advice. Male relatives rarely gave advice to their own sex. Husbands tended to give advice at a younger age than their wives.

When looking at impersonal sources of advice such as magazines, books, and television, the most harmful advice

came from television (31 percent) and newspapers (30 percent) and less from home doctor books (21 percent) and women's magazines (15 percent). Impersonal sources were consulted more frequently by female patients (20 percent) than male patients.

Other sources of advice: the nurse in a professional role gave better advice than as a casual friend. Harmful advice was given least often by chemists (2 percent). The best advice was given for respiratory complaints and the worst for psychiatric illness.

Although the study supports the hypothesis that the lay public is participating in self-care, it has problems with validity. The subjects were only those whose illnesses led them to visit the doctor. The survey also depended upon what the patient was able to remember and what he agreed to disclose in the interview.

Freer (1980) conducted an exploratory study of self-care practices by a group of 26 women who were instructed to keep a health diary for four weeks. The diary that was used had been tested in two previous studies. It was found that the women practiced self-care on more than 80 percent of the days when medical problems presented themselves. This study also showed that for every symptom that would be seen by a physician, about 40 were self-treated.

Because the sample size was small, the results could

not be generalized to a larger population.

## Self-Care Health Benefits and Cost-Effectiveness

Estabrook (1979) evaluated a Cold Self Care (CSC) Center established at the University of Massachusetts for impact on behavior, knowledge and attitudes, as well as participant satisfaction and cost-effectiveness. Seventy-four selected users of the CSC Center were compared with a random sample of 104 members of a prepaid ambulatory clinic. Users of the CSC Center reported a higher level of knowledge about cold care than non-users, and a higher level of knowledge of criteria for seeking professional care. Twenty percent of users had sought professional care, but only 6 percent felt that they would refer themselves to a professional for the next cold. The CSC Center users reported more use of medication, both appropriate and inappropriate. In general, the CSC Center users were satisfied with the services because of ease of use and speed. Clinic costs were greatly reduced. Savings over a two-year period were estimated to be over $46,000 (Zapka and Averill, 1979).

Although the study indicated that self-care can be effective, problems with validity appear in the study: the experimental group was not randomly selected, the

subjects were a select group affiliated with a larger university center, the subjects were probably more educated and more motivated in seeking self-care information than the average adult.

Irish and Taylor (1980) described the benefits of a course in self-care for residents of a rural setting where access to health professionals was limited. A nurse was the program facilitator and coordinator and selected experts to conduct sessions for the 10-week program. The program included classes on health promotion, disease prevention, care of common injuries and illnesses, care of chronic illnesses, communicating with the physician and developing a safe medicine chest in the home. Evaluation of the program was performed from anecdotal data and showed that the participants felt that they were more capable of caring for themselves and their families, and that they felt more responsible for their own health care. Self-care classes such as the one described could be of benefit in other rural areas where health care services are at a minimum.

Brownlea et al. (1980) reported on the benefits of self-care workshops that were provided for young mothers who resided in a less advantaged suburb of Brisbane, Australia. The research team including a general practitioner, a British-trained health visitor nurse, a

pediatric nurse and a psychologist/statistician were responsible for the program. The classes included courses in anatomy and physiology, care of the sick child, first aid, understanding medicine, relating to health advisors, nutrition, pets and disease, child development and behavior, minor othopedic problems, ante and post-natal care, breast examination and cervical smear, rescusitation, cot death and contraception concerns. Besides obtaining new information from the classes, the mothers also acquired practical skills, i.e., taking temperatures, identifying rashes, preparing meals, giving histories, applying butterfly closures, locating and naming body parts and deciding among options.

The research team found that following the work-shop the mothers' response to health problems had changed. They sought health professionals less frequently and they reported feeling more self-confident and self-reliant when dealing with health problems. A strong support group developed among the mothers. There also appeared to be a change in the psychological relationship between the mothers and the health professionals. Mothers came to a deeper understanding of the health professional as a person.

This study indicates that self-care can be a health behavior that promotes independence and decreases the

individual's feelings of powerlessness.

Goodwin (1979) studied the effects of a programmed instruction for self-care following pulmonary surgery. Twenty-six subjects were randomly assigned to an experimental and a control group. The experimental group (N=13) received a programmed instruction booklet on post-pulmonary surgical self-care. It was found that the subjects who had been given the booklet showed more knowledge about their disease than did subjects who had not received the booklet, and that they also more readily performed therapeutic activities which promoted speed in recovery. Respiratory function was improved. It also appeared that the experimental group tended to worry less. No difference was seen between the experimental and control groups with regards to discouraging potentially harmful activities, promoting improved posture or range of motion, or resuming work and social activities. There is some indication from this study that programmed instruction can be effective in teaching self-care, but because of the small sample size and a limited population, and because the subjects were not pre-tested to determine their knowledge abut self-care following pulmonary surgery, one is unable to apply totally the results to other populations.

Avery et al. (1980) conducted an exploratory study to assess the quality of self-care practised by 157 community-

based adult asthmatics. They found that of the sample studied, 67% had no bronchodilators medication at home, 24% used the inhaler ineffectively, and 68% did not see a physician regularly. At least 40% of the asthmatics did not act appropriately with respect to medication use and physician contact when they were faced with increasing symptoms. Questions of validity arise in this study. The criteria for the assessment of self-care behaviors was established by only a few physicians and the subjects saw their own physicians (other than those involved in the study) for asthmatic care. Therefore, the subjects may have been practicing self-care behaviors as instructed by their own physicians versus those behaviors that were established in the criteria. However, the fact that self-care practices may be harmful cannot be ignored. There is a need for health care professionals to become more involved in self-care education, so that unsafe behaviors can be decreased.

The effectiveness of a self-management skills program for asthmatic children and their parents in an ambulatory care setting was described by Fireman et al. (1981). Twenty-six children aged 2 to 14 were selected for the study, 13 patients in each of the study and control groups. Both groups (children and parents) were taught appropriate

asthma management which included avoidance, medications and immunotherapy if indicated. Diaries on symptoms and medication taken were kept for 6 to 18 months. The experimental group was taught self-management skill for asthma by a nurse educator. The educational intervention consisted of four one-hour classes of individual instruction, and two two-hour group sessions. During the study the experimental group was also able to contact the nurse-educator by phone if any problems occurred. Every two to three months the nurse-educator would contact the parents to see that the symptom and medication diary was kept up to date. The results of the study showed that the nurse-educated patients suffered fewer asthmatic attacks, experienced less emergency room visits, fewer hospitalizations and less school absenteeism due to asthma.

Although these results support the effectiveness of self-care practices following an educational program, this study also has problems with validity. The sample size is small, there was no pre-testing before the nurse-educator program was initiated, the sample was from middle-income families, and the families in both groups were self-motivated to seek care and keep appointments.

Voineskos et al. (1975) reported on the effectiveness of a unique self-care program for inpatients in a mental hospital. A 12-bed unit of an

urban mental hospital was designed specifically for self-care patients. From 8 a.m. to 8 p.m., five days a week, the patients participated with the patients at the day-care center, which was staffed with health care professionals. From 8 p.m. until 8 a.m., and during the weekend, the self-care unit operated without professional assistance; the patients were totally responsible for their own treatment program. A house advisor, a volunteer with a non-nursing background, usually a university student who had some experience with the "helping" professions, was available if problems occurred, and he could contact a staff member by telephone at any time during the 12-hours no professional staff was available on the self-care unit.

After one year of operation, an evaluation of the program indicated both benefits to the patients and the institution. The program gave the patients an opportunity to be more responsible and to actively participate in their treatment program. It decreased the dependency role so often associated with institutionalization, and it provided an atmosphere conducive to making the transition from the therapeutic setting to the community. The institution benefited from the program by a reduction in operating costs. It was estimated that by eliminating the 12-members of the nursing staff that were needed to

provide round-the-clock staffing, an annual savings of $30,057 was made.

## Attitudes toward Self-Care--Consumer and Health Professional

Krantz et al. (1980) developed and validated a 16-item Health Opinion Survey (HOS) which determined the type of medical treatment approach a person may choose (information or behavioral involvement [self-care]). The HOS suggested that not all clients wished to participate in self-care practices, some were satisfied with the information that they received about the treatment of their illness. This suggests that not all people seeking medical care wish more control or responsibility for their health. Krantz (1980) questions whether medical outcome would not be more favorable if the patient's choice of treatment approach was honored. It may also prove favorable to match patient preferences for treatment with physicians' preference for treatment approach.

Green and Moore (1980) surveyed by telephone 245 families in central California who belonged to a prepaid medical care plan in order to explore the reliability and validity of a questionnaire developed to measure consumers' attitudes toward self-care. Linn and Lewis's (1979) attitude scale was used with some modificaion in order to

make it more understandable by the lay public rather than health professionals.

The subjects were further randomly assigned to one of three groups as part of a larger study. Group 1 was the control with no intervention. Group 2 and Group 3 received self-care books delivered to their homes by students. Group 3 families were instructed that they would be given $50.00 at the end of 6 months if their visits to the physicians were decreased by a third from a 6-month period a year ago.

The consumers' attitudes toward self-care were found to be favorable with a mean score of 44.51 and a standard deviation of 5.54. Scores ranged from 29 to 60, and the scale was 44, with a mean of 44.03. A significant difference was found between group 1 and group 3 and the attitude scale scores. Group 3, which had the self-care book and financial incentives, had the highest means attitude scores (46.4), while the control group had the lowest (43.4).

Several problems with validity are found in this study: the scale's internal consistency reliability was found to be .65 (Cronbach's alpha), the sample members belonged to a pre-paid medical care plan, the members were from one geographic location, and bias may have been

introduced by the telephone survey.

## Summary

The available literature indicates that many people are assuming more responsibility for their health care by practicing self-care, but that not all people desire to engage in such practice. Research on self-care also suggests that not all individuals upon receiving information via health education programs transfer this knowledge into a self-care behavior, and that all self-care is not beneficial.

Many of the studies reviewed had problems with design; therefore, it is difficult to make the irrefutable statement that the self-care practices studied were or were not of health benefit to the clients. The literature does suggest that self-care programs can be cost-effective. It further suggests that for self-care practices to be effective (provide health benefits), the appropriate education must be provided by health professionals. A favorable attitude by both consumer and health professional must also be present if self-care is to be effective.

# CHAPTER THREE

## Conceptual Framework

### Self-Care Model of Nursing

Over the years nursing theorists have attempted to describe the unique role of nursing. Orem (1980), one of these theorists, believes that the role of the nurse is to assist the client with self-care practices. The nurse's main concern is:

> the individual's need for self-care action and the provision and management of it on a continuous basis in order to sustain life and health, recover from disease or injury, and cope with their effects. (p. 6)

The main premise behind Orem's theory is the belief that man has the inherent ability to care for himself/herself and is responsible for his/her own health. When an individual is unable to carry out self-care behaviors, he/she seeks a health professional. In seeking the assistance of a health professional, the client does not relinquish her/his control, instead she/he wishes to

establish a collaborative relationship. The professional's intervention consists of assisting the individual to maintain, restore or increase his/her ability to provide self-care.

Orem (1980) describes three types of self-care requisites that express the kinds of purposive self-care than an individual may require. The first is universal self-care requisites, which are common to all human beings during all stages of the life cycle and include the need for air, water, food, elimination, activity and rest, solitude and social interaction, prevention of hazards, and promotion of normalcy. The second is developmental self-care requisites that relate to either the developmental process (from interuterine stages of life to developmental stages of adulthood) or to occurrences of deleterious conditions that affect the human development (e.g., loss of spouse, disability, problems of social adaptation). The third is health-deviation self-care requisites that arise not only from disease, injury, disfigurement and disability, but also from measures used in the diagnosis and treatment by physicians.

The nurse works within a framework of the nursing process in assessing, planning, implementing and evaluating the client's self-care capabilities (self-care agency). The nurse also brings her own capabilities depending upon

her education, experience, interpersonal skills (nursing agency) into the client-nurse relationship. When the nurse identifies that her client is unable to meet the demands placed upon him/her and that self-care behavior is not present (self-care deficit), she assists the client with the self-care behavior. The client may not be able to carry out the self-care behavior because of lack of knowledge, skills, or motivation. The nurse develops a nursing care plan which includes the total self-care actions to be performed, the time needed to perform them, and the related sets of actions to be done (therapeutic self-care demands).

Orem has identified three types of interaction between the nurse and client (nursing systems) that occur when the nurse assists the client with self-care behaviors. Wholly compensatory system: the client is unable to carry out any therapeutic self-care demands; the nurse accomplishes the patient's therapeutic self-care, compensates for the client's inability to engage in self-care, and gives support and protection. Partly compensatory system: the nurse and client perform some self-care measures, the nurse regulates the client's actions, and the client accepts care and assistance from the nurse. Supportive-educative system: the client accomplishes self-care and the nurse

regulates the exercise and development of self-care agency.

Mullin (1980) describes the implementation of the self-care concept in the practice of medical-surgical nursing in an acute-care setting, and identifies several constraints to implementation of the concept.

System focuses on illness. The first constraint upon implementation of the self-care concept in the acute-care setting is that a hospital system focuses on illnesses rather than individuals. This type of practice encourages medical dependency and dehumanization. The health professional is seen as being in control and the client follows "orders" in order to get over his/her illness.

System focuses on tasks. The second constraint identified is that the hospital system focuses on tasks that are to be done for the client rather than the client's identified needs. These tasks frequently focus upon physical care, and encourage the client to become a passive recipient of the care. Nurses tend to be "other-directed," completing medically directed tasks for which they stand accountable.

System identifies care givers by task. The third constraint is that the hospital system does not consider the level of professional expertise needed to meet the client's needs, rather it focuses on the kind and number of tasks that need to be done for the client. Personnel are

assigned according to degree of difficulty of the task. Often the client participating in self-care is assigned to a nursing assistant or licensed practical nurse. This type of care assignment encourages lack of continuity of care and discourages client education and participation in his/her care. The nurse focuses her attention upon supervision of personnel and tasks, rather than on supervision of the client.

System sets tasks as priorities. The fourth constraint has to do with priority setting in some hospitals. Medical orders and physical care, such as bed-making and bathing, are given highest priorities. Client education appears to have the lowest priority. The client may be discharged in an improved state of physical health, but without the knowledge or skill to perform self-care. In these settings the nurse finds herself/himself in conflict with the system and the purpose of nursing.

System misperceives the nurse's role. The fifth constraint is the misjudgment that nurses, patients, and physicians share with regards to nursing accountability and autonomy. Nurses are seen as "other-directed," rather than "self-directed." They follow physicians' orders. In reality nurses make independent professional judgments which are based on their clinical expertise, experience and in-

terpersonal skills. This lack of congruence between the perception of nursing practice and reality creates philosophical conflict for the nurses and denies autonomy and accountability. The client also suffers from this misconception as he is not allowed to participate in his care, rather he becomes a recipient of care.

Mullin (1980) makes recommendations for the implementation of the self-care concept in the acute-care setting despite the existing constraints. Nurses can change their attitudes and behaviors toward self-care as this area is in their individual control. They need to internalize the philosophy of self-care which gives responsibility and control to the client and makes the nurse's purpose one of assisting the client with self-care behaviors. The nurse's method of assistance may include doing for, teaching, guiding, supporting, or providing a developmental environment. The nurse seeks autonomy by questioning her actions and she seeks accountability by questioning the results of her actions as they benefit her client. Having a clear purpose and focus for her practice, the nurse reduces the chance of giving task-oriented, and fragmented care.

Throughout the nursing process the nurse and client establish a cooperative relationship in assessing, planning, implementing and evaluating care. Priorities are

established by the client. The nurse and client plan the implementation. The client then implements the plan according to his/her abilities and the nurse assists only if the client is unable to. The nurse maintains this assistance only until the client regains his ability.

If a self-care model of nursing is adopted in an acute-care setting, it can benefit both client and nurse as it can promote assertive, self-directed, accountable and professional nursing practice (Mullin, 1980). It also supports the client in assuming responsibility for his/her own health care by practising self-care behaviors.

The value of such a self-care model of nursing in the acute-care setting is obvious. As discussed above, there are constraints to the implementation of this model. While there is little research that documents the relationship between attitudes and behavior, it is reasonable to expect that implementation of a model is enhanced if the care providers hold positive attitudes toward the basic tenets of this model.

The study described in this thesis was conducted to ascertain the attitudes of nurses in an acute-care setting toward self-care.

# CHAPTER FOUR

## Methodology

### Hypothesis

The study was a survey that tested the following hypotheses:

1) Positive attitudes toward self-care are more likely to be expressed by younger nurses than older nurses.
2) Nurses from a Jewish religious background are more likely to express positive attitudes toward self-care than those from Protestant and, to a lesser extent, Catholic backgrounds.
3) Nurses from specialty areas are more likely to express positive attitudes towards self-care than those from general medical-surgical areas.
4) Nurses with high internal locus of control scores are more likely to express positive attitudes towards self-care than those with high external control scores.
5) Nurses with a baccalaureate degree are more likely to express positive attitudes to self-care than

those with an associate degree or diploma.

6) Nurses who practice primary nursing are more likely to express positive attitudes to self-care than nurses who practice team nursing.

## Setting

The study was conducted at a large West Coast university hospital with 663 beds distributed as following, intensive care and coronary care, 65 beds; maternity, 32 beds; medicine/surgery, 477 beds; newborn intensive care, 25 beds; pediatrics, 44 beds; and psychiatry, 20 beds. Specialty units within the medical and surgical regions consisted of dermatology, oncology, behavioral medicine, renal dialysis, neurosurgery, and orthopedics. The registered nurses employed at the hospital numbered 927.

## Sample

A random selection of 100 non-supervisory nurses who worked either full-time or part-time was made from the staffing roster. No relief or float staff nurses were selected. Fifty nurses' names were picked out of a hat containing the names of nurses from the general medical-surgical units, 25 each from medicine and surgery. Fifty nurses' names were also selected in the same manner from

specialty areas--10 each from cardiac intensive care, coronary care, oncology, dermatology, and renal dialysis. The specialty units selected were most representative of all the specialty units, i.e., patients who were treated on these units had diseases primarily of one system or had one type of disease.

## Techniques for Data Collection

Procedure. Permission to conduct the study was obtained from the Nursing Research Department, Assistant Directors of Nursing and Clinical Nurse Co-Ordinators (C.N.C.). The staff nurses' permission to participate in the study was also obtained. At the Staff Meetings the C.N.C.'s requested their permission upon the investigator's behalf. Each individual nurse's refusal to participate was honored.

From the staffing book on each unit selected for the study, the investigator gathered information as to which shift and on which day the staff nurses to be surveyed were working. The investigator then approached each of the staff nurses and asked her/him to participate by signing a consent form and by filling out a two-part questionnaire during her break or after work. (See Appendix A for the introduction to the staff nurse that was used by the investigator and see Appendix B for the consent form.)

Each questionnaire was given a code number, 1S to 100S.

Instrumentation. The tool consisted of two questionnaires. Part one consisted of a Likert-type Self-Care Attitude Scale that was used by Linn and Lewis (1979). Both Spearman-Brown and Guttman split half reliability were .81 for the 13-item scale. Each question was assigned a value from 1 to 5. The higher scores reflected favorable attitudes toward self-care. A single score was obtained by addition of the numbers circled. The range of scores possible on the scale was 13 to 65. The data were analyzed by computer and a "median split" was done to obtain high and low scores. Any score above the median was considered as reflecting a positive attitude to self-care practices (See Appendix C).

Part two of the questionnaire consisted of a Likert-type Health Locus of Control Scale (HLC) developed and validated by Wallston, et al. (1976). Alpha reliability of the 11 items on the HLC scale was .72. Validity of the scale was shown by a .33 correlation ($p < .01$) with Rotter's (1966) Internal-External Locus of Control Scale for the original sample. The scale measured the degree to which the individual believes he is in control over his own health and illness. Five of the items were internally worded. The scale was scored in the external direction

with each item scored for the internally worded items. Again, a "Median Split" was done and any score above the median reflected that locus of control was external (See Appendix D).

# CHAPTER FIVE

## Findings

### Characteristics of the Sample

The sample of 100 nurses consisted of 10 nurses from cardiac intensive care, dermatology, oncology, and renal dialysis, 9 nurses from coronary care, 25 nurses from medicine and 25 nurses from surgery. The mean age of the sample was 33 years with a standard deviation of 9 years.

Religious affiliation. Four percent of the sample was Jewish, 35 percent Catholic, 40 percent Protestant, 9 percent held no affiliation and 12 percent held affiliations other than the ones stated.

Participation in religious practice. Nineteen percent of the nurses reported that they never participated in religious practices, 54 percent participated sometimes, while 27 percent frequently participated in religious practices.

Length of employment. Thirteen percent of the nurses stated they had been employed at the hospital for less than 6 months, 18 percent 6 to 12 months, 12 percent

12 to 18 months, 6 percent 18 to 24 months, and 51 percent had been employed 24 months or longer.

Level of education. Twenty percent of the nurses had an associate degree in nursing, 26 percent a diploma, 52 percent a baccalaureate degree and 2 percent a master's degree.

Philosophy of nursing on the unit where the nurse worked. Thirty-one percent of the nurses stated that primary nursing was practiced, 20 percent that team nursing was practiced, and 48 percent that a combination of team and primary nursing was practiced. Fourteen percent were aware of Dorothea Orem's theory of nursing, while 86 percent were not.

Self-care attitude. Nurses tended to score higher on the 13-item self-care attitude scale than did physicians in Linn & Lewis's study (1979). The sample mean for this thesis was 45.80 with a S.D. of 7.37. The sample mean for the study conducted by Linn and Lewis with a physician sample was 37.00 with an S.D. of 8.11. Nurses' scores ranged from 14 to 60 while the physician scores ranged from 19 to 60. Alpha reliability of the 13-item self-care attitude scale for the nursing sample was .79.

Health locus of control. The sample mean for the

11-item Health Locus of Control (HLC) Scale was 31.6, with and S.D. of 6.6. Alpha reliability was .72. The scores ranged from 14 to 51. No sample mean for the HLC Scale was given in the Linn and Lewis study.

Table 1 compares the response distribution on the 13-item self-care attitude scale for nurses and physicians. Each item on the scale was computed to provide an item-by-item comparison with similarly derived scores for the Linn and Lewis study. The sum of favorable responses (disagree and strongly disagree for questions 1, 2, 3, 4, 6, 9, and reverse scored for questions 5, 7, 8, 10, 12) point out that 36 to 85 percent of nurses favored self-care on an item-to-item basis. Linn and Lewis found that 25 to almost 50 percent of the physicians generally favored self-care on an item-to-item basis. Uncertainty was a frequent response in both the nurse and physician sample. Both studies indicated a high reliability of the items, indicating that attitudes toward self-care were measured by the instrument.

## Findings Related to the Proposed Hypotheses

A score of 46.67 or more on the self-care attitude scale was considered a positive attitude toward self-care. A score below 46.67 was considered a negative attitude toward self-care.

Table 1. The Response Distribution of the 13-Item Self-Care Attitude Scale* Comparing Nurse and Physician Responses.* Physicians, N=165; Nurses, N=100

| Question | | Strongly Agree (1) | Agree (2) | Uncertain (3) | Disagree (4) | Strongly Disagree (5) |
|---|---|---|---|---|---|---|
| 1. Teaching people how to cure some of their own illnesses without contacting a physician may do more harm than good. | N | 6% | 24% | 11% | 46% | 13% |
| | P | 16% | 38% | 9% | 30% | 7% |
| 2. Self-care programs are not very likely to result in better health for their participants. | N | 7% | 7% | 14% | 43% | 29% |
| | P | 7% | 29% | 18% | 37% | 8% |
| 3. Self-care will probably not reduce the number of times people contact doctors. | N | 4% | 13% | 14% | 51% | 18% |
| | P | 8% | 45% | 14% | 30% | 3% |
| 4. One problem with self-care is that most people can't learn to take care of themselves adequately. | N | 1% | 10% | 4% | 53% | 32% |
| | P | 15% | 50% | 7% | 23% | 5% |
| 5. Most people would prefer to take care of their own health problems without asking for professional help. (R) | N | 3% | 36% | 24% | 33% | 4% |
| | P | 3% | 18% | 17% | 53% | 8% |

Table 1. (continued)

| Question | | Strongly Agree (1) | Agree (2) | Uncertain (3) | Disagree (4) | Strongly Disagree (5) |
|---|---|---|---|---|---|---|
| 6. Very few people want to be self-reliant in making decisions about their health. | N | 3% | 21% | 11% | 54% | 11% |
| | P | 7% | 46% | 23% | 21% | 3% |
| 7. Self-care programs will help reduce the number of people seen by physicians who are not seriously ill.(R) | N | 15% | 62% | 11% | 8% | 4% |
| | P | 3% | 46% | 29% | 20% | 2% |
| 8. In the long run, self-care programs will help reduce the overall cost of medical care. (R) | N | 27% | 48% | 11% | 9% | 5% |
| | P | 5% | 37% | 29% | 23% | 6% |
| 9. Self-care may reduce the overall quality of care provided to people. | N | 5% | 8% | 10% | 57% | 20% |
| | P | 5% | 33% | 26% | 34% | 2% |
| 10. If the people took care of their less serious health problems themselves, then patients with serious illness would have easier access to physicians. (R) | N | 8% | 4% | 12% | 20% | 6% |
| | P | 6% | 45% | 16% | 30% | 2% |
| 11. A person shouldn't take any medication unless a doctor recommends them. | N | 9% | 19% | 18% | 48% | 6% |
| | P | 16% | 35% | 6% | 41% | 2% |

Table 1. (continued)

| Question | | Strongly Agree (1) | Agree (2) | Uncertain (3) | Disagree (4) | Strongly Disagree (5) |
|---|---|---|---|---|---|---|
| 12. People need to rely less on their physicians and more on their own common sense regarding the care of their bodies. (R) | N | 18% | 41% | 16% | 20% | 5% |
| | P | 7% | 29% | 12% | 38% | 14% |
| 13. It is undesirable for people to diagnose and treat their own illness. | N | 6% | 33% | 25% | 30% | 6% |
| | P | 29% | 39% | 9% | 20% | 3% |

N=Nurses,
P=Physicians
R=reversed scored

* From Linn, L. and Lewis, C. "Attitudes toward self-care among practicing physicians," Medical Care. February, 1979. 7(2), 183-190.

A score of 31.50 or more on the HLC scale indicated that the nurse believed health locus of control was external, and any score less than 31.50 indicated that the nurse believed health locus of control was internal.

Hypothesis 1 stated that positive attitudes toward self-care were more likely to be expressed by younger nurses than older ones. The same age categories as established by Linn and Lewis (older physicians described as 46 years or older) were not used in this study, because it was found that few nurses age 46 or older (the age category used by Linn and Lewis) were practising at the bedside. Thus older nurses were categorized as 30 years and over. A t-test comparing the scores of the self-care attitude scale for nurses less than 30 years and nurses 30 years and over indicated that there was no significant difference between the two groups. Therefore, hypothesis I was rejected (see Table 2).

Table 2. Means, Standard Deviations and T-Value of Self-Care Attitude Scale for Nurses Below and Above Age 30 (N=98).

| Age | N | Mean | S.D. | T-Value | D.F. |
|---|---|---|---|---|---|
| Less than 30 years | 52 | 46.94 | 6.12 | 1.68 | 96 |
| More than 30 years | 46 | 44.46 | 8.41 | | |

Analysis of Variance (ANOVA) among the four age groups that were established (group one--21 to 26 years, group two--27 to 30 years, group three--31 to 36 years, and group four--37 years and over) did not reveal any significant differences ($F = 1.01$, 97 df, $p < .39$).

Hypothesis II stated that nurses from Jewish religious backgrounds were more likely to express positive attitudes toward self-care than those from Protestant and, to a lesser extent, Catholic backgrounds. A t-test revealed that there was no difference in the scores between Jewish and Catholic nurses, Jewish and Protestant nurses, Catholic and Protestant nurses, Jewish nurses and those without a religious affiliation, and Jewish nurses and those in other religious categories. Therefore, hypothesis II was rejected (see Table 3).

Table 3. Means, Standard Deviations, and T-Values of Self-Care Attitude Scale Scores for Nurses in Different Religious Categories (N=98).

| | | Self-Care Attitude Scale Scores | | | |
|---|---|---|---|---|---|
| Religion | N | Mean | S.D. | T-Value | D.F. |
| Jewish | 4 | 46.50 | 5.20 | 0.44 | 36 |
| Catholic | 34 | 44.79 | 7.50 | | |
| Jewish | 4 | 46.50 | 5.20 | -0.13 | 41 |
| Protestant | 39 | 46.87 | 5.68 | | |
| Catholic | 34 | 44.79 | 7.50 | -1.34 | 71 |
| Protestant | 39 | 46.87 | 5.68 | | |
| Jewish | 4 | 46.50 | 5.20 | .12 | 11 |
| No Affil. | 9 | 46.00 | 7.16 | | |
| Jewish | 4 | 46.50 | 5.20 | .22 | 14 |
| Other | 12 | 45.17 | 11.47 | | |

Hypothesis III states that nurses from specialty areas were more likely to express positive attitudes toward self-care than those from general medical-surgical areas. A t-test revealed that there was no difference between the two groups. Therefore, hypothesis III was rejected (see Table 4).

Table 4. Means, Standard Deviations and T-Value of Self-Care Attitude Scale Scores for Nurses in Specialty Areas and Medical/Surgical Areas

| | Self-Care Attitude Scale Scores | | | | |
|---|---|---|---|---|---|
| Area of Practice | N | Mean | S.D. | T-Value | D.F. |
| Specialty Areas | 49 | 45.84 | 8.07 | 0.32 | 96 |
| Medical/ Surgical | 49 | 45.37 | 6.55 | | |

Analysis of Variance conducted to compare the various areas of practice: cardiac intensive care, coronary care, dermatology, oncology, renal dialysis, medicine and surgery. ANOVA did not reveal any significant differences between the groups ($F = .90$, 97 df, $p < .49$).

Hypothesis IV stated that nurses with high internal locus of control scores were more likely to express positive attitudes toward self-care than those with high external scores. In examining the relationship between scores on the HLC Scale and the scores on the Self-Care Attitude Scale on the scattergram, one outlier is found. When this outlier is removed the r correlation increases from $-.11$ ($p < .15$) to $-.26$ $p < .00$). Therefore, there

does appear to be a trend toward nurses with high internal locus of control scores scoring high on the self-care attitude scale.

When looking at the grouped data, a relationship is found. Nurses with internal locus of control are more likely than nurses with external locus of control to be classified as having positive attitudes towards self-care (see Table 5).

Table 5. Relationship between Nurses' Scores on Self-Care Attitude Scale and Health Locus of Control

| Self-Care Attitude Scale Scores | Health Locus of Control Scores | | | |
|---|---|---|---|---|
| | Low Scores (Internal Control) | | High Scores (External Control) | |
| Low Scores (Negative Attitude) | N | % | N | % |
| | 19 | 38 | 30 | 60 |
| High Scores (Positive Attitude) | 31 | 62 | 20 | 40 |
| Total | 50 | 100 | 50 | 100 |

$x^2$=4.00, 1 df, $p < .04$ Significant at .05 level.

Hypothesis V stated that nurses with a baccalaureate degree were more likely to express positive

attitudes towards self-care than those with an asociate degree or diploma. A t-test comparing the scores between those of baccalaureate and associate degree nurses revealed that there was no difference between the groups. However, a t-test did reveal a difference in the scores between diploma and baccalaureate nurses. Therefore, the hypothesis was accepted in part (see Table 6).

Table 6. Means, Standard Deviations and T-Values of the Self-Care Attitude Scale Scores for Nurses with Different Levels of Education (N=96)

| | | Self-Care Attitude Scale Scores | | | |
|---|---|---|---|---|---|
| Education Levels | N | Mean | S.D. | T-Value | D.F. |
| Associate Degree | 20 | 44.25 | 10.25 | -1.44 | 69 |
| Bachelors | 51 | 47.20 | 6.60 | | |
| Diploma | 25 | 43.84 | 5.84 | -2.16* | 74 |
| Bachelors | 51 | 47.20 | 6.58 | | |
| Associate Degree | 20 | 44.25 | 10.25 | .17 | 43 |
| Bachelors | 25 | 43.84 | 5.84 | | |

*Significant at .05 level.

Hypothesis VI stated that nurses who practiced primary nursing were more likely to express positive attitudes towards self-care than nurses who practiced team nursing. T-tests between the groups revealed no

difference. Therefore, hypothesis VI was rejected (see Table 7).

Table 7. Summary of Means, Standard Deviations, and T-Values of the Self-Care Attitude Scale Scores and Philosophy of Unit

| | | Self-Care Attitude Scale Scores | | | |
|---|---|---|---|---|---|
| Philosophy | N | Mean | S.D. | T-Value | D.F. |
| Primary Nursing | 31 | 46.06 | 8.25 | .50 | 49 |
| Team Nursing | 20 | 44.85 | 8.71 | | |
| Primary Nursing | 31 | 46.06 | 8.25 | | |
| Combination (Primary & Team) | 48 | 45.83 | 6.18 | .14 | 77 |
| Team Nursing | 20 | 44.85 | 8.71 | -0.53 | 66 |
| Combination | 48 | 45.83 | 6.18 | | |

Other Significant Findings

This study also looked at the effect of frequency of religious/spiritual practices upon attitudes towards self-care, the effect of the nurses' length of employment in his or her area of practice upon attitudes towards self-care, and the effect of the nurses' familiarity with Dorothea Orem's theory of nursing upon attitudes toward self-care. T-tests for the various groups revealed no differences.

The following correlations were found between Health

Locus of Control Scores and age, religion, area of practice, education, and philosophy of nursing:

1. Nurses 30 years or less believed that health locus of control was internal, whereas nurses 30 years and over believed that health locus of control was external ($t = -2.-2$, 96 df, $p < .05$).

2. No differences were found between the nurses' religious affiliation and health locus of control beliefs.

3. No difference in the mean for the HLC Scale Scores were found between nurses working in specialty areas and medical/surgical areas ($t = 2.49$, 97 df, $p < .03$).

Of the groups established for the different areas of practice, (group 1 = cardiac intensive care, group 2 = coronary care, group 3 = dermatology, group 4 = oncology, group 5 = renal dialysis, group 6 = medicine, group 7 = surgery), Tukey-HSD's Multiple Range Test revealed that the means for group 7 and group 1, group 5 and 7, group 4 and 5 and group 3 and 1 were significantly different at the .05 level.

4. When looking at education and health locus of control, nurses with a baccalaureate education believed that health locus of control was internal whereas nurses with a diploma education believed that health locus of

control was external ($t = 2.29$, 74 df, $p < .03$).

When comparing associate degree nurses with diploma nurses, associate degree nurses also believed that health locus of control was internal, whereas diploma nurses believed that health locus of control was external ($t = -2.12$, 43 df, $p < .04$).

The diploma nurses were considerably older (mean age: 37.52. S.D. 10.47) than either baccalaureate degree nurses (mean age: 30.80, S.D. = 8.34) or associate degree nurses (mean age: 31.20, S.D. = 7.05) ($F = 3.58$, 93 df, $p = <.02$).

5. No differences were seen between the philosophy of the units, primary nursing, team nursing, and combination nursing) and health locus of control beliefs.

Summary

In general, nurses in an acute-care setting favored self-care practices. Those with the most favorable attitudes had a baccalaureate education and had health beliefs which reflect an internal locus of control. Those with less favorable attitudes toward self-care had a diploma education and believed that health locus of control was external. No correlations were found between the nurses' attitudes toward self-care in an acute-care setting and age, religious affiliation, area of practice, and philosophy of nursing.

# CHAPTER SIX

## Discussion

This chapter has four main components: a comparison of the findings of this study with those from Linn and Lewis's study, a discussion of the implication of this study for nursing, the limitations of this study, and recommendations for future research.

### Comparison with Linn and Lewis's Study

Of particular note in this study was the generally favorable attitude of nurses toward self-care. The nurses's scores were generally higher than those of physicians in the Linn and Lewis study, suggesting that nurses do in fact place more value on self-care practices, a finding supportive of Orem's self-care theory of nursing. This attitudinal difference is reflected in the two professions, nursing characteristically being concerned with teaching, and patient adaptation and coping, and medicine characteristically being concerned with diagnosis and cure of illness states. These differences may be perceived as potentially complementary in the care of a

particular client, or conflicting in that they come from dichotomous philosophical bases.

Similarities and differences in attitudes toward self-care were found between the physician sample in Linn and Lewis's study and the sample of nurses in this study as noted below.

Age and attitudes toward self-care In the Linn and Lewis study, younger physicians (below age 46) expressed a more positive attitude toward self-care than physicans 46 years or older. There also appeared to be some evidence that the relationship between age and attitude was curvilinear. Physicians 64 years and older showed a more positive attitude toward self-care practices.

No difference was found between age and attitude toward self-care in the nursing sample. Part of the difference in the results obtained in the two studies may be attributed to the different age categories that were used: for the nursing sample, nurses 30 years or over were considered to be older. The age groups, however, are probably representative of age groupings in the two professions, as physicians tend to enter practice at an older age than nurses, and they also tend to continue to practice much later in life than nurses. The lack of difference within the nursing sample may well be due to the overall high level of attitudes toward self-care.

Religion and attitudes toward self-care. Jewish physicians showed a more positive attitude toward self-care than Protestant or Catholic physicians. No difference between religious affiliation and self-care attitudes wre seen in the nursing sample. These differences in the results may be due to the small sample of Jewish nurses in the study, or perhaps to the differing philosophical basis of nursing, or may be related to factors unassociated with religious affiliation, i.e., education or age.

Specialization and attitudes toward self-care. No difference was seen in attitudes toward self-care practices between physicians who were specialists and those who were generalists. These findings wre similar to those found in the nursing sample. Nurses who practiced in specialty areas and those who practiced in general medical/surgical areas had similar attitudes toward self-care. The results obtained from the study with the nursing sample may be due to the fact that the self-care attitude scale measured attitudes toward self-care practices in general and did not necessarily measure attitudes towards self-care practices of a particular unit, or perceived utility or feasibility of self-care on any one unit. Again, this finding suggests that there is a common unifying belief about this aspect of nursing that seems to be present in nurses in this sample, regardless of work setting.

Relationship between health locus of control beliefs and attitudes toward self care. There appeared to be some evidence in the physician sample that physicians who believed health locus of control was internal also favored self-care, whereas physicians who believed that health locus of control was external favored self-care less. When looking at grouped data 60 percent of physicians with high internal control scores expressed positive attitudes towards self-care as compared with only 40 percent of the physicians with high external control scores.

The findings in the nursing sample were similar. There appeared to be some evidence that nurses who believed health locus of control was internal also favored self-care, whereas nurses who believed health locus of control was extenal favored self-care less. When looking at grouped data, 62 percent of the nurses with high internal control scores expressed positive attitudes toward self-care as compared with 38 percent of the nurses with high external control scores. These findings support the hypothesis that if a person believes he/she is responsible for and has control over his/her health it is more likely that he/she will assume responsibility for that care by exhibiting self-care behaviors.

Setting and attitudes towards self-care. Linn and Lewis (1979) found that the type of setting influenced the physician's attitude toward self-care. Physicians that were in group practice were most likely to express positive attitudes towards self-care (71 percent), while physicians that worked solo were least likely (40 percent), and those in small partnerships were between the two groups (54 percent). When further looking at the interrelationsips among the factors that affect self-care attitudes, it was found that younger physicians tended to work in group practice and were internally controlled whereas older physicians tended to work solo and were externally controlled. When the relationship between setting, locus of control, and self-care was examined, controlling for age, a three-variable analysis produced the following results:

1. Among younger physicians the relationship between attitudes toward self-care and type of setting continued to be meaningful.
2. Among older physicians, the relationship between attitudes toward self-care and type of practice setting was not meaningful.
3. At the age levels the relationship between locus of control and attitudes toward self-care continued to be meaningful. (p. 189)

This study did not use setting as a variable because the setting was limited to an acute-care facility. It would be of interest to determine whether nurses who practice in other settings, i.e., community health, nursing homes, rehabilitation centers, etc., express different attitudes toward self-care.

## Significance for Nursing

From this study it would appear that nurses in an acute-care setting had favorable attitudes towards self-care practices: in general, they scored highly on the self-care attitude scale. Age, religious practice, and philosophy of nursing were characteristics which did not affect the nurse's attitude toward self-care. Perhaps part of the results of this study was due to the fact that the nurses were predominantly women, and women have always practised self-care to some degree. Self-care was especially popular during the 1800's when women advocated healthy lifestyles in order to promote health and prevent disease (Risse et al., 1977). In recent years due to the dissatisfaction with the creation of a biomedical model in health care, the women's movement has revived the interest in self-care practices. The results of this study may in part be reflected by the women's movement.

Nurses who believed that health locus of control was internal favored self-care practices more so than nurses who believed that locus of control was external. It may be of value to assess nurse's beliefs about health locus of control before expecting them to participate in teaching self-care. Those nurses who believe that health locus of control is internal could be involved in teaching self-care practices. The client could also be evaluated for the degree he/she wished to be involved in his care, i.e., obtaining information or actively participating. The nurse who believes health locus of control is internal and favors self-care could be matched with clients who wish to obtain information about health care but not necessarily participate in self-care.

If future research on self-care indicates that self-care results in health benefits and cost-effectiveness and that the consumers and health professionals have a positive attitude toward self-care, the health care employer may wish to provide educational programs for nurses and clients in order to affect attitudinal change (from believing health locus of control is external--not favoring self-care--to believing that health locus of control is internal--favoring self-care). Classes for nurses may include the philosophy and principles of self-care, teaching-learning principles and behavior modification.

Classes for the consumer may include healthy lifestyles, how to treat common illnesses and injuries, care of chronic illnesses, and behavior modification.

In our present medical model of health care there is little incentive for the health professional to teach self-care and for the consumer to practice self-care; therefore, the health care employer may wish to provide an incentive for the nurse to teach self-care to her clients. The nurse could be influenced by several alternative incentives: a monetary reward, educational days off, subscription to journals, nursing books, or extra time off from work. The employer may wish to provide an incentive for the nurse to practice self-care in her personal life. A monetary incentive may be provided if the nurse does not use excessive sick time off.

The health care provider may wish to provide an incentive for the consumer to practice self-care. If the consumer's visits to the doctor decrease over a set period of time, the consumer may be given a monetary reward or may be offered free classes on self-care. Self-care classes may encourage appropriate use of the health care system, i.e., using emergency room services and physician's assistance appropriately.

Although the above-mentioned incentives for the health

professional and consumer to participate in self-care may be an influence, perhaps the strongest incentive for their participation is a strong belief in the principles of self-care and a positive attitude towards self-care. Therefore, when planning programs for self-care, factors previously discussed should be considered.

Nurses from a baccalaureate degree program favored self-care practices more than nurses from a diploma program. This finding might be attributed to the difference in the curriculum of each of these nursing programs. Do diploma nurses see their roles as a "doer" in the nursing practice? Have they been educated to be task-oriented, giving priority to following the physician's orders? Do they feel more threatened in relinguishing control over health care to clients? Do the baccalaureate degree nurses see their role as an educator and facilitator in the nursing practice? Is it a reflection of their education? Do the baccalaureate nurses feel less threatened than the diploma nurse in relinguishing control over health care to clients? If future studies indicate that baccalaureate degree nurses favor self-care practices more than diploma nurses do, it may be of value in providing quality health care to have nurses with a baccalaureate education involved in self-care programs more than diploma nurses, or perhaps more emphasis might be

placed on self-care practice in the role of the nurse as educator and facilitator in the diploma program. If future studies fail to indicate that there is a difference in attitudes towards self-care between the two groups, nurses may still be evaluated for their attitudes towards self-care prior to hiring for employment in self-care programs. Priority could be given to those nurses with the most favorable attitudes. This procedure may match employers and employees with similar philosophies of nursing and thereby affect program results favorably. The hiring procedure could be followed by an orientation program on self-care to assist in implementation of self-care behaviors in the nurses. The self-care program might include classes similar to those previously mentioned, i.e., self-care philosophy and principles, teaching-learning principles, behavior modification.

In examining the nurses' beliefs about health locus of control, it was found that two factors affected their beliefs. The first factor was age. Nurses 30 years or less believed that health locus of control was internal, while nurses 30 years and over believed that health locus of control was external. These results may reflect the change in nursing programs over the years.

The second factor affecting nurses' beliefs about

health locus of control was education. The baccalaureate and associate degree nurse believed that health locus of control was internal whereas the diploma nurse felt that health locus of control was external. This study is the first that has found a difference in characteristics between practising nurses from different educational programs in nursing. Meleis and Farrell (1974) conducted a survey of senior nursing students from the three different programs--baccalaureate, associate degree and diploma--in six schools in the San Francisco area to determine the difference in characteristics of the students from each program. They found that the students in the three types of programs were essentially alike on intellectual characteristics, the consideration aspect of leadership, and self-esteem. Baccalaureate students rated higher in the area of communication skills, and on the structure and autonomy factors of leadership. Diploma students placed highest value on research. Because the educational program placement was a result of self-selection, it is not known whether these differences were the result of the educational program, or were pre-existing characteristics in the subjects.

Similarly, in this study the educational process may have been a factor in the development of the different beliefs toward heath locus of control between the diploma

nurse and the baccalaureate and associate degree nurse, or these beliefs may have been the result of the characteristics the nurse possessed prior to entering nursing school. Therefore, these beliefs may have caused these nurses to choose a school they thought might support their beliefs. Other personality characteristics may also have influenced the students' choice of program, and therefore the results of this study also. Age was a critical factor as the diploma nurses were considerably older than the baccalaureate and degree nurses.

Limitations

The present study focused on the nurse's attitudes toward self-care in only one acute-care setting; therefore, one cannot assume that nurses in other acute-care settings have the same attitudes. The philosophy of nursing in the particulare acute-care setting used for the study may have influenced the nurses' attitudes toward self-care.

As frequently is the case in acute-care settings, the nurses were very busy, and the questionnaires at times were hastily filled out. The work assignment that the nurse had on the particular day she was asked to complete the questionnaire may have influenced her attitudes toward self-care.

The ability to make meaningful comparisons with the Linn and Lewis study was limited by certain characteristics of the nursing sample, e.g. few Jewish nurses, few nurses over 46.

## Future Research

Research in the area of self-care is relatively new, and there is much need for further research. Three aspects of self-care practices that require further investigation are: 1) the health benefits of self-care, 2) cost-effectiveness of self-care, 3) health professionals attitudes and consumers' attitude toward self-care.

Health benefits of self-care. In assessing the health benefits of self-care to the various client populations the following questions might be investigated: Are client's self-care practices safe? Is there a need for more health professional involvement in self-care programs to assure safe self-care practices? Are self-care practices improving the health status of the public? Oppponents to self-care believe that the practice is limited to the white, middle- or upper-class, educated population. Can self-care be practised by clients from other cultures of a lower socio-economic educational population.

Cost-effectiveness of self-care. In assessing the cost effectiveness of self-care practices, the following questions might be investigated: Do nurses participating in self-care programs affect the cost of health care delivery? Are self-care programs in various settings (hospitals, community) cost effective? If self-care programs are found to be cost-effective, how might the savings in cost be returned to the clients as a motivation for future self-care behaviors?

Attitudes toward self-care. Future studies on the health professional's attitude toward self-care might include a replication of this study to further determine whether nurses in an acute-care setting have a positive attitude towards self-care. Other questions that warrant investigation are: Do nurses in an acute-care setting demonstrate behavior that is supportive of self-care practices? Do the constraints in a hospital setting affect the nurse's behavior toward self-care? Do nurses in other settings, i.e., community, nursing homes, rehabilitation centers, outpatient clinics, favor self-care practices?

Questions in relation to consumer attitude toward self-care are: Does the consumer favor self-care practices? What does the consumer see as his rights and responsibilities toward self-care? Is there a reliable

means by which we can screen clients for participation in self-care practices? Might educational and behavior modification programs affect the clients' attitude toward self-care?

Research to date is showing promise that self-care can be an effective health behavior. To provide further evidence in this direction, additional research is necessary.

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# APPENDIX A

Introduction to staff nurse by investigator

My name is Gladys Kurzuk. I am a nursing graduate student at the University of California, San Francisco. I am presently conducting a survey on nurses' attitudes toward self-care practices and would appreciate your participation in the survey.

Listed on the next four pages are some of the things people are saying about self-care and self-care programs. Please indicate how strongly you agree or disagree with each statement by circling the appropriate number. There is no right or wrong answwer. Your opinion is being requested. Do not write your name on the questionnaire, but please complete the information requested at the top of the questionnaire. Confidentiality will be maintained as much as possible.

The results of this study may not benefit you directly, but may add to the knowledge base in the area of self-care. Your refusal to participate will be honored.

# APPENDIX B

## UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

## CONSENT TO BE A RESEARCH SUBJECT

********

## EXPERIMENTAL SUBJECT'S BILL OF RIGHTS

Persons who participate in a medical experiment are entitled to certain rights. These rights include but are not limited to the subject's rights to: be informed of the nature and purpose of the experiment; be given an explanation of the procedures to be followed in the medical experiement, and any drug or device to be utilized; be given a description of any attendant discomforts and risks reasonably to be expected; be given an explanation of any benefits to the subject reasonably to be expected, if applicable; be given a disclosure of any appropriate alternatives, drugs, or devices that might be advantageous to the subject, their relative risks and benefits; be informed of the avenues of medical treatment, if any, available to the subject after the experiment if complications should arise; be given an opportunity to ask any questions concerning the experiment or the procedures involved; be instructed that consent to participate in the medical experiment may be withdrawn at any time and the subject may discontinue participation without prejudice; be given a copy of the signed and dated consent form; and be given the opportunity to decide to consent or not to consent to a medical experiment without the intervention of any element of force, fraud, deceit, duress, coercion or undue influence on the subject's decision.

## INFORMED CONSENT

You are invited to participate in a study on attitudes among nurses toward self-care practices. I hope to be able to obtain information that may provide a better understanding of nursing and self-care practices and that

may assist with program planning for nurses. You were selected as a possible participant in this study because you are a staff nurse in an acute-care setting.

If you decide to participate, I, Gladys Kurzuk, will ask you to fill out two short questionnaires that deal with nurse's attitudes towards self-care practices. The questionnaires should take approximately fifteen minutes. I cannot and do not guarantee or promise that you will receive any benefits from this study. The results of this study may add to the knowledge base in the area of self-care.

Any data under the investigator's control will be disclosed in a manner that does not reveal your identity. All questionnaires will be coded so as to insure anonymity.

Your decision whether or not to participate will not prejudice you or your employment status. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without prejudice to you or effect on your employment status.

If you have any questions, I expect you to ask me. If you have any additional questions later, I, Gladys Kurzuk, at 497-5656 or 573-0697, will be happy to answer them.

In the event of physical injury that arises solely out of the negligence of the Stanford University Medical Center or its staff in the this study, reimbursement of expenses incurred for necessary medical treatment and hospitalization is available. For further information, please call 497-5244 or write the Medical Center Committee for the Protection of Human Subjects at 851 Welch Road, Room 115, Palo Alto, California, 94304. In addition, if you are not satisfied with the manner in which this study is being conducted, you may report any complaints to the same telephone number and address.

YOUR SIGNATURE INDICATES THAT YOU HAVE READ THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PRINCIPAL INVESTIGATOR AND HIS OR HER STAFF, AND THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED. A COPY OF THIS FORM IS AVAILABLE TO YOU UPON REQUEST.

_____ _____

Signature Date

_____

Signature of Investigator or Witness

6/17/81

# APPENDIX C

Please circle:

Age: _____

Religion: Jewish Catholic Protestant Other _____
No affiliation

How often do you participate in religious-spiritual practices?
Never Sometimes Frequently

Area of Practice: Cardiac Intensive Care Coronary Care
Dermatology Oncology Renal Dialysis Medicine
Surgery

How long employed in this area: 0-6 months, 6-12 months, 12-18 months, 18-24 months, 24 months or longer

Education: A.D. Diploma B.S. M.S.

Philosophy of Unit: Primary Care Nursing Team Nursing
Combination

Are you familiar with Dorothea Orem's theory of nursing?
Yes No

| Part 1* | Strongly Agree | Agree | Uncer-tain | Dis-agree | Strongly Disagree |
|---|---|---|---|---|---|
| 1. Teaching people how to cure some of their own illness without contacting a physician may create more harm than good. | 1 | 2 | 3 | 4 | 5 |
| 2. Self-care programs are not very likely to result in better health for their participants. | 1 | 2 | 3 | 4 | 5 |
| 3. Self-care will probably not reduce the number of times people contact doctors. | 1 | 2 | 3 | 4 | 5 |
| 4. One problem with self-care is that most people can't learn to take care of themselves adequately. | 1 | 2 | 3 | 4 | 5 |
| 5. Most people would prefer to take care of their own health problems without asking for professional help. | 1 | 2 | 3 | 4 | 5 |
| 6. Very few people want to be self-reliant in making decisions about their health. | 1 | 2 | 3 | 4 | 5 |
| 7. Self-care programs will help reduce the number of people seen by physicans who are not seriously ill. | 1 | 2 | 3 | 4 | 5 |

*From Linn, and Lewis, C. "Attitudes toward self-care among practicing physicians," Medical Care, February, 1979, 7(2), 183-190.

| Part 1* | Strongly Agree | Agree | Uncer-tain | Dis-agree | Strongly Disagree |
|---|---|---|---|---|---|
| 8. In the long run, self-care programs will help reduce the overall cost of medical care. | 1 | 2 | 3 | 4 | 5 |
| 9. Self-care may reduce the overall quality of care provided to people. | 1 | 2 | 3 | 4 | 5 |
| 10. If the people took care of their less serious health problems themselves, then patients wth serious illness would have easier access to physicians. | 1 | 2 | 3 | 4 | 5 |
| 11. A person shouldn't take any medication unless a doctor recommends them. | 1 | 2 | 3 | 4 | 5 |
| 12. People need to rely less on physicians and more on their own common sense regarding the care of their bodies. | 1 | 2 | 3 | 4 | 5 |
| 13. It is undesirable for people to diagnose and treat their own illness. | 1 | 2 | 3 | 4 | 5 |

# APPENDIX D

Part II.

| | Strongly Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1. If I take care of myself, I can avoid illness. | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Whenever I get sick it is because of something I've done or not done. | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. Good health is largely a matter of good fortune. | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. No matter what I do, if I am going to get sick, I will get sick. | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Most people do not realize the extent to which their illnesses are controlled by accidental happenings. | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. I can only do what my doctor tells me to do. | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. There are so many strange diseases around that you can never know when you might pick one up. | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. When I feel ill, I know it is because I have not been getting the proper exercise or eating right. | 1 | 2 | 3 | 4 | 5 | 6 |

Part II (Continued)

| | Strongly Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 9. People who never get sick are just plain lucky. | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. People's ill health results from their own carelessness. | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. I am directly responsible for my own health. | 1 | 2 | 3 | 4 | 5 | 6 |

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* From Wallston et al., Development and validation of the health locus of control (HLC) scale. Journal of Consulting and Clinical Psychology, 1976, 44(4), 580-585.